

Declaration

This thesis is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared in the preface and specified in the text.

It is not substantially the same as any work that has already been submitted before for any degree or other qualification except as declared in the preface and specified in the text.

It does not exceed the prescribed word limit (80,000) for the POLIS Degree Committee.

Joseph Sebastian Brandim Howson February 2022

<u>Abstract</u>

Mexico's federal open data and the possibilities of transparency

Joseph Sebastian Brandim Howson

This study addresses the Mexican state's sudden emergence at the vanguard of global open data rankings and transparency indices. I examine this turn to open data-led transparency by focusing on the work of *daterxs* – those who take advantage of the state's data disclosures to expose corruption, scrutinise decision-making, and participate in governance.

To do so, I deploy what I term an *aesthetic approach*. Situated within an interpretivist methodology, I propose that aesthetic analysis requires the researcher enter an intimate and responsive relationship with the object(s) of study. Therefore, this research project has involved ten months of in-person and digital fieldwork amongst communities of *daterxs* in Mexico. I present the reader with rich materials assembled through participant observation and observant participation; perspectives gathered in over seventy interviews with open data users, cultural producers, civil society representatives, public officials and public servants; and archival records collected across cultural and public institutions in Mexico. Advancing Transparency Studies, I develop empirically detailed chapters formed around specific projects that take seriously the production and substance of open datasets.

I propose that the work of *daterxs* involved a conceptual narrowing of the possibilities of transparency. I determine that open data-led transparency activities are only able to momentarily articulate the fine details of what occurs in the recesses of the state apparatus, stopping far short of purging it of its shadows and masks. In contrast to the celebratory rhetoric of open data proponents, this complicates any simple alignment between open data and democratic advances. I explore this narrowing across three dimensions: *scale*, *scope*, and *proximity*. In developing this argument, I consider the forces these open data-led activities encounter and how *daterxs* subsequently respond to them. Enriching Mexicanist scholarship, I argue that this digital phenomenon advances our thinking in three key areas. First, the role of open data in the consolidation of centralising logics of power; second, extending our understanding of the impact of violence on digital activities; third, the renewing role open data outputs present for political culture.

Yet, despite this narrowing, I argue that open data-led transparency can remain politically significant. Expanding Critical Data Studies, I focus on the ways in which my fieldwork experiences underscored the multiple representational dimensions of open data. In acknowledging the *openness* of open data, I propose that Mexico's federal open data are also deployed in ways that do not necessarily halt or eliminate the shadows and masks of Mexico's state apparatus, but also in ways that attempt to "exceed" (Harcourt 2020) and do "justice" (Taussig 1999) to them. To do so, I reflect on speculative engagements with federal open data, and on creative deployments of data analysis tools in contemporary cultural projects. By using the work of *daterxs* to encourage a shift in the ambition of transparency activities, I conclude by arguing for a re-expansion of the political possibilities of open data-led transparency.

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<u>Acronyms</u>

AGA	Alianza por el Gobierno Abierto
ASF	Auditoria Superior de la Federación
Bienestar	Secretaría de Bienestar
CP	Cuenta Pública
EDN	Estrategia Nacional Digital
EO	Estadísticas Oportunas de Finanzas Públicas
Hacienda	Secretaría de Hacienda y Crédito Público
IFAI	Instituto Federal de Transparencia, Acceso a la Información y Protección de Datos Personales
INAI	Instituto Nacional de Transparencia, Acceso a la Información y Protección de Datos Personales
INEGI	Instituto Nacional de Estadística y Geografía
JCF	Jóvenes Construyendo el Futuro
MORENA	Movimiento Regeneración Nacional
MUAC	Museo Universitario de Arte Contemporáneo
NCH	New Cultural History
NOSC	Núcleo de Organizaciones de Sociedad Civil
OEF	Obras de Entidades Federativas
OGP	Open Government Partnership
OP	Oficina de la Presidencia de la República
OPA	Obra Pública Abierta
PAN	Partido Acción Nacional
PDN	Plataforma Digital Nacional
PEF	Presupuesto de Engresos de la Federación
PNT	Plataforma Nacional de Transparencia
PRD	Partido de la Revolución Democrática
PRI	Partido Revolucionario Institucional
SCS	Sistema de Comunicación Social
SFP	Secretaría de la Función Pública
SN	Servidores de la Nación
TPDG	Transparencia Presupuestario: Observatorio del Gasto
Trabajo	Secretaría de Trabajo
USA	United States of America
VPN	Virtual Private Network

Part one

Introduction

By the end of the first decade of the twenty-first century, scholars had come to denounce an advancing global transparency movement that, over the previous decade, had made significant headwinds across different geographies, and networks of institutions and decisionmakers. The growth of this movement had turned transparency into a "magical concept" (Pollitt and Hupe, 2011, p. 641) or an "ideoscape" (Sanders and West, 2003, p. 10), able to travel around the world and be deployed – at least in name – to solve a plethora of problems. Drawing on a diverse set of literatures and methodologies, a sphere of scholars responded to these advances. Under the broad banner of Transparency Studies, these scholars critiqued the philosophical groundings of this transparency movement, disputing its definition(s) of transparency, highlighting problems in the implementation of transparency solutions, and their unexpected consequences (Strathern, 2000; Hood, 2006; Garsten and Lindh de Montoya, 2008b; Lessig, 2009; Fenster, 2010; Hetherington, 2011; Ballestero, 2012a; Teurlings and Stauff, 2014; Kosack and Fung, 2014; Schudson, 2015; Alloa, 2018). Thus, writing in 2012, Andrea Ballestero noted, "Given this wealth of literature, it has become an accepted fact that transparency projects most often fail to deliver on their democratic and political promises" (2012a, p. 229).

Yet, over the proceeding decade, transparency has continued to hold strength as a rallying call for political movements of various orientations. The re-election of President Barak Obama in the United States of America (USA) marked a milestone in the renewal of this agenda, recentring the transparency movement on the emerging affordances of digital technologies, further advancing what Lawrence Lessig had coined as "techno transparency" (2009 [n.p.]). Open data – datos abiertos – took up position as the new cornerstone of this transparency resurgence. Mexico lent full force into the aspirations of its powerful neighbour. Requiring the rapid deployment of digital technologies and data skills, Mexico was able to position itself at the global vanguard of this movement. Indeed, Mexico swiftly became a world leader in open data provision, providing proponents with a text-book example of how open data could positively intersect with efforts towards development, good governance, and the rule of law (Barros, 2014; Calderón and Lorenzo, 2015; OECD, 2018, 2020).

Open data-led transparency, involving the mass disclosure of state-held data resources, was touted as the efficient corrective to the opaque spaces that hide corruption and inefficiency, reducing the possibilities for illegitimate actors to hold onto power, as well as disrupting asymmetries that then allow for the building of resilient democracies and markets. The promise of an effective, accessible state came to plaster over any historical or contemporary

complaints, promising an ultimately desirable institutional arrangement – what Claire Birchall would go on to term a "dataphilic technological solutionism" (2021, p. 86). In a context such as Mexico, where alternatives to democracy are not a distant memory (if we can even speak of democracy in our present), advances in open data-led transparency came to present the possibility for "a more perfect democratic order" (Fenster, 2017, p. 6).

A subsequent rush of scholarship confirmed the dominant hypothesis: an expansion of open data resources does facilitate state transparency, and contributes positively to a laundry-list of associated concepts (Abella, 2014; Cutberto Vera, Rocha and Concepción Martínez, 2015; Uvalle Berrones, 2016; Martínez Puón, 2017; Ruijer and Martinius, 2017; Sandoval-Almazán, 2019; Gao, Janssen and Zhang, 2021). This onrush of empirical research supercharged the expansion of open data-efforts across Mexico's state apparatus.¹ Yet, in this literature, transparency continued to be simply defined as the publication of the state's data resources, assuming transparency to involve "simply transmitting information from sender to a receiver" (Flyverbom, 2019, p. 17), with little attention paid to how open data are engaged with and subsequently deployed.

The reinvigoration of the global transparency movement around open data did little to convince detractors. Of course, many saw Mexico's rapid acceleration to the forefront of open data-led transparency as public relations management from a media-savvy, globally engaged, political elite (Eréndira Sandoval, 2014). For others, there was scepticism towards this suspension of belief that open data had induced about the ways power works in Mexico: surely these new illuminations would simply cast new shadows (Villanueva, 2013; Peschard Mariscal, 2017). Moreover, the emphasis on a dataphilic solution opened new directions for analysis and critique. Not only are data skills the preserve of an elite subsection of society (Isin and Ruppert, 2015; Gabrys, 2019), but data are themselves the bedrock of contemporary forms of surveillance and economic extraction, centred on logics of quantification (Han, 2015; Muir, 2015; Masco, 2017; Docherty, 2018; Harcourt, 2018; Lyon, 2019; Zuboff, 2019; García Canclini, 2020).

This contemporary mix of contributions has displaced the previous moral weight of transparency, with transparency now "teeter[ing] on a tightrope between tragedy and farce" (Newell, 2019, p. 299). Thus, transparency has been described as "a systematic compulsion gripping all social processes" (Han, 2015, p. 2), even comprising a "parasitic logic"

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¹ Following the scholarship of those such as David Nugent (2019), I use *state apparatus* as a short-hand to refer to the arrangement of institutions, figures, formal, and informal resources that maintain political power within a given territory.

(Valdovinos, 2018, p. 564) that requires interruption. As such, recent scholarship has taken a forceful turn towards abandoning transparency and its duplicitous discourse of redistributing and democratising power (Birchall, 2014, 2015; Baack, 2015; Han, 2015; METAHAVEN, 2015; Levy and Merritt Johns, 2016; Etzioni, 2018; Mersch, 2018; Pozen, 2018).

Yet, these critiques, although centred on the technological groundings of contemporary transparency efforts, are often dystopian in their utopian affirmations, offering totalising visions of what these technologies may do (as opposed to are doing), with little empirical depth (Han, 2015; Schudson, 2015; Etzioni, 2018; Mersch, 2018; Thomä, 2018). When a more nuanced approach to these technologies has been taken, there remains the assumption that these technologies will reverberate in the same ways in Mexico as in, say, the United Kingdom or Nigeria (Birchall, 2015). Moreover, the conceptual advances from which these critiques derive fail to take into consideration the many years of struggle – on the part of civil society actors – to achieve even limited transparency reforms. Urgent calls to abandon these advances seem, if nothing else, insensitive.

Further, few studies that approach open data actually enter into these technical, messy spheres, avoiding "engag[ing] with the slippages, confusions, and translations involved in these projects and then to theoriz[ing] what they might stand for" (Ballestero, 2012b, p. 161). There have been limited attempts to account for the modest operations involved in open data work, the ways of organising open data work, and the tools and methods that underpin outputs that draw from open data. This is particularly so in the case of Mexico and the wider Latin American region. Indeed, given the primary position Mexico has taken in international open data ranking and communities, it is surprising how few scholars from global North institutions have approached the Mexican case. And, when done so (Florini, 2007), these contributions lack the depth and nuance that would come from a grounding in Mexicanist and Latin American scholarship.

I was well versed in the grandiose critiques of transparency and datafication when I embarked on the primary period of fieldwork for this research project. However, the communities that assembled around Mexico's federal open data, and that I came to interact with during this research, pushed me to re-think many of my prior positions.² Entering the spaces in which open data were being utilised, I was surprised by how federal datasets were being engaged with and subsequently deployed. I came to interact with subjects who were, from my

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² A stylistic note: I have chosen not to capitalise *federal* when used in conjunction with *open data*. This is for two reasons: first, I am using *federal* as a generic adjective; second, open data are never singular (as in, datum) and so *federal* is never exclusive to a single entity.

perspective, very far from the "ciudadanos atrapados" (García Canclini, 2020, p. 10) that many now associate with digital activities. Instead, the practices and perspectives that I observed in these spaces pointed to much more complicated forces shaping engagements with open data, and the possibilities that could emerge from these deployments. The users of Mexico's open data were often critical users, very much aware of the forces that sought to "offer data in place of politics" (Birchall, 2021, p. 82). Yet, for my interlocutors, whilst recognising these forces and very much conscious of the constraining dimensions of digital life, open data remained a valuable resource not only worth engaging and deploying, but also maintaining and defending.

With the recent shift in presidential administration to Andrés Manuel López Obrador (2018-2024), the electoral success of the Movimiento Regeneración Nacional (MORENA) party and the inception of Mexico's *cuarta transformación*, federal open data have fallen down the list of national priorities, substituted for daily briefings in which the voice of the President has become the only "voluntad de apertura" (Peschard, 2020 [n.p.]). At the time of writing, Mexico's federal open data sit in a delicate position, close to entering the condition of "data rot" (Boellstorff, 2015, p. 104). To complicate further the contemporary milieu, several vocal, critical figures who have provided significant contributions to transparency debates in Mexico (particularly during the previous *sexenio* of Enrique Peña Nieto) have entered government roles, altering the tenor and vigour of their critiques.³ In May of 2021, numerous Mexican institutions collaborated to launch the inaugural *Conferencia Nacional de Datos Abiertos*. Whilst this moment could be perceived as signalling the continued ascendance of federal open data in Mexico, it was more accurately a rallying call to ensure that those who can, continue to demand and defend access to this public resource.

Inspired by the many committed individuals, and thought-provoking interventions and activities that I interacted with over this research project, I seek to approach open data-led transparency with nuance, not immediately writing it off as a neoliberal trap that carries little political potential. Instead, I hope to offer an analysis that responds to the contexts in which Mexico's federal open data are engaged with and subsequently deployed. Therefore, this study is driven by two primary research questions:

- (1) How are open data engaged and deployed, and what do these activities tell us about the limits of open data-led transparency?
- (2) How can open data be engaged and deployed in politically useful ways?

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³ Such as Irma Eréndira Sandoval Ballesteros, who left an academic position at UNAM to lead the federal Secretaría de la Función Pública, and John M. Ackerman another UNAM academic (and Sandoval Ballesteros' partner) who now offers much more supportive analysis of the López Obrador administration's transparency activities.

In building a response to these questions, I have deployed an interpretivist methodology. Instead of approaching open datasets as stable objects to be counted, I have opted to collaborate with those who regularly engage and deploy open data. I take seriously what can be learnt through the everyday activities of open data work. Instead of approaching open datasets as the dazzling outputs of a digital revolution, able to effect drastic social change, I remain attentive to how open data intersect with dynamics of power, attending to both continuities and discontinuities. Therefore, I do not take the disclosure of open datasets as equivalent to transparency, but instead, "start work where the unveiling ends" (Harcourt, 2020, p. 224), to see what possibilities these datasets hold for how we think about and stimulate political change. Thus, I hope to contribute to repositioning open data as a resource that can, when utilised in certain ways, assist in proposing, creating, and maintaining alternative political arrangements.

The shift in ambition that I propose in this study draws from and follows roughly ten months of fieldwork, engaging closely with *daterxs* and across Mexico's transparency circuitry. This involved a preliminary research trip in the summer of 2018, followed by an eight-month primary research period between July 2019 and March 2020, with subsequent digital fieldwork continued over the spring and summer months of 2020, and intermittently into 2021. Therefore, this study presents a unique collection of research materials to the reader, gathered through extended engagements in the field.

The terms just deployed – *daterxs* and *transparency circuitry* – are likely to be unfamiliar to the reader. They are heuristic devices that I deploy throughout this study. *Daterx(s)* is the collective noun I use to capture the individuals who come together to engage with and deploy open data within transparency activities and projects. The work of *daterxs* has clear resonances to Stefania Milan and Miren Gutiérrez's notion of "data activist", involving a series of practices "at the intersection of the social and the technological dimensions of human action" (2015, p. 127), in which activism is enabled by the "digital infrastructure that allows the managing, sharing, storage and use of data" (Gutiérrez, 2018b, p. 65). More specifically, *daterxs* fall into the subdivision that these authors describe as "proactive data activists": those "actively pursuing the exploitation of available data for social change" (Milan and Gutiérrez, 2015, p. 127).

Daterx was a commonly used term in the communities and spaces in which I conducted research. However, nuancing the work of Milan and Gutiérrez, it was certainly not a stable identifier. A *daterx* may at other moments (say, during the working week) identify as a financial

analyst, biologist, or front-end developer. Or, they may have once been a *daterx* but now find themselves more firmly aligned to other identifiers (say, public servant, hacker, community leader), sporadically returning to the *daterx* community as and when availability allows. Therefore, in this study, *daterx* is a term that takes on meaning whilst individuals are engaged in open data analysis and community spaces, typically participating in datathons, supporting an organisation in a particular analysis project, or collaborating with peers on their own open data-led transparency activities. In addition, connected through various digital platforms and physical spaces, *daterxs* meet to train, learn, and share skills amongst each other. This creates a shifting community, but one sharing in strong bonds of support, solidarity, and care. Mexico hosts a thriving *daterx* community, with many connections and interactions across hubs in Mexico City, Guadalajara, and Monterrey as well as other communities across Latin America. For reasons noted in chapter one, this study focuses on Mexico City's *daterx* community.

Daterxs are one component of what I am calling Mexico's transparency circuitry. This is a term that I did not come across during my fieldwork but is one that I have imposed onto this social world to write more cogently about it. Through this term, I seek to capture the network(s) of actors who come together to foster and support public interest in transparency activities. Particularly, in the case of this study, open data analysis activities. This involved several different nodes: local and national civil society organisations, international funding bodies, technology companies, academic institutions, professional associations, independent media organisations, and particular state institutions and agencies. Together, the transparency circuitry forms a very contemporary iteration of Mexico's "organised civil society" (Aguerre and Tarullo, 2021, p. 5). Many of these institutions and organisations have previously partnered on other issues and campaigns over the years, with open data the newest resource around which to pool their energies. The responsibilities they take on are numerous: providing physical spaces to meet; technical assistance and training; organisation and sponsorship of datathons, and other data analysis activities; the identification of useful open datasets, and even the provisioning of open datasets for investigation and analysis. Therefore, in the background of most open data-led transparency activities are a subset of components of Mexico's transparency circuitry.

A key objective of the transparency circuitry is the translation of open data-led insights and discoveries into transparency outputs. These may take the form of an *informe*, *diagnóstico*,

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⁴ A datathon (*datatón*) – a play on the word, hackathon – is a public event in which *daterxs* come together to learn about new data analysis tools and resources, then deploy and develop their skills through the analysis of open data, typically relating to a topic with some contemporary social relevance.

reportaje and so on. These outputs typically translate a technical, multi-stage data analysis into something that can be circulated and understood (and defended) across broader publics, sometimes even "forming a public interested in being informed" (Barry, 2010, p. 22). Therefore, components of the transparency circuitry also become the stakeholders and gatekeepers for transparency outputs. Following the circuitry analogy, they become the capacitors and resistors that *daterxs* regularly interact with during a project lifecycle. They undertake the task of quality assurance, guarding against "poor quality transparency" and "false transparency" (Michener and Bersch, 2013, p. 240).

Seeking to not only describe Mexico's contemporary socio-technical arrangement but also intervene in it, in chapter one, I detail how I came to gain access to Mexico City's *daterxs*, and broader transparency circuity. This pivoted on my ability to offer a range of complementary skills to open data analysis projects. Through doing so, my primary period of fieldwork involved assisting, collaborating with, and mentoring *daterxs* during their engagements with and deployments of open data. This spanned analysis projects that gained national media attention, to open data-led ventures that remain budding analyses that are yet to take their final form. These perspectives and experiences are complemented with materials gathered through interactions with projects in Mexico's cultural sphere. This includes both historical and contemporary experiments that have thus far not received analytical attention for their contributions to how we conceptualise the possibilities of transparency.

As this broad overview of my fieldwork suggests (given more depth in chapter one), this study has developed through an orientation towards research that favours intimate and responsive research relationships. I have termed this, an aesthetic approach. I understand this to be distinct from scholarly contributions that seek to define a particular aesthetic as emerging around data analysis activities and outputs. Instead, here, an aesthetic approach captures a particular orientation towards research objects and experiences. It is an orientation that requires research at a micro level, that can reveal forces that have repercussions at a macro level. It involves being attentive to the slippages, contradictions, and confusions that make open data, and then theorising what they may stand for. It involves cultivating a more openended sensibility towards the way power works through data, digital activities, and the ends to which they may lead. Through deploying an aesthetic approach in the field and during subsequent analysis of research materials, this study proposes a re-configuration of open data-led transparency. I argue that this re-configuration involves a double movement: a conceptual narrowing and expansion of open data-led transparency's possibilities. Whilst both movements require attention, it is the expansive possibilities that allow us to re-position open data as a material able to catalyse alternative political arrangements.

Following this introduction, in chapter one I set the scene for the conceptual and methodological interventions that thread through this study. I open the chapter with an exploration of an immersive exhibition from Grupo Proceso Pentágono, 1929: Proceso (1979). I draw on this work in order to propose this study's overarching argument: a shift in the ambition of transparency from eliminating the shadows and masks of the state, to outdoing the shadows and masks of the state. This involves a review of scholarly contributions that advance our understanding of the state from a rule-bound organisation, to a fluctuating set of shadows and masks through which power is arranged. Taking this literature seriously involves acknowledging a complex terrain into which transparency activities are to be deployed. Instead of ignoring this complexity, or proposing that it can be fixed, I draw from across a set of scholars in order to propose a mode of transparency that seeks to counter these masks and shadows through attempts to exceed, outdo, and do justice to them. This is an approach to transparency that I consider latent within 1929: Proceso, and later encountered in the field when interacting with daterxs and contemporary cultural producers.

Importantly, open data provide a useful material through which to undertake this task as they are productively open to different representational possibilities. Chapter one then details what I mean by the *openness* of open data. This requires thinking about open data not simply as data that are publicly accessible, but instead, as a material able to be drawn on for different interpretive acts, operationalised within diverse practices, and able to assert different responses from analysts and audiences. For daterxs, this means that open data animate ways of being engaged and deployed that should not be restrained, but instead invite interaction with this openness. Building this position requires a return to and re-evaluation of data's supposed crisis of representation. Chapter one then details the methods deployed during this project. I establish this study as a *multi-sited* study. This does not only mean that fieldwork took place across numerous geographical sites. More importantly, this study is multi-sited because it incorporates multiple vantage points gathered through the deployment of different methods, advanced further by the need to respond to the interruption caused by the COVID-19 pandemic. Given the rich materials that I gathered through deploying this aesthetic, multisited approach, I end chapter one by detailing the filters that have guided the selection of materials and construction of chapters. I justify my focus on projects that involved working with open datasets covering public budgeting and spending (excluding chapter six) - spheres of data and state activity typically ignored by social and cultural researchers of a critical orientation.

In part two of this study, I unpack the efforts towards narrowing the possibilities of open dataled transparency that I observed and participated in. To do so, I offer a three-part heuristic comprised of scale, scope, and proximity. Each chapter of part two focuses on a different dimension of this heuristic, and the ways *daterxs* both propose and negotiate this narrowing. Chapter two begins this task with the dimension of scale. After detailing the rapid expansion of Mexico's open data infrastructure, and its promise of open data-led transparency at scale, I argue that this promise of scale must be situated within efforts to further centralise power in Mexico. I propose that this offers a very contemporary iteration of *presidencialismo*. Identifying this dynamic complicates any simple alignment between open data and democratic advances. However, during my fieldwork experiences, I observed that *daterxs* often shun the possibility of broad panoramas of the state apparatus. Instead, *daterxs* regularly re-orientate their work towards detail, condensing datasets, and limiting the breadth of analyses. I evidence this narrowing through drawing on my participation as a mentor in a national anti-corruption datathon that was specifically designed to promote analyses at scale. Able to move across and between teams of participants, I detail how daterxs opted for other objectives during their analyses. Whilst producing a narrowing of possibilities, I argue that this constitutes a contemporary moment of open data-led counter-conduct.

Chapter three moves to consider the dimension of scope. Scope refers to the available field of tools and methods that daterxs deploy to explore the open data selected for analysis. Whilst open data are typically considered to offer expansive material for innovative experiments and analysis techniques. I detail how the interests of the transparency circuitry limit the available tools and methods to be applied by *daterxs* in the pursuit of a particular form of transparency output. During my fieldwork, I observed the deployment of a discursive gesture, análisis integral, used by figures within the transparency circuitry in order to guide the production of transparency outputs. Drawing on materials from a datathon focused on the analysis of open data on federal publicity spending, which I participated in over a number of weeks, I came to be confronted with the demand of producing análisis integral. Reflecting on the actions of my collaborator and I, as well as broader research materials, I consider the constraints this gesture places on the possibilities of open data-led transparency outputs. However, rather than position this gesture as indicative of a naïve alignment between datafication and empiricism, I think more broadly in terms of the context in which daterxs conduct their activities. I argue that this gesture is an attempt by the transparency circuitry to distance their own activities from the precarious position of the *periodista* in an increasingly violent Mexico - both offline and online. Yet, despite repeated attempts to ensure análisis integral, at times daterxs must stray from this path. I also observed the discursive gesture, análisis artesanal.

Reflecting on these moments, I use them to acknowledge open data's openness to other possible engagements.

In chapter four, I focus on the dimension of proximity. In this chapter, proximity is synonymous with positioning, and seeks to capture the situ from which *daterxs* undertake their activities vis-à-vis Mexico's state apparatus. First, I chart the emergence of *transparencia proactiva*, a paradigm which advantageously intersects with the acceleration of open data disclosures. Whilst *daterxs* take responsibility for the analysis required for making decisions and solving contemporary public policy issues, *transparencia proactiva* should also (in theory) offer *daterxs* space to create and advance a plethora of new vistas onto and about the state. However, through engaging a rich stream of literature exploring the Mexican state's representational repertoire(s), I detail the ways in which this space is undercut by the state continuously drawing the *daterx* into closer proximity. Through participation in a datathon led by a national champion of *transparencia proactiva*, I present the reader materials that illustrate the ways *daterxs* are kept in physical and metaphysical proximity to the state apparatus. For the *daterx*, the result is an inability to abstract or displace the state from the frame. Therefore, I make an unexpected link between open data and the weightiness of state – not its dematerialisation or making virtual, as may be expected in our digital present.

Part three of this study then turns to the expansive possibilities of open data-led transparency. In chapter five, I revisit a critique often directed at Mexico's rapid advancement in transparency rankings and indices: that this advancement presents *una transparencia simulada*. According to the proponents of this critique, this signals the dominance of a symbolic sphere of politics over structural reforms. This chapter reflects on my participation in a project that involved submitting over 130 *solicitudes de información* to numerous federal state entities. During this process, I observed and participated in the active deployment of *simulación* in order to obtain additional open datasets, and secure clarifications from data producing institutions. In the process, my collaborators and I took on fictional personas in order to successfully petition these federal entities. Noting that it was the most fictional *solicitudes* – submitted by the most imaginary (unlike ourselves) personas we developed – that were most successful in soliciting additional open data disclosures from the state apparatus, I reposition *simulación* from being a critique of transparency to grounds from which to engage open data and open data-producing institutions. Thus, we see evidence of this shift in the ambition of transparency from exposing the shadows and masks of the state, to outdoing these shadows and masks.

Chapter six then looks outside of the transparency circuitry and more directly into the sphere of contemporary cultural production. I focus on the transmedia project, DERIVA.MX. The films

that they produce and circulate are the result of a fascinating mix of data, algorithms, and cinematic processes that respond to key phenomena in Mexico's contemporary social and political context. What drew me to their work is the way their method for developing films points to an alternative approach to understanding and deploying algorithms – key tools in the *daterx*'s toolkit. Instead of using algorithms to analyse, condense, and produce a single output from which to action decision-making, the DERIVA.MX process uses algorithms to present the audience with multiple, colliding, and often confusing disclosures concurrently. With this process often resulting in a fascinating excess of visual data, I once again evidence this shift in the ambition of transparency towards outmanoeuvring the shadows and masks of the state, and so catalysing political contestation. Building from the outputs of this project, I consider how open data and algorithms can be put to work in ways that produce the possibility of alternative political arrangements.

In the conclusion to this study, I propose some of the practical ways these expansive possibilities can be engaged and deployed. I also consider how these activities may sit in contention with other observations drawn throughout the study. I then reflect on what alternative political arrangements an expansive open data-led transparency may encourage, proposing some of the limits to these arrangements. Noting that this study has taken place during a transition between federal administrations, each with distinct paradigms of transparency and prioritisations of open data, I end this study by noting the increasingly uncertain position open data and *daterxs* now find themselves.

Chapter one: Towards open data with politics

1a. Introduction

In a potentially unusual beginning to a study on contemporary open data work, in this chapter I take the reader into an exhibition from 1979, titled 1929: Proceso. Exhibited by Grupo Proceso Pentágono within Mexico City's Galería del Auditorio Nacional as part of that year's Salón Nacional de Artes Plásticas: Sección Anual de Experimentación. I turn to this exhibition as I intend to position contemporary open data-led activities within histories of the representation and exposure of the Mexican state's manifold shadows and masks. By doing so, we are then able to distinguish both continuities and new possibilities for daterxs today.

Following an introduction to 1929: Proceso, I plot how Mexico's history of state formation and political culture provide ample space to rethink how transparency emerges in and across political arrangements. I then turn to detailing the particularities of Mexico's recent turn to open data, and how open data's openness calls for an aesthetic approach. In the final sections of this chapter, I detail the interpretivist methods deployed in this study and how research materials were filtered and selected for presentation to the reader.

1b. 1929: Proceso

Had I been around to attend the exhibition, I would have approached with trepidation. On my approach, the smell of burnt oil would have hit the nose and the ground pulsed with the vibrations of a thundering radio. Then, I would have confronted the soaring, bare wall that marked the entrance to 1929: Proceso. Constructed as a 400m² installation, this vast structure mimics a police station comprised of a warren of different spaces through which I must slowly pass. My stomach clenches as I step into this space.

Oblivious to the presence of two figures lurking in the shadows of the entrance, my hand meets the cold edge of a clipboard. My fingers tighten on its surface, although my eyes remain fixed on the space in front of me, acclimatising to the darkness. I move forward, turning the first corner. Flashes of a strobe waylay my newfound grasp of this darkness. Through the tracks left by the strobe, I see a dirtied sink, its dulled chrome surface stained with splatters of dark red, escaping out onto the white ceramic tiles that frame it. My heart-rate lifts again. Above these tiles, a line of metal torture devices hang like kitchen utensils. Pincers, prongs, tongues.

As I pass in front of this scene, I catch the reflections of the other visitors standing behind me and I remind myself that I am in an art installation. My nerves calm. I use

the opportunity of the next turn of the strobe light to finally look more closely at the clipboard, onto which is fastened a questionnaire. (Fieldnotes, July 2018)



Figure i: Author's image of an archived image of the entrance to 1929: Proceso (MUAC, 2014d).

This is how I imagined my entrance to *1929: Proceso* would have been as I sat in the Grupo Proceso Pentágono archive, my hands cased in latex gloves under the fluorescent lights of the Arkheia.⁵ Whilst I sat in this sharp luminosity, I stared at black and white images of the obscure rooms of a fictional police station, piecing together the different spaces of this mammoth installation.

Like the members of Proceso Pentágono, many younger artists passing through Mexico's principal art schools of San Carlos and La Esmeralda were uncomfortable with Mexico's post-revolutionary political arrangement. There was disappointment in what had culminated in "una revolución congelada" (Gleyser, 1971 [n.p.]). The *Partido Revolucionario Institucional* (PRI) is indirectly referenced in the work, with 1929 referencing the year in which the party was

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⁵ The archive of the Museo Universitario Arte Contemporáneo.

founded and the exhibition taking place in the shadow of the party's fiftieth anniversary celebrations. For these artists, critiquing the PRI-state's authoritarian practices required abandoning their representational emphasis on muralism and pictorial chronicling, and so drawing on alternative artistic strategies (McCaughan, 2012, p. 14).⁶

The archived images and documents depict the eighteen months of investigation, research, and production that went into the development of 1929: Proceso. Such painstaking work was required if Proceso Pentágono were to construct a convincing window into the Mexican state's repressive techniques. As Néstor García Canclini noted in the exhibition's catalogue: 1929: Proceso was able to "captar la realidad de México" – a reality that also resonated across other Latin American contexts (1979, p. 3). In constructing a life-size replica of a police station-turned-torture facility, this work allowed the visitor to "entrever los procedimientos burocráticos y políticos" (García, 2015b, p. 31) of the PRI-state. It created a fascinating and terrifying semi-index of contemporary state practices that were supposed to be kept secret, revealing the brutality of Mexico's supposed dictadura perfecta (Vargas Llosa, 1990). Through 1929: Proceso, the PRI-state's deployment of torture, brutality, and disappearance were revealed not to function according to the logic of the sovereign's "lightning strike" (Massumi, 2015, p. 5) – a flash decision of power within "anomic space" (Agamben, 2005, p. 48) – but according to tedious processes of planning, calculation, and collaboration.

According to Álvaro Vázquez Mantecón, the explicit engagement with the political in the work of Proceso Pentágono set them aside from other contemporary artists.⁷ In a later text addressing the broader corpus of Proceso Pentágono, Cuauhtémoc Medina and Oliver Debroise note:

Por su parte, la preocupación de Proceso Pentágono por temas como la tortura en América Latina y la 'guerra sucia' contra los grupos guerrilleros en México lo situaba como un colectivo donde la discusión sobre la realidad política y económica tenía un lugar importante. (2006, p. 197)

This sense of their works capturing reality *as-is*, of an indexicality to the contemporary milieu of Mexico emerged through clear specificities within their works. As well as the reference to the PRI in the exhibition's name, *1929: Proceso* included a photomural of Mexico's Cámara

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⁶ In this study, PRI-state refers to the "single-party rule" that held in Mexico between 1929-2000 at the federal level (Smith, 2005, p. 424). However, as Alonso Lujambio (2000) noted, Mexico experienced a more gradual opening towards alternative political parties at a municipal and state level from the mid-1980s onwards.

⁷ Indeed, Proceso Pentágono are considered amongst the initiators of the movement that has come to be known as *conceptualismo ideológico latinoamericano* (Carmen Ramírez, 1999; Camnitzer, 2007; Gilbert, 2009; López and Watson, 2010).

de Diputados, a framed image of then president, José López Portillo y Pacheco (1976-1982) and current copies of the newspaper, *Unomásuno*. Whilst clearly fictional, these months of research and production enabled the visitor to "look deep into this institution arrangement" (Meijer, 2009, p. 258). In this way *1929: Proceso* could be positioned very much within the context of a post-1968 transparency paradigm with transnational resonances.

1968 was a watershed year in Mexico, with the state sponsored Tlatelolco massacre, the ensuing media and elite cover-up, and subsequent celebrations of the Mexico City Olympics. Globally, 1968 was also a year of student and labour-led revolts in major cities across the world, with repercussions for how logics of power were understood and contested. As Stefanos Geroulanos noted in *Transparency in Postwar France* (2017), in the era preceding 1968 transparency and related terms had become subject to deep suspicion. For the generation that had come of age in the 1930s and early 1940s—under the influence of thinkers such as Georges Bataille, Claude Lévi-Strauss, Jacques Lacan – to propose that social and epistemological complexity could be easily resolved was itself distorting. For Franz Fanon ([1952] 2008), the promise of unravelling reality's many knots, with this unravelling undertaken by colonial powers, meant that transparency became a deeply violent objective.

Yet, the events of 1968 marked a pause in the growing suspicion towards transparency. In the rush of strikes, revolts, and massacres there was a greater urgency towards immediate political demands – "the whole philosophical line of the critique of transparency was side-lined as an abstract matter of discourse and epistemology" (Geroulanos, 2017, p. 171). It may initially seem appropriate to place 1929: Proceso within this hiatus in critical thought in which transparency – a clear look into the obscure spaces of powerful institutions – re-emerged as a sensible and feasible demand to make. However, distinct from many of the contemporary reflections on 1929: Proceso to be found in the archive, I interpret 1929: Proceso to be a work that seeks more than transparency as the construction of a life-like window into bureaucratic shadows. 1929: Proceso did not engage in mimicry, but the production of "a difference that is almost the same but not quite" (Bhabha, 1997, p. 157).

Archived images also document the lengthy production process displaying the prior, low-tech experiments undertaken by Proceso Pentágono to construct this immersive experience. Leafing through this archive, there emerges the sense that despite the artist's close attention to realistic detail, there is also something deeply melodramatic about this exhibition. In one image, a mannequin has blood smears running down its chest. In another image, members experiment with thick electrical wire twisted into menacing shapes. There are also elements that are almost farcical: vogue jars filled with bloodied body parts, mannequins blackened with

paint as if torched. The artists' efforts at indexicality are also accompanied by other registers of representation, gesturing towards a potential alternative ambition for transparency that I will return to below, and that threads throughout this study.



Figure ii: Author's image of an archived image of 1929: Proceso (MUAC, 2014b).



Figure iii: Author's image of an archived image of 1929: Proceso (MUAC, 2014e).

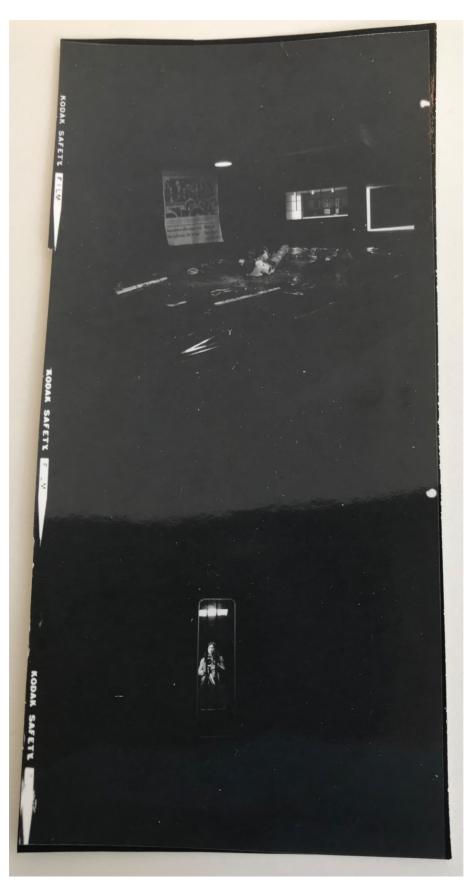


Figure iv: Author's image of an archived image of 1929: Proceso (MUAC, 2014c).



Figure v: Author's image of an archived image of 1929: Proceso (MUAC, 2014f).

1c. The state: from statutes to shadows and masks

Classic thinkers in Liberal political thought offer encouragingly simple guidance for the production and maintenance of transparent political arrangements. This guidance is typically dictated in a list of requirements that, when followed, produce a formally structured state apparatus through which decisions are neatly tracked and responsibilities clearly defined. In Jeremy Bentham's text, *Of Publicity* ([1843] 1999), formal interventions are proposed to ensure the transparency of political assemblies through the production of written records such as registers of attendance and minutes of meetings. Despite Bentham's deep suspicion of the personal interests of those holding political power, these formal instruments come to hold

sway over any illicit intentions. These records can then be scrutinised by a public that can hold these assemblies to account. In their analysis of *Of Publicity*, Dilip Parameshwar Gaonkar and Robert McCarthy emphasise Bentham's endorsement of the written form, which is considered much more fixed and reliable than speech (1994, p. 19). In Bentham's broader *An Essay on Political Tactics* ([1843] 1999), this public is split into three classes, with only an elite minority having the rational capacity to fulfil this gatekeeping role. Nonetheless, assemblies continue to function as designed because these elite observers can communicate their findings outwards towards the broader public.

Writing in the early twentieth century, Max Weber offered extensive reflections on the state as a rule-based administration. Weber famously proposes that the defining feature of the state was its right to define the legitimate use of violence. However, Weber also recognised that a state has to offer more than just the threat of violence in order to gain "legitimate validity" ([1922] 2019, chap. 1 §7). According to Weber, a state's legitimate validity can and should be established by rational, legal means – the "modern form of rule" (ibid., 3 §3,5). As the only alternatives to legal rule are traditional or charismatic rule – neither able to ensure "impersonal authority" – these cannot be regarded as "specifically modern" (ibid., 3 §4). Therefore, "purely bureaucratic administration—monocratic, documented administration—is the most formally rational way of exercising rule" (ibid., 3 §5).

This rational way of ruling requires bureaucratic authority as staff and administrators (anyone under the leader) are bound by rules governing their conduct—Weber's famous system of *statutes*. Bureaucracy emerges through this existence of rules, the imposition of objectives, and the demarcation of impersonal authority. Echoing Bentham, Weber emphasised writing and paperwork as essential for the "continuing conduct" of legal rule (ibid., 3 §3). Those skilled in writing and record-keeping are then occupied with specific tasks in a detailed division of labour within a strict hierarchy, enforcing conformity and ensuring the endurance of social processes through the restriction of activities towards organisational objectives. This ensures a "predictably obedient group of men and women exists whose action is dedicated to the execution of general directions and substantive commands" (ibid., 3 §1). Rule-bound bureaucracy directly produces transparent institutional arrangements as all statutes are publicly available and verifiable by constituents, and all statutes are followed to the letter, ensured by the state's ordered bureaucracy (ibid., 3 §3). In effect, there is no backstage to the state from a Weberian perspective.

Following Weber's thinking, this rule-bound, transparent bureaucracy becomes the "inescapable shadow of mass democracy" (ibid., 3 §5). Reflecting this direct link between

transparency and democracy, Mexico's first formal transparency interventions emerged within a set of selective democratic reforms under the presidency of López Portillo y Pacheco. A series of fourteen constitutional amendments were introduced that came to be known as Portillo's *reforma política*. As well as legalising electoral competition to the PRI, the reform also included an amendment to *articulo seis* of the Federal Constitution such that: "El derecho a la información será garantizado por el Estado" (Diario Oficial de la Federación, 1976, p. 31). Yet, there seems little correspondence between these classic approaches to the state and Mexico's historical and contemporary political arrangement, impelling critiques such as that of 1929: *Proceso*.

Despite the critique offered by Proceso Pentágono, the reader may first question whether transparency was even a demand made of Mexico's political arrangement. According to Fernando Escalante Gonzalbo (2007), up until at least 1982, there was a corporatist *pacto* between state and society that meant that few questions were asked, allowing the state activities to continue without oversight of the public. The post-revolutionary *pueblo* was promised access to land, social rights and protections relating to work, housing, education, health, and land in exchange for loyalty and obedience to the regime (Córdova, 1973, 1974; Padilla, 2008). This exchange gave rise to what Octavio Paz titled *El ogro filantrópico* (1979), or what Claudio Lomnitz later described as a "massified" form of social citizenship (1999, p. 289).

With the PRI-state emerging from a geographically diverse and decentralised *junta* of revolutionary victors (Córdova, 1980; Ganido, 1982), meeting these corporatist demands soon necessitated an increasing concentration of decision-making at the Federal level (Centeno, 1997; Smith, 2014). Thus, creating a nucleus of power that could at least be spatially located and identified according to specific institutional names. However, this formalisation also had the subsequent effect of creating renewed space for isolation and contestation at local levels (González, 1968; Rogelio Hernández, 2008). According to the changing persuasions of presidents, international forces were then inserted into this turbulent scene of state development and consolidation, with Mexico undergoing a "180 degree turn" towards

⁸ This process is typically described as *Cardenismo*, taking place under the presidency of Lázaro Cárdenas (1934-1940).

⁹ Extant scholarship tends to point to the presidency of Miguel Alemán Valdés (1946-1952) – *Alemanismo* – as the closest the PRI-state moved to a united, routinised, and coherent organisation (Medin, 1990; Niblo, 1999; Navarro, 2010). However, these organisational advances took place under Alemán's "unilateral" form of autocracy (Niblo, 1999, p. 45) and so still at quite a distance from Liberal ideals.

international markets and the USA (Davis, 1992, p. 669). Further, whilst doling out increasingly scarce benefits to supporters, the PRI-state was simultaneously amassing resources through far-reaching coercive, extortionist practices (Flores Pérez, 2009; Pansters, 2012), undertaken through both official institutions (Maldonado Aranda, 2012; Aguayo, 2014) and unofficial actors (Astorga, 2005; Cedillo, 2011).

For this current study, what is most instructive in the scholarship noted above is that, despite different historiographical trajectories (cf. Rubin, 1996; Knight, 2006), each contribution demonstrates that the development of the Mexican state has taken place according to distinct logics, behaviours, and actors to those set out in the classic theories. Thus, our starting point for thinking about the possibilities of transparency cannot take the putative end-state of a neatly identifiable, independent, coherent, fully crystalline state apparatus as our objective. Indeed, far from Mexico's first reforms leading to the formation of bureaucratic discipline, Juan Francisco Escobedo noted that even after Portillo's *reforma política*, across the PRI-state there was the continuation of:

El secretismo, la discrecionalidad, la manipulación de los documentos oficiales, la destrucción de archivos históricos y de gestión, la impunidad en el uso de la información pública y la protección de los funcionarios frente a la indefensión del ciudadano. (2010, p. 12)

According to Knight's analysis, in the context of Mexico "Major decisions – such as the 1982 bank nationalization – can emerge from small kitchen cabinets" (Knight, 1996, p. 11), emphasising the way power was wielded with a high degree of secrecy and uncertainty, even around fundamental issues of the day.

A state that takes shape through secret negotiations and pacts has been conceptualised in diverse ways, often building on Elias Canetti's claim that power is closely bound with secrecy – *arcana imperii* ([1960] 1978, p. 43). John Gledhill's scholarship identified a "shadow power" that emerged within and around Mexico's political elite, "depend[ent] on the way in which actors with diverse interests are willing to allow a lack of clarity to prevail" (1999, p. 221), ensuring that unelected officials and potential beneficiaries are shielded from public scrutiny. For Gledhill, the "culture of the state" in Mexico came to rest on the twin idea that "the law was not a totally dead letter but that the wheels of justice fail to grind without engaging the shadow powers behind the legal apparatus" (ibid.). Whilst the legal apparatus may align somewhat to

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¹⁰ This process is typically described as *Salinismo*, taking place under the presidency of Carlos Salinas de Gortari (1988-1994), with staggeringly adverse repercussions for the vast majority of Mexicans (Castillo and Salgado, 2016, Herrera, 2019, Aranda Maldonado, 2012).

Weberian codes of statutes and neatly partitioned divisions of labour, there is another sphere of activity that defies any attempts to make known or understandable the workings of these agents, and their activities. Shadow powers, by definition, cannot be laid bare through any formal encoding. Echoing Slavoj Žižek (1997), any attempts at illumination only work to displace these shadow powers to new spaces. The ever-shifting presence of these shadows means that the institutionalisation of power and its codification into a transparent structure becomes a categorically unfeasible objective.

Yet, whilst not functioning according to written statutes, there are levels and hierarchies in this shadow space, with tasks dispersed and rewarded accordingly. Indeed, an important nuance of Gledhill's work is its recognition that shadow powers did not solely emerge through the closure of Mexico's own political elite, but also through interaction with the shadow powers of the northern elites of the USA and international institutions: "it is difficult to preserve that what happens north and south of the border belong to completely separate worlds" (1999, p. 226). 11 Both nationally and internationally, this approach to understanding state activities emphasises the role of the intermediary, the *prestanombre*, orchestrating the secret meetings and exchanges of illicit products and funds whilst public officials sit calmly at their desks, or attend ribbon-cutting events. Carlos Cabal Peniche, a business administrator-turned-dark-money financier of the Miguel de la Madrid (1982-1988) and Carlos Salinas de Gotari (1988-1994) presidencies, is exemplary of this *prestanombre* figure. Despite serving a substantial prison sentence for fraud, he has recently re-emerged as having close connections with fellow tabasqueño, President López Obrador (Infobae, 2020).

In a recent contribution, *Negocios de sombras* (2020), Carlos Antonio Flores Pérez pushes our thinking in terms of shadows and the Mexican state in an alternative direction. Rather than being ancillary to the legal apparatus that Gledhill identifies, for Flores Pérez, shadows and the negotiations that take place within them are the very basis of the state. Building from the work of Charles Tilly (1985, 1992), Margaret Levi (1989), and Luis Astorga (1995) that emphasise the predatory origins of states, Flores Pérez proposes that shadowy spheres allow for "la administración de regímenes punitivos [que] le permite configurar circuitos institucionales con fines ilícitos" (2020, p. 36) that become the basis for hegemonic power and

¹¹ This influence has ebbed and flowed and shifted between public and private interests. However, particularly since the presidency of Alemán and the creation of a Mexico's Direción Federal de Seguridad (backed by the USA's Central Intelligence Agency) historians have found significant evidence of northern interests in domestic decision-making, spanning Mexico's economies and regions (Jefferson, 2008; Navarro, 2010; Aguayo, 2014).

the socio-political force we have come to recognise as the Mexican state. ¹² With an empirical focus on the post-revolutionary history of the state of Nuevo León, but identifying networks with national and international repercussions, Flores Pérez argues that shadows and illicit activities, such as dealing contraband and drug trafficking, "no surgen ni operan en los 'márgenes' del Estado, son el núcleo del Estado" (2020, p. 28). From this perspective, the *prestanombre* holds reduced significance as those with institutional positions are themselves directly involved in these shadows. Indeed, it is through increasing involvement in illicit economies that individuals gained "major influencia en la estrustura estatal" (2020, p. 35), and so reaped further benefits and higher institutional positions. Thus, Flores Pérez warns against the contemporary language of describing the Mexican state as being "penetrated" or "infiltrated" by predatory activities and illicit actors, proposing instead that "son funcionales a quienes, en los hechos, lo configuran" (2020, p. 28).

Whilst Flores Pérez's work strongly argues that state is in fact a constellation of shadow negotiations and relationships, this contribution simultaneously brings into question the suitability of the shadow as a helpful heuristic to think about these dynamics. For, these "redes de poder hegemónicas" (ibid., p. 57) were not so set in the shadows as we may have assumed. Following the extensive and far-reaching archival work of Flores Pérez, the construction and consolidation of these networks is not only evidenced in the secret archives of security agencies and high-profile plea bargains, but also in the society pages of newspapers that documented the strategic marriages between powerful families, and the attendees of sumptuous parties hosted by politicians and business leaders. Therefore, the figures and relationships positioned within the shadowy networks identified by Flores Pérez are simultaneously named, pictured, and cited on numerous occasions and across a plethora of sources. Reading against Flores Pérez, these shadows may not be as opaque as we may have once assumed, or perhaps, they do not need to be as opaque as we would like to think they need to be. Secrecy may not be so essential to power as Canetti theorised. Instead, Negocios de sombras implicitly directs us to think about the ability to hold both institutional positions, public credibility, and illicit interests together within the same figure (or family, or institution). The ability to move and swap between these spheres and activities suggests something more akin to the mask. Therefore, it is necessary to enhance our theoretical approach by drawing on additional streams of scholarship.

¹² It is important to note that Flores Pérez is not using hegemony in the Gramscian sense (further explored in chapter four), but as a phrase to capture a mode of power that seeks "supremacía, predominio, dirección" (2020, p. 28).

Scholars have also used the idea of the mask – holding significant conceptual importance in the Mexican context thanks to the work of Octavio Paz ([1950] 1981, pp. 10-17) - to understand logics for organising power in Mexico (Taussig, 1999; Escalante Gonzalbo, 2007; Suárez Salazar, 2017). Approaching the mask at an individual level, Claudio Lomnitz proposed that masking works to de-emphasise the individual, allowing for "una maniobra brechtiana" (1996, p. 42) that allows for a split between individual image and action. The mask is the public-facing façade of legality and formalised conduct. This mask is hardened through appeals to formal credentials, such as degrees from western universities, associations with religious organisations, and conservative values. Forging this mask is now the job of the public relations industry (Eréndira Sandoval, 2014). Whilst this mask should be subtle - not noticeable as performance - it must simultaneously be thick, refracting any attempts to penetrate behind it. The mask can easily be removed when required, and so the same individual can act in both the formal and illicit spheres. Genaro García Luna is a recent example of this masking in practice. As the top-ranked official in Mexico's public security apparatus between 2006-2012, Garcia Luna headed counterinsurgency efforts against drug trafficking organisations across Mexico. Then, in December 2019, Garcia Luna was arrested at Dallas airport and charged with receiving bribes from Beltrán Leyva and the Sinaloa cartels. Thus, whilst wearing the General's uniform and the highest honours of the Mexican military establishment on his lapel, Garcia Luna was accused of using the Blackberry device concealed in his pocket to arrange cross-border drug shipments (Castañeda, 2019; Castañeda et al., 2020).

The idea of the mask and subsequent "unmasking" (Baehr, 2019, p. 2) can also work at a broader, conceptual level. In the context of Mexico, this approach has been elaborated by Gilbert Joseph and Daniel Nugent, drawing on scholarship of Philip Abrams ([1977] 1988). Abrams posited that the state is itself a mask that prevents our "seeing political practice as it is" (ibid., p. 58). What Abrams means by this is that the state is not a unified, reified subject or structure but only a collective illusion. For Abrams, "The state... is not an object akin to the human ear. Nor is it even an object akin to human marriage. It is a third-order object, an ideological project. It is first and foremost an exercise in legitimation" (ibid., p. 76). Further:

the state comes into being as a structuration within political practice: it starts its life as an implicit construct; it is then reified... and acquires an overt symbolic identity progressively divorced from practice. (lbid., p. 58)

This reification means that even across deep political divides, "conservatives and radicals alike believe that their practice is not directed at each other but at the state; the world of illusion

prevails" (ibid.) As Begoña Aretxaga goes on to note in the context of Spain, "This illusion is sustained in no small measure by the shroud of secrecy surrounding the 'being' of the state" (2000, p. 43). Thus, the political value of this mask is not so much its covering of a dark void, but its deflection of our attention away from the substantive institutions and processes that secure domination. Therefore, any "gaze into the labyrinthine 'interiority' of the state being does not necessarily dispel its 'magical' power" (ibid.). Instead, any attempts to gaze into the state augments it by "triggering an endless proliferation of discourses about the state in the most diverse areas of social life", making it an "all-pervasive ghostly presence... an unfathomable power which can shape social life as a dangerous universe of surfaces and disguises" (ibid.). Therefore, the state itself is "constituted through the narrative proliferation of excess, but that is constituted as nothing but excess" (ibid., p. 53).

Following this forceful stream of literature, the reader may fairly reckon that thinking on transparency has arrived at an impasse. The logic of exposure and revelation, in the context of Mexico's political culture (although, not unique to Mexico), appears only to function as a buttressing force to existing political arrangements. There is no accountability accomplished over shadowy spheres or the dissolving of deceptive masks, but only the faintest fracture of light that is quickly converted into a moment for immunisation against future threat. The end-state of transparency seems a mere delusion that can only function to divert attention from the deeper dynamics at work within and around powerful institutions and power brokers.

Yet, as the reader is also aware, the purpose of this study is to develop a path that steps back from a rejection of the possibilities of transparency. To be clear, whilst I agree with the position that argues that the idea of a crystalline state structure is an objective to be discarded, I do not concede that transparency activities necessarily spark an endless proliferation of disclosures that have little political value, and so should be abandoned. The state apparatus is certainly elusive. However, the state simultaneously pivots on something substantive and weighted that can be the subject of investigation and knowledge production. There are actors and processes organised into configurations that, whilst shifting and evolving, are essential to power and have consequences for political subjects. Following Bob Jessop, we must "recognize rather than ignore the messy, polymorphic, and polycontexctual features of the state" (2016, p. 16). Responding to Abrams, we do not necessarily need to reify the state as unitary, separate, and functional in order to develop politically useful knowledge about it. Whilst recognising that the state does not "always already exist" we can still hold space for the study of "efforts by state personnel and others to impose some provisional, temporary, and unstable unity on the actually existing state system and to create relative coherence across official policies in diverse fields of action" (Jessop, 2016, p. 18). Therefore, echoing the work

of Jane Schneider and Peter Schneider in the sphere of Italian state-mafia relationships, "The inevitable uncertainty of knowing should not, in other words, be conflated with a blind conviction that there is nothing to be known, even in the realm of deep politics" (1999, p. 194). Instead, we must remain attentive to the "imperfect outlines" of the "structures of power" that emerge in moments of political transparency (ibid.).

To proceed, this study proposes that we need to reconsider how we think about transparency and the activities undertaken in its name. To begin this task, I first turn to Michael Taussig's work, whose interrogations of the "more-than-rational" (1997, p. 4) dimensions of the study of the state have been useful to think through the research materials I gathered for their emphasis on the idea of a revelation that does justice to the secret.

1d. Doing justice to shadows and masks

Much like Abrams' and Aretxaga's scholarship, Taussig first identifies the process of exposing shadows and masks as circular, "[f]or with unmasking, discovery gives way to recovery" (1999, p. 134). Following this logic, the process of unmasking often actually works to strengthen the mask. However, Taussig also identifies a logic in which what is recovered, once read back through the disclosure, is "not so much an item of remembrance but something new that emerges from the charged juxtaposition of present with past, creating... a mystical fusion of the imaginary with the real" (ibid. [italics original]). This, as termed by Taussig, is the "labour of the negative" that converts "the negative into being" (2006, p. 93).

In exploring this form of critical thought and action, Taussig identifies the potential for ruptures with this self-enforcing circularity of revelation and concealment. Taussig extends our thinking – and provides an alternative route to the directions offered by Abrams and Aretxaga – by proposing that the mask, the secret, the shadow is only strengthened through exposure until met with a revelation "that does justice to the secret" (1999, p. 167) – a line of thinking that Taussig draws from Walter Benjamin ([1928] 2003). In these moments, there emerges a break in this self-enforcing logic of revelation and concealment, giving way to "a Swiss-cheese reality of unexpected shapes and irregularly shaped holes" (Taussig, 1999, p. 60). This rupture in the logic of revelation and concealment reconciles towards a surfacing in which this social articulation can change the direction of travel (or not). Circularity then resumes, but from a different threshold.

In these momentary breaks, where "confusion" meets "counter-confusion" (Taussig, 1997, p. 125), there is the potential for developing insight and understanding of the "gargantuan

enterprises" on which "the ship of the state rest" (ibid., p. 144). This is not to say that we grasp this enterprise as a whole, but instead garner insightful "swerves and flows" (Taussig, 2006, p. 40) that prove essential material for interpretation. Whilst this certainly does not produce anything close to "the permanence and clarity that comes with [the material] marble", for these are revelations that are "bound to intermittence, transposition, and shock" (Taussig, 1997, p. 184), they do provide for deeper awareness of social processes and political arrangements.

Here again we see the influence of Benjamin, whose Theses on the Philosophy of History ([1968] 2007) – one of Benjamin's more esoteric texts – encourages readers to grasp knowledge as it appears, in "flashes": "to articulate the past historically does not mean to recognize it "the way it really was" (Ranke). It means to seize hold of a memory as it flashes up at a moment of danger" (ibid., p. 255). Avoiding the presentation of any totalising account or narrative, Benjamin encourages us to remain open to streams of consciousness. As expanded by Yael Navato-Yashin, Benjamin encourages us to draw on "that which is not stable, not re-articulable, but which blinks, momentarily shows itself, and escapes" (2002, p. 15). A call for attention to these flashes finds parallels in the work of Roger Bartra who warns contemporary researchers not to seek settled moments of "[Hegelian] synthesis", but instead consider moments of "mediation" around "articulation points" that can be similarly evasive but also powerful for political and social understanding (2012, pp. 13, 31, 104).

The elaborate work of Taussig is primarily interested in moments in which these illuminating flashes then lead to further concealment, the secret further transformed into a "deeper" or "public secret": "that which is generally known but cannot be articulated" (Taussig, 1999, p. 5 [italics original]). Therefore, I interpret Taussig as offering a triadic schema for thinking about transparency activities. First, a mundane logic of transparency that does little more than sustain the field of masks and shadows. Second, engagement with these masks and shadows that (at least) attempt to do justice to them. ¹³ Third, moments where these revelations are reconcealed. It is this second sphere of transparency activities that is of key interest to this study. Whilst exposures that do justice to the secret is a premise for their conversion into public secrets (this third sphere of transparency activities), I do not follow Taussig so far down this provocative conceptual path. Conscious that this may be received as theoretical cherry-picking, I am nonetheless taken by this second transparency logic and have found provocative traces of it during my fieldwork experiences.

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¹³ It is worth noting that Taussig also sees this dynamic functioning in reverse, with state attempts to reveal social masks also strengthening these masks. To make this argument, Taussig draws on Subcomandante Marcos, leader of the Zapatista uprising in Chiapas in January 1994. Whilst the masked figure was ostensibly unmasked by state security forces, just days later this unmasking was followed by many thousands more donning the black ski mask of Subcomandante Marcos (1999, pp. 236–248).

A particular advantage of Taussig's writing is that it offers a vocabulary and approach to engaging transparency activities that does not immediately follow the path of post-Marxist scholarship on ideology (cf. Horkheimer, 1937). Such interpretations would analyse transparency activities through the lens of false consciousness, with the practices and outputs of open data-led transparency offering moments in which the veil is pierced, leading to recognition of the distortions that obscure contradictions, and so activating the true interests of the masses (Baehr, 2019, p. 19). However, despite similar concerns and scholarly influences (namely, Benjamin), I am keen to maintain a separation between Taussig's approach of seeking to do justice to secrets and the advances of the Frankfurt School. This is primarily because in Taussig's account of these moments, emerging in the anthropological texts that form the basis of this analysis, they are not due to the impetus of the critical scholar but instead, emerge through the activities, productions, and practices of those who are themselves kept by secrets and logics of concealment. Further, in Taussig's exploration there is no sense of true interests or an authentic subject who has been released from the grip of ideology. Defacement does not point towards a post-defacement settlement or a postideological truth.

Through sustaining this difference, I see a useful overlap between the work of Taussig and the more contemporary contribution of the political and legal scholar, Bernard Harcourt. Harcourt is hesitant to adopt an approach to scholarship that solely engages in "the exercise of exposing illusions" – indicative of both a Kantian and Marxist split between knowledge and the perceived world (2020, p. 35). Instead, in *Critique & Praxis* (2020) Harcourt proposes that the researcher is always necessarily situated within "a historical transformation that he or she forms part of and fuels" (ibid., p. 36). There is a constant process of "denaturalization" in which settled beliefs come to show themselves to have been illusions: "illusionary beliefs that prevent people from realizing change or reshaping history and their world" (ibid., p. 45). In calling for a radical theory of illusions, Harcourt insists that:

What matters is that we do not reify what is unveiled or stop being reflexive... Precisely because of its reflexivity, historicity, and constructivism, critical theory is not a *basanos* that creates and tests truth, but a constant critique that unveils recurring illusions. (Ibid., p. 46 [italics original])

As such, "There must be a GPS-, a time-, and a date-stamp for every answer" that any transparency activity contributes" (ibid., p. 49).

Going a step further than Taussig's contribution, Harcourt directly engages the question of why we should engage in this infinite regress of "recursive unmasking" (ibid., p. 46). For Harcourt, a commitment to endlessly exposing, unmasking and secret-telling pivots on these activities' potential to challenge distributional effects and enduring material conditions (ibid., p. 221). For instance, Harcourt's prior scholarship (2011) engages in a sustained unmasking of the illusion of the free market.

Despite now having a clear motive for why we should want to engage in transparency activities, a significant question remains as to what may come to comprise an exposure that does "justice" to the secret. As Navarro-Yashin writes, "Benjamin's aphorisms are much more insightful as a strategy of tracing the political than a research strategy or anthropological methodology" (2002, p. 15). Like Benjamin and Taussig, Harcourt pushes the reader "not simply to understand, but to deploy the infinite regress of interpretations" (2020, p. 215). This is then followed by a call to "offer better and more compelling interpretations... in the sense of exceeding the illusions we encounter" (ibid.). But again, guidance on how to identify this type of work in action, or even undertake this critical work of exceeding illusions, are sparse.

Returning to Taussig, few clear instructions for recognising these consequential, secondary expository logics can be found. Yet, reading across the moments explored by Taussig in numerous texts, what I find of particular interest is how this logic requires engaging representational objects – masks, body paintings, sacred instruments, alters, statues, flags, official documents – at the limits of their representational capacities (1997, pp. 36, 125, 1999, pp. 19, 50, 129, 210, 246, 2006, pp. 136, 154), moving towards "a discharge of the powers of representation" (1999, p. 256). This draws heavily on Benjamin's prior idea of "profane illumination" (cf. Cohen, 1993) in which illumination produces a "sense of mystery mixed with revelation" (Taussig, 1999, p. 167). According to my own reading of Taussig, doing justice to the secret – or, at least attempting to do justice to the secret – requires working across and at the extremes of representational registers, attempting to deploy representations of these shadows and masks to exceed those that keep these shadows and masks in place.

I now return to the work of Grupo Proceso Pentágono as I have found their work instructive in thinking about this shift in the ambition of transparency towards seeking to outdo the shadows and masks of the state. As a reminder, the *1929: Proceso* exhibition was multidimensional in its representational registers. Proceso Pentágono filled this art space with indexical objects such as typewriters, filing cabinets, wall calendars and desk phones. These were placed alongside the purposefully amateurish mannequins and wire-shaped figures, each half dripping in crimson paint and half charred. Then, there were theatrical elements: voque jars

filled with human-like remains, prongs and straps. Further, 1929: Proceso not only blended these different dimensions of representation, but the installation also pushed representation to its limits. On arriving at the vast wall that marked the beginning of the installation (figure i), visitors were given clipboards and questionnaires to be completed during and after the installation. These questionnaires are still present in the Proceso Pentágono archive (figure vi).

"CUESTIONARIO NUMERO [sic] 3" opens: "Escriba usted el nombre de uno de los cientos de desaparecidos políticos de nuestro país" (MUAC, 2014a). As figure vi details, several questions then confront the audience:

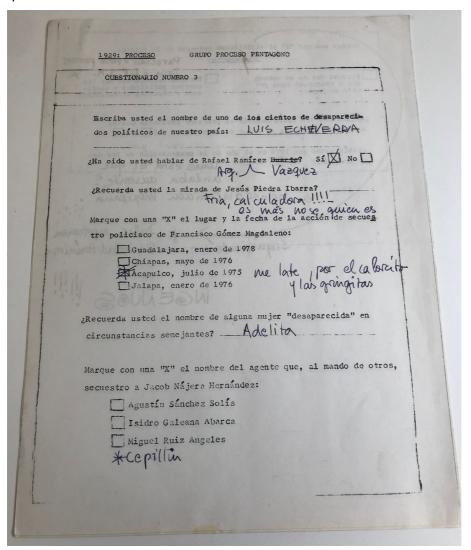


Figure vi: Author's image of an archived CUESTIONARIO NUMERO 3 (MUAC, 2014a).

These questionnaires have no referent in the state's own torture practices. These are objects that, whilst mimicking the stylistic qualities of official administration, with their thickly printed typeface, lines and boxes, could never themselves be inserted into the official files of Mexico's

bureaucracy as they testify to what lies behind the *dictadura perfecta* – a long and bloody dirty war. Audience members respond to these prompts with their own attempts at contributing to the multiple registers of representation and revelation at play. As figure vi depicts, responding to one question the visitor writes, "Fría, calculadora!!!!"; then, squeezed into the space below, "es más no se [sic] quien [sic] es" (MUAC, 2014a).

Through engaging these multiple dimensions of representation, exaggerating, and contrasting these registers, Proceso Pentágono developed a compelling approach to disclosing the activities of the PRI-state, able to articulate the dirty war being undertaken by its security apparatus. Moreover, 1929: Proceso quite literally mounted this disclosure using the state's own representational repertoire: the installation taking place in the Galería del Auditorio Nacional, with state funds being used to finance the production of the installation (García, 2015a, p. 130). Attesting to the potency of this exhibition, state agents quietly closed the exhibition just a few days into its run (García, 2015a, p. 137). Despite being fictional, unfamiliar to the contours of disclosure we have now come to expect, 1929: Proceso was clearly considered a threat to the illusion of legitimacy mounted by the PRI-state. Yet, in being closed, the PRI's functionaries transformed this expression that sought to do justice to the secret back into a secret. Echoing Taussig's third transparency logic, the closure of 1929: Proceso - the interruption of this revelation - testified to its forcefulness as a moment of exposure. As recorded by Katya Mandoki (1979), then art critic for El Día, exhibition organisers would have awarded one of the competition's prizes to Proceso Pentágono, had they not disqualified themselves from the competition in response to the PRI-state's act of censorship.

I have not offered this exploration of *1929: Proceso* with the intention of constructing a strict mould for open data-led transparency activities. Instead, I intend this exploration to offer subtle coordinates that will re-emerge throughout the rest of this study's analysis of contemporary open data-led activities. Animated by my fieldwork experiences, I would like to recognise and create space for a mode of engaging with and deploying open data – the Mexican state's contemporary representational repertoire – in ways that attempt similarly provocative, manifold disclosures that deepen our collective understandings of state activities and decision-making. The hope is that in doing so, these transparency activities make space for thinking about and moving towards alternative political arrangements. This is a transparency that is not necessarily accompanied by a laundry-list of positive buzz words, but it is an activity that is essential for any broader project that seeks to re-think the distribution of Mexico's social, political, and economic resources.



Figure vi: Author's image of an archived image of 1929: Proceso (MUAC, 2014f).

1e. The openness of open data

Proceso Pentágono constructed this multidimensional exposure through an abundance of varied materials: smoke, ink, lights, manikins, metal, paint, plastic, plaster, paper, the bodies of the audience. In this study, I focus on a single material: open data. Below, I take up the task of showing the reader that a focus on open data need not be restrictive as this matieral – federal open data – are open in many more ways than they may initially seem.

In just a few years, open data have risen to the top of the agenda for institutional actors and those with reform agendas, both within and outside of the state apparatus. It is not only their novelty that draws interest, but also their potential to afford insight at a granularity and scale heretofore unknown. Key to this affordance is data's positioning within the traditional pyramid model of knowledge. Data form the smallest block on top of which a wider epistemic system extends: data, to information, to knowledge, then wisdom (Weinberger, 2011, p. 9). Indeed, in the *Diccionario de Transparencia* released by the Instituto Nacional de Transparencia, Acceso a la Información y Protección de Datos Personales (INAI) – a key node in Mexico's transparency circuitry that I will return to numerous times in the chapters that follow – this is exactly the definition of a datum provided: "la cifra o letra que al ser analizada o procesada puede convertirse eventualmente en información. Es el mínimo componente que permite producir información" (2019, p. 99).

Providing an historical perspective on this pyramid model, Daniel Rosenberg noted that it emerged alongside a form of argumentation in which data's meaning changed from "being reflexively associated with those things that are outside of any possible process of discovery to being the very paradigm of what one seeks through experimentation and observation" (2013, p. 36). As this base element, data became considered to be "pre-factual, different in nature to facts, evidence, information and knowledge, but a key element in the constitution of these elements" (ibid., p. 8). Through access to data, each analyst can undertake their own process of organisation, zooming in on points of interest and following interconnections, allowing for new perspectives that are "supposedly born from the data" (Kitchen, 2014b, p. 2). From the perspective of open data's proponents, access to this base layer of the pyramid is what is provided through federal commitments to open data, offering expanded opportunities for transparency through the possibility of more informational and knowledge production activities, taking place across more actors.

In drawing on the stream of literature that has become known as Critical Data Studies (Iliadis and Russo, 2016), the present study resists approaches that take open data to be natural elements: "float[ing] free of [their] origins, shedding form, substance, and history, and thereby rendered free to travel the world as an undifferentiated and universal currency" (Ribes and Jackson, 2013, p. 165). Attempts to challenge data's association with rawness have even led to proposals to change the very term that we use for these units: data, with the etymological roots of the word, *dare* ("to give") to be substituted for *capta* ("to take") (Kitchen and Dodge, 2011, p. 5). This intervention is designed to emphasise how "data are always a selection from the total sum of all possible data available – what we have chosen to take from all that could potentially be given" (ibid., p. 29). As such, any data encountered in any dataset, even those labelled big data, are "always partial and selected" (Kitchen, 2014a, p. 6).

Cristal Biruk's *Cooking Data* (2018) not only makes explicit how selection and abstraction is essential to the process of producing data, but that such production requires a significant amount of human labour and disciplining of that human labour in order to smooth data. Therefore, whilst data may be positioned at the bottom of the epistemic pyramid, they are never simply the result of experimentation and observation, and so destabilising any simple binary between raw and cooked (cf. Lévi-Strauss, 1969 [1964]). Further, as will be explored in the chapters that follow, attempts to smooth this dataspace are only ever partial. According to Tom Boellstorff, data are never fully raw but also never fully cooked, but instead are always susceptible to the "unplanned, unexpected, and accidental... transformed in parahuman, complexly material, and temporally emergent ways" (2013 [n.p.]).

Open data-led transparency, defined in its most prominent invocations as "simply transmitting" more data from "sender to a receiver" (Flyverbom, 2019, p. 17), requires embracing the positive possibilities of digital technologies and "datafication" (Cukier and Mayer-Schönberger, 2014). Therefore, access to federal open data first became feasible for Mexican citizens in 2014, under the federal *Estrategia Nacional Digital*, part of President Enrique Peña Nieto's *Pacto por México* and Mexico's subsequent inclusion in President Obama's *Open Government Partnership* (*Alianza para el Gobierno Abierto*). The interventions that fell under this set of reforms included the digitisation of numerous federal processes and archives, as well as the expansion of federal data-production activities (Becerril, 2012; Ackerman, 2013; Vásquez Cruz, 2019).

Whilst open data may at first seem a straightforward term, Harlan Yu and David Robinson remind us that even from its early circulation, it is a "deeply ambiguous" term and has been interpreted according to numerous definitions (2012, p. 182). My focus in this study is on data produced and published by federal institutions and agencies. This subsection of the open data movement is often termed open government data. However, in the case of Mexico, open data not only cover government sources but expand out into the wider state apparatus (explored further in chapter two). Indeed, thanks to further federal transparency legislation under Peña Nieto, Mexico's federal open data production draws from across the branches and arms of the state, even mandating autonomous and decentralised institutions to be part of this effort. Federal open data initiatives also cover decision-making in political parties, the voting records of fideicomisos, satellite images held by security forces, and even the finances of private organisations receiving federal funds (Diario Oficial de la Federación, 2016, p. 38). Mexico's unique and expansive definition of open data (going well beyond government) helped place Mexico at the vanguard of the global transparency movement (INAI, 2019, p. 100). Whilst emerging from multiple different sources, common across these data are their digital nature. being accessible across the Internet in machine-readable formats (ibid.).

Examples of the optimism generated by the rise of open data across Mexico's transparency circuitry are numerous (Barros, 2014; González et al., 2014; Naser and Gastón, 2014; Calderón and Lorenzo, 2015; Manchado, 2015; González and Juan, 2017) and this optimism has persisted till today. For instance, Adrián Alcalá Méndez, a Commisioner of the INAI, expressed during the aforementioned inaugural *Conferencia Nacional de Datos Abiertos*, "Con los datos abiertos, iniciamos una nueva etapa en la historia de la transparencia en México" (INAI, 2021). Given the rest of Alcalá Méndez's speech and wider contributions from public officials and components of Mexico's transparency circuitry, it was clear that these actors invested open data with a transformative potential. Open data-led transparency did not

simply involve adding "more pages to already overstuffed files" (Hetherington, 2011, p. 159) – akin to simply transferring more data from sender to receiver – but instead offered new foundations for a robust, functioning democracy (Guardián Orta, 2015; Cejudo, 2016). Open data is therefore not only a descriptive term that identifies the characteristics of these datasets (structures, organised and so on), but also communicates the anticipated benefits of increased data disclosure. These span from improved service delivery through to public accountability (Gonzalez-Zapata and Heeks, 2015; Mayernik, 2017; Ruijer and Martinius, 2017).

Whilst celebratory remarks are to be expected with any shift in technological capabilities, such soon coalesce into techno-solutionism assessments (Morozov, technochauvinism (Broussard, 2018) - labels critically applied to approaches that emphasise technologies as able to offer simple fixes to social problems, proposing that via technological adoption, "everything will be alright" (Servaes, 2014, p. 294). These approaches typically introduce an "abundant lack of caution about how new technologies will be used" (Broussard, 2018, p. 69) and "distortions that while possibly useful for some, are profoundly misleading to others" (Gilroy-Ware, 2020, p. 196). Of course, such a perspective neglects to consider the co-development of technology within human, social contexts (Latour, 1996), and the potentially destructive effects technologies can have on social relationships (Bartlett, 2014), and environmental contexts (Gabrys, 2016). This study does not seek to re-create these lacunas. However, it is important to recognise what benefits data, particularly open data, are expected to leverage within the transparency circuitry.

There are important distinctions between open data-led transparency and previous generations of informational and documentation-led approaches. One key affordance of open data is their ability to override what Ann Florini terms the requirement of "volition" (Florini, 2007, p. 32) on the part of transparency actors. A shift to open data-led transparency means that citizens no longer depend on individual institutional commitments, or the guarantees of elected officials as the digital system that underpins open data provides for disclosure by default – abierto por defecto. Open data are continuously collected and released according to mechanical operations that ensure accessibility. This also means that open data overcome one of the key obstacles of previous iterations of transparency, which according to Roger Taylor and Tim Kelsey, is a retention of too much control over discretional flows of transparency materials, meaning that "the informational advantage of those in power is to a large extent undented" (2016, p. 15).

Another key change is the directionality of transparency. There is a shift from a unidirectional line, a one-time disclosure from information-provisioning institutions, towards a looping

trajectory in which open data are continuously published and updated. If, as Christiana Garsten and Mónica Lindh de Montoya argue, "transparency is relational" (2008a, p. 287), then open data multiply these potential relationships exponentially, with a single disclosure becoming accessible to an extensive public. This includes anyone with an Internet connection and basic data skills. According to proponents, the constant and broad access to these base materials ensures a "less mediated" transparency, with "fewer opportunities for officials to 'cook' or 'game' them [data] out of professional or political motivations" (Michener and Bersch, 2013, p. 240).

Yet, how open data become recognised, engaged, and deployed *qua* open data is also a political process in which different forces are at work (Leonelli, Rappert and Davies, 2017). As noted above, for most scholars and commentators, open data are simply those data which are hosted on a public website accessible to the general public. Yet, datasets released according to the definitions and standards of open data producing institutions, when accessed by distant users, may not subsequently be recognised as open (i.e., deficient), or maybe even unreasonably open (i.e., include personal identifiable datum). The status of *openness* is an interpretive task of encounter and negotiation. Therefore, I propose that we think more expansively about the openness of open data. Instead of thinking about openness simplistically, with openness synonymous with accessibility, fulfilling the technocratic objective of facilitating communication or transaction (cf. Humphreys, Sachs & Stiglitz, 2007), I seek to think about openness as the possibility to complicate, to produce different and contesting interpretations, and to represent more than just the singular digits presented onscreen.

As I detail in the chapters that follow, there are different degrees and facets of open data's openness. These become recogniseable once the researcher enters into close proximity with open data and those working with them, having to respond to each dataset's unique peculiarities. For instance, during my research interactions, it was common to hear that an open dataset from a particular institution was more suspect than an open dataset from another institution. Or, that a dataset released during the institutional leadership of a certain public official would be more trustworthy than under their predecessor. Or that technological advances/changes of an federal entity were noticeable in the data subsequently disclosed. Further, the simple presence of data (digits on screen) did not prove that a certain policy was implemented, or resources used as described. Open data may be forged, open data may not be an exact index or mirror of an empirical reality. On most occasions, open data include numerous errors, gaps, and inconsistencies. Open data are certainly illustrative, but never only of what their producers intend to present. This most clearly came into view when it was the omission or lack of data that was itself the central insight for the *daterx*. Moreover, the

interpretations of these data are never settled. As noted above, the same configuration of open data can be interpreted by distinct groups in diverse ways, a characteristic that is expanded with ever broadening publics of *daterxs*.

Attention to open data's openness highlights the multiple representational possibilities of open data. However, it is important to be clear on what I mean here as representation is used regularly and according to different coordinates in the fields of Information and Data Studies. For instance, seminal figures such as Claude Shannon and Warren Weaver (1964) used "representation" to emphasise information's "independence" (Goguen, 1997, p. 33) in communications processes, involving the removal of any sense of information's situatedness through a focus on structure. This move towards focusing on information as representational sought to ensure that information could be fixed, and so interpreted identically across contexts.

Many scholars have rejected thinking in terms of the representational independence of information (and later, data) as this perspective flattens informational practices and their effects. For a subsequent generation of Information Studies scholars, particularly influenced by social semiotics, this independence between subject and object was a core pillar of the field to be challenged. Instead, Joseph Goguen posited that: "An adequate theory of information would have to take account of social context, including how information is produced and used, rather than merely how it is represented" (1997, p. 28). In seeking to form a middle ground between the communicative and semiotic approach, Goguen developed a dual "wet" and "dry" model of information that later extended into a "continuum of humidity":

Even the driest information is still situated, and in particular, is open, emergent, contingent, and even embodied at the meta level, where analysts are accountable for its formalization. Similarly, even the wettest information about social interaction is necessarily partially abstracted from its social context, in order to be presented to an audience of analysts. (Ibid., p. 51)

Goguen's position is echoed in a later contribution from Bruno Latour, in which there is a call not to abandon representational approaches in contemporary technology-infused social analysis, but a reconsideration of how we approach representation:

half of such a crisis [of representation] is due to what has been sold to the general public under the name of a faithful, transparent and accurate representation. We are asking from representation something it cannot possibly give, namely representation without any re-presentation, without any provisional assertions, without any imperfect proof, without any opaque layers of translations, transmissions, betrayals, without any

complicated machinery of assembly, delegation, proof, argumentation, negotiation and conclusion. (2004, p. 16)

More recently, scholars such as Yanni Loukissas (2019) have criticised approaches to the study of data that emphasise their representation quality (cf. Borgman, 2015). In a reverse of the former model of representational independence, Loukissas argues that contemporary representational approaches to data favour a "rhetorical" understanding of data that excludes their "operational" dimensions (2019, p. 17). According to Loukissas, data are always "part of functional sociotechnical systems from which they cannot be easily separated" (2019, p. 17). Redeploying the language of Goguen, our frameworks have become too wet, ignoring the dryer elements that continue to shape data.

However, as the short reflection I provided above on the openness of open data highlights, this is exactly what comes to the surface when open data's representational possibilities are studied. Technologies, infrastructres, and production processes (Loukissas' dryer elements) are always folded into these interpretations. The openness of open data means that they can be the basis for a number of interpretive acts that extend into their sociotechnical and functional dimensions. Responding to Loukissas' rebuttal of representational approaches, I argue that the operational is reflected in the rhetorical and the rhetorical has subsequent consequences for the operational. These multiple dimensions always sit together in any (open) data analysis activity.

In thinking through the openness of open data, Flyverbom's *The Digital Prism* (2019) has been a useful source. Flyverbom concurs with previous Critical Data Studies scholarship that data "produce particular ways of seeing, knowing and governing" (2019, p. 11). Yet, Flyberbom seeks to elaborate on this position by proposing that data and the relationships that they produce should be thought of as prismatic. Prisms are "particularly prone to refract and change what enters into something else", and so able to "create extensive and manifold reconfigurations" (2019, pp. 16, 17). Therefore, in our contemporary "datafied world", there is not a single vision that is provided by data but "multiple forms of vision and disclosure" (2019, pp. 23, 53). Adding on what is to be learnt from the work of Loukissas, at least a subset of these visions and disclosures reference the functional, sociotechnical systems from which these data emerge.

Following this line of thinking, the openness of open data means that open data are never just open in the sense of being publicly accessible. Thinking beyond this definition, openness involves recognising open data as themselves promisingly open. They are able to be drawn

on for different interpretive acts, operationalised into different practices, and able to assert different responses. Whilst the task of producing transparency through open data is certainly distinct from mounting an immersive, 400m^2 installation, this does not mean that our approach to open data, this singular material, should necessarily be restrictive. In the case of the *daterx*, the materials to be worked with, and the ways they are worked through should not be restrained. Instead, they should be mined for their prismatic potentials.

1f. An aesthetic approach to open data

Having spent a significant part of this introductory chapter considering an art exhibition, the reader will no doubt be wondering how I approach aesthetics and what the adoption of an aesthetic approach means for the study of open data. In this study, aesthetics is not deployed in a Kantian mode that seeks a distinction between judgements of taste and claims to universality. An immediate alternative perspective to turn to would be the influential work of the Frankfurt School. Scholars of this tradition pay attention to aesthetics as a quality of art objects, with artworks playing a critical role in the raising of critical awareness. Artworks could, as Theodor Adorno proposed, gesture to something real beyond the veil of reality that can only find expression in art:

If thought is in any way to gain a relation to art it must be on the basis that something in reality, something [behind] the veil spun by the interplay of institutions and false needs, objectively demands art, and that it demands an art that speaks for what the veil hides. ([1970] 1997, p. 18)

For Adorno, "The mimesis of artworks is their resemblance to themselves" (ibid., p. 104). It is an artwork's alienation from the world that is the condition of its ability to convey its truth, encapsulated in Adorno's windowless monads: a search for "objects, events, and experiences that escape the representational construction of reality and express a truth from the other side of the ontological difference" (Benčin, 2019, p. 108). For Adorno, aesthetic investigation involves a consideration of artistic techniques and their appropriation into oppressive social arrangements, most notably fascism. Thus, aesthetics broadly remains confined to the traditional outputs of artists and exhibitions.

Subsequently, Jacques Rancière (2010) has offered a significant revision of how aesthetics can be understood. According to Rancière, aesthetics involves the "distribution of the sensible" (2010, p. 35), with this distribution shared across "communities of sense" (2009, p. 32). This distribution underpins a particular domain of power relations, as such power "revolve[s] around

what is seen and what can be said about it, around who has the ability to see and the talent to speak" ([2004] 2013, p. 8). Thus, according to Rancière, the community that shares in a particular aesthetics, a particular set of power relations, is always prefigured by an "apportionment of parts and positions", determining those "who have a part in the community of citizens" (2013, p. 7). Whilst an alignment exists between *poiesis* (a way of doing) and *aesthesis* (a way of being) there exists *consensus* (Corcoran, 2010, pp. 15, 16). However, Rancière is more interested in moments in which a gap or disruption exists between poiesis and aesthesis, moments of *dissensus* in which there is a "redistribution" of the sensible, "an overturning of the propriety of identity, and the identity of propriety, that works by configuring different forms of relationship between the sensible and the intelligible" (Corcoran, 2010, p. 7).

The opportunity that Rancière's scholarship provides to re-evaluate the scope of aesthetics has recently been adopted by scholars more firmly placed within Political Science (cf. Bleiker, 2009, 2018). However, Rancière's work is clear in establishing a tripartite regime of aesthetics, split between the ethical, representational, and aesthetic. The representational regime, the "set of laws for the composition of elements" (2010, p. 209) is exactly what needs to be interrupted by aesthetics if we are ever going to move beyond current configurations of consensus. Going beyond the representational, the aesthetic regime operates in a field of unlimited, unrestricted representation. Given the divisions in the scope of the representation set out by Rancière and my previous celebration of open data's multiple representational dimension, the potential of open data to ascend from the representational into the aesthetic register, to generate a moment of dissensus, diminishes. This seems even more the case when we recognise that open data are representations created about the state by the state, suggesting further limitations on the potential for dissensus. Aesthetic analysis seems to be foreclosed by the very representational nature of open data.

It is not my intention to revise Rancière's regime in order to create space for open data within this aesthetic level. ¹⁴ Instead, I take from Rancière what is distinctive in this approach to studying aesthetics. First, Rancière seeks to encounter and approach aesthetic moments outside of specific artworks and exhibition sites, creating space for interest in the aesthetics of the everyday. Second, an appreciation for the political resonances of processes of production, presentation, composition, and experience. Third, I adopt a perspective that considers how these multiple aesthic moments and processes can create ground for re-

¹⁴ From the perspective of scholars such as Alexander Galloway, Rancière's abandonment of representation "is less a question of the failures of representation on its own terms and more a question of the historical shift out of one regime into a subsequent regime" (2011, p. 91).

thinking the political, creating space to imagine and propose other political arrangements. Finally, following Rancière, in order to develop this appreciation, the researcher must get close to and be responsive to these processes in action, receptive to different conceptual opportunities and challenges.

The question then becomes how this aesthetic approach relates to (open) data. Following the discussion above, my intention is to avoid deploying aesthetics descriptively, as is often done when digital products or code are described as "appealing" or "elegant" (Oram and Wilson, 2007). Some scholarship has sought to understand how the deployment of these terms and the affective experience involved in achieving these moments of "pleasure" are understood to "enunciate" a particular politics (Coleman, 2013, p. 15). Yet, these approaches to the aesthetics of data are challenged by scholars such as Luciana Parisi who instead understands the aesthetics of data as the ordering and sifting of "patternless data" into "simple functions that engender complex behaviours" (2013, pp. 66, 67). An appreciation of aesthetics involves an appreciation of the functioning of these logics. Parisi's work centres on the "aesthetic and mode of thought specific to the computational production of new probabilities" (2013, p. x), within the space of digital architecture where computational logics and data abundance create a context in which there are "an infinite amount of infinities that are immanent to all actualities" (2013, p. xiv). This attention to data practices as "aesthetic tools" that "elicit, extract and select" is reflected in the work of a number of subsequent contributions (cf. Schaffer, 2017).

Whilst Parisi offers a fundamental revision to computational thinking that I will not engage to its fullest here, what I take from Parisi for the purpose of this study is an appreciation of aesthetics as emerging within the contingencies, abstractions, and potentialities of data and code. Although not in explicit dialogue with Parisi, Orit Halpern's *Beautiful Data* (2014) picks up on a deep concern in this previous work with computational aesthetics, focusing on how these ordering logics interact with questions of power and control. Whereas Parisi conceptualises aesthetics as a strictly endogenous process existing within code, Halpern positions these aesthetics as co-constituted by outside forces and influences. Halpern describes any moment's "technical condition" – expressed through a particular aesthetic configuration – as "critical to understanding the tactics of governance and power at any historical moment" (ibid., p. 24).

Like Parisi, Halpern offers useful instruction on developing an aesthetic approach to the study of data-led artefacts. Halpern pays close attention to the processes that are deployed in making data, the crafting and mining that facilitates the subsequent descriptions of data and data solutions: "There is, in fact, an aesthetic crafting to this knowledge, a performance

necessary to produce value" (ibid., p. 9). Investigating this sphere of work reveals how datadriven sciences "produce aesthetics" (ibid., p. 17). Commenting on the cybernetic context of interest, Halpern states:

Behind the materialization of data as an object to be marvelled at, however, lay an aesthetic infrastructure of sensorial training and a new imaginary of vision as a channel and a capacity that was autonomous, networked, and circulative. (Ibid., p. 15)

Thus, we return to concerns of perception and representation but with a concern to "how [data's] aesthetic *and* epistemological dimensions combine to reformulate power" (2014, p. 8 [italics original]). Halpern is not so concerned with mapping out an aesthetic category particular to these dynamics, but more with thinking through aesthetics as a way to reveal particular power dynamics at play.

An aesthetic framework has been applied to the study of open data in the work of Helene Ratner and Evelyn Ruppert (2019), in which they highlight the absence and subsequent need for attention to the aesthetic dimensions of open data. They focus on data portals, the sites specifically tasked with "bring[ing] data into relation" (2019, p. 2). To be brought into relation, Ratner and Ruppert argue that a set of practices need to be developed and deployed in order to manage differences and uncertainties. This is not only to make data "pristine" (Plantin, 2019, p. 53), but more importantly in order to prepare them for projection. Therefore, according to these authors, aesthetic activities take place in the sites of data production in which data are prepared for their subsequent insertion into relation (Ratner and Ruppert, 2019, p. 4). Through projection, data then have "performative effects for knowing, seeing, enacting and governing populations" (ibid., p. 2). Situated within a Foucauldian framework, they argue that within the sphere of open data, "specific aesthetic practices are necessary to translate the imaginings of state officials into measures of the population and its activities" (ibid., p. 2).

Ratner and Ruppert explicitly state that: "Aesthetics, in the ways advanced by these authors, is thus neither about questions of representation – to what extent data represents the entities it speaks for – nor its hidden meanings, but rather how data or knowledge are given material forms" (ibid., p. 3). However, their attention to the way data are cleaned, the work to "absent what exceed them" (ibid., p. 2) is, from my perspective, very much a representational task. The boundaries of what comes to be understood as excess (or not) is always a task taking place from within data-producing institutions and concerned with what these data will reveal and how they will be understood. Instead of engaging the language of representation, Ratner

and Ruppert opt for a language of forms (ibid., p. 5).¹⁵ They argue that the forms visualised onscreen "shape how worlds are made" (ibid., p. 3). However, it is not clear from the account of Ratner and Ruppert where the distinction between representation and form lie, and why data considered through the frame of representation and the practices that go into shaping these representations cannot function in the same world-making capacity as forms.

Nonetheless, this contribution is helpful in that it positions the language of aesthetics, perception, and performance within the field of open data. Similar to Ratner and Ruppert, my aim is not solely to analyse different open datasets as finished products but the process of working with these open data. Yet, whilst these authors focus on the preparation of open data for publication (within open data-producing institutions), I focus on their subsequent engagement and deployment by *daterxs*. Further, I do not intend to suggest that open data projects or the transparency outputs that I consider here align towards a particular aesthetic, one that requires its contours carving out within a proliferation of scholarship on digital and post-digital aesthetics. Instead, I propose an aesthetic approach to involve a particular orientation towards research objects and experiences.

Adopting an aesthetic approach to research involves an attention to the details of these open data-led representations, to the ways these representations are constructed, their perceptual effects on those downloading and working with these data, to the techniques deployed in their curation and presentation, to their reception and consumption, to the relationships and politics they subsequently enable. It involves attention to the slippages, contradictions, and confusions that make open data – engaging the openness of open data. It requires research at a micro level across data-led outputs, attentive to subtleties that can reveal alternative connections and possibilities that have repercussions at a macro level. It involves cultivating a more openended sensibility towards the way power works through data, digital activities, and the ends to which they may lead.

I therefore disagree with Roland Bleiker's statement in the opening lines of Aesthetics and World Politics (2009) that deploying an aesthetic approach "is about the ability to step back, reflect and see political conflict and dilemmas in new ways" (ibid., p. 2). My objection lies with the first part of this statement: that aesthetics requires a stepping back from the sites of contestation and negotiation, thus suggesting an epistemological distance between researcher and object. If aesthetics is such a powerful perspective through which to develop

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 $^{^{15}}$ It is worth noting here that the authors do not situate forms in relation to Žlžek (1997) and a Marxist perspective on forms.

a sensibility about the political, it seems strange to extract the researcher from simultaneously being involved in this process. Instead, I propose that aesthetics draws the researcher in, requires the researcher to get even closer to the objects of study and the processes under consideration. Aesthetic analysis, even deployed in a more standard setting, requires attention to form, to detail, to subtlety that is eclipsed if positioned at a distance. Therefore, in this study I attempt to make the most of this closeness, working intimately with open data and *daterxs* to understand the complexities and nuances that shape the possibilities of open data-led transparency.

1g. Opening the interpretivist toolkit

As noted above, previous studies addressing open data in Mexico (and beyond) have sought to quantify transparency through a counting and sorting of open datasets, taking the publication (or, transfer) of open datasets as the endpoint of the transparency process (Abella, 2014; Barros, 2014; Murillo, 2015; Ortiz Frueler, 2015; Sandoval-Almazán, 2015; Vetrò et al., 2016). Whilst studies differ in their approach to defining and counting these datasets, open data and their underlying technical systems are considered stable technologies, able to ensure transparency simply through facilitating this transfer. More nuanced studies have gone on to consider open data availability, identifying technical and quality barriers to the deployment of open data (Zuiderwijk and Janssen, 2014; Gonzalez-Zapata and Heeks, 2015; Dawes, Vidiasova and Parkhimovish, 2016). However, as recently noted by leading transparency scholar Albert Meijer (and colleagues), with few exceptions studies continue to fail to acknowledge "open data practices that work on the basis of rich interactions with users rather than government-centric implementations" (Ruijer et al., 2020, p. 3). These scholars go on to propose that extant literature "fail[s] to produce an in-depth understanding of what actually occurs in the interaction between government organizations and citizens' initiatives when using OGD [open government data]" (ibid., p. 4). This echoes a previous contribution from Igbal Safarov, Albert Meijer and Stephan Grimmelikhuijsen (2017) who similarly conclude that little is known about how open data are used and put to work.

Responding to this absence, a smaller selection of studies are beginning to consider the usage of open data (Attard et al., 2015; Ruijer et al., 2020). Rather than standing back and seeking to measure the quantity or spread of open data, overcoming this absence involves getting close to the sites in which open data are engaged and deployed. It involves attempting to appreciate the diverse ways these data are received, what they are understood to disclose, the tools and methods of analysis employed, attentive to the forces that shape these interactions. Therefore, following the advances of Science and Technology Studies, a

compelling response to this absence requires an appreciation of open data as not being able to act alone. Rather, technologies act by virtue of being embedded in networks composed of humans and non-humans (Latour, 2005). As a researcher, my role requires not only interacting with open datasets as closed units, but entering into these datasets alongside the actors who engage and deploy them.

I now turn to detail how I – an outsider to Mexico's transparency circuitry – came to enter, engage, and alter this community through my own process of fieldwork. In doing so, I hope to make it clear that as a researcher, I did not have to confront the issue of *whether* to be involved in these research sites, but that involvement was inevitable. As Chela Sandoval (2000) has powerfully shown, a researcher's work always has effects, whether used to legitimise, stigmatise, or privilege practices or understandings, and often in unintended ways. Thus, researchers have an obligation to acknowledge and reflect on those effects, rather than discount them.

Prior to beginning my primary period of fieldwork, I contacted numerous civil society organisations based in Mexico City working on the themes of transparency, surveillance, digital rights, and access to technology, volunteering my time and energy. After initial conversations, this led to time spent in the offices of Artículo 19, Oficina por México y Centroamérica. Much of my day-to-day work involved desktop research for a number of ongoing litigation cases in Central America. However, the collaborative office environment meant that I was soon engaged in conversations with colleagues that aligned more closely with my research interests, through whom I learnt more about Mexico City's landscape of transparency actors, events, and opportunities. To be clear, I do not consider the work undertaken during these office hours to have been a primary research activity for this study. However, this time was certainly informative to the rest of this research project as it through these initial conversations that I came to orientate myself within the field. Furthermore, colleagues provided an informal source to gather rapid background information on policy histories, processes, and key figures, as well as an initial source of research contacts. Therefore, I began this study as many other transparency researchers have: through engagement with existing transparency actors in the day-to-day elaboration of transparency activities (Hetherington, 2011; Ballestero, 2012b; Sharma, 2013). This ensured that my entry into the field was not "reckless", but instead guided by "responsible intuition" (Pachirat, 2018, p. 94).

Through these initial contacts, I was quickly incorporated into numerous mailing lists, Facebook, WhatsApp, and Telegram groups dedicated to organising open data activities and

discussing topics of interest to Mexico's transparency circuitry. My diary soon became populated with upcoming datathons, project presentations, and training sessions for open data and open-source resources, public consultations, panel discussions, conferences, and social events.

1h. Participant observation and observant participation

For many of these events – particularly the conferences, project presentations, and public consultations – I attended as a *participant observer*. ¹⁶ The rhythm of these events was dictated by quarterly meetings, annual celebrations, and project milestones. Whilst these events were open to the general public, they tended to take place on weekdays during typical working hours, in the auditoriums and meeting rooms of institutional buildings. Participant observation of these spaces involved sitting in the crowd, taking jottings on the materials presented, the speeches and discussions, the atmosphere, the dynamics in the room. Following the direction of those such as Alpa Shah, I also paid close attention to "not only what is said but also that which is left unsaid" (2017, p. 52).

Continuing with the guidance of Shah, insights from this method not only emerge from what is both said and left unsaid, but what is "demonstrated only through action" (ibid., p. 52), with higher evidentiary value assigned to conduct that is able to be observed (Bowker and Leigh Star, 1999). Therefore, participant observation also required studying Mexico's *daterx* community outside of these formal spaces, situating these presentations and speeches in relation to practice. From August 2019 to March 2020, I participated in seven datathons, over twenty training sessions for different open data analysis tools and resources, and roughly weekly social events across civic, cultural and hacker spaces. ¹⁷ Collectively, these allowed for sustained attention to engagements with and deployments of open data. The rhythm of these events was sporadic, driven by the calendar of this community's events, organised by actors within Mexico's transparency circuitry, often responding to emerging issues, available expertise, and funding.

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¹⁶ Examples of such events included one-off conferences such as *Avances y Retos del INAI* (October 2019), *Nuevos Horizontes de la Transparencia* (December 2019, February 2020). Annual events such as *FITS 2019* (September 2019), *Foro Stream* (October 2019), *COLPIN* (November 2019), *Plan de Apertura de Datos Abiertos* 2020 (December 2019), *Presentación Pública del Cuarto Plan de Acción Nacional de Gobierno Abierto 2019-2021* (December 2019). As well as public presentations for projects such as Tower Builder (September 2019), ImpuniDATA (January 2020) and PlanDAI (February 2020).

¹⁷ This included datathons such as: Datatón #undíaparadar México (August 2019), Datatón D3 Desastres (September 2019), Datatón de Cambio Climático (December 2019). Training sessions on tools and resources such as DataWrapper (September 2019), D3.js (November 2019), QDA Miner (January 2020), QGIS (February 2020), ExploraDatos (March 2020). As well as regular social and community events organised by Data Pub, Social TIC, Rancho Electrónico and MediaLab MX.

Whilst each event differed in format according to the priorities of the organisers, these typically lasted between one day and two weeks, with the co-present dimensions of these activities often taking place over weekends and evenings. These events were hosted in the auditoriums of cultural centres, university buildings, co-working spaces, and the meeting rooms of civil society organisations. These sites became populated by different components of Mexico's transparency circuitry, with open data the "point of contact" (Loukissas, 2019, p. 195) between these different components. Attendees typically included university-educated, middle-class, white, urban dwellers, ages tending to stretch from early-twenties to late-forties, with a balanced mix of genders. Many participants I interacted with pursued careers in diverse areas often disconnected to civil society actors and activism, with participation in these activities driven by a specific interest in deploying data skills, interest in a particular theme, or sometimes, as a way of taking initial steps towards a career change. A considerable number were also postgraduate students from elite universities such as CIDE, UNAM, and ITAM who sought to develop their data analysis skills, or were drawn to participate by the potential of prize money and CV-enhancing accolades.

The features of *daterxs* plotted thus far suggest that I may have easily passed for an insider within these research sites. From my own perspective, I did not look out of place as a participant in these events. However, navigating researcher positionality involves more than visible features. As Edward Schatz reminds us, "membership in any community or category comes in shades of grey" (2009, p. 7). I consider my position within these spaces to have always remained at the periphery, primarily because I always introduced myself as a researcher conducting a study into the "oportunidades y retos de los datos abiertos en México". I consider myself to have remained an outsider because my presence as a researcher no doubt changed, to some greater or lesser extent, the dynamics that I became privy to. I do not see this peripheral positioning as a drawback of this study. To position it as a drawback would be to reify the idea of the "gaze from nowhere" (Haraway, 1988, p. 581). Instead, in the chapters that follow, where appropriate I consider what influence on the proceedings my presence as a researcher may have had.

Although remaining an outsider to this community, this does not imply that my practice of participant observation always remained at a distance. Deploying an aesthetic approach, I came to take on a much more active role in the field, coming to undertake *observant*

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¹⁸ Mexico's transparency circuitry also includes a number of groups, events, and initiatives specifically targeted at self-identifying women (*dateras*). I did not explicitly incorporate these spaces and events into my research design.

participation (Wacquant, 2004, 2015; Moeran, 2009; Wilkinson, 2017; Seim, 2021). This method involves a positionality that assumes "neither full participation nor pure observation", particularly suited to work- or practice-based research (Seim, 2021, pp. 3, 8). Often framed as a "heterodoxic style of fieldwork", it is considered "capable of unlocking truths that are otherwise hidden" from the orthodox researcher (ibid., p. 5). The argument underlying this claim depends on a researcher's particular scholarly background: either, that such depth of immersion is necessary for accessing exclusive community conduct; or, that such activities enable the researcher to embody experiences similar to those subjects being studied (Wacquant, 2004; Desmond, 2006; Salazar Parreñas, 2011). The intention in deploying this method is to ensure that the interpretivist researcher maintains "an edge in data assembly" (Seim, 2021, p. 25), eventually resulting in a "far more nuanced analysis" (Moeran, 2009, p. 140).

The reader may ask how I came to be both an outsider and an observant participator. Whilst my presence as a researcher was always disclosed, I was able to offer skills and expertise highly valued within this community of practice. My prior professional experience working as a management consultant in the digital technology sector, and research training in social statistics meant that I arrived into these field sites with a substantial grasp of different coding languages, quantitative analysis techniques, and familiarity with computational processes. I was well equipped with the "data skills" (Gutiérrez, 2018a, p. 64) required of data activists, able to offer practical support to open data analysis projects. I did not only observe *daterxs* at work, but also worked alongside them in order to clean databases, de-bug code scripts, review visualisations, assist with translations and so on. My access to this social world was not built solely through rapport between researcher and subjects, but also through cooperation in sharing the load of engaging and deploying open data. This also meant my research interactions unfolded well beyond the timetables of the organised events noted above, as the data analysis process continued in cafés, bars, office spaces, the homes of collaborators, and subsequently, across digital platforms.

Therefore, I came to deploy what Philip Agre described as a "critical technical practice" in which "building things is an important way of learning about the world" (1997, p. 149). Agre's reflections on research through critical technical practice note that it is always a very personal process in which the researcher "assumes certain risks" (ibid., p. 133). Deploying this method meant reflecting explicitly on "my personal, yet socially relevant, experiences in the field" (Seim, 2021, p. 17). This required more personal scrutiny, "paying careful attention to my shifts in preference and practice" (ibid.). I had to consider the dispositions that developed within me as I grew more accustomed to this sphere of activity. For instance, the initial shock and then

habituation to the amount of time and energy it takes to prepare an open dataset for analysis – something I was not so accustomed to whilst conducting similar work in the private sector. It is one thing to listen to *daterxs* complain about this undertaking within the confines of a semi-structured interview, paying attention to the multiple ways this frustration is expressed; but another to be awake at 02:00am in the living room of a collaborator trying (unsuccessfully) to produce synthetic data to fill gaps in a dataset.

Yet, this self-scrutiny sometimes slipped, particularly – as in chapter five – where participation led into uncertain legal research terrain. Another challenge that emerged turned on the difficulties of continuously documenting these activities. The prioritisation of extensive jottings taken in the moment (my priority as a researcher) sometimes had to be dropped for the objective amongst my collaborators of quickly executing a script, or discussing the next point on the meeting agenda (my priority as a *daterx*). Indeed, during intense periods of observant participation my research jottings were certainly *thinner* than could have been achieved during pure observation, edging more towards a "field diary" than "field notes" (ibid., p. 22). This, however, was counterbalanced by access to other research materials captured during moments in which *daterxs* consented to me recording our activities, their laptop screens at moments of analysis, or voice recording crucial conversations, providing other *thick* research materials to complement jottings.

Although research collaborations and partnerships are necessarily sporadic, requiring significant energy and care (Moten and Harnet, 2013; Lowenhaupt Tsing, 2015), deploying observant participation facilitated my access to different sites and actors. A clear example of this method leading to new research opportunities was, for instance, being invited to join a national datathon as a mentor to participating *daterxs* (detailed in chapter two). As a mentor, I was able to move between teams of participants, with different teams turning to me for support on various aspects of their projects. Entering this space in this privileged position, able to move across teams, engage organisers, and senior officials is something I would not have gained as either a participant working on my own project or as an observer at the side-lines of proceedings.

I also engaged two complementary methods to develop a more robust interpretivist research design. This included interviews with components of Mexico's transparency circuitry and gathering research materials on contemporary creative, open data-led projects. Whilst I do not claim that the sum of these methods resulted in a complete survey of actors and interests in my field site, nor a representative sample, I did seek out different perspectives and covered a breadth of open data users and initiatives. Further, deploying these complementary methods

provided a different register of research materials against which I could triangulate observations and initial conclusions.

1i. Interviews

I engaged three different strategies for collating interview participants. ¹⁹ First, as noted above, I invited fellow participants that I met during *daterx* activities for subsequent semi-structured interviews. ²⁰ Occasionally this involved rapid, fifteen-minute interactions at the end of an event. However, where possible, I gathered contact details from participants during these events and arranged interviews in the following days. These interviews focused on each *daterx*'s motivations, interests and skills, experience of working with open data (or particular tools and resources), previous engagements and experiences of Mexico's transparency circuitry, reflections on the projects and outputs developed by the *daterx*. If the interviewee was an individual with whom I had worked closely with during the event, these interviews also reflected on particular decisions made, and approaches taken during the event. In these moments, I was able to leverage the *observer* dimension of the participant-observer dyad, bringing to the fore moments for consideration that would have otherwise passed in the rush of the event's proceedings. Given that this strategy involved participants with whom I had already had some interaction, and given my broad positionality as their peer, this typically translated into cordial, informal interview dynamics.

The second strategy involved organising interviews with components of Mexico's transparency circuitry within the sphere of civil society: non-government organisations and institutions, independent media outlets, cultural institutions, think tanks, citizens groups, advocacy groups, and private businesses. This involved semi-structured interviews with individuals with professional responsibilities for open data analysis, the production of transparency outputs, advocacy for increased open data resources, and/ or the production of civic data.²¹ Job titles included those such as *Director/a de investigaciones, Coordinador/a de*

¹⁹ All participants in interviews were provided – in advance or in the moments before the interview – a two-page information sheet. This provided broad details of my research project, detailing how the resulting interview materials would be used and stored, as well as confirming the anonymisation of all subsequent materials. The information sheet also provided my contact details such that participants could subsequently withdraw their participation if desired or seek updates on the progress of this study. Following the guidance of Victor Shih, when conducting interviews in "authoritarian regimes", anonymity must be ensured for all participants as when working in such contexts, the researcher can never be in control of the immediate nor future consequences of their disclosures, and so must take all possible precautions to protect identity, "even at the expense of other research objectives" (2015, pp. 20, 21).

²⁰ During fieldwork, I conducted interviews with forty-five *daterxs*. These are identified in subsequent chapters by the letter 'A' (i.e., Interview A13, October 2019).

²¹ During fieldwork, I conducted interviews with eighteen figures from civil society organisations. These are identified in subsequent chapters by the letter 'B' (i.e., Interview B3, September 2019).

análisis de datos, or Investigador/a principal. These interviews, with the main questions communicated in advance, focused on experiences of leading open data analysis projects, reflections on recent open data projects launched by the organisation, and forces that shape Mexico's open data landscape. The vast majority of these interviews were conducted in the offices (or chosen location) of the participant during their typical working hours. As I developed my own experiences working with open data, I was able to compliment points and anecdotes raised by participants with my own experiences. This facilitated dynamic research interactions and, I believe, enabled interviews to enter greater depth as participants were assured that I held a baseline understanding of the history and characteristics of Mexico's federal open data.

The third interview strategy involved public servants and public officials within the transparency circuitry.²² Within this study, I consider public officials to be individuals who regularly represent their agency or institution in public proceedings. These were senior figures with job titles such as Director/a, Comisionado/a Presidente/a and Comisionado/a. They tended to have advanced academic and professional credentials, and have had long careers in their specific fields. My approach to engaging these figures involved attending public events and subsequently introducing myself in person. During these interactions, I tended to emphasise my credentials as a postgraduate student at the University of Cambridge, and my institutional affiliation to the Universidad Nacional Autónoma de México (UNAM) - thus, seeking to maximise on this privileged position. Whilst I certainly handed out many more contact details than successful research interactions, I was able to organise a number of interviews that took on a formal, semi-structured format, taking place in the offices of the relevant public official, with questions submitted in advance. However, this research strategy was one of the least productive in terms of generating insightful materials. When not cancelled at the last-minute, these time-boxed interactions often included numerous interruptions as participants responded to pressing emails and WhatsApp messages. Whilst offering anonymity to all participants, responses diverted little from official discourses. Further, despite prior research experience and growing familiarity with the subject, the more palpable power differentials in these research interactions made it difficult to put pressure on interesting aspects of respondent's contributions, and I was unable to create space for additional reflections.

In this study, I consider public servants as those whose day-to-day work is more directly engaged with the production and maintenance of open data, such as working directly in the

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²² During fieldwork, I conducted interviews with eleven public officials and public servants. These are identified in subsequent chapters by the letter 'C' (i.e., Interview C10, February 2020).

transparency unit (*unidades de transparencia*) of a particular federal agency. Job titles included those such as *Titular*, *Responsible*, and *Coordinador/a*. Access to these participants was primarily dependent on their previous employment in civil society organisations, and my subsequent research relationships with their former colleagues. Therefore, I had access to a very particular profile of public servant: those who were committed champions of transparency within their institutions, seeing great value in this public service, and a need for the expansion of open data resources. These interviews focused on the differences between their civil society and public sector roles, the challenges of working within transparency functions, internal processes and challenges.

I also tried to engage public servants through a more random sampling approach, using professional contact details available via digital directories, and through the numerous interactions I had with *unidades de transparencia* during the development of open data-ld projects. A special effort was made to engage the offices and teams who produced and maintained the open datasets that I worked with during specific analysis projects. In some cases, this was facilitated via prior research contacts. In most cases, requests for input were ignored (as in chapter four). Indeed, challenges to accessing public servants as research participants have been noted by previous scholarship in Transparency Studies (Ruijer, 2017) and my experience followed a similar path.

1j. Cultural projects

The study also includes research materials gathered through a mix of archival work on creative, cultural projects and research interactions with their creators. As already presented, this included time spent in the Arkheia of the Museo Universitario de Arte Contemporáneo (MUAC). Whilst I was fortunate in that this archive was well preserved and indexed, I am aware that all archives are incomplete and always the product of "power, politics and privilege" (Kim, 2021 [n.p.]), indelibly shaped by the materials left out (Trouillot, 1995; Hartman, 2008). However, in entering this archive, my intention was not to use these records to find evidence of previous lives, nor conduct an activity of process tracing. Instead, in line with this study's aesthetic approach, I entered the archive in order to be in close contact with remaining fragments of Proceso Pentágono's works, and so gaining a sense of how it must

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²³ This research strategy involved regular visits to cultural institutions such as the Centro de Cultura Digital, Laboratorio Arte Alameda, MediaLab MX, as well as many smaller cultural and art spaces in Mexico City such as El Rancho Electrónico. It also included attending annual initiatives such as *Connecting the Dots* (December 2019), *CDMX Semana de Arte* (February 2020) and digitally attending *Ambulante* film festival (May 2020, November 2021).

have been to experience 1929: Proceso first-hand. This archival experience has subsequently been triangulated with contemporary written sources and secondary literature.

Numerous *daterxs* I engaged with were knowledgeable about contemporary creative projects and initiatives, allowing me to map out many exciting projects and direct initial desktop research. It is through the recommendation of a participant in this research that I became aware of the work of DERIVA.MX. This recommendation then prompted me to look deeper into this project, subsequently becoming the basis for chapter six of this study. This research process involved accessing their digital archive, media coverage of their previous screenings, and reaching out directly to the collective. I participated in the construction of one of their films, screened in late 2020. In 2021, I was able to interview one of the founders of the collective and one of their regular production collaborators. These semi-structured interviews were conducted digitally, with core questions sent in advance. These interviews focused on the approach DERIVA.MX took to data collection and analysis, the different tools and resources deployed in the construction of their films, reflections on films, audience responses, and the future of the project.

1k. A multi-sited study

In plotting out these methods, the reader will recognise that this study has unfolded quite far from what Michel-Rolph Trouillot rightfully critiqued as the typical research "trilogy" of "one observer, one time, one place" (1995, p. 125). Indebted to research strategies influenced by post-structuralism's interruption of the idea of research sites as closed systems, this study could well be described as multi-sited (Marcus, 1995). However, I consider this study multisited not only in the sense of occurring across numerous locations, but more expansively as a study that draws in and continuously works through multiple perspectives gathered through deploying different methods, and adopting different research positions. In this study, multisitedness acknowledges that as a researcher, at different moments in this process, I occupied different vantage points. As part of this study's aesthetic approach, multi-sited research invited opportunity for recognising nuance and contradiction, for less objectification of research sites and subjects, and creating more opportunity for serendipity within the research process (Schatz, 2009; Pachirat, 2018). However, it would be dishonest to claim that all of the polyvalence that emerges in this study was a result of my own research design. An exogenous factor that came to significantly shape this project was the onset of the COVID-19 pandemic in the spring of 2020.

I unexpectedly left Mexico City in March 2020, eight months into a twelve-month research trip. I had just attended a weekend of events in Mexico City to commemorate the international Open Data Day 2020, and kicked off an exciting new analysis project (detailed in chapter five). At the time, I was unaware of the long-term impact the pandemic would come to have on my research, expecting normality to return in a matter of weeks. In Mexico City, like in many other parts of the world, group gatherings and shared workspaces became public health hazards, and so many of the activities that had been the focus of my attention during the previous months were cancelled. As the public health situation got rapidly worse in Mexico, the energies of my research participants and collaborators turned to the safety of themselves, their loved ones, and communities. Once active WhatsApp and Telegram groups suddenly went quiet, and calendar invites went unanswered. In the initial period of the pandemic, there was a clear switch from research-oriented interactions to the more urgent demands of ensuring the wellbeing of the many individuals who had generously given time and energy to this project over the previous months. As noted above, fruitful research collaborations are not only built on mutual interests and technical knowhow, but on relationships of care and solidarity.

The urgency of the situation in Mexico meant that many of the events that had been postponed during the spring and summer of 2020 were not re-scheduled. As the crisis continued into 2021, I made the difficult decision not to resume in-person research. The pandemic has only accentuated inequalities in public health and working conditions. I did not feel comfortable attempting to recover my highly social, mobile research activities in a context in which many of those in my environment (particularly those who were not directly my research interlocutors) would have to go about their day-to-day tasks without the same securities that I enjoyed.

Digital fieldwork continued through attending online events and conferences, and conducting interviews via online video platforms.²⁴ In general, the research I conducted following the onset of the pandemic was much less participatory. I made an unexpected shift in research cadence back towards participant observation, although now with many months of first-hand experience, introducing yet another vantage point into this study. Unfortunately, these digital interactions resulted in the absence of the informal introductions and serendipitous encounters that had sustained the prior period of fieldwork. This impacted the opportunities for developing

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²⁴ This included digitally attending events such as: *Nuevos Paradigmas hacia la Administración Pública Electrónica* (June 2020); *Transparencia y diagnóstico oportuno* (October 2020); *Pabellón de la transparencia en línea* (November 2020); *Transparencia e Integridad* (December 2020); *Pandemia de Desinformación y Transparencia como Antídoto* (March 2021); *Taller Nacional de Datos Personales* (May 2021); *Conferencia Nacional de Datos Abiertos* (May 2021); *El poder social de la transparencia en voz de la sociedad civil* (June 2021).

new collaborations and recruiting further research participants. Whilst the majority of research materials that form the basis of chapters five and six were gathered in the summer months of 2020 and into 2021, these interactions were facilitated by research relationships developed during the first half of fieldwork.

Unexpectedly extracting myself from the field and having to sit with my research materials was a difficult, but ultimately essential part of the research process. No doubt that the reader will be familiar with the urgency that accompanies time-boxed fieldwork to collect and amass more materials. This can result in less emphasis on the subsequent process of sifting through, analysing, and making sense of the research materials gathered. Over many months of numerous lockdowns, I had little choice but to undertake this daunting activity, confronting the many "inconvenient facts" (Duneier, 2011, p. 2) that populated my research materials, forcing me to reconsider the initial arguments that I developed during fieldwork. In amassing a significant collection of research materials, this process inevitably raised subsequent unanswered questions and frustrations. However, part of the challenge for the researcher deploying an interpretative methodology is a constant sense of "incomplete and fragmented research materials" (Schatz, 2009, p. 12). Rather than always seek to fill in the gaps that continuously appear, I opted to re-immerse myself in the research materials I did hold. Continuously re-visiting and reflecting on my research materials, and asking renewed questions of these materials further amplified the different vantage points present in this study. Therefore, instead of attempting to fake this study's completion, I intend to "leave up enough of the scaffolding" (Pachirat, 2015, p. 29) for the readers' interrogation – thus, offering my own "appropriate meaning" of research transparency (Büthe and Jacobs, 2015, p. 2).

11. Filtering my research materials

As I transitioned from fieldwork and analysis towards writing, a number of decisions had to be made regarding which materials to present within this study. There are three core filters that have guided the inclusion of fieldwork materials, all applied with a consideration to how these materials can provide space for analytic work in relation to this study's research questions, and so, according to "information-oriented" (Flyvbjerg, 2001, p. 79) case selection.

First, chapters (excluding chapter six) deal directly with the analysis of data produced and disclosed by Mexico's state apparatus. Whilst this may sound obvious, my fieldwork included numerous detours into citizen and civic data – efforts that, in the context of Mexico, often take the form of enumerating the many epistemological gaps around the disappeared, femicides, and state-led mass violence. There is a growing body of literature that attests to the

importance of this work, developed through long-term research with the producers of these data (Milan and van der Velden, 2016; Wright, 2017, 2018; Schwartz-Marin and Cruz-Santiago, 2018). Given the ethical and political importance of this work, this is research that should not be approached lightly. Whilst I did collect materials on related issues, my lack of substantial engagement with these actors and datasets meant that I did not feel in a position to be able to write with any authority on these activities.

Second, the chapters that follow develop primarily around federal open datasets. I recognise that whilst this study is indebted to the *New Cultural History* turn in Mexican scholarship (see chapter four), I adopt a clear "state-centeredness" (Pansters, 2012, p. 30), with federal institutions and agencies at the core of this study. My original research plan allotted time and resources in order to undertake fieldwork in communities outside of Mexico City and these communities' orientation towards Mexico's federal landscape. Indeed, I was excited to follow many of the regional and local research leads that I had developed over the first half of fieldwork. However, the onset of the COVID-19 pandemic also required the cancelation of these trips. My strongest research materials derive from communities based in Mexico City, working predominantly with federal open datasets. One benefit of this focus is that I often interacted with the same technologies, tools, and resources on different projects, providing for depth in my understanding of these objects of study.

Third, the following chapters (excluding chapter six) focus on datasets covering public budgeting and spending activities. My fieldwork included forays into open data on environmental indicators, health statistics and educational achievement (amongst other themes). My focus on budgeting data responds to a gap in the scholarly literature that tends to ignore these datasets – likely considered "boring things" (Leigh Star, 2002, p. 108). Instead, researchers across geographies have tended to focus on open data focused on demographic topics (Safarov, Meijer and Grimmelikhuijsen, 2017; Gao, Janssen and Zhang, 2021), with some exploration of environmental data (Gabrys, Pritchard and Barratt, 2016). In primarily approaching budgeting data, I introduce space into this literature for the consideration of other empirical and analytical possibilities.

The final consideration that has structured this study is the influence of the scholarship of Loukissas (2019). The intentional move towards considering data "settings" – datasets as not closed, not self-contained, not independently interpretable collections (ibid., p. 184) – has required a shift from a chronological or thematic structure towards a project-based structure in which each setting can be given space to be detailed. Adopting this format allows me to effectively elaborate this aesthetic approach as time and attention can be given to explaining

the context of an activity, the forces that shape engagement with a particular open dataset, the actors and technologies deployed, the perspectives and activities of those involved, and so on.

Part two: Narrowing possibilities

Chapter two: Scale

2a. Introduction

In part two of this study, I detail the narrowing of open data-led transparency across a three-part heuristic. In this chapter, I focus on the dimension of scale. Andrea Ballestero wrote that "transparency ideology" takes a "productively ambivalent" position on scale (2012b, p. 228). However, in the context of Mexico's federal open data, the expansion of scale has been a significant advantage leveraged by components of Mexico's transparency circuitry. This scaling of transparency purportedly allows for immense vistas across state activities, across geographies, and across time. To evidence this attention to scale, I describe the rapid expansion of federal open data since 2014. I consider the primary technology that has come to underpin Mexico's federal open data landscape: datos.gob.mx. My analysis draws attention to datos.gob.mx as *una plataforma*. I take this term seriously, identifying the centrifugal force that continuously draws open data into and through its conduits.

I situate this scaling of transparency within literature on the centralisation of power towards the Mexican President. However, I argue that recognising the scaling of open data and its political resonances requires a change in conceptual lens. Whilst Mexican *presidencialsmo* is typically approached through the lens of exceptionalism, the scaling of open data points us in another direction. Datos.gob.mx cannot be understood though the lightning strike of the sovereign, but instead works to reveal the layers of deliberation, preparation, and planning required for the maintenance of this modality of power. The datos.gob.mx platform requires a system of forms that smooth data, and allow rapid transfers across its conduits, between open data producers and its users. Acknowledgment of this centralising logic runs counter to any power-sharing repercussions expected of open data.

However, reacting against the possibilities of transparency at scale, I then detail the subsequent narrowing in the scale of *daterx* projects observed during my fieldwork. I focus on a particular datathon, Datatón Nacional Anticorrupción 2019, to which I was invited to participate as a mentor to teams of *daterxs*. This datathon focused on open data covering public contracting, public servants engaged in contracting public services, and sanctioned public servants. Whilst this event lent heavily into the possibilities of open data-led transparency at scale, many of the teams I came to interact with proposed and executed projects that shunned scale. Through getting close to the work of these *daterxs*, I observed an orientation towards detail, toward condensing datasets, and limiting the scope of analyses. I complement these ethnographic moments with further research materials collected through

interviews with *daterxs*. Returning to the work of Michel Foucault, typically deployed to derogate the work of *daterxs*, I propose that this orientation towards narrowing the scale of open data analyses should be considered as a process of resistance to *presidencialismo*. Whilst not fulfilling Harcourt's (2020) optimal category of the *counter-move*, I argue that this narrowing orientation should be thought of in terms of *counter-conduct*.

In the conclusion to this chapter, I reflect on an unexpected reversal in the fate of datos.gob.mx. Despite platform dynamics ostensibly forging an endless cycle of expansion and appropriation, datos.gob.mx must now face a moment of *realpolitik*: its budget has been decimated, and its team disbanded to new priority areas of federal policy. This pushes us to also reserve space for recognising other, suprising modalities of power in this sphere of digital activities.

2b. Scaling transparency

Datos.gob.mx is the core site on the Internet through which to access Mexico's federal open data. This technology's history is tightly interwoven with Mexico's arrival at the vanguard of the global transparency movement, catalysed through Mexico's involvement with President Obama's Open Government Partnership (OGP). Known as the *Alianza para el Gobierno Abierto* (AGA) in Spanish, Mexico was one of its eight founding members.²⁵ It is important to note that Mexico's involvement with the OGP had its origins in the presidency of Felipe Calderón (2006-2012). However, it was under Peña Nieto's administration that Mexico's participation in the OGP matured, and that the intervention of interest here – datos.gob.mx – took shape.

As it was phrased to me by a public servant active in this sphere of public policy for several years, for Peña Nieto and colleagues, it was hoped that Mexico's participation in the AGA would "modificar la lógica del quehacer gubernamental" (Interview C7, January 2020). Further, digital technologies formed "la piedra angular de la nueva política de gobierno en México", with open data at the core of these efforts (ibid.). This turn to open data required a digital technology that could provide an access point to newly produced and disclosed data. The technology constructed to respond to this demand was initiated by AGA commitment *MX0051: Política Nacional de Datos Abiertos*, published as part of Mexico's second AGA *Plan de Acción Nacional, 2013-2015* (Alianza para el Gobierno Abierto, 2013b). Like any good functional

²⁵ Since then, the promises of the AGA have quickly caught the attention of governments in the region and over the proceeding decade thirteen other Latin American and Caribbean governments have joined the partnership.

specification, the commitment's description is careful to remain flexible, with the desired apparatus defined in terms such as "un mecanismo para la publicación de datos" and "un medio de acceso público a los datos abiertos" (Alianza para el Gobierno Abierto, 2013a). As also noted in this commitment, coordination of this technology would sit within Peña Nieto's *Estrategia Digital Nacional* (EDN), and so within the Oficina de la Presidencia de la República (OP).

The technology constructed to meet AGA commitment *MX0051*, datos.gob.mx, was launched on February 14, 2014. As of February 2020, the site hosted over 40,000 datasets from across 280 federal entities. The rapid construction of Mexico's federal open data space has been fundamental in Mexico's rise in global transparency rankings (Ortiz Frueler, 2015), as well being used as an international case study for lessons in making rapid progress in open data provision (OECD, 2018, 2020). In the technical documentation and secondary literature, datos.gob.mx is primarily described as *un portal* (Alianza para el Gobierno Abierto, 2013a; Lourenço, 2015; Ortiz Frueler, 2015). However, during my research interactions with *daterxs* and components of Mexico's transparency circuitry, the term *una plataforma* emerging more routinely. This shift likely reflects a broader lexical movement as the term *plataforma* has come to prominence in contemporary vernacular over the last few years. Nonetheless, I take this shift as an opportunity to consider the particular power dynamics at play with the formation and scaling of open data-led transparency, directed by Mexico's OP.

In 2010, Tarleton Gillespie, an early commentator on the semantics of technology platforms, noted how the term *platform* had previously been deployed as a "broadly progressive" sales pitch (2010, p. 356). This usage chimed in many ways with the rhetoric of the *portal*, as deployed in Government Technology forums such as the AGA. According to Gillespie, this progressive discourse allowed advocates to elide inherent tensions in these new technologies "between user-generated and commercially-produced content, between cultivating community and serving up advertising, between intervening in the delivery of content and remaining neutral" (ibid., p. 348). Yet, despite the term becoming a discursive resting point, these progressive connotations have certainly not crystallised. In a move against this initial technooptimism, recent scholarly work has shed this term of its progressive associations (cf. Bratton, 2015; Srnicek, 2017; Zuboff, 2019). As noted by Nick Srnicek, "While often presenting themselves as empty spaces for others to interact on, they [platforms] in fact embody a politics" (2017, p. 61). Indeed, it now common to point to technology platforms as unaccountable nodes of a sinister, "instrumental power" (Zuboff, 2019, pp. 351–398).

Platforms link actors and objects together across multiple sites, allowing them to interact in new ways. In the simplest terms, they are "intermediaries that bring together different users" (Srnicek, 2017, p. 57). Thought of infrastructurally (Bowker and Leigh Star, 1999), datos.gob.mx is both an installation of hardware and software that forms the basis for various operations and systems, and a bridge through which different relationships can be established. Through developing a technological infrastructure, transfers of data between actors can be established and maximised. Further, in drawing different actors into new associations, and providing an efficient conduit through which data can travel, this platform becomes an intermediary that users come to value. This can often mean becoming reliant upon the platform for both the retrieval of known open data, and serendipitous encounters with new datasets and data types.

On entering datos.gob.mx, there is an immediate sense of possibility. The image greeting the user is one that privileges their perspective, as they look out over the Mexico City skyline from Chapultepec Park (figure vii). Cutting into the skyline, capping these urban high-rises, an empty search bar calls out to be filled with the user's unhindered requests. Sidebars and tabs offer a more structured route into this open "data world" (Gray, 2018, p. 4) – if the visitor so requires. Asked to reflect on their own experiences of using datos.gob.mx, one *daterx* remarked how the different icons that horizontally line the screen (directing the user to various categories of open data) are welcome, as through them "se puede comprender que este mundo de datos puede brindar diversas oportunidades" (Interview A31, February 2020).

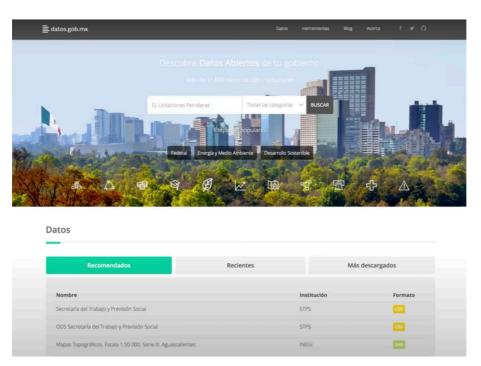


Figure vii: Screenshot of datos.gob.mx landing page (August 2021).

Beyond a sleek webpage, datos.gov.mx also incorporates features that align it to the many eminent technology-company platforms that the reader will no doubt be familiar with. For instance, the datos.gob.mx technical architecture is easily expanded, facilitating connections between multitudinous actors and datasets at any one time. This flexibility is key to ensuring the platform can host an expanding quantity of datasets and users. Additionally, datos.gob.mx complements the core functionality of open data provision with additional component and tools for users, becoming both a conduit of data and a site for its analysis and interpretation. As noted by Srnicek, "More often than not, these platforms come with a series of tools that enable their users to build their own products, services, and marketplaces" (2017, p. 57). Further, datos.gob.mx offers application programming interfaces for developers, facilitating these data's integration into third-party systems and data feeds, the development of plug-ins, and mirror sites. Datos gob.mx even offers both managed and user-generated content, including guides and write-ups of previous projects that are relevant to those that come to engage open data. Thus, datos.gob.mx is not only the key conduit for the transfer of open data between sender and receiver, but a crucial space through which open data are engaged and deployed.²⁶

According to the work of Anna Lowenhaupt Tsing, scalability involves seeking constant expansion, increasing size, speed, and efficiency without substantively rethinking what this expansion may mean for any constitutive elements or the potential adverse consequences of always scaling up (2015, pp. 37–43). Approaching scalability in digital spheres, Benjamin Bratton, proposes that platforms hold within them a generative logic, coalescing more and more data into their systems in order to fill ever-expanding conduits (2015, pp. 41–50). These two threads of thinking are reflected in the development of datos.gob.mx. Even in its infancy,

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²⁶ Although I argue for the relevance of critical platform thinking to the case of datos.gob.mx, it is also necessary to make a number of significant distinctions between datos.gob.mx and the technology-company platforms this term is now synonymous with. Clearly, the user base of Mexico's open data platform is not at all comparable with global technology-company platforms. Whilst taxonomies of platforms based on size or user numbers encompass their own restrictions (Tarnoff, 2019), data.gob.mx certainly sits at the opposite end of the spectrum to say, Facebook. A more critical point of difference is that datos gob.mx is not directly involved in the commodification of data. Through datos gob.mx, an individual datum is not assigned economic value to be sold off, or deemed so valuable as to be kept secret by means of the highest cybersecurity and legal frameworks. Whilst datos.gob.mx connects those seeking data and those who supply data, it is not a marketplace in the usual sense in which a trade occurs. Exchange occurs, but this is not dictated by a profit motive. Indeed, datos.gob.mx is – although not stated in these terms - implicated in the processes of the decommodification of data through the gifting of data between public institutions and daterxs. In not ascribing economic value to these data, they are kept at a distance from the forces of the market economy - at least in the short-term. Another dimension of platforms explored by Srnicek is their role as an "extractive apparatus for data" (2017, p. 63). During interactions with functionaries of datos.gob.mx they noted that the platform gathers basic data on site usage and interactions with datasets, but such data do not capture the "behavioural data" explored by Srnicek (2017) and Zuboff (2019). Indeed, the small quantities of behavioural data collected by datos gob.mx were the subject of a solicitud de información submitted by research participants of this study. According to these daterxs, the subsequent data released showed minimal behavioural data extraction.

the platform gathered into its domain core sectors of the Mexican state apparatus, such as open data from the Procuraduría General de la República and Petróleos Mexicanos. In 2016 and 2019, Mexico's AGA *Planes Nacionales de Acción* (2016, 2019) maintained focus on expanding both the depth and breadth of the open data made available through this platform.

Whilst some institutions, such as the Instituto Nacional de Estadística y Geografia (INEGI) make the primary datasets produced available for download from their own websites, most of the state's core data-producing institutions now directly link their own websites to the datos.gob.mx platform. Even the Consejo Nacional de Población (CONAPO), once a favourite site for researchers, activists, and journalists, now has its users pushed directly to the datos.gob.mx platform (Ortiz Frueler, 2015, p. 31). Data.gob.mx is now the central repository and access point for almost all of the state's major data producing entities, tying together disparate "data archipelagos" (Bratton, 2015, p. 10).²⁷

Since the AGA plan for 2019, the platform has expanded from a federal project towards "una estrategia nacional", with a subsequent focus on absorbing state and municipal data (2019, p. 13). As such, inclusion within this *mundo de datos* is now essential for any state institution or agencies' claim to transparency. The development of datos.gob.mx, involving the convergence of this flexible computational infrastructure with user benefits, also requires the imposition of legal requirements and data-governance processes to facilitate this platform's centrifugal force. The expansion of the breadth and depth of open data disclosures requires that an increasing numbers of state entities be legally obliged to release their data in certain ways. Therefore, we see increasing requirements for how data must be produced and prepared for publication and subsequently published. As a public servant from the CONAPO informed me, the introduction and rapid growth of Mexico's open data requirements "ha requerido un gran cambio en nuestra forma de trabajar" (Interview C4, October 2019). Through Mexico's federal transparency laws, these institutions must also abide by the models, standards and formats (henceforth, forms) imposed by datos.gob.mx. Not to do so would be to risk coming up against the ire of the INAI and its set of legal sanctions. Thus, whilst datos.gob.mx may seem to only take on relevance towards the end of the data lifecycle, as the site of open data disclosure and transfer, this set of forms impacts heavily on the data production process, and so all of the subsequent intractions across this open data world.

²⁷ Such as the Secretaría de Economía, Secretaría de Hacienda y Crédito Público, Ministerio de Desarollo Social, Ministerio de Comunicación y Transporte, Ministerio de Medio Ambiente y Recursos Naturales and Comisión de Electricidad.

In establishing a clear set of forms and drawing increasing quantities of data into its domain, the datos.gob.mx platform seeks interoperability. ²⁸ However, "para lograr la interoperabilidad, es necesario estandarizarlos y ponerlos [data] en un formato común" (ibid.). Interoperability does not just ensure data can be easily brought into new associations, it is also primary to the production of data's value. On their own, each datum is a simple numerical or textual digit that provides little assistance in the knowledge production process. It is by putting individual data into relationships with other data and across new fields of data that their real value emerges (Kitchen, 2014b, p. 107). In scaling open data, datos.gob.mx ensures interoperability and this dimension of value. The growing number of entities, topics, regions and time periods consolidated into a single platform means that these data can be put into increasingly expansive relationships. For proponents of scale, open data can then cover vast new terrains, test broader hypothesis, and mine relationships across disparate entities. This only provides for new, exciting opportunities for the *daterx*.

Therefore, ensuring scale involves carving out and imposing the forms through which all future open data are produced. As a previous member of the datos.gob.mx team quipped during an interview, "la diversidad dificulta la interoperabilidad" (Interview C10, February 2020). This interoperability – the standardisation of open data inputs – has been at the centre of the datos.gob.mx project. In the first and second *Planes Nacionales de Acción* (Alianza para el Gobierno Abierto, 2011, 2013b) there were several commitments relevant to this task. For instance, *MX0034* established the file-types in which data must be published, and *MX009* sets out new standards to improve the quality and consistency of open data. Although the description of this commitment is brief, it contains the ambition to move towards a common quality standard across federal data-producing entities. These commitments were later consolidated under the Consejo de Datos Abiertos, "una política nacional para la publicación y uso de datos abiertos" (Alianza para el Gobierno Abierto, 2013a). Following *MX0051*, there was subsequently the establishment of a federal *Norma Técnica* for all federal data producers, pivoting on datos.gob.mx (Ortiz Frueler, 2015). ²⁹

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²⁸ A common term in data spaces, the public servant from CONAPO defined this term as "la posibilidad que tiene un sistema de obtener o transferir datos con otros sistemas" (Interview C4, October 2019).

²⁹ This includes measures such as the adoption of the international DCAT vocabulary, and the Dublin Core Metadata Element scheme. Whilst such commitments are often described as aligning open data disclosures to international standards, these can be more accurately described as ensuring non-global North actors follow the practices already adopted by global North actors (Birchall, 2015). This chapter does not fully consider the international consequences of the forms integrated into Mexico's sphere of open data. This is primarily due to a lack of research materials on this aspect, following several lost research opportunities due to the COVID-19 pandemic.

2c. Platforms for presidents

The unfolding of datos.gob.mx, suturing together a single access point to the state's open data, and positioning its users as able to rapidly traverse the conduits that interconnect a sprawling state apparatus, is by no means a natural development. As noted, its rapid expansion was designed and driven from the EDN, part of Mexico's Federal OP, through consultation with civil society via the Núcleo de Organizaciones de Sociedad Civil (NOSC). Whilst scholarship often skips ahead to think about what federal entities publish in their open data disclosures, I want to pause and consider the relevance of the institutional positioning of datos.gob.mx, and the subsequent repercussions for *daterxs*. I consider the scaling of open data, powered by the centrifugal force of datos.gob.mx, to centralise a modality of power in the federal executive branch – Mexico's OP. Thus, far from the liberatory potentials of digital platforms, datos.gob.mx fits into Mexico's unfolding logic of *presidencialismo*.

According to Enrique Krauze (1998), the central historical task of Mexican democracy has been the demolition of presidential autocracy. However, Soledad Loaeza notes that, "En México tenemos una cierta resistencia a discutir el tema del presidencialismo" (Cordera Campos *et al.*, 1996 [n.p.]). Despite this reticence, several of my research participants made specific reference to presidential power within the context of open data. In an interview with a long-time contributor to a civil society organisation focused on digital access, and a member of the NOSC, the participant noted: "[Peña] Nieto sacó la iniciativa [datos.gob.mx] como una oportunidad de avanzar en la centralización. Claramente demuestra un gusto por el presidencialismo" (Interview B3, October 2019). Of course, the individuals whom I was engaging, with their professional and political interests, are not the broad public to whom Loaeza refers. Yet still, I was surprised by the regularity of references to open data's centralising tendencies during my research interactions.

Echoing Krauze, according to José Antonio Aguilar Rivera, in Mexico "La democracia nació con la desconfianza del poder unificado como marca de nacimiento" (Aguilar Rivera, 2020 [n.p.]). Since Mexico's imperial history there have been numerous struggles to prevent the concentration of power in a single figure.³⁰ Yet, even after these interventions and the beginning of Mexico's *democratic* history after the 1910 Revolution, the figure of the President

³⁰ Historians points to moments such as the military opposition to President Venustiano Carranza (1917-1920), the delahuertista rebellion (1934), and the expulsion (1936) of former President Plutarco Elías Calles (1924-1928) as early examples of counter-balancing forces to the position of the President (Meyer, Segovia and Lajous, 1978). Carlos Heredia Zubieta (2020) points to the Texan declaration of Independence, and the subsequent attempted independence of the northern states of Tamaulipas, Nuevo León, and Coahuila as another direction through which Mexico's *presidencialismo* has been challenged.

has benefited from a dominant position in relation to the other branches of government and state institutions. As noted in chapter one, scholarship has focused in particular on *Cardenismo* and *Salanismo*.

Whilst the Federal Constitution of 1917 sought to prevent the rise of another dictatorship, enshrining the federal character of the Republic, and a re-distribution of power towards the legislature (Aguilar Camín and Meyer, 1993), this task was also pitted against other political objectives. Brian Loveman (1993) has observed that *artículo veintisiete* of this Constitution endows the President with the power to suspend constitutional order and the rights of citizens, forming a direct copy of *artículo veintinueve* of Benito Juarez's 1857 Constitution. Loveman uses this as evidence to propose that at the heart of Mexico's democratic structure there is an oligarchic mechanism that allows for the expression of sovereign power (ibid., p. 67). In *The Mexican Exception* (2011), Gareth Williams links this remnant of dictatorial power to what theorists such as Carl Schmitt ([1922] 2005) and Giorgio Agamben (1998, 2005) have termed the *state of exception*: the sovereign's capacity to transcend the rule of law. Williams' contribution identifies such moments of exception as a recurring dynamic in Mexico's democratic history, forming the core modality of power through which *presidencialismo* is maintained ³¹

Scholars have also pointed to the PRI party-system as the source of Mexico's preferential presidential arrangement (Cordera Campos *et al.*, 1996). Yet, this perspective was contested by the 2000 presidential election in which the PRI's hold on the OP was broken. Indeed, this break in federal power produced the opportunity for new forces to push forward reform agendas. The Grupo Oaxaca's successful lobbying for Mexico's original *Ley de Transparencia* (2002) is one of these outcomes (Francisco Escobedo, 2010; Puente de la Mora, 2017). A more concerted effort to limit the power of the president began in 2005 with the growth of "antipresidencialismo" (Aguilar Camín, 2018, p. 189) that saw other state institutions fight to multiply "los contrapesos institucionales al poder presidencial" (Sánchez Talanquer, 2021b [n.p.]), including the introduction of autonomous institutions and devolution of powers to state-level institutions. Mexico's INAI, the national transparency guarantor and linchpin of the transparency circuitry, is one of the institutions that was bolstered by this institutional unsettling and attempts to "limitar el poder presidencial" (Aguilar Camín, 2018, p. 189). This involved having its constitutional position elevated from a federal institution (previously, IFAI)

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³¹ For instance, Williams argues that President Felipe Calderón's *Guerra contra el narcotráfico* is a clear expression of presidential power wielded through exceptionalism (2011, pp. 17-40).

to a national institution (hence, INAI). As these two examples indicate, Mexico's transparency advances and reforms are tightly interwoven with this struggle against presidentialism.

However, apart from a spatter of hard-won initiatives, Mexico's OP continues to endure as the centre of the political system. Indeed, as Irma Eréndira Sandoval presciently predicted in the early days of the AGA, the digital interventions that it would spawn could also work to "aumentar el control de la Presidencia de la República sobre el flujo de información gubernamental y preservar la opacidad" (2012 [n.p.]). Following Eréndira Sandoval, whilst recognising that datos.gob.mx is an infrastructure emerging as part of democratic reforms, attention to its ambitions for scale through platform logics allows space to question its democratic possibilities. We can recognise how transparency at scale is dependent on Mexico's OP spinning a technical infrastructure of forms that now underpin open data-led interactions between the state apparatus and its citizens. Yet, whilst I seek to situate this insight within extant literature on presidencialismo, it is important to consider how datos.gob.mx modifies this logic. The material differences between the printed text of the constitutional document and the digital code scripts that build datos.gob.mx are not all that separates these modalities of power. Whilst Williams positions the potential of invoking the state of exception as core to presidencialismo, datos.gob.mx points to an additional modality at work.

Louise Amoore (2013) suggests caution when deploying the frame of exceptionalism to contemporary data-driven processes, particularly in state-security spheres. Amoore's reading of Agamben and Brian Massumi (2015) takes issue with exceptionalism when theorised as a moment of the lightning strike. In this moment of the strike, the sovereign's move becomes emptied of discussion, consultation, and preparation. To admit to any of these preceding processes would be to "admit to having been in a state of indecision" (ibid., p. 5) – a state of being incompatible with the exception. Thus, there is an unpredictability and uncontrollability to the sudden flash of exceptionalism that is essential to its power. This is why Agamben understands the state of exception as a "kenomatic" or "anomic space" (2005, p. 48). Yet, for Amoore, to focus on this sudden moment is to ignore the complex calculations and processes that produce the conditions of possibility for the strike: "what is elided is precisely the lively, unpredictable, and complex life that thrives within that space" (2013, p. 2). In very non-digital terms, we can also see this critique echoed within the work of Proceso Pentágono, noted in chapter one, with the PRI-state's extensive bureaucratic administration positioned as the foreground of their dirty war tactics.

Whilst scholars such as Ranciére (2004) had previously raised the issue of the emptiness of the sovereign strike, Amoore draws our attention firmly towards how digital infrastructures always evidence that "the sovereign strike is always already something more, something in excess of a single flash of decision" (2013, p. 2). Code bases, technical protocols, data forms, and the construction and maintenance of sophisticated hardware all evidence the preparation and planning that precedes the strike. Indeed, it is exactly this preliminary rush of actions and decisions that are the desired object of transparency for many *daterxs* and civil society actors. It is the discussions, consultations, and preparations that the *daterx* seeks to gradually uncover through targeted analysis. Consideration of the preparation, planning, discussion, and consultation undertaken to produce a platform such as datos.gob.mx pushes us to adopt other conceptual tools and texts.

What the process of scaling open data reveals is the way power emerges in this process of establishing and dictating the forms open data must take. As the ex-EDN public servant made explicit: "Tomamos decisiones trascendentes en materia de datos abiertos" (Interview C2, October 2019). A consistent lesson derived from Science and Technology Studies scholarship is that there is no such thing as a "natural" or "universal" system or standard (Bowker and Star, 1999, p. 13). In coordinating the datos.gov.mx platform, the centralisation of power can be traced in non-exceptional terms through a deeper consideration of how dictating the forms open data take is also part of the arsenal of power located in the OP.

This departure from exceptionalism and a focus on forms immediately invites an analysis influenced by the writings of Foucault. Foucault's seminal work on biopolitics is concerned with the production of the category of the population and the standards and classificatory systems that are required for its reproduction. In concluding Security, Territory, Population ([1978] 2007), Foucault summarises biopolitics as "the genesis of a political knowledge that put the notion of population and the mechanisms for ensuring its regulation at the centre of its concern" (ibid., p. 363). As Foucault proposes in previous texts, to produce and maintain this population, bureaucrats needed to create and enforce a uniform set of data-gathering and encoding practices – for instance, standardised medical records ([1977] 1995). Crucially, these forms do not only have effect on paper, but also produce new modes of subjectivity. This is a principal contribution that Foucault's work enables us to perceive: power is not only constraining but can also be a productive force. Ian Hacking, a scholar who draws insightfully on the work of Foucault, described these practices and institutions as bringing "a new kind of man into being, the man whose essence was plotted by a thousand numbers" (1990, p. 34). For Foucault, the production of particular subjectivities results in the norm: lives lived according to a social and moral order that serves the interests of those in power (2007, p. 63).

In further contributions, Ruppert and colleagues have detailed the emergence of "subjects who take positions in and through the various resignifications and challenges that it [data] spawns" (Bigo, Isin and Ruppert, 2019, p. 12). *Data citizens* is a term that captures the subjects that form as the outcome of techno-political data practices (Gabrys, 2019, p. 255). There is a distinction to be made here between the broad statistical persons produced through data (i.e., Hacking) and those formed with engagement with the state's data (of interest to Ruppert and colleagues). The plural – *citizens* – is also important as data "subjectifies through practices of production, accumulation, aggregation, circulation, valuation and interpretation" (Bigo, Isin and Ruppert, 2019, p. 13) – with this plethora of activities not consolidating into a single trajectory, but demonstrating the multiple and competing "modes of political subjectivity that materialize through the language and practices of 'data citizens'" (Gabrys, 2019, p. 255). For *daterxs*, a subset of data citizens, the practices of mobilising open data are crucial to the formation of political subjects (Isin and Ruppert, 2015; Gabrys, Pritchard and Barratt, 2016).

Developing on this line of thinking, directing datos.gob.mx – and so the forms that define what and how open data are captured and published – positions this norm-creating power squarely within the sphere of the OP. The AGA commitments noted above are more than just functional specifications, but the basis for how state activities themselves can come to be captured, published as data, and known to open data users and their audiences. Through building this platform and establishing the conduits through which open data must move between state entities and its users, the ability to dictate the terms of interoperability can be positioned within the contemporary arsenal of *presidencialismo*. The democratising discourse of open data at scale – the possibility of immense vistas across state activities, across geographies, across time – becomes undercut by recognising that the forms through which these vistas take shape are in fact an expression of presidential power. Datos.gob.mx holds Mexico's federal open data space together, but it also invests its organisers with significant resources to arrange and alter how open data are produced and circulated. Here, there are echoes of the *decisiones trascendentes* and changes to daily working practices noted by my research participants.

Yet, a potential concern emerges in turning to a framework developed through the historical analyses of Foucault and Hacking to consider this very contemporary dimension of presidential power in this digital sphere. This is not to say that Foucault's frameworks and methodologies are obsolete, but suggests that caution should be taken in their direct application to contemporary phenomena. Colin Koopman (2018, 2019a, 2019b) has addressed Foucault's thinking more specifically within the realm of data. In response to the application of Foucault's texts and tools to contemporary data practices (cf. Harcourt, 2015),

Koopman argues that "biopolitical statisticalization and disciplinary documentation neither wholly anticipate nor exhaustively comprehend the politics of datafication in which we now find ourselves" (Koopman, 2019a, p. 113). According to Koopman, this divergence emerges through Foucault's analytical focus on the material body, and later, the collective population. It is important to note that Koopman is not only making this argument in the context of *big* data, where scholars have rushed to develop new theoretical approaches to meet its novelty. Instead, even in earlier histories of datafication, Koopman attempts to identify logics at play that escape a Foucauldian framework. Therefore, Koopman proposes that "Perhaps we need to do to Foucault what he did to all political theory before him: learn from him what we can and then productively press onward" (ibid., p. 161).

To fill this gap, Koopman argues that contemporary data assemblies – such as datos.gob.mx – exhibit a modality of power internal to them that is not reducible to biopower (or, disciplinary power) (ibid., p. 14). Instead, Koopman presents the concept of *infopower*. Infopower emerges through informational formatting: the checkboxes and forms that "shape, constrain, and prepare whatever is collected, stored, processed, refined, retrieved and redistributed" (ibid., p. 12). Similar to prior scholarship, Koopman agrees that the quotidian work of formatting is rarely neutral, despite often being presented as such (ibid., p. 12). But what is distinct in Koopman's approach is the proposal that formatting reveals there to be a modality of power "internal to information itself" that works to subject us to operations of being fastened to our data (ibid., pp. 14, 156). This is emphasised in Koopman's subtle shift from "informational persons" to "information's persons" (ibid., p. 5). Attention shifts towards what "our informational technologies have coaxed us to become" (ibid., p. 6).

Charting the development of infopower, Koopman argues that this logic is "canalizing and accelerating" its own dynamic: "we are fastened in a double sense: pinned down and sped up, boxed and quickened, canalized and accelerated. We are first wound up tightly, and then set to a dizzyingly fast spin" (ibid., p. 157). However, presented with a context such as datos.gob.mx, deploying Koopman's framework would propose that the architects of this platform – Mexico's OP – are not in fact the ultimate beneficiaries of this scaling of open data. Instead, Koopman pushes towards recognition of data forms as not only productive of the self "but rather constitutive parts of who we can be" (ibid., p. 8). Data and their attendant informational practices are themselves the central "universalizing technology" (ibid., p. 10) that extend beyond any particular political or social regime.

Yet, this conceptual shift in the beneficiary of this modality of power is left unexplored in Koopman's contribution. Whilst claiming that infopower is irreducible to previously proposed

theories, its contemporary contours remain abstract. Data's current significance is given in their detailed histories, yet the actors who direct and profit from these forms are left unconsidered. In the shift towards consideration of Koopman's *information's persons*, we lose sight of a fundamental component of the preceding interventions of this politics: information and data are always spaces of domination, where there are real winners and losers in the exercise of different modalities of power (Haraway, 1988). Thus, I would draw the reader's attention back towards the biopolitical frame as it allows us to understand how the direction of datos.gob.mx fortifies and renews *presidencialismo*, with the OP being the clear beneficiary of this modality of power.

In Koopman's elaboration of infopower through data forms, there is a continued committed to the idea that these forms – the "ubiquitous shapes into which we regularly squeeze" (2019a, p. 12) – succeed in producing data that are always responsive to them. This conclusion – that data always follows form – is one that is arrived at by open data's most vocal proponents, although via a different route. These proponents favour the optimistic assumption that digital technologies (and their users) by necessity behave as expected, with the resulting data rapidly disclosed always accurate and of high quality. Thus, datos.gob.mx will necessarily be populated by datasets attuned to the forms dictated, permitting these vast vistas at scale. Accordingly, open data will always be smooth, cooked and easily interoperable. In the research materials I present across the chapters of this study, this perspective will be debunked and replaced with an appreciation of the openness of open data. In the remainder of this chapter, I focus on how daterxs respond to the scaling of open data through datos.gov.mx. For, despite open data's rhetoric of facilitating transparency across the entire state apparatus, my research interactions led me to observe daterxs choosing to work at much smaller scales. To elaborate this dynamic, I present materials collected during my participation in a datathon intended to maximise on the possibilities of an open data-led transparency at scale.

2d. Shunning scale

In December 2019, I was invited to join the Datatón Nacional Anticorrupción (DNA) as a mentor to teams of participating *daterxs*.³² The datathon was supported by a number of organisations that were already familiar to me as part of Mexico's transparency circuitry. In

³² This invitation came about through previous research interactions with some of the event's organisers, particularly with staff of the *Plataforma Digital Nacional*. Whilst I was invited in order to provide "una perspectiva internacional" on *daterx* projects, I am quite sure that my institutional affiliations were the primary factors motivating the invitation to participate as a mentor.

addition, this datathon was also funded by US Aid, along with Microsoft and the British Embassy in Mexico. As I go on to detail, it was an event that fully leaned into the possibilities of open data at scale.

A webinar published in the days leading up to this event introduced the characteristics of the open datasets to be explored during the DNA. The core datasets, known informally as S2, S3 and S6, were all produced by the federal Secretaría de Hacienda y Crédito Público (Hacienda) and so directly available on datos.gob.mx.³³ These federal datasets had successfully passed through the conduits of this platform, and so their production taking place according to the forms dictated by the OP. This meant that each datum could become a frictionless unit, smoothly transferred from datos.gob.mx onto the digital devices of the attending *daterxs*. Indeed, the webinar emphasised the careful work that had gone into producing and publishing these datasets.³⁴

Thanks to following these forms, these open data were touted as providing a detailed panorama of federal public contracting over previous years, broken down to the level of individual public servants across the state apparatus. The scale assembled by each one of these datasets – each containing hundreds of thousands of data points – was only amplified by the possibility of each of these datasets being put into relation with other datasets. This interoperability was a recent technical advance made by Hacienda, with this progress now offering the possibility of enhanced transparency at scale across public contracting. Indeed, most of the preparatory webinar focused on the different skills and techniques required to bring the numerous volumes of JSON code together. After doing so, public contracting data across vast swathes of the state apparatus became available for exploration and mining.

³³ These datasets were titled *Servidores públicos que intervengan en procedimientos de contrataciones públicas* (S2); *Servidores públicos y particulares sancionados* (S3); *Sistema de Información Pública de Contrataciones* (S6).

³⁴One of the most emphasised of these was the Estándar de Datos de Contrataciones Abiertas (EDCA).

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Figure viii: Author's screenshot of one of the datasets (S3_5) in JSON format explored during the DNA (August 2021).

Arriving at the datathon, I was surprised to find the event hosted in an upper story of a high-rise complex in the heart of Mexico City's midtown. This steel and glass structure provided for impressive views out over the city skyline, offering a horizon reminiscent of the image that greets the datos.gob.mx user when landing on the platform's website (figure vii). As I arrived, part of the event's production team circulated the space with a drone-mounted camera, whilst others laid out the event's paraphernalia (t-shirts, notebooks, pens and so on), and others erected branded signage across the impressive space in anticipation of the arriving participants. There was clearly a set of resources available to this datathon's organisers that was not matched in other research events that I participated in.

The expenditure of resources and the possibilities presented by these newly interoperable datasets culminated in grand expectations of *daterxs*. Requiring a prior application for entry into the datathon, participating *daterxs* had to have experience in either data analysis, software development, journalism or law, and were expected to put those skills quickly to use on these datasets. The teams of participants that came to fill this space, formed from roughly sixty *daterxs*, were notably more senior in age and experience than at other datathons I observed and participated in. My research jottings captured the attire that I observed across the DNA's participants. The usual *daterx* uniform of branded hoodies, jeans and trainers had been swapped for buttoned shirts, blouses, smart jumpers, and skirts. Although a minor detail, this change captured the atmosphere of the DNA: *daterxs* came prepared to develop serious analyses.

This sense was re-emphasised during the DNA's official opening, delivered by senior public officials and civil society representatives who reiterated the grand opportunities that these datasets – now interoperable – produced for exposing corruption in Mexico. Emphasis was put on the types of analyses and tools that could assist in the identification of corrupt networks of public servants and private organisations, identify patterns in nefarious practices, and building predictive tools to combat future graft. Given these lofty expectations, I was relieved that I was participating as a mentor and my contributions would not be presented, judged, and scored by the DNA's panel of experts at the end of the datathon.



Figure ix: Author's image capturing the DNA's official opening and introductory talks (December 2019).

As a mentor, I had the privilege of being able to move across the teams of participating daterxs, responding to requests and pausing to observe the different approaches being taken to the analysis of these open datasets. One of the teams that I came to observe closely – Team X – was formed by a group of two physicists, a data scientist, a software developer and a journalist. They had travelled by car to Mexico City from their hometown of Xalapa (Veracruz) overnight. Like myself, they were a little taken aback by the set-up of the DNA and the expectations on daterxs. Yet, as the morning began, they huddled around a makeshift whiteboard to finalise the direction of their project. These suited figures detailed the contours of their project: not only were they to work with the three datasets provided by Hacienda, but

they planned to also incorporate open data from another eight sources.³⁵ They even asked if I could assist in identifying open data sources from other Latin American contexts to be used for benchmarking against Mexico's open data. This mammoth database would then be mined in order to surface six key variables, on which they would perform several cluster analyses.

Their enthusiasm was palpable as they passed coloured marker pens amongst themselves, with each colour further amplifying a portion of the project that lay ahead (figure x). Observing their aspirations and activities, Team X's project proposal came to exemplify the possibilities of scale for *daterxs*. The rapid maturity of Mexico's landscape of federal open data, directed from the OP, ensures the ability to weave these diverse open data together, to develop an understanding of contracting behaviour across vast segments of the state apparatus. From this mass of open data, the resulting tables, graphs, and maps would disclose the manifold statistical relationships that underpin public sector corruption. The members of team X set themselves a lofty mission. Only after each empty space of the whiteboard was filled were their blazers removed and the plan put into action.

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³⁵ For instance, this included additional datasets from the Auditoria Superior de la Federación and the Registro Público de la Propiedad Federal.

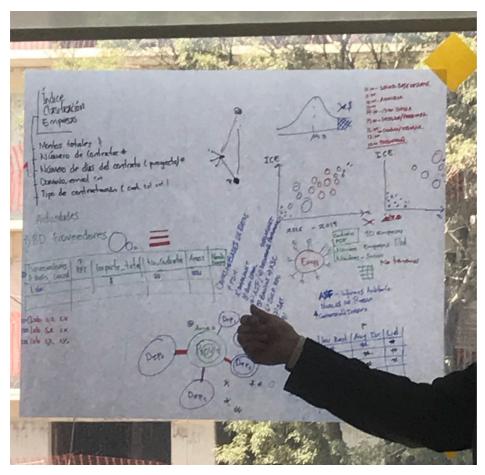


Figure x: Author's image of a Team X's project plan for the DNA (December 2019).

Whilst Team X responded affirmatively to this call for scale, they were amongst the exception. Had I been a participating *daterx*, sitting through the preparatory webinar and introductory talks, huddled amongst glass, screens and suits, I too would have felt compelled to embark on a colossal analysis that continuously propelled outward. Indeed, as a mentor, I had been instructed to push teams to think about their projects capaciously. However, most of the teams I came to interact with during the DNA took a different approach to planning and executing their projects. As my fellow mentors and I circulated through spaces busy with activity, I came to encounter many more projects that shunned the temptation towards amplification, narrowing the possibilities of their projects.

Another team that I came to interact with closely was Team P. They had travelled in from the adjacent city of Puebla. Outside of these spaces, three of the team worked professionally as data analysts, another as an economist, and another as a lawyer. Whilst this was their first time working together as a team, each had previously taken part in datathons and individually undertaken analyses of federal open data. They also spent their morning marking the blank spaces of a whiteboard. It quickly filled with the customary circles and rectangles linked by

arrowed lines, depicting the intended new relationships to be drawn between variables across datasets (figure xi).

It was a messy collection of sketches by the time I reached their station – akin to that produced by Team X. Yet, as I observed them deliberate, I realised that they had plotted out the many directions which their project could take. However, it was now time to select which direction to pursue within the limits of Hacienda's core datasets. As they discussed each proposal, the prospect of scale was inverted. They thought carefully about how and if datasets should be brought into relation, and if amplification of the remit of their project was necessary. They also acknowledged the openness of open data: they knew that the open datasets they would come to work with would not hold the smoothed datum expected. As each potential line of investigation was put under scrutiny, more contention emerged with the objective of scale.

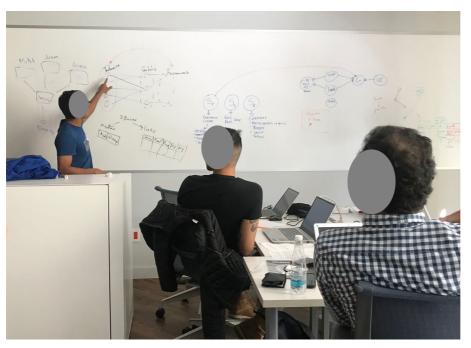


Figure xi: Author's image of a team of daterxs participating in the DNA (December 2019).

Team P eventually settled on working solely with the S6 dataset. Further restricting the scale of their project, they chose to focus only on contracts made through *adjudicación directa* (noncompetitive tenders). The lawyer in the team was aware that according to federal law, there was a limit to the amount that each federal institution and agency can spend via direct contracting. Within Hacienda's datasets, it was not possible to identify these limits and any potential contracts that surpassed them. Therefore, Team P planned to enrich a subset of this single dataset, developing "un sistema de banderas rojas con puntos de alerta dentro de este conjunto de contrataciones que violaran este procedimiento" (Fieldnotes, December 2019).

Still a significant undertaking, given the breadth of the S6 dataset. Yet, each time I returned to the station of Team P, another factor came to further constrain the scale of their project. For instance, this flagging system needed to incorporate individual weightings per institution per year, as these shifted according to the size of each institution's proposed budget. Therefore, Team P further defined their scope to only include contracts for the first ten institutions of the S6 dataset (when ordered alphabetically), over 2017 and 2018. This project no longer sought to encompass the entire state apparatus, nor a large chunk of it. Instead, it attended to a small subset of the data that datos.gob.mx could yield.

The eventual output of this project would be a simple code script that, whilst vertically running into thousands of lines, was horizontally slender. Just one additional variable that would intermittently read "s" – for sospechoso – as the lines of code descended. This "s" signalled a contract that surpassed the *limites establecidos* for direct contracting per institution per year. It was a small intervention into a mass of open data that seemed, according to DNA organisers, to demand more. Yet, it was an intervention that these *daterxs* were keen to pursue. They worked through the S6 dataset with an energy that was impressive, keeping the other mentors and I returning to their station to keep track of their progress.

During these visits, mentors pressed Team P on how scalable the algorithm they were developing to produce this measure of suspicion could become. Yet, several factors complicated any prospect of scaling their code, such as irregular shifts in budgets, and the closure, merger and creation of federal agencies and institutions (especially in the period of a new *sexenio*). Whilst any subsequently expanded flagging system could learn from the basis of Team P's code, so many factors would need to be re-visited that it would essentially involve creating a new system. Still, Team P persisted in the elaboration of their project.

Team P were not alone in constraining the scale of their contribution to the DNA. As we circulated amongst the spaces of the DNA, mentors had to work hard in their role as facilitators of scale. Apart from exceptions such as Team X, the projects proposed and initiated quickly shed the impulse towards maximising on the scalability of open data that drummed through the DNA's proceedings. This impulse towards producing transparency at scale – palpable in the setting, discourses, and production of this event – was shunned as *daterxs* opted to work on much more modest projects and sought to test much more narrowly defined hypotheses.

This does not mean that these projects were meagre contributions to the broader mission of uncovering and disputing corruption. However, such scaling down did seem to carry this risk. In a subsequent interview with a member of Team P, when I moved to ask about the scaling

down of their project, they jumped to inform me that this was by no means a consequence of the team's technical abilities: "O sea, no fue tan complejo técnicamente. No creo que haya sido un reto para nadie del equipo" (Interview A22, December 2019). Their tone was assertive, as if my question had involved passing judgement on their project — I had not handled the transition from mentor to interviewer successfully. This point was re-emphasised later in the interview, although this time less emphatically: "Dudo que publique el código [of Team P's project] en mi GitHub, o al menos, no en mi perfil personal" (ibid.).

In further exploration of the DNA, this *daterx* expressed aversion to the datathon's emphasis towards transparency at scale: "fue un poco agobiante, ¿no?" (ibid.) – referencing the atmosphere of the DNA. On the one hand, they were referencing the drones flying overhead, the mandatory photo sessions in branded t-shirts and posing with the sponsor's paraphernalia. Additionally, it was also this approach to open data analysis that was being pressed on participants that was causing this stifling environment. When asked to elaborate on this impression of the DNA, they noted:

Cuando amplificas [scale-up open data analysis projects], te pierdes en los grandes números. O sea, son cientos de millones de pesos aquí, cientos de millones de pesos aquí, otros cientos de millones de pesos aquí, otro número ridículo aquí. Ya no tiene sentido. (Ibid.)

On each annunciation of "aquí", the *daterx*'s two hands came together – thumb meeting thumb, middle finger meeting middle finger – to form the shape of a rectangular cell. These hands then stacked each cell on top of the other, portraying the descending records of a dataset. Interpreting this moment, I was drawn to think about the summary figures and statistics that often emerge through open data analysis at scale, where the entire activity of sprawling institutions is compressed into a single digit. A few pixels below, another institution is wedged into the available space. Abstracted from the contexts and details that have elaborated these digits, the *daterx* is disorientated, expected to make sense of numbers and sums that can only be taken for granted when approached through aggregation. As another DNA *daterx* related to me in an interview following the close of the event, when dealing with open data at scale, "no queda más que la fe" (Interview A26, December 2019).

At many points in my research interactions with *daterxs*, I was surprised by answers to the deceptively simple set of questions: "¿Cómo se define la transparencia estatal? ¿Qué deben hacer los *daterxs* para garantizar esta transparencia?". Whilst I began this research processes expecting responses to include grand references to the disinfecting power of sunlight, and metaphors of crystalline institutional structures that could only emerge through an overhaul of

institutional arrangements through the resource of open data, I recurrently encountered much more restrained responses. For instance, the following interview interaction with an experienced *daterx* with whom I had been introduced to during a transparency circuitry event at the beginning of 2020:

A33: No es lo mismo lo que me interesa a mí, que lo que interesa a otros actores. Considero que la transparencia es insuficiente como remedio a los problemas del estado. Pero también es insustituible. Es casi una trampa.

Author: ¿Puedes explicar lo que quieres decir con esto?

A33: La transparencia no lo va a resolver todo, como tampoco lo harán más mañaneras. Pero eso no significa que no haya pequeños avances que podamos hacer en diferentes puntos y campos. O sea, no soy totalmente pesimista.

Author: ¿Y qué significa esto para tu trabajo como *daterx*?

A33: Podemos usar datos para empujar en la dirección correcta, pero no de una vez, como si eso [a transparent state] fuese posible. Prefiero trabajar en propuestas muy específicas, no me gusta que las cosas se abstraigan... Descargo un conjunto de datos, y luego elimino el 90% de los registros y el 50% de las variables casi de inmediato, los cuales solo complementaré [with additional open data] cuando sea necesario. No quiero simplemente construir conjuntos de datos masivos.

Author: ¿En qué momentos se hace necesario complementarlos [the datasets]?

[Pause]

A33: En muchos. Pero trato de evitarlo como forma de trabajar y de abordar los análisis.

(Interview A33, February 2020)

It is worth remembering that this exchange emerged during an interaction with a *daterx* who had spent a great deal of time engaged in open data analysis since 2014. There may have also been a tiredness and frustration with Mexico's open data resources that predicated this refusal of scale. However, this idea was also expressed in many other research interactions that spanned age, experience, and technical ability. This sentiment was also conveyed in responses such as: "[transparency] significa elegir lo qué realmente quieres entender y poder entenderlo detalladamente" (Interview A3, September 2019) and "no significa saberlo todo [state activities]. Eso es imposible. Pero lo que sí sabes, lo sabes con detalle" (Interview A27, January 2020).

For me as a researcher subsequently interpreting these activities, conscious of the political resonances of open data at scale, the question then becomes whether this shunning of scale could also be interpreted as resistance against the biopolitically infused *presidencialismo* of datos.gob.mx. For, as Foucault notes in *The Will to Knowledge I*, "Where there is power, there is resistance" ([1978] 1998, p. 95). However, there have been significant shifts in conceptualising how power and resistance interact, both in the work of Foucault and subsequent application of these texts.

The first interpretation available to us would be to argue that in simply continuing to use datos.gob.mx and federal open data, the practices of *daterxs* offer no trace of resistance. However, in making this move we risk making the mistake of beginning with power, and so "inevitably end[ing] up seeing only power" (Hardt and Negri, 2017, p. 78). A more nuanced perspective can be developed if we return to the passage just stated from the *The Will to Knowledge:* "Where there is power, there is resistance, and yet, or rather consequently, this resistance is never in a position of exteriority in relation to power" (1998, p. 95). Considering this passage in full, we could argue that this shunning of scale does constitute resistance, but it is a very reactive modality of resistance that is never able to escape the original logics of *presidencialismo*. There is no exteriority to *daterx* activities that can evade the forms of datos.gob.mx, and so the refusal of scale only ever acknowledges and returns to this original expression of presidential power.

Offering a potential third line of argumentation, scholars have understood Foucault's later texts, such as *The Subject and Power* (1982), as offering a re-writing of parts of *The History of Sexuality* that allow for a less reactive understanding of resistance. If, for later Foucault, power involves "structur[ing] the possible field of action of others" (ibid., p. 221), then there is left open the possibility of engaging this field in different and creative ways. It is through these creative engagements that resistance is forged to the presidential forces that intertwine Mexico's contemporary open data resources. Whilst some research participants were consciously aware of and reacted against this logic (evidenced in the quotations in 2c), for others, this refusal was visible in their approaches to engaging and deploying federal open data. Therefore, whilst *daterxs* continue to use open data produced by the state, depending on its infrastructures, and according to its forms, there is a creative demand being put forward in the space of open data-led transparency activities that can be called resistance. Whilst still interacting with the forms of open data available to them – certainly, a significant force within this field of activity – their subsequent engagements also incorporate other actions for themselves and for others.

Despite being encouraged to maximise on scale within the DNA, many participating *daterxs* set out their own terms for engaging the available datasets, and the limits of their investigations. Whilst there was a call for breadth and escalation, many projects developed within this space limited scale in order to seek specificity, developing idiosyncratic analyses and tools that, by definition, could not allow for smooth expansion. In creatively traversing the field of action that datos.gob.mx creates, in being aware of this call for scale yet seeking out opportunities for this contraction in the scale of transparency activities, I observed a "counterconduct" (Foucault, 2007, p. 201) that infused many of my research interactions: an effort to "short-circuit" (ibid., p. 213) this emphasis on scale and its underwriting of presidentialism. Shunning scale is not only a moment of resistance to this impulse, but also a conduct that becomes its own form through encouraging flexibility with open data, such as the continuous shifting of project parameters undertaken by Team P.

Shunning scale may not be substantial enough to disrupt or cause chaos in the system (cf. Scott, 1985), but these activities do propose an alternative engagement with open data. Whilst sharing in the materials and technologies of open data at scale, shunning scale re-directs and re-creates the objectives associated with open data analysis and so offering something more than just disobedience. As evidenced in this chapter, shunning scale is a "a sphere of revolt that incites a process of productivity" (Davidson, 2009, p. xxx). This way of engaging open data may not reach the level of the "counter-move" – "countering without reference to its counter" (Harcourt, 2020, p. 201) – but counter-conduct remains a useful direction of travel perceptible within the activities of *daterxs*.

2e. Conclusion

The rapid expansion of Mexico's federal open data landscape has involved the construction of a platform whose centrifugal force has quickly drawn vast amounts of open data together. This possibility is underpinned by a technical system of forms that shape all federal open data. This chapter has argued that this positions a renewed modality of power within the Mexican OP. Collectively, the materials gathered through this platform present the possibility for the construction of immense vistas across the state apparatus. The *daterx* is invited to engage and elaborate equally immense projects, developing insights across institutions, geographies and times. This chapter then turned to explore several research interactions, drawn primarily from my participation in the DNA, in which working with open data at scale was shunned by *daterxs*. Whilst engaging the materials of the state, I have argued that this shunning of scale constitutes a productive sphere of counter conduct.

Yet, whilst working on initial drafts of this chapter, the circumstances surrounding datos.gob.mx changed substantially. During López Obrador's first year in office, Mexico's EDN (including datos.gob.mx) dropped from being a presidential priority to something of an afterthought. When, in July 2019, López Obrador's first Estrategia Digital Nacional was announced, the federal administration's focus was redirected towards expanding digital access and improving the country's Internet infrastructure (Castañares, 2019b).³⁶ A further announcement in December 2019 finalised a budget cut of roughly thirty percent for the EDN (Castañares, 2019a). In 2020, the withdrawal of funding to the platform continued at pace (Chávez, 2020; Riquelme, 2020). 37 As funding has dwindled, the team tasked with maintaining datos.gob.mx has been slowly dispersed to other teams and priorities. As I write the conclusion to this chapter in the winter of 2021, datos.gob.mx remains a functioning platform, and masses of datasets are still accessible through its search function, tabs and lists. However, as this infrastructure now receives little maintenance and open data-producing institutions receive limited support from the OP. This means that these datasets will slowly enter a state of "data rot" (Boellstorff, 2015, p. 104). Further, the platform itself will become punctuated with technical failures. Broken links, errors, and 404s will make what was once a major accomplishment in Mexico's federal transparency agenda a derelict space within a cluttered digital landscape.

Here, *realpolitik* has overpowered the theoretical explorations of Bratton and other platform theorists who are hard pushed to put limits on the pace of platform expansion. If Bratton's triumphant exploration of platforms now seems misguided in the context of datos.gob.mx, then, this turn in the fate of datos.gob.mx may offer an example of Paul Virilio's (2006) famous axiom that the invention of any new kind of technology is also simultaneously the invention of a new kind of accident. However, the side-lining of datos.gob.mx is in no way an accident. Instead, following Tung-Hui Hu, maybe the fate of datos.gob.mx actually "indexes a *reemergence* of sovereign power within the realm of data" (2015, p. xiii [italics original]). Troubling – both for the argument of this chapter and, more importantly, for the fate of federal open data and *daterxs* – we have come to witness a strange twist of technological exceptionalism: datos.gob.mx has been reduced to some digital version of Agamben's *bare life*. This platform did not only come to extend presidential influence into new sites and broader scales, it has now also become a necessary sacrifice to strengthen the demarcations of a new

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³⁶ The strategy did, however, specify that responsibility for policies around "Gobierno Digital" and "Gobierno Abierto y Datos Abiertos" would continue to be defined by the OP (Vásquez Cruz, 2019).

³⁷ It is worth noting that for the period 2022-2023, the EDN's budget has expanded to 117% of 2021-2022 levels. However, the key objectives for the EDN remain establishing Internet connection across the country (especially after the collapse of the *Red Conectada* programme) and promoting basic IT skills training across all age groups in Mexico (Domínguez, 2021; Ríos, 2021).

president seeking to forge an alternative politics of transparency (see Conclusion). Yet, as a final note, I would re-emphasise that this sacrifice has not occurred though a lightening-strike manoeuvre. Data *rot* emphasises this process of slow, deliberate neglect and decay. Nonetheless, this is a sorry end for an intervention that has done a great deal to enable *daterx* activities since 2014.

Chapter three: Scope

3a. Introduction

In this chapter, I continue detailing the narrowing of the possibilities of open data-led transparency through the dimension of scope. Whilst scale and scope are often used interchangeably, in this study, scope refers to the available field of tools and methods that the daterx deploys to analyse open data. This scope of tools and methods is determined by preexisting skills, the open data under investigation, and crucially, ideas of proper and legitimate data analysis. Whereas in chapter two, I proposed that the scale of transparency is narrowed through the efforts of daterxs, in this chapter, I argue that this limiting of scope is directed via the efforts of the transparency circuity. During my fieldwork experiences, restrictions on the tools and methods available for analysis came to be captured in the discursive gesture of análisis integral. This gesture expresses the need for rigorous investigation that takes shape through objective numbers, rule-driven decision-making, and a sense of calculative order. For the daterx, ensuring that the tools and methods deployed remain within scope is essential to producing transparency outputs that can be endorsed by the broader transparency circuitry. During this research project, I came to understand that this focus on análisis integral was not the result of a naïve alignment between datafication and empiricism. Instead, I understood its deployment as a response to the context in which *daterxs* and the transparency circuitry exist.

To develop the argument of this chapter, I draw on my experience participating in a two-week datathon during September 2019. During this datathon, our focus was on open data capturing state entity's spending on publicity and official advertising (publicidad oficial) during the sexenio of Peña Nieto (2012-2018). Hence, the datathon was called, publitón. Through close and productive collaboration with another datero, David, the project we developed went on to win the publitón. With assistance from a set of stakeholders, we then further elaborated and refined our findings into a transparency output that gained the approval of gatekeepers within Mexico's transparency circuitry. Titled, El gasto navideño en publicidad oficial (El gasto navideño), the full informe was published in December 2019 by Mexico's civil society watchdog for this sphere of public spending (Brandim Howson and Jáuregui, 2019b). In tandem, we also co-authored coverage of our findings that appeared in national and international outlets (Brandim Howson and Jáuregui, 2019a, 2019c), and David made a national radio appearane on Aristegui Noticias to disseminate highlights from the report

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³⁸ A pseudonym is not used in this chapter as the outputs of *El gasto navideño* have been published and circulated widely under our legal names.

(2019). Key findings from this transparency output also found their way into subsequent coverage by several popular news titles (Animal Polítco, 2019; Head Topics, 2019; Lado, 2019) as well media industry-specific outlets (AS Consulting, 2019).

With a keen interest on the "settings" (Loukissas, 2019, p. 2) from which open data emerge, this chapter first turns to providing the reader context on the production and disclosure of the open datasets we came to work with during the publitón. Doing so highlights that the production and disclosure of open data are highly contentious activities, sites of political strategy and negotiation intended to catalyse particular vistas and debates. In recognising that open data carry with them these complex and unfolding narratives, we are pushed to consider the openness of open data. Taking seriously this openness proposes that errors, gaps, and inconsistencies should not be written off as simply a lack of data. If nothing else, they tell us rich details about institutional priorities and shifts in attention that should be carried forward into subsequent analyses. However, such an approach is foreclosed by the more forceful demand made on *daterxs* for análisis integral. This chapter then turns to elaborate this discursive gesture, involving a restriction of the scope of analysis as many of the tools and methods deployed must reside within strict limits.

Yet, as is to be expected, deployments of open data sometimes diverge from the mark of análisis integral, both through decisions taken by daterxs and due to the openness of open data themselves. Instead of positioning these moments as moments of resistance and following a similar path to chapter two, I detail how my collaborator and I went about re-working our analysis to ensure it fit within the scope of análisis integral. Through participation in this process, I came to observe that this limiting of scope is not a burden naively placed on to daterxs. It is also, sadly, a mechanism through which the transparency circuitry protects daterxs and the interests of this community. Integridad becomes a mark of distinction between daterx activities and a broader field of periodismo. The deployment of this discursive gesture evidences a very real, very physical violence that structures the narrowing of open data-led transparency.

I end this chapter by considering the moments in which despite the re-working of *El gasto navideño*, the openness of open data remained present in our analysis. In these moments, I observed the emergence of a further discursive gesture: *análisis artesanal*. For my collaborator and me, coming to draw on *análisis artesanal* to ensure the progression of our project through the stakeholders and gatekeepers of Mexico's transparency circuitry, this gesture acknowledged that open data always remain open to other possibilities.

3b. The setting of SCS data

During the *publitón*, our focus was on federal spending on *publicidad oficial*. This was defined as "la compra de espacios en los medios para difundir información a la ciudadanía, y el gasto en la producción de materiales para llenar estos espacios" (Fundar, 2019, p. 1).³⁹ This area of public spending required the attention of Mexico's transparency circuitry as it had long been a shadowy space of financial manoeuvring with significant impacts for the prospect of democracy in Mexico. Historically, during the PRI-state era, officials established mutually beneficial relationships with media outlets, exchanging cash bribes for the promotion of positive coverage and the suppression of negative coverage (Gill and Hughes, 2005; Freije, 2020). Since privatisation efforts and democratisation reforms in the 1990's and early 2000's, media players developed revenue streams largely composed of private advertising and subscriptions, rather than government bribes (McPherson, 2012).

However, a new relationship between the state and private media actors emerged during the presidency of Peña Nieto. This administration is widely acknowledged for having vastly expanded public spending within the media sphere, developing more formalised, market-based interactions with national and regional media outlets, establishing similar clientelist results to the prior bribe-for-coverage era. Here, we do not see the withering of the state as a result of Mexico's neoliberal reforms, but the transformation and persistence of its core functions, with "PR-production" becoming one of these central functions (Fisher, 2009, p. 44). As Mexico's population became re-positioned as an electoral audience catered to by an increasingly variegated media ecosystem, state and government entities emerged as decisive forces in this ecosystem. The new tools of dominance became vast funds to buy advertising space and bank-roll media production.

This massive injection of cash also conveniently arrived at a moment when Mexico's media industry had to respond to an advancing digital transformation, with traditional media business models collapsing. Thus, both new and old players scrambled for federal pesos. The empirical research of Armando Rodríguez Luna has also established that in urban centres outside of Mexico City (such as Culiacán and Monterrey) as many as ninety percent of a region's primary media outlets are controlled by the state governor through expenditure on *publicidad oficial* (2018, p. 100). Commentators and analysts knew that a lot of money was being spent simply

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³⁹ This is public spending coded in Mexico's federal budgeting process under the category of *Servicios de Comunicación Social y Publicidad* and *Información en Medios Masivos Derivados de la Operación y Administración de las Dependencias y Entidades*.

from the state's footprint in every media channel. Yet, exact details and specificities of this spending remained unknown to those outside of these negotiations.

Publicidad oficial was actually one of the priority areas for open data production under Mexico's AGA commitments, championed by Mexico's OP. Yet, open data disclosed during the Peña Nieto administration only covered preliminary budgeted spending, not the *cifras definitivas* required for more substantive analysis (Fundar, 2019, p. 2). Further, the open data sporadically released to cover this area of spending were not at all the well-defined data objects expected to be produced by the system of forms considered in chapter two. For Mexico's transparency circuitry, these open data were unable to generate any significant impact, and spending on *publicidad oficial* continued "sin los criterios idóneos para su asignación" (ibid., p. 6).

A later federal law championed by Peña Nieto, the Ley General de Comunicación Social (2018), then established the creation of the Sistema de Comunicación Social (SCS), a new entity within the Secretaría de la Función Pública (SFP) tasked with reporting and oversight of publicity expenditure. This new intervention faced the difficult task of retroactively bringing the planned datasets promised in AGA commitments to fruition. Yet, if institutional pressures remained set against the accurate recording and disclosure of open data, production is unlikely to take place as intended, even in spite of the proliferation of transparency interventions, As a public servant within the Secretaría de Bienestar acknowledged in an interview, "es que muchas veces no existirán las condiciones para generar los datos abiertos cómo se esperaba" (Interview C11, March 2020). As I pressed on what was meant by such condiciones, the interviewee drew the conversation elsewhere and I struggled to guide our conversation back to this subtle revelation. I interpreted these words to refer to not only technical knowhow and computing capacity, but also factors such as institutional will, political interest and appetite. Whilst certainly not part of any of the forms outlined in open data's technical documentation or functional designs, these forces are also fundamental to shaping the landscape of open data.

Whilst the SCS began its task, the backlog of *cifras definitivas* continued to be blocked from being made open despite specific requests from components of Mexico's transparency circuitry. This was, until the election of President López Obrador. From the very beginning of this administration, the *modus operandi* has been to mark distance between López Obrador's presidency and those of recent predecessors (González Rosas, 2018). As part of this posturing, López Obrador's administration elected to release these previously undisclosed *cifras definitivas* produced by the SCS and pertaining to *publicidad oficial*. The first partial

disclosure revealed that during Peña Nieto's administration, thirty-six journalists working for well-known, national media outlets had collectively received 1,081 million pesos in *publicidad oficial* during the first few years of this *sexenio* (Publicidad Oficial, 2019 [n.p.]). In this very strategic disclosure, open data became an overtly political resource, furnishing the public sphere with the elements required to form advantageous narratives under the name of transparency. Whilst many of my research participants often conceptualised transparency along the lines of "un instrumento ciudadano para colocar a nuestro gobierno en un contexto de mayor exigencia" (Interview A17, November 2019), this dynamic was now being strategically deployed from one administration towards its predecessor.

Then, in mid 2019 came the release of six years of *cifras definitivas* from the SCS, forming a quintessential moment of transparency when conceptualised as "linear communication and information provision" (Fenster, 2010, p. 632). Celebrated by López Obrador's supporters, this open data disclosure was considered an early signal that the new administration was taking demands for transparency seriously. For those who had long been petitioning for their release, this disclosure of open data was seen as a decisive opportunity to develop an in-depth understanding of how Mexico's federal publicity machine had functioned in recent years. However, scepticism remained as to the current administration's calculated manoeuvre. Encouraging scepticism towards this disclosure, whilst these data were made open after the first trimester of 2019 (and so could be expected to include data from the first three months of López Obrador's administration), the open data disclosed did not include records for this period.

The long awaited SCS dataset included aggregations of monthly reports provided by law (obligaciones de transparencia) ten days after the end of each month and self-recorded by each federal entity directly to the SFP. These datasets were typical of open data: structured, machine-readable files with each record of the dataset corresponding to a public contract, with a mass of variables capturing key data points for each particular contract. Each record was structured to hold details such as the recipient of the contract, how the contract was awarded, and a description of the services provided. This totalled over forty variables. The SCS dataset included these self-reported data points from nearly 200 federal entities. A key advantage of the design of SCS datasets for the transparency circuitry was that each record, more or less equivalent to each publicity contract signed, was designated a Clave de identificación de la campaña. This data object, administered by the Dirección General de Normatividad, would allow each record within the dataset to be associated with a campaign appearing in newspapers, government buildings, radio or on social media platforms. Each record could, in theory, be mapped to existing publicity materials already in the public sphere.

As Biruk noted, "Data's travels are circuitous and do not follow a straight path" (2018, p. 146). Yet, for these open data, they seemed to have now found their appropriate destination in the hands of the *daterxs* gathered under the *publitón*. However, this does not necessarily mean that the open data that arrived were of any quality. The initial value of SCS data pivoted on their exclusion from the public sphere during Peña Nieto's administration – reflecting Canetti's thinking on arcana imperii (1978, p. 43). However, once open, their value now had to derive from their accurate representation of past movements of money and influence in the publicity sphere. Yet, the SCS data included many errors, gaps and inconsistencies. This is hardly surprising. Returning to Biruk: the individuals who handle data along their life course are typically "the most poorly paid and least well qualified link[s] in the data production process even as they, in reality, might have the most influence on the accuracy and quality of a dataset" (2018, p. 146). Given the interests of the previous administration, the clerks and administrators tasked with turning neglected paper trails into definitive digits likely lacked the resources and training to realise this transformation with the sharpness now demanded of them by the transparency circuitry. Furthermore, given the early resistance to the release of these data by the Peña Nieto administration, these clerks and administrators may well have been subject to workplace pressures that demanded partiality in the completion of their tasks. This possibility is only heightened when we take into consideration the many institutional hands through which these data passed:

Los [SCS] datos son proporcionados por las instituciones de la APF [Administración Pública Federal], los revisan los OIC [Órganos Internos de Control] y la Dirección General Adjunta de Control, y dan seguimiento la SFP [Secretaría de la Función Pública] y la SEGOB [Secretaría de la Gobernación]. (Interview C8, January 2020)

Thus, despite the fanfare, the SCS datasets eventually released by López Obrador's administration were vastly depleted and filled with errors, gaps, and inconsistencies. Whilst "transparency projects often revolve around strategic ambiguity" (Flyverbom, 2019, p. 104) – that is, they "use ambiguity purposely to accomplish their goals" (Eisenberg, 1984, p. 230) – the ambiguity of these data seemed to only work against the objectives of the new political elite who determined their release. Yet, instead of encumbering themselves with the laborious process of retrospectively interrogating these fields of data, they disclosed them as-is.

And so, *daterxs* gathered under the rubric of the *publitón* were now tasked with making sense of these open datasets and their errors, gaps, and inconsistencies. In the forty variables laid out in the SCS datasets, none were designed to record this political history and the context surrounding the production of these data, despite such twists and turns having a fundamental

impact on the eventual data disclosed. Neither were these details logged in the accompanying user guide or data dictionary (the latter did not even exist). From my perspective, these twists and turns form a crucial part of the vistas these open data come to create. Whilst not present in the digits of any record, this dataset's errors, gaps and inconsistencies do speak of these twists and turns. This ambiguity is a direct product of this history: overburdened administrators, pressure from superiors, no resources for data maintenance, a rush to disclosure. As noted by Biruk, gaps in datasets are not "merely an empty space", but rather "a confluence of multiple and competing interests and frictions that are full of pre- and misconceptions" (2018, p. 170). A representational richness recorded through absence, this openness allows for additional narratives to be formed and expressed that, whilst not emerging directly from the digits present, are always bound within this dataset. However, even when the possibilities of this openness outweigh the digits of a dataset, engaging these possibilities is suspect ground for the *daterx*.

3c. Análisis integral

"¡Recuerden, produzcan un análisis integral!" is a phrase that I would come to hear directed at fellow daterxs and me numerous times during the publitón and the development of El gasto navideño. The first time was during the opening session of the publitón. Stood at the front of a modern co-working space, filled by roughly forty daterxs and a number of representatives from different parts of Mexico's transparency circuitry, a senior figure from a national NGO sponsoring the publitón explained the structure of the event, stretching over the following twoweeks, and the expectations of participating *daterxs*. As they announced the grand prize – an impressive 20,000 pesos to split between the winning team – they paused. Participants shared a collective gasp at this amount and the presenter gave a moment for the excitement to settle, their hands stretched out in front of them in anticipation. "Pero", followed by another pause. Now their index fingers pointed out towards us as if to indicate the importance of what was to come next: "para ganar el publitón, ustedes tendrán que producir un análisis integral" (Fieldnotes, September 2019). With their back facing panoramic windows that looked out over Mexico City's Plaza de la Revolución on a bright Saturday morning, there was a dramatic quality to this moment that gave this short phrase an importance that made me revisit how I had interpreted it thus far during my research.

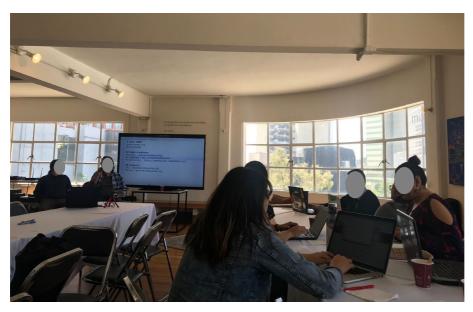


Figure xii: Author's image taking during one of the Publitón's preliminary training sessions (September 2019).

In research interactions prior to the *publitón*, when the phrase *análisis integral* had arisen I had understood it to mean an investigation that addressed a fundamental aspect of the theme or institution under investigation – at this point, I was confusing scale and scope. As I became more familiar with Mexico's transparency circuitry and my research involved increasing amounts of observant participation, my understanding evolved. *Análisis integral* did not capture the particular significance of an investigation but was instead a label assigned to outputs of certain "rituals of knowledge making" (Halfon, 2006, p. 785). It involved conforming to a particular script in the construction of transparency outputs – the *informes*, *reportajes* e *investigaciones* that flow amongst the transparency circuitry and then outwards towards broader publics. To achieve the status of an *análisis integral* was to secure an "outward sign of integrity" (Strathern, 2000, p. 2).

Core to the integrity of a transparency output engaging open data is its own commitment to a certain understanding of transparency. This is not transparency that seeks invisibility (Turilli and Floridi, 2009) but the very opposite: data and analytical steps are explicitly arranged to be easily perceived and understood by outside eyes. Working from a basis of open data, transparency outputs need to document meticulously each decision and movement, and put these in a visible order. It matters how open data are operationalised and put to work during the development of a transparency output. There are a set of tools and methods – a scope – that the *daterx* must remain within. To help us in this effort, during the first morning of the *publitón* (as was customary with all the datathons I participated in) we were introduced to and trained in a number of analysis tools, ways of working, and approaches to documentation that

would facilitate *análisis integral*.⁴⁰ Unspoken within each of these sessions was a warning not to stray beyond the calculative paths of these different tools and techniques, and so to avoid placing the integrity of our open data-led transparency outputs in jeopardy.

One core pillar to achieving *integridad* is technical ability. As Ruppert (2012) notes in the case of citizen auditors, once the transparency system is reliant on these figures, it matters a great deal how good their skills of analysis and interpretation are. However, in the context of this research, technical ability was not measured through a capacity for "technical flourishes" (Savage, 2013, p. 18) or the flexible tendencies of "being smart" (Žižek, 2006 [n.p.]). Indeed, performing such abilities would have risked falling outside of the scope of análisis integral. Instead, technical ability involved maintaining a mechanical consistency carried throughout operations. This required a project's methods to be constructed through deliberate consideration of the hypotheses to be tested. Thinking concretely in the terms of hypothesis development, tool selection and explanatory models may seem at odds with our nascent big data age. Indeed, since the prophetic announcement that big data marked the end of knowledge production as we know it (Anderson, 2008), correlation was pitted as trumping causation with a new "aura of truth, objectivity and accuracy" (Boyd and Crawford, 2012, p. 663). However, in my research experiences within Mexico's transparency circuitry, I observed the incorporation of federal open datasets into a more conventional model of analysis, starting out with hypotheses to be tested and then moving forward "in search of causes and reasons" (Rouvroy and Stiegler, 2016, p. 19). Each step in this process needed to be recorded and made explicit. Echoing Donald Levine, for the *daterx*, "to believe to be scientific means to be unambiguous" (1985, p. 7).

Like peer-review and due diligence, ensuring análisis integral involved many layers of surveillance, with daterx activities caught in a "spiral of evaluations" (Bigo, Isin and Ruppert, 2019, p. 12). The bare bones of our projects would be exposed and made available for assessment from fellow daterxs, stakeholders, gatekeepers and eventually a broad public. In the case of the publitón, our stakeholders were the civil society organisations who had been involved in the organisation of this event and our gatekeepers were organisations with significant experience in parallel spheres of open data analysis. Together, they were tasked with reviewing our findings and later recommending our output for admission and distribution through the transparency circuitry. We had to be prepared for this coming scrutiny and this preparation had to begin from the very initiation of our investigations. This process of surveillance takes on additional prescience in the sphere of open data as the materials of

⁴⁰ In the case of the *publitón*, this included tools such as Kibana and TowerBuilder.

analysis – open data – are, by definition, publicly available. There are no proprietary datasets or paywalls that mean that any part of this process can be kept from public view. All computation is expected to be reproducible as all the materials are also openly available. Again, the scope of tools and methods selected becomes essential to this process of review, with detailed explanations of their stepwise compatibility expected by future assessors. Whilst this surveillance certainly also provides the opportunity for the pooling of resources and perspectives, the datathon environment and the subsequent process of producing a transparency output remains a very "watched" public space (Lyon, 2019, p. 69).

So, to produce *análisis integral* involves "choice-making" (Bigo, Isin and Ruppert, 2019, p. 12) around tools and methodologies that directly shapes the trajectory of these open data as they are transformed into transparency outputs. It also involves the choice of which aspects of open data to consider of revelatory value. Another core pillar of producing *análisis integral* is learning how to respond to the openness of open data. As noted in the previous section of this chapter, Mexico's federal open data always bring with them complex histories of institutional posturing, priorities and leadership. These are important histories that, represented through errors, gaps, and inconsistencies, are only ever speculative. Yet, to acknowledge this additional representational capacity, to engage in the representational detours that this openness animates, is to require varying degrees of political sensibility that go beyond the scope of tools and methods available to the *daterx*. This narrowing towards *análisis integral* strictly follows the doctrine that "addition is more transparent than narration" (Han, 2015, p. 29).

To begin to engage with this openness, would be to allow personal persuasions and prejudices into the transparency output. As Lorraine Dalston and Peter Galison note, "Because we moderns habitually oppose our brand of objectivity to the subjectivity of individuals, we fret most about idiosyncratic subjects: their 'personal equations', their theoretical biases, their odd quirks" (1992, p. 85). *Análisis integral* is squarely set against the toleration of these types of equations in the calculative space of open data analysis. For the transparency actor, such ambiguity evolves into distractions: unknowns that always present the possibility of solidifying and leading the analysis astray and towards alternative conclusions. Instead *daterxs* must demonstrate "pure intentions" (Thomä, 2018, p. 75) by ignoring open data's representational detours and only taking into consideration the digits present, regardless of how they have come to populate the dataset. Only in this way could we ensure the maintenance of a "clean and light self" (Bowker and Leigh Star, 1999, p. 30). As a fellow participant in the *publitón* responded in a subsequent interview when I asked what they understood *análisis integral* to mean: "es un análisis basado en los datos, basado en el rigor y no basado en un capricho

político" (Interview A11, September 2019). Shifting their weight forward in the chair, they repeated for emphasis: "es rigor. Lo que queremos hacer [as *daterxs*] es posicionarnos así" (ibid.). A recent entrant to Mexico's community of *daterxs*, this individual already felt comfortable claiming this space of *análisis integral* for themselves and for the broader community – it was, *lo que queremos*.

It may be unsurprising that we were ushered towards the application of a "de-politicised data science" – with this de-politicisation always itself a political endeavor (Iliadis and Russo, 2016, p. 2). However, to me, also as a recent entrant to Mexico's transparency circuitry, I was hesitant to let go of the ambiguities that so richly populate these datasets. If we make the most of the openness of open data, then surely, we equip ourselves with a multifaceted resource to challenge the many spheres of opacity that *daterxs* care about. Returning to the scholarship of Isin and Ruppert, when such choice-making is directed by the idea of *análisis integral*, we observe a "closing" (Isin and Ruppert, 2015, p. 95), a limiting of political possibilities. Whilst these closings are dynamically configured across actors, these scholars pay particular interest to the closings that "arise in response to callings to participate, connect and share" (Isin and Ruppert, 2015, p. 95). This is pertinent in the context of *daterxs*: subjects who respond to the progressive call to engage in open data analysis only to find limits around their participation, with clear direction, and incentivisation to follow the path of *análisis integral* – remember, there was 20,000 pesos up for grabs!

Whilst dissatisfaction with any closing was certainly my initial response when observing *daterx* activities, with time and through participation, I came to understand the real contextual considerations that the *daterx* had to acknowledge that influenced this closing. Therefore, in the following section of this chapter, instead of detailing how *daterxs* respond to and resist the scope of open data-led transparency activities made available to them, I detail how my collaborator and I worked hard to ensure that *El gasto navideño* fit within the bounds of *análisis integral*.

3d. Análisis integral in practice

After a morning of training in particular tools and methods appropriate for the scope of *análisis integral*, it came time to define more concretely how we would apply them to the SCS data. Many participants in the *publitón* had arrived in pre-arranged teams, others – like me – had arrived as an individual participant seeking to meet and connect with others during the datathon. For this latter category, activities awaited us through which we were to connect with our future collaborators.

On the order of the facilitators – staff of the sponsoring organisations – our workspace was transformed into two straight lines of chairs facing each other. The task, modelled on a speed-dating format, involved explaining to the participant facing you your project's hypothesis, the relevant tools and methods to be applied to respond to this hypothesis, and a major challenge you foresaw for your project. After one minute, there would then be thirty seconds for questions and comments from the *daterx* in front. After the exercise was repeated from the other side of the aisle, each participant would then move seats and so be introduced to another project and at the same time, refine their own project according to the questions and comments received. As I participated in this activity, I tried simultaneously to wear the hat of both *daterx* and researcher, diligently trying to jot down the particularities of each project and probe its basic elements, whilst also trying to present myself as a competent *daterx* with a set of skills that would make me a useful collaborator.

Many projects took seriously the application of specific technical proficiencies in the pursuit of análisis integral. For instance, one daterx was keen to develop a network analysis of SCS data, intending to expose over-reliant relationships between individual public servants and media outlets. They had a clear hypothesis: the repeated issuing of contracts via adjudicación directa from one public servant to a single contractor signalled a corrupt relationship. This daterx was a systems biologist and had used network analysis to map biological data at a molecular level. Thus, they had significant experience in coding and analysing the statistical significance of binary interactions. The issuing (or not) of a non-competitive contract within publicity services was one such binary interaction. And so, the application of this method in the context of SCS data conformed to the scope of análisis integral. Another daterx sought to mine the SCS dataset to identify shell companies used to siphon public money into private hands. The plan, detailed in their sixty seconds, was to focus on the naming patterns of companies that win contracts for providing publicity services. Their hypothesis was that the shell companies that win contracts in the area of publicidad oficial would follow similar naming formats to shell companies already identified and prosecuted in other areas of federal spending. Algorithms could be trained through the adjacent dataset, Sistema Nacional de Servidores Públicos y Particulares Sancionados (a dataset already mentioned in chapter two) and then applied to the SCS data. This *daterx* had significant experience with text processing, having been a developer working on plagiarism detection software that used fuzzy string pattern-matching algorithms. Therefore, through clear alignment between the tool and hypothesis presented, this method also came to sit within the scope of análisis integral.

Yet not every project began from such a coherent basis. I arrived to the task with a basic proposal: embark on a short exploratory analysis of contract recipients who received a high volume of contracts, select contractors that appear suspicious, and continue with a deep dive into a select few contractors. I pre-empted concerns around methods and tools by shyly responding that I would "dar diferentes tratamientos a los datos" (Fieldnotes, September 2019). Yet, this did little to tame the concerns of my fellow *daterxs*. As a more seasoned *daterx* warned me during their allotted thirty seconds of feedback: "Tenemos que tener bien claro lo que queremos de los datos. Es necesario hacernos esta pregunta antes de empezar con el análisis porque, si no, no vas a llegar a ningún lado" (ibid.). Their concerns were well grounded: I lacked a substantive hypothesis, no definition of *suspicious activity* or clear analytical technique to deploy. My offering joined the small group of vague, uncertain projects that were batted back and forth between participants.

During this round of project speed-dating, I was introduced to the proposal of my eventual collaborator on *El gasto navideño*. David was a recent graduate of the highly regarded Centro de Investigación y Docencia Económicas (CIDE). Well-trained in the core competencies of quantitative research, David had taken part in several of Mexico City's datathons and was familiar with the analysis of federal open data. In response to the presentation of my project, David had recommended that I use Kibana (one of the tools we had received training in) to develop a dashboard that would visualise not only the volume and values of these contractors, but also the regularity at which these contracts were renewed or not. This response was constructive, showing a clear understanding of what was expected of the *daterx* by the transparency circuitry. As I sat, relieved that my minute of performing competency was over, I was suddenly surprised by how David's project was introduced. My jottings, recorded the moment as follows:

[David's] Hypothesis: Creo que usan estos contratos como regalos de navidad. ¿Y por qué no lo harían? Strong sense that publicity spending in December is key to explore. Confident. V[ery] animated by the topic. Persuasive! (Fieldnotes, September 2019)

The project brief, offering more of a rhetorical proposition than a structured hypothesis, took less than the allotted minute. Copying the responses of fellow *daterxs* to my own project, I pressed David on the technical approach and tools to be deployed; how would David ensure *análisis integral*? The morning's introduction to the SCS dataset had confirmed that these records were dated and so enabling a month-wise analysis and so David sought to simply filter by month and progress from there. In my final contribution to this exchange, attempting to fill the time allotted by the facilitators, I queried whether there would be any difficulties using

self-reported contracting data to build these vistas of *publicidad oficial*. David's response was simple: "Como siempre pasa con datos abiertos relacionados con contratos, hay campos vacíos, inconsistencias, duplicidad de contratos. Eso complica nuestra labor, obviamente" (ibid.). As I came to realise in later reflection on this activity and the broader *publitón*, this was one of the few moments in which open data themselves came to be acknowledged as a possible determining factor in the development of *análisis integral*.

Whilst hardly the solid basis to a transparency project that we had been expected to propose and form teams around, I then took a decision unlinked to tools and methods and partnered with David. Had I observed another *daterx* make this decision, evading projects with a much greater inclination towards producing *análisis integral*, this would have been a moment I raised in a later interview, seeking to understand the *daterx*'s decision-making process. On reflection, this decision was made because of a gravitation towards David's enthusiasm, a set of compatible social science and data skills, David's prior experience in federal open data analysis, and an initial personal interaction that indicated that we would work well together. David's existing connections to Mexico City's *daterx* community and to CIDE also struck me as potentially useful for future research opportunities. Another set of factors was, no doubt, that I did not have a clear professional or social interest in the theme of *publicidad oficial*, state entity, method, or tool and so I was more disposed to working on an unusual project. I was also not taking part with any need to win the cash prize. I was in the privileged position of having research funding that meant that I did not have to strategise and seek to collaborate on a project that looked likely to win (at least at this early stage in the process).

As our project grew out of the first day of the *publitón* and rolled into the following weeks, our open data-work meant that David's hypothesis began to gain some validity. Through a randomly selected sample of thirty federal entities, our exploratory analysis established that on average, sixty percent of the publicity budgets of federal entities were spent in December of each year during the Peña Nieto *sexenio*. Yet, as our project expanded beyond the walls of the tidy coworking space and the purview of the *publitón's* facilitators and fellow *daterxs*, David and I failed to apply the discipline and constraint required of us to ensure *análisis integral*. We failed to base each of our analytical moves on the available data, forgot to document each of these moves, and were taken in by the speculative conclusions these SCS data left space for. Whilst our project had made some interesting advances for our understanding of *publicidad oficial*, this analysis needed to be brought back into the scope of *análisis integral*.

As this two-week period of analysis ended, we returned to the *publitón* for a final day of data analysis and project presentations. As stakeholders navigated between teams, offering

feedback to each team and project (much like I had done during the DNA), a central concern they raised to us was the state entity that we had chosen from the sample as a case study to illustrate our findings. In the division of labour between David and myself, I had taken charge of case study selection and elaboration. I had conducted a deep dive into an entity that had caught my attention as I moved manually through the list of institutional names in the sample – the vast majority unfamiliar to me. Through this idiosyncratic method I chose to focus on the Comisión Nacional para Prevenir y Erradicar la Violencia Contra las Mujeres (CONAVIM). This decision, based more on political interest rather than any reason born from the data, had proven productive: in 2013, 2014, and 2018 CONAVIM had spent more than ninety percent of its budget for *publicidad oficial* in December alone. In two of these years, close to the entire budget had been spent with a single publicity supplier. In the other three years of the *sexenio*, a slightly less extreme version of this pattern was present. Despite these illuminating results, I now had to unpack the ambiguous origins of this case study selection, formalising the rationale behind this selection criteria and its favourable results.



Figure xiii: Author's image taken during part-2 of the Publitón (September 2019).

Following the advice of our stakeholders, instead of personal idiosyncrasies driving case study selection, our reformed selection criteria involved taking a much more structured approach that was led by these data themselves and could be closely documented. Visualising the monthly breakdown of spending through a heatmap of the entire sample, we were then able to surface entities of interest that could justify both extreme and explanatory case study selection criteria (figure xiv). Through this analysis, CONAVIM emerged as a case that corroborated our hypothesis: whilst the ideal would have been a row filled with varying tones of light-to-mid blues, the dark blue squares that periodically pierce through the vacant white

space evidence an erratic pattern of spending that draws the eye of the observer. Further, a linear regression analysis confirmed that CONAVIM proved a significant outlier in the sample (although, not as much as it potentially should have been). Now, having a data-led rational for our focus on CONAVIM, my prior analysis could be re-worked back into the scope of *análisis integral*.

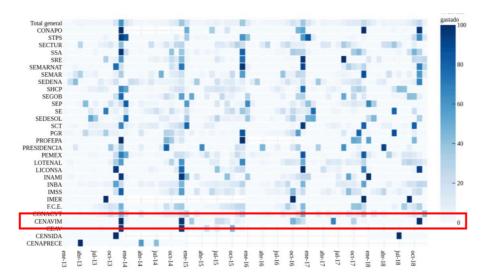


Figure xiv: Screenshot of the heatmap of SCS data created during the elaboration of El gasto navideño (September 2019).

Following the final presentations at the end of the two-week datathon, *El gasto navideño* was selected as the winning project by a panel of judges. Feeling satisfied, I was yet to realise how much work there was still left to do to turn our exploratory analysis into a transparency output that could circulate within Mexico's transparency circuitry. This challenging and intensive process would last from the end of this two-week sprint (early October) until late December 2019.To refine our output into something our stakeholders could endorse and the transparency circuitry accept, required a further process of identifying and removing the idiosyncrasies that endured within our analysis.

One of the first post-publitón revisions we were asked to make was to consider the choice of topic itself. We had to find an alternative origin story to that of David's peculiar impulse towards analysing publicity spending in December. Formal presentation of our transparency output could not place the project's beginnings within such speculative terms. Thankfully, unbeknownst to us at the beginning of our investigation, there is ample academic literature on the spending pattern known as *spend it or lose it*, whereby budget holders (whether public or private) wastefully spent remaining budgets at the end of the fiscal year to prevent reductions in budgets in the following cycle. The end of the fiscal and federal budgeting year in Mexico is

December, correlating with the results of our analysis. This existing academic literature allowed us to formulate a concise hypothesis: state entities contracting publicity services spend a substantial portion of their budgets at the end of the fiscal year with inefficient results. Given the recent release of SCS data, we now had an opportunity to test this hypothesis on open data covering a significant temporal period. This *ex post facto* hypothesising enabled us to present the origins of our analysis to gatekeepers in more agreeable terms. David's absorbing pitch about Christmas extravagance – the one that had originally drawn me into this project – was replaced with the language of budgetary cycles and resource mismanagement.

As we continued this slow process of unpicking, re-formulating, and re-coding, I could not help but feel a sense of disappointment. In our initial analysis sprint, my collaborator and I had spent many hours combing through each record and variable of the SCS data, developing a certain intimacy with them. In interacting with their messiness and finding ourselves negotiating the contents of individual cells, their errors, gaps and inconsistencies were now familiar to us – a "non-codified feel for data" (Zimmerman, 2007, p. 7) that was now to be superseded. It was this intimacy that gave us confidence in our analysis as it unfolded, eventually making apparent and understandable a tangible pattern of mismanagement in this shadowy sphere of public spending. In transforming our "accidental contingent experience[s]" towards "digested experience[s]" (Daston and Galison, 1992, p. 95), our creative and pragmatic turns and discoveries had to be re-situated into more traceable, stepwise analysis. Often, these open data needed to be wrangled to make them make any sense, yet the pragmatic steps required to produce something inclined towards *análisis integral* now had to take precedence.

However, as this process continued and my interactions with *daterxs* broadened and deepened, this disappointment-turned-resentment then resolved into a more considered understanding of the position *daterxs* and the transparency circuitry within Mexico. If this framing of *análisis integral* appears to align towards transparency's "exclusively positive connotations: impartial, neutral, democratic and progressive" (Alloa, 2018, p. 30), we must also remember the context – the data setting – in which these activities take place.

Transparency outputs can expose transparency actors and individual *daterxs* to physical and digital danger. As noted by Rihan Yeh in the context of contemporary Tijuana, "The voice of dissent, the voice that does not conform to the ritualistic celebration of state and media authority underway, is immediately branded not only as illiterate but as criminal" (Yeh, 2012, p. 714). The possibility and risks that accompany this branding are substantial. *Daterxs* only need to look to the adjacent figure of the *periodista* to be reminded of these risks. Whilst the

historical work of Pablo Piccato positions Mexican *periodistas* as "[los] representantes preeminentes de la opinión pública" (2015, p. 111) suffuse with positive characteristics such as valour and honour, the contemporary scenario for *periodistas* is one of violence and exploitation. Indeed, the precedent set by Mexican *periodismo* – from honour to horror – is one that dwells within the transparency circuitry as it seeks to distinguish itself from this sphere and maintain its reputation through reinforcing *análisis integral*.

Efforts to establish this distance between the daterx and the periodista emerged across numerous research interactions. This was particularly clear when daterxs I interacted with were themselves periodistas seeking not only to enhance their journalistic practice, but to change career path entirely. As one daterx, I came to interview explained: "Para mí, no es demasiado tarde [to make a career change]. Va a requerir mucho esfuerzo, claro. Pero sé que será más fácil ahora que en 5 años" (Interview A2, August 2019). This daterx, in their late-twenties and from the city of Cuernavaca, had been working in regional journalism in the state of Morelos. A Philosophy and Educational Sciences graduate, they had fallen into journalism as they enjoyed writing. However, the draw of this career had soon stalled as the realities of the profession became known to them. Deepening involvement in the daterx community was part of their strategy to manoeuvre themselves out of journalism. "El análisis de datos es útil en muchas esferas. No creo que yo vaya a ser un científico de datos, pero es una habilidad adicional que puedo demostrar" (ibid.). They continued, "Participar en estas cosas [datathons and training sessions] es una oportunidad gratuita para desarrollar habilidades que pueden llevarme a otras partes" (ibid.). This daterx, one of the first that I interviewed and so someone I would come to cross paths with on numerous occasions as they spent more time in Mexico City in search of new opportunities, always remained confident and optimistic in our interactions. Yet, I could not help but imagine that there was an urgency to this transition that was itself masked by their optimism, for the position of *periodistas* seems to be only increasingly "precarious" (Rivera Hernández, 2020, p. 91). 41

As alarming as the levels of violence against Mexican journalists are, one explanatory narrative has been to focus on the individuals and practices of *periodistas* themselves.⁴² As

⁴¹ As recently as November 2020, Reuters published an article titled Journalist killings in Mexico worst in a decade (2020) and numerous civil society and academic texts have long detailed and analysed the different dimensions of the risks and violences faced by *periodistas* (González de Bustamante and Relly, 2014; Article 19, 2015; Rodríguez Luna, 2015; Melesio, 2019; Vázquez, 2019).

⁴² Another explanatory possibility includes the expansion of non-state armed actors across vast regions of Mexico's territory (Maldonado Aranda, 2013; Pansters, 2015; Heinle, Rodríguez Ferreira and Shirk, 2016). This means that *periodistas* not only have to negotiate between an expanded (and increasingly dangerous) set of actors contending for dominance, but also report from an increasing number of violent situations (Pansters, Smith and Watt, 2018).

first identified by Eduardo Valle (1995) and later elaborated by Benjamin Smith (2020), a significant reaction to this violence has been to claim that individual *periodistas* bring these attacks upon themselves by engaging in extractive journalism, with many *periodistas* linked either to political elites or organised crime groups (or, often most dangerously both) that now battle for domination. As well as links to violent actors, the poor quality of journalism (particularly at a regional level) is also cited as an explanatory factor for this level of violence. As Armando Rodríguez Luna's empirical work with regional *periodistas* across numerous states in Mexico has established, there is a certain resistance amongst *periodistas* towards journalistic training and professionalisation, with a preference for spurious but rapidly gatherable evidence (2018, p. 96). After all, when journalists are paid per article – with the fee being as low as twenty pesos per article (ibid., p. 97) – and intense competition for newsworthy content, journalistic best practice and source triangulation are far from priorities.

Criticisms faced by *periodistas* and the justifications given for their precarious position are not ones that transparency actors will allow to circulate in relation to their own practices and outputs. The production of análisis integral is a mark of distinction between daterxs and periodistas. 43 Maintaining the perception of high standards, of technical ability, objectivity and neutrality prevent the debasement of these actors and their outputs to a level at which they become legitimate targets for the abuses encountered by periodistas. Whereas formal training and technical skills are avoided by the rank-and-file *periodista*, they are central to any *daterx* and their successful production of a transparency output. Análisis integral is a protective posturing that marks the boundary of how open data should be deployed and worked through. Yet, comments from stakeholders, mentors and experienced daterxs to tune of "no te metas en periodismo" (Fieldnotes, November 2019) mean that this sphere of activity is not only situated as distinct from transparency activities but becomes the dark side of the coin to análisis integral, a lingering threat that is discerned through longer and deeper interactions with this community of practice. The distinct values put on these different spheres and roles was even indicated through the organisation of the publitón, with David and me splitting a cash prize roughly equivalent to half a year's official salary for a regional journalist.

3d. Análisis artesanal

Ideally, the open data that we worked with during the *publitón* would have been primed according to the forms detailed in chapter two, resulting in smooth data then ready to pass

⁴³ The distinction between *daterxs* and *periodistas de datos* is finer. However, outside of Mexico City and the most prominent and well-funded journalistic outlets (for instance, *Nexos*), *periodismo de datos* remains a fringe activity within Mexico's journalistic sphere.

through carefully constructed pipelines of calculative operations, proofed and legitimised by our peers, the transparency circuitry and wider publics. This was the expectation first introduced in the opening moments of the *publitón* and expressed through the repeated discursive gesture of *análisis integral*. Yet, these open data were certainly not this primed material. Errors, gaps and inconsistencies ran throughout the SCS data, complicating any prospect of neat progression during analysis. A confrontation between these materials and the expectations on the *daterx* was inevitable.

As a fellow participant in the *publitón* acknowledged to me in a later interview: "La verdad, eran [SCS datasets] realmente malos, peores de lo que yo esperaba. Incluso a mí me costaban..." (Interview A27, January 2020) – this last phrase delivered in a manner that underscored surprise at such difficulty. Taking place after our project had been completed and subsequently dispersed through the transparency circuitry, I interpreted this interaction not only as this *daterx*'s acknowledgement of the difficult characteristics of the SCS data, but also as a muted congratulations to David and me – somehow able to produce an output within the scope of *análisis integral* despite these materials. To understand how we achieved this, I end this chapter by introducing a second discursive gesture: *análisis artesanal*. If *periodismo* is the murky flip side to *análisis integral*, *análisis artesanal* is its minor sibling that must be drawn on at times to overcome the signficiant challenges of remaining within the narrow scope permitted.

Engaging análisis artesanal was a discursive gesture that I first observed deployed following the close of the publitón, as David and I spent weeks moving back and forth between stakeholders, presenting iterated drafts of our informe and seeking sign-off from gatekeepers in order to disseminate our transparency output. Yet, fundamental issues remained within our analysis. The open data that we worked with included numerous temporal variables for each record such as: fecha, fecha de contrato, fecha de pedido, fecha de gasto, gasto, mes, mes de gasto. The user guide only provided brief definitions for a few of these variables and no data dictionary accompanied the dataset. As daterxs, we understood little as to the origins and production of each temporal variable and the distinctions between their usage. The situation became even more complex when we remember that as self-reported data, each of these variables could have been interpreted and inputted in unusual ways by different administrators over this six-year period. Even within each of these variables, many anomalous data objects and inconsistent formats were present.

El gasto navideño focused on the variable, mes, defined in the user guide as "Mes al que corresponde la erogación" (Secretaría de la Función Pública, 2019). We came to base our

analysis on this variable as it was the most complete of those recorded in the dataset, meaning that it held the smallest percentage of missing data points compared to the other variables.⁴⁴ If each empty cell represented an error, gap, or inconsistency that could weaken any conclusions drawn, we moved forward on a path that sought to minimise this risk. Yet, as we entered detailed discussions with gatekeepers, our rationale for choosing this variable as the pillar of our analysis did not reconcile with expectations of análisis integral. Although a more complete variable than others, mes still introduced a large margin of ambiguity into our output. Maybe fecha de contrato would have been a more appropriate variable on which to build our analysis. Our transparency output was facing a fundamental challenge on the grounds of poor data maintenance that was outside of our sphere of control as daterxs. Yet, the expectation was that we should still respond to these data as if such ambiguities did not exist, as if open data's representational capacity was accurate and finely tuned to the realities they indexed. Initial feedback following the close of the two-week publitón noted that this focus on mes was a pivotal "paso arbitrario" (Fieldnotes, September 2019) that would need to be resolved. Reflecting on this review process in a later interview my collaborator, David, described this negotiation as follows: "Hubo unos cuantos comentarios [from stakeholders] que, pues sí eran muy importantes porque, o sea, ellos cuestionaron el mero, mero principio de cómo montamos todo. Era como si tuviéramos que empezar de cero" (Interview A32, Feburary 2020).

In my research interactions, the discursive gesture of *análisis artesanal* first emerged amid a video call with several staff members from an international transparency organisation with extensive experience in budgetary analysis, and so one of our primary gatekeepers. It was early November, David and I were co-located, participating in the video call from a single laptop positioned on top of the dining room table of my shared apartment. We had submitted an elaborated draft report in anticipation of the meeting. As our discussion progressed, the issue of the temporal variable on which we had based our analysis (*mes*) emerged as a primary issue of concern. To respond to this challenge, one direction we had considered was to attempt to fill existing gaps with petitions (*solicitudes de información*) to each federal entity for the relevant missing data. Whilst this would have involved an explicit recognition of the failures of these entities in this process of open data production, this approach was described by a stakeholder as "reacomodar los datos para que estén major estructurados" (Fieldnotes, October 2019). As further explored in chapter six, following this route would have involved a mammoth operation that was well beyond the timescale expected of our stakeholders. Another

⁴⁴ Whilst eight percent of records missed a data point for the variable *mes*, as many as twenty-two percent of records missed a data point for other variables such as *fecha de contrato*.

alternative direction was to use statistical techniques to produce synthetic data, imputing missing records to fill and eliminate errors, gaps and inconsistencies. However, our position outside of the data production institutions meant that we lacked sufficient domain expertise to assess the likely fit of these imputed values. As is well recognised in data science literature, imputation typically increases numerical values and reduces variation across the sample. Performing these techniques on large swathes of these variables – for some, over one fifth of records – would have introduced its own dimension of ambiguity that would have also sat outside of scope.

Responding to the gatekeeper's concerns and our own concerns around these potential alternatives and their limitations, David proposed that the analysis remain centred on the variable *mes*. The atmosphere stagnated and the pauses between interactions lengthened as a potential impasse emerged between the realities of these open data and the objective of *análisis integral*. More was needed to convince them and receive their approval. As the conversation circled around once again to this temporal variable and the appropriateness of other variables, David's body lurched forward, arm extending further to unmute the microphone: "Mira, en este aspecto, introdujimos algo de análisis artesanal" (Fieldnotes, November 2019). There was a sense of resignation in the delivery of David's contribution. Maybe David thought that this admission would have been interpreted by our audience as an excuse, or worse, a confession of inadequacy.

However, it functioned much more constructively. It served as a reminder to our gatekeepers of the space in which we were working. It operated to mark the common challenges we face as transparency actors so dependent on open data produced far beyond our purview, with their many deficiencies. Our primary material emerges from a distant, opaque source that depends on a digital infrastructure that we had no access to. As David later recounted to me in a reflection on this meeting: análisis artesanal was deployed "como último recurso" (Interview A32, February 2020) in our effort towards análisis integral. As a tactic of last resort, análisis artesanal holds resonances to the concept on bricolage, often deployed in research in Latin America to capture popular efforts of making do with a heterogenous assortment of materials (cf. Berlo, 1992; Stam, 2003; del Real, 2008). Similarly, análisis artesanal marks a project forced to make do with the errors, gaps and inconsistencies of federal open data. We were able to rummage through this SCS dataset and still, despite difficulties, mount an insightful analysis. This, to me, is what our fellow daterx was complimenting in the earlier noted interaction.

Yet, Claude Lévi-Strauss' reflection on bricolage provides for a moment of distinction between this concept and that of análisis artesanal: "(S)he is a jack-of-all-trades rather than a scientist" ([1966] 1972, p. 16). Unlike this approach to bricolage, appealing to the artisanal was not a move seeking to distance our work from that of the model scientist. Instead, David's objective in this discursive move was to permit our investigation to continue to proceed through spaces that certainly do ascribe value to whatever is considered scientific. Therefore, in a similar vein to Jacques Derrida's critiques of Lévi-Strauss, in which Derrida proposes that the figure of the scientist (or, "engineer") is only ever a myth and that we are all bound (at least, linguistically) into a process of bricolage ([1967] 2002, p. 360), análisis artesanal becomes a reminder to the transparency circuitry that even the scientist and engineer must at times come to draw on bricolage. The daterx, given the context of open data, also becomes at moments dependent on advances and operations that they cannot be fully accountable for. Therefore, the deployment of análisis artesanal was not an example of "add culture and stir", where rational empiricism comes into contact with "local" knowledges that expose the premises of the former paradigm (Biruk, 2018, p. 51). Neither was this a moment of "breakdown", where "customary practices and the role of our tools in maintaining them are exposed, and new design solutions are created" (Escobar, 2018, p. 113). Instead, it was a gesture that recognised factors outside of the *daterxs* control that challenge the narrowed limits of scope available to the *daterx*.

Following David's deployment of *análisis artesanal*, I appeared to be the only one drawn to its novelty as no one else sought clarification. To my surprise, the conversation then recovered at pace and our microphone remained unmuted for the remainder of the session, both our bodies leaning forward into this screen of interlocutors. David's deployment of this gesture successfully allowed us to manoeuvre our investigation around the ambiguity inherited from our use of the variable *mes*. After a few more iterations, this informe then went on to be published, circulate across the transparency circuitry and gain substantial media attention across Mexico. Of all the activities explored in this study, it produced the most quintessenetially successful open data-led transparency output.

After becoming more attentive to deployment of *análisis artisanal*, I observed its emergence in several other interactions outside of the *publitón*. Of particular interest was its emergence in research interactions not only with *daterxs*, but with more established actors within Mexico's transparency circuitry. For instance, during one interview with the *Director de análisis de datos* for a respected civil society organisation, I raised the issue of the seeming trade-off in the

realm of open data between data integrity and data cleanliness.⁴⁵ Recognising no easy solution to this trade-off, this research participant went on to convey frustration at the different methodologies applied by federal entities in the data capture process. The example of national crime data was given:

Si cruzo dos bases de datos de violaciones, pensando que uno es del Secretariado [Ejecutivo del Sistema Nacional de Seguridad Pública] y el otro del INEGI [Instituto Nacional de Estadística y Geografía], tenemos que ver qué clasifican como violaciones por parte del Secretariado y también por parte del INEGI, ya que a lo mejor no usan la misma definición. (Interview B7, December 2019)

Due to this enduring inconsistency, the participant noted: "tal y como están, el equipo hace un poco de análisis artesanal si es necesario" (ibid.). When asked to develop on what this term meant, they continued:

Trabajando con estos [open] datos hay muchos factores que no podemos controlar ni entender desde nuestra posición [outside of data producing institutions]. Pero tenemos que seguir, hacer saltos de una forma u otra para seguir. (Ibid.)

For this senior professional in data analysis, the frustration of allowing elements of an analysis to proceed for which their training had long advised against was evident. It involved ignoring many of the professionalised habits of the successful data analyst developed over many years. It involved coming to accept dimensions of a project that produce an undercurrent of anxiety and uncertainty as to the results and eventual acceptance of the output within one's community and a broader publics. For those with professional responsibilities, as was the case for this interview participant, it harboured the potential of reputational damage and loss of credibility. Yet importantly, this participant – who at times also acted as a gatekeeper to the transparency circuitry – did not implicate themselves directly in the act of conducting *análisis artesanal*. Instead, there was recognition that this open data landscape at times required recourse to *análisis artesanal* to produce *análisis integral*. Here, within the narrow scope of appropriate *daterx* activities, there was the modest recognition of the folding of the data setting into what could be gathered from the data set.

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⁴⁵ By this, I mean that downstream actors want to access data early in their production cycle before there is opportunity to pass them through various political and institutional filters. However, when datasets have not been through an initial cleaning process, the complexity of an analysis process is multiplied as rapidly disclosed open data tends to hold many more errors, gaps and inconsistencies.

3e. Conclusion

Any reference to the artisanal, with its resonances of embodied knowledge and idiosyncratic craft, seems far removed from the spaces of open data analysis to which I have thus far focused during this study. Yet, this is not the first-time unexpected figures have made their way into dominant data discourses. Genevieve Bell has commented on the "new priests and alchemists" – contemporary jargon for "quants and geeks" – that now populate the offices of technology companies (2015, p. 23). Srnicek also finds unexpected figures in job postings for data scientists in Silicon Valley: "If you had been born in 800BC you would have been a mystic" (2017, p. 44). This terminology, according to the analysis of these scholars, does not so much encapsulate the extraordinary powers of these reemergent figures, but instead speaks to our collective dependence on tools and processes that we do not fully understand but still trust to be efficacious (Srnicek, 2017). As I detail above, the artisanal, as deployed in Mexico's transparency circuitry, takes on a different significance to that identified by Bell and Srnicek. The artisanal was not evoked in order to exaggerate our skills or add a mystical element to our work. Instead, it was used to acknowledge the difficult reality of working with federal open data.

In the case explored in this chapter, the objective of *análisis integridad* was fulfilled, thanks to the leeway achieved through deploying the gesture of *análisis artesanal*. David and I managed to produce an investigation that remained within the prescribed scope of a transparency output, resulting in the identification of an unusual and recurrent pattern of spending in the area of *publicidad oficial*. *El gasto navideño* plotted different dimensions of this spending pattern: its peaks and movements across the *sexenio*, what these sums of money were spent on and who benefitted. This disclosure of federal SCS open data provided the base material for a transparency output that then went on to circulate across numerous public spheres. It expanded our understanding of the inner workings of these federal entities whilst also maintaining the reputation of the transparency circuitry. Yet, both of us recognised that this flash of understanding remained narrow and only ever temporary. Despite our efforts, this output did little more than, as David put it, "exponer a los peces gordos del gobierno anterior" (Interview A32, February 2020). Further, the practices and patterns it revealed are no doubt already outdated as Mexico's shadow powers shift their methods and ways of working. 46

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⁴⁶ According to Rodriguez Lara (2020), the most contemporary practice for buying off media owners is for Mexico's political elite to invite these individuals to join them in private enterprises set up by these same elite.

The methods that now occupy the opaque spheres of the state apparatus may escape the representational limits of a federal open data set. Or, at least, the representational limits of the dataset if we are only to consider the digits presented to us that fit with the forms expected. However, if we allow ourselves the opportunity to remain with the errors, gaps and inconsistencies that always interlace open datasets – acknowledging the openness of open data – then we may subsequently find the opportunity to understand and chart these opaque spheres in new ways, and so challenge the political arrangements they produce.

Chapter four: Proximity

4a. Introduction

In this final chapter of part two, I consider the narrowing of open data-led transparency through the dimension of proximity. Here, proximity is synonymous with positioning or location, and seeks to capture the situ from which daterxs undertake their activities vis-à-vis Mexico's state apparatus. Whilst recent contributions to Transparency Studies have called for the recognition of transparency activities along both vertical and horizontal axes (Flyverbom, 2019), these axes are static gauges, and contributions do not yet consider the repercussions of points of proximity along these axes. This chapter responds to this gap by considering how daterxs are purposely brought into close proximity to the state, and so highlighting the important forces at work between points along these axes. In Mexico, this is achieved through a focus on transparencia proactiva. Whilst proximity involves the handing over (or, outsourcing) of certain responsibilities to daterxs, it also means that the state (quite literally) always remains within the frame. As I go on to detail, the positioning of the *daterx* in proximity to the state apparatus has important consequences for the outputs that emerge from open data-led activities. Through acknowledging proximity, we can better understand the ways open data activities and their outputs work to produce and re-produce the state, further narrowing the possibilities of open data-led transparency.

To develop this argument, this chapter first explores a rich stream of Mexicanist scholarship that takes seriously the representational repertoire of the Mexican state. Premised on a shift in our framework for understanding state formation, I consider the ways these tightly controlled cultural processes produced the Mexican state throughout the twentieth century. I then turn to consider the very contemporary development of transparencia proactiva which, in theory, hands over some of the responsibility for these representational activities to the daterx. Through analysing institutional documentation, I show the history and specificity of this term to Mexico. Transparencia proactiva is then given empirical depth through presenting materials gathered during my participation in #DatosEnLaCalle. As the name suggests, this open dataled activity required daterxs get out from behind their desks and into the streets. Led by one of the organisations at the forefront of Mexico's drive for transparencia proactiva, my collaborator and I spent close to three weeks mining federal datasets on public investments in our local area, and making visits to sites of federal investment. During these visits, we captured audiovisual material that documented the progress of these public works, and compared these outputs to federal sources. Focusing on the production of these open dataled visual representations of the state, I detail the difficulties of visually capturing the absence

or incompletion of the state's presence. Expanding out from the example of #DatosEnLaCalle, I argue that despite the digital nature of open data, the narrowing of representational possibilities through proximity come to reinforce to the fragile silhouttes of the state found in open datasets. This presents us with an unexpected dimension of digitally-produced state formation that should be of interest to social and cultural researchers.

4b. Representational repertoire(s)

The previous chapter's exploration of *publicidad oficial* demonstrated that the Mexican state apparatus cares a great deal about its public image, about how representations of the state circulate and are interacted with by diverse populations. Whilst the previous chapter focused on a very contemporary iteration of "PR-production" (Fisher, 2009, p. 44), this is by no means a new phenomenon. Recent historical scholarship, such as that of Vanessa Freije (2020), has charted the intimate relationship between the print media and the PRI-state during the midtwentieth century, also paying close attention to when this relationship broke down and led to scandal. Freije's contribution is a contemporary extension of a stream of Mexicanist scholarship (New Cultural History) that I cited in chapter one, which does not take the stability or reach of the PRI-state for granted, but seeks to understand how this stability was constituted, negotiated, and its consequences. This has required a shift in our understanding of what the *state* is. Thus, alongside the critical role violence and coercion play in state formation, Philip Corrigan and Richard Sayer emphasise "the immense material weight given to... cultural forms by the ... routines and rituals of state" (1985, p. 5).

Echoing and drawing on the work of Corrigan and Sayer in the context of Mexico, Gilbert Joseph and Daniel Nugent propose that the Mexican state's power derived not only from its formal institutions, its armed forces, and economic underpinnings, but also from "the centurieslong cultural process which was embodied in the forms, routines, rituals, and discourses of rule" (1994, p. 20) – akin to what Taussig would later go on to describe as "the fantasy theater of the state" (1997, p. 5). This re-positioning and subsequent expansion of a political-cultural approach in Mexico (and more broadly, Latin America) was underpinned by a Gramscian turn that linked "culture explicitly to power" (Joseph, Rubenstein and Zolov, 2001, p. 16). Antonio Gramsci's (1996) idea of *hegemony* stresses a consensual basis to power that acts alongside coercion, together coming to form a "compromise equilibrium" between "rulers and ruled" (ibid., pp. 124, 170). Any bloc that seeks rule must do so through both force and consent. In

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⁴⁷ It is worth noting that this differs from the foundations to texts of historical sociology, such as Corrigan and Sayer, who turned to and adapted Emile Durkheim's concept of collective conscience (1985, p. 6).

introducing a core edited volume to this stream of literature, Will Pansters noted: "There seems to be a consensus among scholars from different disciplines that political culture matters, and that it is a fertile area of research that grants insights into broader political processes" (1997, p. 5). Going a step further, with an empirical focus on post-independence state formation in Argentina and Brazil, Jens Andermann (2007) posited that states are themselves cultural forms: "[The state] is a specific correlation between politics and aesthetics, or rules of perception, in which the latter sustains the former as its own cause and end" (ibid., p. 2).

The repertoire of representations that the Mexican state conceived and circulated to produce this hegemony has been analysed according to numerous periodisations and heuristics. For instance, during Cardenismo, the state diffused an image of the "Estado Educador, Protector, Constructor" (Vaughan, 2001, p. 484). A more recent contribution, offered by Benjamin Smith and Paul Gillingham, considers the "mechanical metaphors" that circulated during the PRI's golden age (1940-1968): "the country was run by el sistema, la maquinaria oficial, the party machine, 'a political solar system,' in which Mexicans 'rotated around the presidential sun and his electoral machinery" (Krauze, 1997 p. 136 cited in Gillingham and Smith, 2014, p. 4). These mechanical metaphors went in tandem with the PRI's reliance on the "positivist magic of numbers" with "statistical blizzards" filling presidential reports and bureaucratic documents (ibid., p. 7). As Alan Knight noted, this flood of numbers was often produced and circulated without adequate technical capacities and so subject to "[a] lack of accountability, nepotism and clientelism" (2004, p. 251). Yet still, these blizzards of numbers gave the state "weight" (ibid., p. 212). As Smith and Gillingham note in relation to these statistical artefacts, "they are as useful as cultural artifacts as they are useless for straightforward representation" (Gillingham and Smith, 2014, p. 8).

John Mraz's scholarship focused on print media photo images in Mexico's process of hegemony construction, a particularly favoured medium by those in power as the photo image is treated as the "index of some reality that we take for reality" (1997, p. 147 [italics original]). Mraz recognises the error in this position, with the photo image's:

apparent transparency and familiarity conceal[ing] what are in fact densely structured representations that play a vital role in forming political cultures and identities through the worlds they reflect back to their viewers. (Ibid., p. 148)

Mraz's archival work proposes that apart from rare exceptions (such as the photography of Tina Modotti), during the PRI's *golden era* the skills of photographers and photojournalists were "uniformly laudatory of those in power" (ibid., p. 151). In Mraz's analysis of these images,

attention is given to the way technical factors impact the distribution of light in an image, the way different compositions of bodies suggest political allegiances or souring relationships, and the way image and text work together to augment representational capacity. This is a discursive analysis, deployed retrospectively after the production and original circulation of these images.

A particular strength of latter contributions to this stream of scholarship are that they have often challenged the sense that hegemonic projects do in fact become cohesive and adhered to. They warn that we must not assume the successful delivery, reproduction, and circulation of all that the state "states" (Corrigan and Sayer, 1985, p. 4). Instead, scholarship that draws on case studies from Mexico have tended to understand the PRI-state's cultural projects as "improvised, multivalent, accumulative process[es] that grew through interaction between state and society" (Vaughan, 2001, p. 471). Attention to these accumulative processes, with great interest in their specificities and details, animated a multiplication in the definitions of hegemony and a "deep suspicion of any grand claims to the existence of hegemonic projects, let alone their success" (Sayer, 1994, p. 371). Instead, they propose a move to recognising a multitude of "hegemonic process[es]" (Roseberry, 1994, p. 365). As Pansters (1997) noted, these multiple processes are often themselves in conflict and contested.

Taking this insight seriously requires opening the field of culture and hegemony construction/contestation to other projects and actors. As James Scott contended, political systems typically contain a "public" or "official" transcript that is the place of legitimised rhetoric and a "hidden" transcript that is disconnected from the language of the state and elites (1990, pp. 2, 4). Indeed, according to Scott, it is the strength of this hidden transcript – ensembled through the weapons of the weak (1985) - that emphasises the lack of consensus (and so, hegemony) even in social situations of domination. Utilising this window into studying popular mobilisations, rituals, habits, relationships, education, and morality that counter the official transcript, studies then focused on counter hegemonic practices that proposed a reversal of our understanding of Mexican state formation from one of Revolution-to-Evolution towards Revolution-to-Demolition (Schmidt, 2001, p. 30; Rogelio Hernández, 2008). Through this turn, echoed in later contributions such as Freije's (2020), it becomes clear that whilst heavily invested in its own image, the PRI-state had to confront and attempt to overcome the weapons of the weak - gossip, slurs, satirical songs, jokes and so on that challenged the official transcript (cf. Vélez-Ibañez, 1983). For instance, in response to the PRI's "statistical blizzards" (Gillingham and Smith, 2014, p. 7), political cartoonists of the era invented the Secretaría de Verificación Nacional del Discurso Estatal (Barajas Durán, 1994, p. 22) that satirised the obvious fallacies in these statistical outputs and the dependence of senior public figures on celebratory "official numbers" whilst ignoring Mexico's dire social inequalities (Gillingham and Smith, 2014, p. 7).

This fictional state institution and 1929: Proceso highlight that:

The state did not forfeit its production or regulation of national culture; however, it lost its monopolistic control and its own messages were increasingly deployed against it by a burgeoning and rapidly differentiated population whose demands for inclusion it had difficulty meeting. (Vaughan, 2001, p. 481)

However, as these examples and this quote from Vaughan indicate, despite emerging from *many Mexicos* (Knight, 1986), the "forms and languages of protest or resistance *must* adopt the forms and languages of domination in order to be registered or heard" (Sayer, 1994, p. 364 [italics original]). In the visceral reconstruction of a police torture facility in *1929: Proceso*, there is an imitation of state power even in its rebuttal. The "policeman's hail" (Althusser, 2014, p. 190) is acknowledged even if this acknowledgment is made in order to dissent and object to it. Thus, hegemonic processes do not only configure the responsive category of consent and the antagonistic position of refusal, but also (amongst other potential positions) a rejection of consent that continues to register the state's ability to "produce and reproduce" (Sayer, 1994, p. 374). This dynamic is not easily accommodated within the Gramscian framework of hegemony (or even, hegemonic processes). Instead, this process of production and reproduction echoes back to the *conduct of conduct* (Foucault, 1991) noted in chapter two.

As the discussion of #DatosEnLaCalle below elaborates, the contemporary processes of representational production, building around the material of open data, continue to be a complex space of competing forces. Drawing on the language of Yael Navaro-Yashin (2002), if open data form one of the most contemporary of the "multiple metamorphoses" in the state's representational repertoire – a "re-dressing [of] 'the state'" into its newest "variety of garbs" (ibid., pp. 3, 4) – then this is a process which society is now actively invited. Open datasets, these masses of digits that exhibit the different spheres of state activity and accomplishments are core to the contemporary representational repertoire of the state. They are also the primary material that are inputted into the subsequent representational outputs produced in collaboration with *daterxs*.

4c. The proximity of the *daterx*

Many of the activities I observed and participated in during my primary period of fieldwork fall under the rubric of *transparencia proactiva* – a term with recent but specific significance in Mexico (Peschard Mariscal, 2014). In literature developed by scholars focused on European and North American contexts, *proactive transparency* captures an orientation (rather than a specific policy or approach) towards the disclosure of data and information by state or corporate entities (Darbishire, 2011; Christensen and Cornelissen, 2015; Alom, 2018; Ruijer *et al.*, 2020). For instance, contributing to the *American Review of Public Administration*, Erna Ruijer (2017) explored proactive transparency within government communications officials in the USA and the Netherlands. Ruijer describes proactive transparency as "the proactive release of documents to the press, proactively placing documents on the agency's website, or making information available proactively via traditional media channels or social media" (ibid., p. 358). Therefore, this term identifies an individual orientation undertaken by those with a personal commitment to transparency. However, this effort can then be bolstered through institutional support, particularly in rules-based transparency regimes such as the USA.

In the context of Mexico, *transparencia proactiva* captures a broader, institutional approach to transparency activities with particular significance in our era of open data-led transparency. Following time spent in the documentary archives of the INAI, the term *transparencia proactiva* first emerged in Mexico in 2009 (InfoDF, 2009). In 2012, the IFAI (later, INAI) hosted the *Primer Semenario de Transparencia Proactiva*. This event brought together national and regional transparency actors to plot out the implications of this emerging approach to transparency. During one of the opening addresses of the *Primer Seminario*, Cecilia Azuara Arai, then a senior official of the IFAI, described *transparencia proactiva* as follows:

realmente en el IFAI entendemos la transparencia proactiva como el conjunto de actividades e iniciativas ordenadas que tienen como propósito elevar, de forma sostenida, la publicación de bases de datos abiertos y de información estatal que permitan la rendición de cuentas a los ciudadanos y promuevan la participación activa de la sociedad en la solución de problemas públicos de manera continua. (IFAI, 2012, p. 15)

A subsequent PowerPoint slide shared during this event described *transparencia proactiva* as offering: "Nueva Relación Gobierno – OSC – Ciudadano" (ibid., p. 192). Thus, in the context of Mexico, *transparencia proactiva* encapsulates more than the individual orientation of a public servant or official. More substantially, it involves the creation of spaces, moments and opportunities in which citizens can participate in solving the many problems that confront the

contemporary state. This turn in the institutional paradigm towards *transparencia proactiva* can be aligned chronologically to Mexico's initiation into the AGA (detailed in chapter two).

To better understand the contours of this new paradigm, catalysed by open data and at the centre of Mexico's transparency circuitry, it is useful to turn to a concrete example of *transparencia proactiva*. As part of the *Primer Seminario*, a new annual prize was announced, initiated to recognise institutional efforts towards *transparencia proactiva* within state entities. The inaugural prize was awarded to Transparencia Presupuestario: Observatorio del Gasto (TPDG), an organisation situated within Hacienda. In its early iteration, the TPDG was a website that acccumulated and displayed "todas las etapas del proceso presupuestario: generación de ingresos, programación, presupuestación, ejercicio, evaluación y proceso de mejoras que fortalecen la rendición de cuentas" (IFAI, 2012, p. 189). A precursor to datos.gob.mx, it accumulated Hacienda's budgeting data all in one place, presenting it according to "menús intuitivos" and "accesos fáciles", breaking down these vast amounts of open data thematically for the user (ibid., p. 36). Here, we see a move away from simply "throwing data over the wall" (Sieber and Johnson, 2015, p. 309) towards turning data into a material that can be put to use by citizens.

Over the proceeding decade, *transparencia proactiva* has matured as a paradigm. It remains core to the language and activities of Mexico's transparency circuitry. Indeed, my primary period of fieldwork aligned with two further seminars organised by the INAI titled *Nuevos Horizontes de la Transparencia*, held in December 2019 and February 2020. Despite the provocative title of this series, gesturing to the emergence of a new paradigm, amongst speakers and panelists *transparencia proactiva* remained dominant. Indeed, these seminars marked the launch of the *Guía de Transparencia Proactiva* (2019), produced in collaboration between the INAI and SFP, evidencing its continued centrality to Mexico's transparency circuitry. In keeping with the approach to *transparencia proactiva* proposed in the *Primer Semanario*, in this latest contribution, *transparencia proactiva* is defined as "instituciones que, además de generar información pública útil, permiten que los ciudadanos tengan canales para participar y colaborar" (ibid., p. 7). As with its earlier iterations, open data remains foundational to this sphere of activity (ibid., p. 9).

The language of proactivity immediately invites an analysis guided by Foucault's writing on the *conduct of conduct* (1991). Such an analysis would position *daterxs* as being encouraged into this active form of citizenship, where they take on the responsibility to produce transparency in place of the state (cf. Ruppert, 2012). This operates through inclusive calls to enter into partnership with state institutions and agencies. In doing so, citizens adapt

themselves to flexible regimes of monitoring, responding to different situations and scenarios of the state's own making. There is an effort from institutions to reach down through the "middle latitude" (Ferguson and Gupta, 2002, p. 983) of the civil sphere towards individuals and encourage them to be more resourceful, show initiative and manage both the opportunities and risks of governance. Proactivity is thus part of a process that helps construct subjects according to norms and values that accommodate increasingly neoliberal governance. Whilst this would certainly be a fruitful line of analysis, I will direct this chapter in an alternative direction. What is of particular interest to me in this chapter is the representational logic *transparencia proactiva* initiates through open data-led transparency activities.

In Flyverbom's *Digital Prism* (2019), there is an effort to push towards recognising (amongst other dynamics) the directionality of transparency. Building on the earlier work of Christopher Hood (2006) and Steven Mann (2004), Flyverbom charts the directions of transparency as "inward, outward, upward, downward", allowing us to "integrate multiple forms of vision and disclosure" into our conceptual understanding of transparency (2019, p. 53). Following these scholars, Mexico's particular paradigm of *transparencia proactiva* can be situated along the horizontal "inward, outward" axes (Hood, 2006, p. 29). This is not a position in which the "hierarchically superior can observe the conduct of the subordinate, or the ruled can observe their rulers" (Flyverbom, 2019, p. 53). Instead, there is a greater sense of symmetry between parties, a situation of productive alignment in which initiative and responsibility emerge through shared visibility.

However, Flyverbom's static model does not take into consideration the proximity of actors along these axes and the subsequent consequences for transparency. The positioning of *daterxs* not only along the horizontal axes but in closer (or more distant) proximity to, and collaboration with the state is one that allows for this co-authorship, this responsibility to produce new representations of the state. The proximity from which these outputs are developed is unlike previous state/society relationships, as this is neither a position of passivity nor opposition, but of co-production. As a public servant with responsibilities for digital innovation stated to me after recounting an example of *transparencia proactiva* undertaken by their institution: "es una actividad que requiere de respeto, respeto entre ambos [state and citizens]" (Interview C9, January 2020). This position of respect and co-authorship was one *daterxs* appreciated. As one interviewee put it to me, "Así, la transparencia [*proactiva*] no castiga a la iniciativa ni al sentido de la responsabilidad" (Interview A35, March 2020). For this *daterx*, responsibility was a positive characteristic of this unfolding relationship, involving being able to guide open data analysis towards the ends they have chosen and intended.

If transparencia proactiva creates the grounds for citizens to exercise their individual capacities, a response to the complexities of social, political, and institutional dilemmas, then surely complex interpretations and representations should emerge from this invitation. Inviting daterxs into this position of proximity involves the state letting go of its preferred "self-representation" and its "selected idea about itself" (Navaro-Yashin, 2002, p. 6), instead opening out this role to a growing number of daterxs. The daterx becomes the subsequent co-author of open data-led representations that assemble from these initial disclosures. If open data form a contemporary "face of the state" (ibid., p. 3), then the possibility of proactive engagement means that many subsequent faces become a possibility, making space for "multiple metamorphoses" (ibid.) and a plethora of new "boundless disguises" (ibid.). However, whether the actual production of open data-led representations can maximise on this conceptual possibility is another question, one that I now turn to through the project of #DatosEnLaCalle.

4d. #DatosEnLaCalle

In exploring the emergence of transparencia proactiva within Mexico, I referred to TPOG, part of Hacienda and an award-winning component of Mexico's transparency circuitry. One of their most prominent activities is their annual datathon, #DatosEnLaCalle. In its 2020 iteration, this involved a three-week activity during which citizens mined open data on federal public investments, then made visits to local sites of federal investment to produce audiovisual representations that confirmed or disputed these open data. As one participating *daterx* later put it in an interview, #DatosEnLaCalle provided "una gran oportunidad para vigilar y fiscalizar el poder" (Interview A35, March 2020). Given the institution from which #DatosEnLaCalle is directed, my engagement with this activity involved participating in a "paradigmatic case" (Flyvbjerg, 2001, p. 79) of transparencia proactiva. 48 Yet, it was also unlike many of the datathons and open data-led activities in which I participated. It required stepping away from open data as masses of digits projected through screens and put emphasis on the physical referents of each collection of datum. Like previous datathons, #DatosEnLaCalle began with a preparatory webinar hosted by TPOG. The TPOG's spokespeople were diegetic voices visible on-screen. They sat on two chairs, directly facing the camera with no table or lectern distancing them from the viewer. The presenter's informal attire, exposed tattoos, and loose flowing hair was unlike that of the public official or senior civil society representative who

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⁴⁸ Motivated by the TPOG, similar activities have taken place at a municipal and state-level in Mexico, as well as internationally, such as in Colombia and Chile.

typically introduced such activities. In other words, these spokespeople resembled the *daterxs* that I observed across research activities. Proximity was already being established.

During this forty-five-minute session, we were encouraged to dismiss any worries regarding potential barriers to participation in this datathon as TPOG had developed a flexible format for the activity that meant that anyone with access to the Internet and basic competencies on a computer could get involved. The primary basis for establishing proximity was the TPOG's award-winning website – noted above – with a custom-built sub-section for #DatosEnLaCalle. In this sub-section, the website hosted a data mapping tool that allowed federal infrastructure contracts to be positioned over a street-view of Mexico, allowing easy identification of projects down to the street-level. Through applying intuitive location filters, within a few clicks, daterxs could produce a detailed map of federally funded infrastructure projects in their local area (figure xv). On clicking an icon, the participant would then be presented a tile of data points extracted from the underlying open datasets (figure xvi).

These visualisations drew from two of Hacienda's primary open data outputs: *Obra Pública Abierta* (OPA) and *Obras de Entidades Federativas* (OEF). Together, these datasets compiled a sizeable register of federal spending on public infrastructure. Both are produced according to the forms of datos.gob.mx and are updated each trimester. When cross-referenced, they comprise over eighty variables for each public investment, as well as offering a historical view for those works that span over one trimester (the vast majority). This "high-dimensional [open] data space" (Mackenzie, 2015, p. 434) includes the *who*, *what*, and *when* of these public works, including exact location coordinates for each investment, the names of the public servants who have given budget approval, advances in progress, and details on significant subcontractors. The visualisation tool surfaced a key selection of these data points, designed to include just enough data to get a broad impression of each site of federal investment (figure xvi).

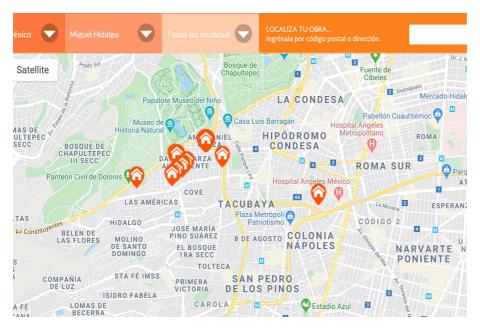


Figure xv: Screenshot of the TGOP visualisation tool: map view (March 2020).

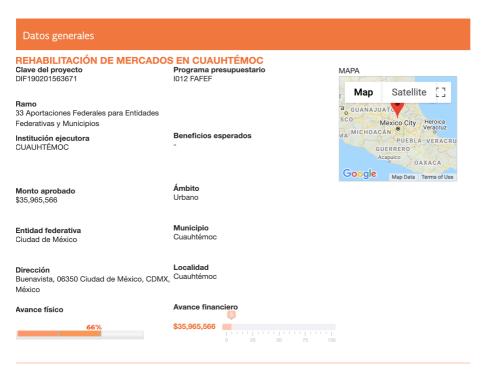


Figure xvi: Screenshot of the TGOP visualisation tool: data tile view (March 2020).

Introduction to this mapping tool occupied most of the webinar. In addition, the presenters also informed would-be participants of the rules of #DatosEnLaCalle: after forming teams (or, participating individually) we were to use this visualisation tool in order to identify federal public investments in our local areas. We were then asked to "sal[ir] a la calle" (Fieldnotes, February 2020) in order to visit these sites, and capture visual material about these sites that

corroborated or contradicted Hacienda's open data. For instance, if a new medical clinic was supposed to have been recently completed on a particular street in my neighbourhood, I was to visit this site and check that this clinic was indeed complete. I would then capture images and videos of the site to corroborate this analysis. These audiovisual materials, re-indexing the reality indexed in federal open datasets, were then to be shared on social media (Twitter and/or Facebook), utilising several event-specific hashtags. Over the duration of this datathon, TPOG would then collate these contributions, assigning points to each team according to a criterion that rewarded the number of sites visited, and the number of interactions each post received on social media. Additional points were assigned if the posts also engaged the perspectives of the local beneficiaries of the public works, as well as identifying and sharing the federal spending portfolios to which the investment aligned. The team that accumulated the most points would then be announced the winners of the datathon during the closing event of #DatosEnLaCalle, organised to align with Mexico City's celebrations of the International Open Data Day, in early March 2020.

If registering for and attending the webinar was the first indication of a *daterx's* proactive orientation, the next step involved progressing towards active participation in the datathon. Over 500 individuals signed up to participate in #DatosEnLaCalle, with 110 of these individuals becoming active participants (uploading audiovisual material). As the third iteration of this annual event in Mexico, the number of active participants more than doubled from 2019, resulting in a subsequent doubling of site visits conducted by participants (Transparencia Presupuestario: Observatorio del Gasto, 2020, p. 2). In the 2020 iteration of #DatosEnLaCalle, the ODG registered visits to 217 sites of federal public spending across Mexico (ibid., p. 3). These participants were dispersed across eleven states in Mexico – primarily Oaxaca, Guanajuato, and the Mexico City region.

There was a significant fall in numbers from those initially showing interest to those actively participating in #DatosEnLaCalle. A contributing factor to this fall, no doubt, was the collapse of the TGOP mapping tool. Whilst the expected user flow was nicely illustrated on the PowerPoint slides presented during the webinar, numerous functional and performance issues meant that interacting with the tool was often impractical. Instead, we had to resort to downloading the underlying open datasets and working with them via our preferred analysis packages. Here was an unexcepted dimension of proactivity: how to negotiate interaction with these open data in the context of unworkable TPOG tools. I, and at least another 109 daterxs, were able to draw ourselves towards this new threshold for proximity, utilising previously developed data skills in order to interact directly with the OPA and OEF datasets.

Once these open datasets were accessed directly, the high-dimensional space they constructed soon became shallow when considering the task of representing federal infrastructure investments. Take for example, *Proyecto Tamaulipas Constituciones*. Initiated in 2001, the project's expected end-date is the 31st of December 2044, during which time it will receive federal funding to the amount of 59,971,818,744 pesos. For a project extending over forty-three years, the culmination of these data points – with many remaining static across extended periods of time – can only sketch the broad silhouette of such a colossal investment at the centre of Mexico's petroleum industry. These silhouettes, although carrying "weight" (Knight, 2004, p. 212), remain slender, flimsy even, open to numerous interpretations.

Even when a full set of data points were present for an individual project, making sense of this record remained a convoluted task. As a researcher, simultaneously undertaking this task alongside daterxs, I also experienced the bewilderment induced by these datasets. For instance, returning to Proyecto Tamaulipas Constituciones: in the fourth trimester of 2018 this project was recorded as 78.08 percent complete. In the fourth trimester of 2019 this progress was recorded as 85.74 percent complete. In the first trimester of 2020, the project was recorded as 84.57 percent complete, corresponding to a reduction in progress of 1.17 percent. At first, such granularity strikes as impressive – building progress measured to two decimal places is surely a sign of technical proficiency, and open data's meticulous ability to represent this reality. Yet, on reflection, this accuracy begins to baffle. When I raised records like the above to a daterx during an interview, asking what they thought of this accuracy, they responded: "¿Qué significa una cifra así, qué representa cada punto decimal? Me cuesta entender" (Interview A39, March 2020). To confound further, no clear methodology for how such digits were arrived at was provided, making this marginal retreat in progress between the end of 2019 and beginning of 2020 difficult to comprehend.⁴⁹ Moreover, within this highdimensional space, colossal investments such as Proyecto Tamaulipas Constituciones are arranged alongside minor refurbishments to bus shelters and metro stations that incur a small fraction of the cost. Lined up against each other, perspective on these airy silhouettes is easily lost when each record occupies the same visual space on screen.

However, as the webinar had instructed, #DatosEnLaCalle was about getting away from our screens and out in the streets to develop our own representations of these open data and the public works which they indexed.

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⁴⁹ The variable capturing this detail, *avance_fisico*, is defined in the accompanying data dictionary as providing "Avance en la construcción acumulado al cierre del actual trimestre de los programas o proyectos de inversión", with no specifics as to how this measurement takes place.

4e. Negotiating proximity

Irene – my collaborator during #DatosEnLaCalle – and I had met during a training event at a hackerspace in Mexico City during the autumn of 2019.⁵⁰ With a formal education in human rights law, Irene had been attending more and more *daterx* events to develop new data skills to complement future projects. We lived in the same area of Mexico City and so had kept in touch, sometimes arranging to take public transport together to various events and training sessions. A mutual contact had shared the details of #DatosEnLaCalle in a Telegram group that Irene and I were both part of. Primarily a group for experienced *daterxs* who used the space for social posts, memes, and peer support during analysis projects, I got the impression that #DatosEnLaCalle had been shared to the group with an edge of sarcasm.

However, due to my existing awareness of TPOG, this datathon did draw my interest. Irene's curiosity had been sparked by the hype surrounding #DatosEnLaCalle, and the rapid spread of its format across regional and international spaces. Indeed, investment in the event from the TPOG was clear from the beginning, with slick promotional materials communicating a fun, exciting experience for participants (figure xvii). Further, Irene did not usually participate in datathons as they typically required the commitment of entire weekends (often longer) to a project — a commitment that would interfere with other responsibilities. However, #DatosEnLaCalle was much more flexible. Apart from the introductory webinar, and an open invitation to the closing ceremony, there were no scheduled time commitments to the datathon. Facilitating proximity, this activity was intended to adapt to each daterx's personal circumstances. In a separate conversation, apart from the Telegram group, Irene and I decided to team up and participate in #DatosEnLaCalle.

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⁵⁰ Irene is involved in feminist activism and organising within Mexico City. For this reason, the individual social media posts that emerged from our joint efforts were posted solely from my personal Twitter account as such posts (typically taken within an individual's local community) could unintentionally disclose Irene's home address and usual routes of travel.



Figure xvii: Author's screenshot of promotion materials shared for #DatosEnLaCalle by the TPOG (February 2020).

After initial frustrations with the TPOG mapping tool and resorting to working with the underlying Hacienda datasets, Irene and I had to respond to the next test of proactivity: how to prioritise projects to visit over the coming weeks. Our initial strategy was simple: consider our agendas over the coming days and visit projects near to these locations and routes of travel. When these datasets were filtered by municipality, and their location coordinates passed to other mapping tools (such as Google Maps), projects could be easily plotted against our usual routes of travel.

Our first attempt at getting away from our desks and stepping out into the streets to verify and visually represent Hacienda's open data took us to the community of Actipan. In the central region of Mexico City, the community branches off the city's main thoroughfare, Insurgentes, where the metrobus typically transported Irene and I between our home neighbourhood to the north of Actipan, and the zone of university campuses, public institutions, and offices buildings to the south of Actipan. Tucked just behind the noisy activity of Insurgentes, the neighbourhood quickly became residential. Bougainvillea crept up the sides of modern, multistory apartment buildings, and suprisingly few *ambulantes* roamed the streets.

We were there to investigate and verify federal spending on a project replacing filament-bulb streetlighting with LED lamps. As well as its location, this project had also drawn our attention as whilst the open data for this project recorded that the full budget had been spent, the variable recording *avance_fisico* was empty. Like other participants, we shared a giddy excitement that over the datathon we were going to uncover a watershed example of corruption. As a fellow participant expressed to me during the closing event, "Claro, yo quería descrubir la próxima *estafa maestra* o *casa blanca*" (Interview A35, March 2020) – both references to corruption scandals that rocked the Peña Nieto administration. As we arrived at

Actipan, locating the coordinates specified in Hacienda's datasets, we experienced another period of confusion. We wandered the streets, peering upwards. Whilst not quite sure what to look for, all we could initially see were bulky hunks of rusted metal amongst the city's usual scene of tangled wires and telegraph poles. Whilst this was evidence of a streetlighting system within Actipan, these metal fixtures certainly did not look like an updated LED system.

Our initial assessment was that the lighting system had not been updated, the street still illuminated by these old, tired lanterns scattered overhead. We took the presence of these lighting fixtures to corroborate Hacienda's data: this federal infrastructure project had not been completed, despite the spending of funds. Yet, this was our first outing as part of #DatosEnLaCalle: had we already confirmed a discrepancy indicating corruption within the purchase of street lighting technologies? We began pacing the streets to confirm our suspicion, our eyes and camera phones tilted upwards once again as we surveyed the street's knotted infrastructures passing above. During a second examination of the area, we came to notice unfamiliar devices had been attached to many of the same infrastructure that upheld the older lighting system: small, white and black plates that were dwarfed by the lanterns. After a subsequent online search to familiarise ourselves with what LED street lighting may actually look like, we felt comfortable confirming that these objects were the LED lighting system detailed in Hacienda's database.

Neither Irene or I were familiar with public lighting infrastructure, nor the area of Actipan. Yet, we saw these devices spread evenly across the streets of the community, and from this position of naivety, agreed to confirm this investment as complete. On later reflection, we realised that we came to this decision during the late afternoon, not even waiting to see whether this new lighting system functioned at night. Although we had been invited into this situation of proximity for which a certain set of data skills were highly appreciated, we lacked many other auxiliary competencies and spheres of knowledge that would have made us much more appropriate analysts in this context. Yet, our proactive orientation seemed to extend into the capacity to learn whilst doing, surmounting any potential concerns from the TGOP as to our lack of skills for the task.

By getting out into the street and making a physical visit to Actipan, we were able to confirm that the open data representation of this investment held at least one anomaly. But rather than bringing suspicion to this site of investment, we came to positively confirm the presence of state activity in the community of Actipan. Whilst Hacienda's open data had no record for the physical advancement of this public work, we were able to confirm this progress, thickening

the database's silhouette. The next step was to visually represent this undocumented completeness, giving even more weight to this silhouette.

This task involved the next dimension of proactivity as participants had to determine the most appropriate means to frame and capture each site. For Irene and I, this required deliberation as we were unsure as to how to visually represent the completeness of an investment that spanned across numerous geographical positions. We experimented with framing. First, long shots attempting to capture numerous lighting devices along a single street in one image. The results were ineffective, failing to distinguish these modest devices from the older, tangled urban infrastructure in which they were situated. Such a visual representation would have been misleading, re-creating our initial reaction of confusion for the eventual audience. Instead, we needed to frame these devices more intimately, negotiating our physical proximity to these sensor-like fixtures. We tried the opposite approach, moving our bodies close to these sensor-like objects and zooming in from below to isolate the devices in the frame. Yet, the problem then became a lack of context. These devices were public infrastructure designated to a specific neighbourhood. Unlike the original datasets that disassociated these investments from their beneficiaries, we wanted to include Actipan in the frame. Thus, this open data verification activity also become a narrative task, catalysed by the openness of the initial datasets. We needed to craft a visual story that could re-represent these open data with contextual groundings.

Thanks to *transparencia proactiva*, as co-authors of these representations we had some creative licence over their production. Our eventual framing of this federal investment combined numerous points along this spectrum between zoomed in and zoomed out shots (figure xviii). We captured multiple images in different parts of the community, typical of the viewing subject who must piece together a coherent whole from numerous, intersecting perspectives. In each frame, the devices are captured from below, from the level of the street with this very human, corporeal perspective recognisable to audiences (Crary, 1992, p. 43). It is a familiar, pragmatic framing that allowed us to situate these devices in the context of Actipan. Through deploying an aesthetic approach, responding to the complexities of engaging and deploying open data, I began acknowledging the many negotiations involved in the production of these open data-led visual representations.



Figure xviii: Author's screenshot of author's contribution to #DatosEnLaCalle (March 2020).

As noted above, our initial strategy for participation was organised around convenience, visiting projects near to our usual routes of travel. Fellow participants adopted other criteria through which to organise their participation: some focused on a single category of federal investment in which they were particularly interested (for instance, water treatment), and others on projects relating to a certain theme of interest (for instance, education or emergency works). Again, this is one of the benefits of *transparencia proactiva*: involvement can be heterogenous, responsive to each participant's own curiosities and objectives. Drawing on this flexibility, our own strategy for deciding where, when, and how to participate in #DatosEnLaCalle shifted during this datathon. As the activity advanced and we exhausted the initial list of sites to visit, a second criterion emerged for Irene and me. Despite both of us beginning #DatosEnLaCalle with a critical orientation towards how federal resources were managed and an eagerness to interrogate the irregularities in these open data, we began to prioritise visiting investment sites where Hacienda's open data recorded complete (or near complete) projects.⁵¹

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⁵¹ Again, this was determined via the variable, *avance fisico*.

As we soon came to realise, it was much easier to determine, frame and capture completed projects than provide a diagnostic on any irregularities and produce a visual representation that repudiated these open data. In this context, situated in proximity to the state, our critical inclinations shifted, and a bias emerged towards the easy situation of the state's presence in the daily hustle of Mexico City.

To illustrate the difficulty of representing incompletion from this situation of proximity, I now turn to our experience verifying an incomplete project. Given the central neighbourhood in which Irene and I lived, many of the public works in our local area related to structural improvements to urban markets. As we performed our initial explorations of these data, we recognised that some of these market improvement projects related to specific, named sites whilst others offered broad titles and evaded even cursory project descriptions. Our hypothesis was that the absence of a clear group of identifiable beneficiaries meant that these were projects that left ample space for graft. We tracked the coordinates of one of these broad market improvement projects, Fomento y Mejoramiento de los Mercados Públicos de la Ciudad de México, down to Avenida Cuahtémoc 898, another main avenue of the city along which Eugenia metro station is located.

Arriving into the belly of this metro station, we climbed the steps upwards to arrive at street-level, where we encountered a bundle of road bollards and stationary machinery, suggesting active building works. However, open data from the latest trimester recorded this public works project as physically complete, and the full funds as spent. As we investigated further, we came to realise that the building equipment was associated with unrelated roadworks along Avenida Cuauhtémoc. So, we began exploring the local area for signs of an urban market. Yet, passers-by informed us that there were no urban markets in the vicinity. Corroborating the unofficial information that we were receiving, the security guards who patrolled the entrances of surrounding buildings gave us detailed updates on the roadworks in front of the metro station, but no one had any knowledge of urban market improvement works nearby. It seemed that we had uncovered a significant irregularity in Hacienda's open data. Yet the complete absence of any market, public works or anything around which to subsequently develop our representational activity came to complicate our task.

As we occupied the space around Avenida Cuauhtémoc 898, we attempted to capture images to represent the absence of federal investment. We experimented with different perspectives and framing techniques. Yet, each attempt was complicated by the building works and bustling urban environment that surrounded us. Every image taken suggested some activity, some

presence that could be mistaken for the state's activity. Wherever we pointed out mobile camera devices, the frame filled with unrelated visual noise: red bollards, piles of debris, functioning streetlights, spontaneous crowds, passing public transit. Framed too closely, the scenes of Avenida Cuahtémoc came to misrepresent the presence of the state. Any number of other elements could immediately step in to unexpectedly become "the face" of the state (Navaro-Yashin, 2002). Irene and I deliberated, concluding that the visual misrecognition of these elements for state activity was likely for any future audience. This would contradict our claim of uncovering an absence of public works. Yet, framed from too far of a distance and it appeared that we had not completed our task as *daterxs*, not getting close enough to these sites in order to investigate their particularities. We had been given the benefit of proximity to the state and so we could not abandon this privileged positionality. Thus, whilst we were being entrusted with this representational responsibility, seemingly able to fashion "a face" of our choosing, we could not opt out of giving the state any face. In being situated in close proximity to the state, we were simultaneously only able to register presence.

Maybe Irene and I were overthinking the difficulties of framing absence. Maybe it was our own fear of misrepresentation that was continuously filling the blank space with what we thought others would misconstrue for state activity. Whether a legitimate concern or not, after consideration and much frustration, we increasingly opted to visit investment sites with a finished or near-to-complete status. After all, transparencia proactiva allowed us to change and adapt our participation as we saw fit. However, whilst following this approach of confirming completeness certainly made the initial moments of data verification and representation production more pleasant, it did not come without its drawbacks. In a later interview reflecting on our involvement in #DatosEnLaCalle, Irene noted that this "obligación [towards confirming presence] genera una sensación de cinismo" (Interview A38, March 2020). For Irene, it felt unusual, strange even to be producing visual representations that continuously demonstrated the functioning of the state, the success of singular public investments. Facilitated by Hacienda's open data, it was then a real representational struggle to contradict them. Yet, at least in our case, such cynicism was not itself outweighed by a sufficient impulse to chart a representational strategy able to capture this absence. We continued with our contributions to the broadening representational repertoire of the state with an undercurrent of resentment. With Irene growing increasingly frustrated with this reflection during our post-datathon interview, it almost came to feel that this representational activity fell on the coercive side of Gramsci's "compromise equilibrium" (Gramsci, 1996, p. 124).



Figure xix: Author's screenshot of author's contribution to #DatosEnLaCalle (March 2020).

Thus far, I have focused on Irene's and my own experience of #DatosEnLaCalle. However, it is important to note that the way we interpreted the task and responded to the brief set by TPOG was not typical of all daterxs. As noted, heterogeneity is a characteristic of any task under the rubric of transparencia proactiva, with participants adopting different strategies influenced by their location, available skills, technologies, and resources. Thus, whilst Irene and I were unable to, there was still the potential that others would be able to alter and revise the representational repertoire captured and mobilised through these federal open data.

As one *daterx* explained to me in an interview after the close of the datathon: "No revisé los [Facebook and Twitter] feeds [sic] durante los primeros días [of the datathon] porque no quería estar influenciado por lo que otros [*daterxs*] estaban subiendo" (Interview A40, March 2020). This participant wanted to maximise on the space that *transparencia proactiva* gave them to define their own participation in this activity. However, when this participant started uploading their own analyses, the temptation to review the contributions of other *daterxs* grew too strong. During the interview, I asked this *daterx* to think back to what entered their mind when comparing their own contributions to those of other *daterxs* distributed across Mexico:

Pues, todos [the contributions] eran bastante similares. O sea, claro, hay diferencias ya que algunas obras están en ciudades y otras en áreas rurales, diferentes tecnologías para grabar, tiempos del día... Los más diferentes [uploads to #DatosEnLaCalle] eran los que crearon [data] visualizaciones. Pero con éstos [uploads] se pierde la conexión con el lugar donde se encuentra cada proyecto, cada obra... Pensé que la idea era conectar estos datos con las obras, con lugares específicos. (Ibid.)

Despite this flood of situated representations diminishing the uniqueness of this participant's own contributions, they were – according to this *daterx* – the most appropriate for the task. Furthermore, despite the range of projects visited and the regional diversity of participants, this interviewee perceived an overarching similarity between these contributions. In effect, this respondent identified a narrowing of the possibilities of these open data-led representations.

Following the close of #DatosEnLaCalle, and soon after, the onset of the COVID-19 pandemic, I spent more time back in front of a screen reviewing the contributions to this datathon uploaded from across Mexico. Drawing on the flexibility of an aesthetic approach, I was able to then draw close to this other corpus of rich research materials. During this exercise, I too came to recognise the trend that my research participant had highlighted: a narrowed field of representational possibilities, similar to that experienced by Irene and myself. Further, my analysis of the results of #DatosEnLaCalle, captured in a dataset released by TPOG following the close of the datathon (covering the teams, sites visited, interactions gained and so on), confirmed this hypothesis: the projects visited, when cross-referenced with the status of projects provided from the two datasets, were predominantly complete or late-stage works.⁵²

Like figure xix, figures xx-xxv provide further illustrative examples of this orientation towards re-representing and confirming completion. This orientation towards completion typically meant capturing the façade of a building between a medium and long shot, usually during the day whilst people bustled around the site of investment. In most cases, the human bodies, cars, and trees that also share these spaces are dwarfed compared to these federal investments. This orientation involved capturing roads and public transit whilst they were in use, leading the users captured to distant destinations. They included busy markets and plazas, with the state accentuated as facilitating these activities. Even when incompletion seemed to linger in the frame, this was negated by *daterxs*. For instance, in figure xxiv a

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⁵² A notable exception to this rule was the site, Escuela Nacional de Estudios Superiores in Oaxaca, a site in an early-to-mid construction stage (at the time of #DatosEnLaCalle) visited by numerous teams of daterxs during this activity.

wooden ladder lingers in the shot, suggesting active building works (and so, incompletion), yet the accompanying comments confirms: "el programa de construcción de cuartos de dormito [sic] estaba terminado". Despite the openness that interlaced these open data-led silhouttes, I and many of my fellow *daterxs*, lost any impulse to draw on this possibility. From this position of proximity, engaging and deploying open data in order to get close to these public works, this exercise became one of simply re-indexing completion. As the author of figure xxii writes in the last line of the explanatory comment for the investment project visited, "así luce ahora". Here, I interpret *luce* as referencing both the successful completion of the investment project, and the ability of this *daterx* and their open data-led activities to bring attention to this site of federal investment, making it real, weighty and fortifying its presence.

In this sphere of open data work, where technicality and objectivity are supposed to prevail, we see the emergence of a set of "routines and rituals" (Jospeh and Nugent, 1994, p. 20) that connected this very contemporary digital practice to much older representational activities. Yet, distinct from the extant literature explored in 4b, as the figures from #DatosEnLaCalle exhibit, even in their supposed completeness these are not representations of a mechanical whole. They are of piecemeal components of the state apparatus that reflect many different spheres of activity. Whilst the proximity of the daterx in relation to each site is similar, the contents of each frame are diverse, resisting being neatly stitch together into a single vision. For instance, the bare concrete floor of the rural, municipal school (figure xxii) contrasts with glass fortress of the new building of the Cancilleria (figure xxv). Quite distinct from a mechanical whole, these open data-led contributions represent the state's polymorphous and pluri-functional nature, themselves emerging from increasing streams of open data that capture diverse spheres of state activity (as noted in chapter two). Each of these sited representations is then fastened back to its open data origins through the accompanying titles and comments, connecting digital and physical spheres of state presence.



Figure xx: Author's screenshot of a daterx's contribution to #DatosEnLaCalle (March, 2020).



Figure xxi: Author's screenshot of a *daterx's* contribution to #DatosEnLaCalle (March, 2020).

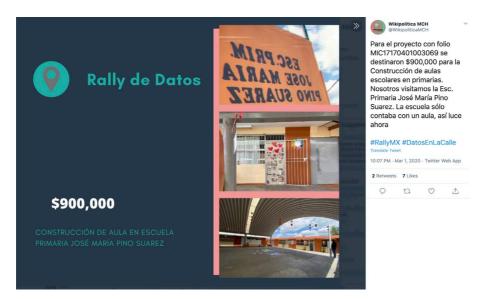


Figure xxii: Author's screenshot of a daterx's contribution to #DatosEnLaCalle (March, 2020).



Yareli @yarelisepulveda · Mar 2 Clave: NLE190101510759

Nombre: SEC GRAL PROFRA ELVIRA MALDONADO, ALTAVISTA SUR,

MONTERREY. #DatosEnLaCalle #RallyMX @TPresupuestaria

@yaremiadeliz

Figure xxiii: Author's screenshot of a daterx's contribution to #DatosEnLaCalle (March, 2020).





Figure xxiv: Author's screenshot of a daterx's contribution to #DatosEnLaCalle (March, 2020).



Figure xxv: Author's screenshot of a daterx's contribution to #DatosEnLaCalle (March, 2020).

4f. Conclusion

During the closing event of #DatosEnLaCalle, no mention was made of any fraudulent public works uncovered, or of any corrupt contracts identified. Despite the activities of these 110 daterxs taking place across close to three-weeks, not one of us had uncovered the latest estafa maestra or casa blanca scandal. The organisers did note that daterxs had identified

five "proyectos no identificados, sin clave de seguimiento federal" (Transparencia Presupuestario: Observatorio del Gasto, 2020, p. 4) however, no next steps were detailed in terms of their further investigation. In the days and weeks following the close of #DatosEnLaCalle, I made multiple attempts to engage TPOG, enquiring for confirmation as to how the representations produced and circulated would be utilised by Hacienda. I received no response, which I take to mean that they were put to little use, unlikely to form part of the exploration for "la solución de problemas públicos de manera continua" (IFAI, 2012, p. 15). ⁵³

In my post-datathon research interactions with fellow participants, most were indifferent to the future impacts of their contributions to #DatosEnLaCalle. Whilst participants had broadly enjoyed participating in this activity, getting away from their desks and searching their localities for notrworthy data points, there was a broad understanding that the assessments undertaken at each site were amateurish, focused on superficial characteristics rather than a thorough understanding of the financial and material developments of these public investments. Despite the status of TPOG and the excitement surrounding #DatosEnLaCalle, its salience was coming into question. Yet, this chapter has proposed that #DatosEnLaCalle is significant not so much because of its direct results in combatting corruption, but because of the open dataled representations it generated. Taking a step further than a discursive approach, adopting an aesthetic approach has provided insight into the process of negotiating and producing these representations, and the experience of daterxs in this process.

Principally, this approach reveals the proximity of the *daterx* vis-à-vis the state apparatus. In catalysing the production and circulation of these open data-led representations, I have argued that the repertoire #DatosEnLaCalle assembles is one in which the state is emphasised as very present and sited. We see this through the visual transformation of these projects from the high-dimensional open dataset into these digital but weighty outputs. Further, we also see this in the experience of *daterxs* as they seek to negotiate their positioning vis-à-vis the state in order to complete this data production task. This is not what we may expect when considering the contemporary process of state formation in digital spheres. Yet, engaged from the vantage point of literature that considers the cultural dimensions of the state, this open data-led activity becomes recogniseable as an important sphere in which the state is produced and re-produced.

⁵³ It is worth noting that initial emails and Twitter messages were sent during the first few weeks of the COVID-19 pandemic hitting Mexico, and so a number of reasons could have prevented an institutional response. However, subsequent attempts at securing research interactions with the TPOG team sent over the summer and autumn of 2020 were also unanswered.

As the third dimension of the reconfiguration of transparency that this study has detailed, it is one not recognised in models of transparency that only acknowledge static positioning along vertical and horizontal axes, neglecting changing relationships of proximity between nodes along these axes. Whilst #DatosEnLaCalle is one novel intervention of Mexico's transparency circuitry, with increasing relevance in regional and international contexts, the dynamic it reveals has applicability outside of this unique intervention. This relevance is underpinned by a continued emphasis on transparencia proactiva, with its focus on drawing in and collaborating with daterxs. No longer the aggressive solicitante seeking transparency from the outside, citizens are encouraged to interact and work with the open data produced by state entities. Open data, in vast abundance and increasingly less demanding in terms of the data skills required for engagement, become the sphere through which this proximity is achieved, and the possibility of representational weightiness is returned to the state.

Part three: Expanding possibilities

Chapter five: Revisiting Mexico's transparencia simulada

5a. Introduction

In part two of this study, I examined how the practices of *daterxs* narrow the possibilities of open data-led transparency, contrasting with celebratory rhetoric that emphasises the grand opportunities that open data provide. In part three, I shift focus from this narrowing to consider also the ways that the work of *daterxs* signal a potential shift in how we think about transparency and the possibilities of open data-led transparency. As a researcher, the concurrent presence of these two contrasting ambitions has involved confusion, requiring the working through of many inconvenient facts in order to comprehend and coherently present these dynamics. Yet, it has been a fruitful endeavour as it is this expansive shift that provides renewed ground for the political possibilities of open data-led activities.

As noted in part one, this study proposes a shift in the ambition of transparency from seeking to halt and eliminate shadows and masks - activities that do little more than displace and reconfigure such forces - towards seeking to "exceed" (Harcourt, 2020, p. 215) and do "justice" to them (Taussig, 1999, p. 167). This shift was first proposed in the introductory chapter through reflecting of the exhibition 1929: Proceso by Grupo Proceso Pentágono. In this chapter, I draw on my involvement in an open data-led analysis project that involved actively deploying simulación to exceed Mexico's formal transparency mechanisms and procure additional data disclosures. The project that forms the basis of this chapter, Burlar al congreso, began as a typical follow the money effort focused on the re-direction of federal pesos from congressionally approved budgets towards particular social programmes that aligned with the interests of López Obrador and the MORENA party. Beyond engaging directly with datos.gob.mx, developing Burlar al congreso required petitioning numerous federal institutions for additional data in order to undertake this analysis. This task required the formal submission of over 130 solicitudes de información through Mexico's Plataforma Nacional de Transparencia. This chapter charts the way my collaborators and I developed fictional personas through which to procure these data. Taking on the advice of experienced *daterxs*, we deployed simulación in order to get Mexico's formal transparency mechanisms to function.

Below, I detail the significant labour involved in developing the personas used during *Burlar al congreso*. I also present the reader the responses to these *solicitudes*, noting that it was the most fictional *solicitudes* – submitted by the most imaginary (unlike ourselves) personas we developed – that were most successful in soliciting additional data disclosures from the state apparatus. Allied to *1929: Proceso*, I position this activity as a moment in which transparency

shifts from eliminating opacities to matching opacity with opacity, seeking to do justice to these shadows and masks of the state by matching them with excess. Thus, I propose a reconsideration of Mexico's *transparencia simulada*. Whilst this term has come to be used to criticise Mexico's formal transparency system, highlighting the dominance of the symbolic sphere of politics over structural forces, I re-position *simulación* as a productive position from which to engage open data-led transparency activities.

5b. Mexico's transparencia simulada

As noted throughout this study, Mexico's efforts in federal open data have received international recognition and been the subject of numerous awards and policy briefs (OECD, 2018, 2020). Mexico's transparency reforms, such as the federal laws of 2002 and 2015, consolidated the formal strength of Mexico's transparency system. As interventions to be celebrated, not only did these laws ensure strong legal obligations towards the disclosure of the state's informational and data resources, both reforms were projects in collaborative law-making that centred the voices and needs of civil society (Pérez Ponce, 2019; Sandoval-Almazán, 2019). As continued interest in the history of the Grupo Oaxaca indicates (pivotal in the success of the 2002 law) these processes hold significant promise for an alternative future of Mexican politics (Peschard Mariscal, 2017). Yet, simultaneous to these successes and awards, Mexico's daily news cycle is a constant reminder that the shadows and masks of Mexico's state apparatus persist: the Pegasus spyware scandal, the narco-political connections of key figures such as General Cienfuegos, unresolved mass disappearances such as in the case of the students of Ayotzinapa.

Scholars who focus on the formal credentials of Mexico's transparency system – and so those who tend to celebrate Mexican successes in this field – adopt a structural approach to their analysis. These approaches take for granted the capacity of the formal sphere of politics to overcome and subsume any contending forces. As noted in chapter one, for those such as Weber, bureaucracy and its system of rules, objectives, and strict demarcation of impersonal authority were able to restrain individual machinations (2019, chap. 3, §1-3). Whilst Weber was not naïve to the potentials of those invested with power to use their roles for deceitful purposes, Weber's project was a practical response to the potential havoc that could arise if a backstage to politics was to become dominant and so threatening the potential rewards of modernity. Thus, the "disenchantment" (Lassman and Speirs, 2010, p. xxiii) of the political sphere that Weber schemed was not a negation of a deep suspicion of human behaviour, but a belief that structures and institutions could restrain and overcome these human forces.

Attention to these structural advances has resulted in a stream of affirmative and comparative studies that have compared legal provisions in Mexico to other states (Calderón and Lorenzo, 2015; Cutberto Vera, Rocha and Concepción Martínez, 2015; Ortiz Frueler, 2015; Bautista-Farías, 2016; Sandoval-Almazán, 2019). Yet, a commitment to the robustness of these structures and an analytical focus on them can also be considered deficient in a context such as Mexico. Maintaining this limited focus involves ignoring all the shadows and masks that continue to dominate across the state apparatus. However, as scholars such as Gledhill (1999) emphasise, this deficiency is in no way unique to Mexico.

A critical response to this focus on Mexico's formal accomplishments has been a turn to describing these same structural advances as presenting "una transparencia simulada" (Villanueva, 2005, p. 19). This position challenges the claim that federal transparency laws and the boom in open data really provide a clear window into the functioning of Mexico's institutions and political elite. Formal rules may be in place, but public servants continue to block access, and power and resources continue to be manoeuvred under the cover of shadows and masks. Thus, formal transparency accomplishments are "más bien una apariencia" (Peschard Mariscal, 2017, p. 26). According to critics, since 2002 each federal administration announces its own unique blend of transparency interventions, but:

no hay nada nuevo y la aparente transparencia es una simulación pura y dura para engañar a la sociedad. No sólo no habrá un cambio favorable sino, como se ha visto, las cosas no seguirán igual, sino peor. (Villanueva, 2013 [n.p.])

Transparencia simulada, a term that captures this pretence, the imitation and fakery of Mexico's formal transparency system, points to surface-level reforms that do not address deeper logics wedded to the preservation of arcana imperii. As José Woldenberg argued, "las rutinas burocráticas tienden de manera 'natural' a desplegarse en una cierta opacidad, no está en su naturaleza la transparencia" (2017, p. 8). Thus, Villanueva and colleagues (Guerrero, 2005; Leticia Díaz, 2016; Peschard Mariscal, 2017) shift from a material to a symbolic analysis, with attention to the way the state produces a social reality that may not directly correlate with these structural, legal instruments (cf. Durkheim, 1962). This involves identifying studies that follow a structural approach as analytically deficient, even suggesting that the researcher has succumbed to the "PR production" (Fisher, 2009, p. 44) of this same state apparatus.

This charge of a pretend transparency reached its peak in 2016 when the INAI, "el máximo órgano garante de transparencia" (INAI, 2018 [n.p.]), and a state institution (in theory) fully

independent from government influences, blocked the release of recent archives relating to human rights abuses (Leticia Díaz, 2016). The sentiment that transparenia simulada captures continued to be present during my primary period of fieldwork. For instance, during one interview with a long-time participant in transparenct activities, I asked if Mexico's advances in open data resulted in any significant changes compared to the previous era of informational reforms. After detailing numerous challenges with open data, this *daterx* stated: "En resumen, no hay nada nuevo [with open data]. Sigue siendo una simulación pura y dura para engañar a la sociedad" (Interview A8, September 2019) – these words echoing almost exactly those of Villaneuva. In another research interaction with a civil society representative. I began the interview by listing some of the transparency events and activities that I had been participating in during my fieldwork. In response to this list of events, the interviewee stated: "Así se deja posicionado el mensaje de la transparencia sin transparencia" (Interview B6, November 2019), cutting short my obvious attempt to develop a sense of familiarity between us. Or, as another daterx responded at the close of an interview conducted early in this fieldwork in which this *daterx* vented on some of the difficulties faced trying to engage public servants working in federal unidades de transparencia: "Bienvenido a México. Aquí la transparencia engaña" (Interview A28, January 2020). Implicit in all these interactions is the negative status of transparencia simulada, identifying a malicious illusion that does more harm than good.

5c. La cola de la rata

I now turn to outlining another collaborative open data-led transparency project in which I participated, once again taking on the position of observant participant. This project was not as successful as other projects I participated in, such as *El gasto navideño*, in the sense that it did not produce any transparency outputs to be shared across Mexico's transparency circuitry, nor did it gain any media attention. At the time of writing, an incomplete analysis sits on a Google Drive, awaiting further processing and elaboration into *análisis integral*. Yet, whilst not successful according to the criteria of the transparency circuitry, observation and participation in this project was critical to my own understanding of the possibilities that emerge from shifting the ambition of open data-led transparency.

The origins of *Burlar al congreso* lie in a sweeping conversation that took place in early 2020 between two research participants-turned-collaborators –Jimena and Jaime – and me, that touched on many facets of López Obrador's policy agenda. Of particular interest were two recent federal reforms. First, López Obrador's administration had proposed a new law, the *Ley Federal de Austeridad Republicana* that: "tiene por objeto regular y normar las medidas de austeridad en el ejercicio del gasto público federal" (2019a, p. 1). López Obrador's electoral

discourse stated that the incorruptible moral character of the *cuarta transformación* (and its leader) would allow federal spending budgets to be reduced without a negative impact on society's most vulnerable as the eradication of graft would more than compensate for any budget cuts. To achieve this, this reform set out several new conditions for how public funds could be spent. In a moment of policy engineering, this law also installed a reform to *artículo* sesenta y uno of the Ley Federal del Presupuesto y Responsabilidad Hacendaria (2019b), establishing that:

los ahorros generados con la aplicación de las medidas de austeridad republicana deberán destinarse a los programas del ejecutor del gasto que los genere, a los programas previstos en el Plan Nacional de Desarrollo, o al destino que determine el ejecutivo federal. (Adams, 2019 [n.p.])

In effect, any savings made through these austerity efforts would be redirected to coffers of the OP without these funds having to pass through a budgeting process overseen or approved by Mexico's Federal Congress.

Second, in the first weeks of 2020, López Obrador's administration proposed a reform to artículo cuatro of Mexico's Federal Constitution. Celebrated publicly as a strengthening of Mexico's welfare system, it constitutionally embedded a series of progressive initiatives from the right to a liveable pension and free medical treatment, to financial support for students from disadvantaged households (Castillo, 2020). The reform also included a short passage constitutionally enshrining that there be "dinero suficiente para poder ir creciendo el presupuesto para los programas cada año" (Muñoz, 2020 [n.p.]). Given the subject of the reform and the strength of the MORENA party in Congress, the bill passed with little debate. As most of López Obrador's signature projects are in the field of social welfare, this reform constitutionally guaranteed the funnelling of federal pesos to the core interests of the López Obrador administration. It was Jimena's hypothesis that these various interventions, although seemingly moving independently in their own constellations of actors and interests, had a common thread that coalesced to re-direct budgeting oversight powers away from Congress and re-position these powers within the OP itself (hence, Burlar al congreso). This union of public spending powers and the oversight of public spending into a single entity would thus create new routes for corruption and financial dealing that would be hidden from view.

Reflecting the argument of chapter two, my collaborators were quick to turn away from the idea of an expansive analysis of federal welfare spending over the first two years of López Obrador's administration, instead proposing a much narrower focus on a single social programme through which this broader hypothesis could be tested. My collaborators, two

young adults from peripheral Mexican states who had benefitted from the privilege of a university education in Mexico City, were particularly interested in social programmes aimed at confronting the economic and social challenges facing young people in Mexico. Thus, we agreed to scale down our project and focus on the particularities of a single federal programme: *Jóvenes Construyendo el Futuro*.

Jóvenes Construyendo el Futuro (JCF) was a country-wide employment alternative for ninis – young Mexicans who ni estudian ni trabajan. Workplaces (from a law firm through to a local bakery) could become partner organisations, agreeing to offer work experience and training to these young people, with federal funds covering the monthly salary of these jóvenes. Inaugurated in April 2019, proponents of JCF intended to reach 400,000 young people through this programme in the first year and had a budget of 40,000 million pesos (Casar, 2019a). At the start of June 2020, the programme's official website counted "591,279 aprendices vinculados" to the programme (Casar and Székely, 2020 [n.p.]). Yet, despite these grand numbers, many commentators failed to see sufficient evidence of young people participating in the programme. Further, many young people who were applying to the programme reported that their applications were going unanswered and those already employed through the programme reported being underpaid or not receiving any reimbursement at all (Roldán, 2020; Ureste, 2020). This led to questions as to where these federal funds were being directed.

It was my collaborator's suspicion that the federal funds ear marked for JCF were being redirected to fund another federal social programme, *Servidores de la Nación* (SN). With this shifting of funds occurring after congressional approval, the new patchwork of legal mechanisms taking shape in the early years of the López Obrador administration would make this opaque transfer of funds lawful. Thus, if our hypothesis was to be proven correct, the abandonment of the beneficiaries of JCF was a worrisome example of what was to come if both federal spending powers and oversight powers became co-located within the OP.

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⁵⁴ This social group typically emanate from low-income households, have completed low levels of formal education and enjoy few employment opportunities in the formal sector (Tornarolli, 2017; Márquez Jiménez, 2018). Concern for the long-term social and economic ramifications of this social group were confirmed in 2018 when a report by the OECD estimated that this group "cuestan al país 0.9% del Producto Interno Bruto cada año" (Carcillo *et al.*, 2017, p. 12). This report recommended that the federal government prepare Mexico's youth for formal employment through increasing access to industrial experience. JFC was widely recognised as the López Obrador administration's response to this social and economic concern. It should also be noted that the social group targeted through this policy, the socially disadvantaged and the young, are core bases of electoral support for López Obrador and the MORENA party.

⁵⁵ In 2019-2020, those employed as *jóvenes* were supposed to receive a monthly salary of (up to) 3,748 pesos and private medical insurance for up to one year (Casar and Székely, 2020).

At the core the López Obrador administration, SN comprised roughly 20,000 workers in peripheral areas and rural states of Mexico. The role of *servidores* was to travel door-to-door engaging socially vulnerable households in order to advise them on state support and welfare programmes that their households may be eligible for and assist them in navigating the various bureaucratic hurdles required to access support (Casar, 2019b; García Rodríguez, 2021). ⁵⁶ It was widely acknowledged that the rank-and-file *servidor* had been transferred over to this position after previously being part of MORENA's voting drive in the run up to the 2018 election. Furthermore, many continued in their role as campaigners with numerous allegations that federal money was being spent on a quasi-electoral force, or as critics termed it, "el ejército privado" of López Obrador and the MORENA party (López, 2020 [n.p.]). Several journalistic articles had already pointed to seeming irregularities in the contracting and operation of this programme, and the lack of budgeted federal funds to maintain SN in the post-election era (Cabrera, 2020; Lindero, 2020; Montes, 2020).

In view of this intricate context, *Burlar al congreso* set out to investigate whether federal funds approved for JCF had been re-directed to pay for SN. This was the perfect opportunity for Mexico's advances in open data to bear fruit. Federal spending on social programmes is a central pillar of *obligaciones de transparencia*, also captured in AGA commitments and subject to federal transparency laws.⁵⁷ Masses of budgeting and spending data from each of the state entities involved would be easily accessible, enabling a number of numerical operations to be performed on these data to quickly reveal whether the budget approved by Congress had been implemented as originally stated, or whether funds from the approved budget had been funnelled elsewhere.

In the days following our initial conversation, we began our analysis of the annual *Presupuesto de Engresos de la Federación* (PEF). This vast dataset, elaborated by Hacienda, provided planned data on the quantities, distributions, and destinations of public funds across the state apparatus. Trawling through these records with a narrow purpose, we could not find any mention of SN. Therefore, we elaborated a simple *solicitud de información* (*solicitud*) directed to the Secretaría de Bienestar (Bienestar):

¿En qué sección o partida del Presupuesto de Engresos de la Federación, en este caso 2019, está constatado el presupuesto asignado a los pagos de los Servidores de

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⁵⁶ In 2019-2020, the average salary for a *servidor* was 10,217 pesos a month, with the contract renewed monthly and excluding medical insurance (López, 2020).

⁵⁷ Much of the open data we interacted with during *Burlar al congreso* became publicly disclosed thanks to the *Ley de Ingresos y el Presupuesto de la Federación* (2012).

la Nación, a cargo de la Secretaría del Bienestar? (Plataforma Nacional de Transparencia, 2020d, p. 4).

Note, we did not ask *why* such a reference was missing or *how* SD has been financed during 2019. Instead, we simply sought confirmation of the location of these data. Recognition of the absence of this programme from the PEF would corroborate its absence from the budget approved by Congress. Thus, money to pay each *servidor* would have had to come from another source.

The response from Bienestar:

Se comenta que dentro del Presupuesto de Engresos de la Federación no figuran los servidores de la Nación, en razón de que, al momento de la publicación de éste, el Programa Promoción y Evaluación de la política de Desarrollo Social y Comunitario, la Participación y la Cohesión Social (al cual se encuentran adscritos), no se había asignado un presupuesto para el mismo. (Secretaría de Bienestar, 2020b, p. 1)

Here, Mexico's formal transparency mechanism fulfilled its function. This response confirmed that in the congressionally approved federal budget for 2019, SD did not have any budget assigned. As Jaime would later describe, this response was "la cola de la rata" (Fieldnotes, March 2020) that gave grounds for further investigation.

The next stage in this transparency project involved accessing additional open datasets on procurement and spending taking place within these specific entities within the state apparatus. The two datasets we focused on were the *Cuenta Pública* (CP) and *Estadísticas Oportunas de Finanzas Públicas* (EOFP), both produced by Hacienda. Working with these datasets enabled us to review the spending behaviour of OP and Bienestar over 2019 and compare this to previous years. Although each federal entity is reported separately, each dataset conforms to the same structure thanks to the open data forms explored in chapter two. The *daterxs'* eye can quickly move between columns and rows to track changes in digits, and simple summary statistics offer a helpful first exploratory step. However, the *daterx's* optimism is short lived. Like the open datasets explored in previous chapters two and three, the CP and EOFP are host to a plethora of errors, gaps and inconsistencies that stall any simple analysis.

As an illustration of some of the challenges faced when working with these open data: the EOFP splits costs across several categories according to the type of federal spending undertaken: Servicios personales, Subsidios, Otros gastos de operación and so on. Yet, the

digits assigned to a single cost differ wildly across short spaces of time. For example, for Bienestar, *Servicios personales pagados* in March 2019 was recorded as 44,041 million pesos. This drops to 34.4 million pesos in April 2019 and then rises again to 43,951 million pesos in May 2019. Here, we see extreme peaks and troughs across months within a spending category that should be relatively stable when viewed monthly-wise (paying a contracted workforce). Each of these expenses is then subset into a further three cost-specific subcategories: *Original, Modificado* and *Pagado*. For the costs associated with *Servicios personales* in the month of March 2019, the original budget was pencilled at 70.1 million pesos, with the modified sum falling to just over half of that. However, the digit recorded as *pagado* then settled at 44,041 million pesos. Such fluctuations trigger numerous hypothetical and speculative lines of thinking. Whilst in previous chapters the openness of open data emerged from errors, gaps, and inconsistencies, here, it was through the presence of these disorderly digits that numerous representational potentials unfolded.

A typical data wrangling process would categorise such digits as anomalies, likely the result of human inputting error. However, similar disparities were recorded throughout these open datasets. Each data point seemed disassociated from those that lay adjacent. Some discrepancies in open data produced at the margins of the transparency system may be expected. But here, we were interacting with data recorded by entities at the heart of the Mexican state apparatus, collated, examined, and disclosed by its central financial institution. Any hope that this investigation could develop through already available data disclosures was dashed. Instead of open data that allowed us to test our hypotheses, our initial analysis concluded in a longer list of questions and concerns we sought to pose to the OP, Bienestar, Hacienda, and the Secretaría de Trabajo y Provisión Social (Trabajo), and other entities of the state apparatus. This situation was a clear example of *transparencia simulada*: immense datasets disclosed by the state to meet formal transparency objectives, but with these open data providing little assistance in understanding what was taking place between these entities.

5d. Turning to simulación

To solicit additional data, we turned to the *Plataforma Nacional de Transparencia* (PNT) to submit *solicitudes* directly to the state entities that interested us. Yet, unlike the *solicitud* noted above that catalysed *Burlar al congreso*, our intention with the second set of *solicitudes* was to request missing data and explanations as to the discrepancies across available open data from both CP and EOFP datasets. This led *Burlar al congreso* to embark on a process of submitting over 130 *solicitudes* to six federal state entities.

It is worth noting that many of the daterxs I interacted with during this research project deliberately do not engage the PNT. 58 As one interview participant cracked, "Puras patrañas y mentiras. Darán los [data] que ellos quieran dar, maquillados y a modo" (Interview A8, September 2019). Further, from my interactions with daterxs who had experience with submitting solicitudes, I understood this process was much more of an undertaking than it may at first seem. For instance, one daterx I interviewed recounted how their previous professional position in an organisation that focused on drugs policy had led them to submit solicitudes to secretive institutions such as the Consejo Nacional de Seguridad Pública: "Nos empezamos a batear. Entonces me dije que tengo que aprender a perfeccionar mi proceso de solicitar datos. Si no, te dan vueltas y vueltas" (Interview A3, August 2019). This suggested that there was a field of tacit knowledge that needed to be correctly deployed to engage the PNT. Others informed me of how seemingly uncomplicated solicitudes had been outright rejected. For instance, another daterx recounted how one solicitud they submitted in 2018 requested a list of the names of the heads of departments of the Comision Federal de Electricidad. This information was declared "inexistente" (Interview A41, May 2020). When asked how this interaction with the PNT had made them feel, they responded: "Es absurdo, nos sentimos burlados porque la Comisión, incluyendo su unidad de transparencia, esconde estos datos tan básicos" (Interview A41, May 2020). The consensus across my research interactions was that if you did not learn how to compose solicitudes correctly, you would find yourself sent from pillar to post.

From the perspective of *daterxs*, *unidades de transparencia* (*unidades*) – the offices within state entities that receive and process these *solicitudes* – overwhelmingly act in the interests of their own institutions. Here again, *transparencia simulada*: political and personal allegiances overpower the formal advances that have established these very *unidades* with distinct roles and responsibilities across the state apparatus. Within Mexico's institutional set-up, these *unidades* do exist under certain opacities with little understanding of their role in negotiating and mediating transparency requests (Arellano and Guerrero, 2003). Researchers who have gained more thorough access to these offices note that Mexico's traditional bureaucratic incentive structures favour the maintenance of these shadows: "Our respondents [public servants within *unidades*] voiced strong support for open government, but responded that preferences for closure and secrecy would interfere with full compliance" (Gill and Hughes, 2005, p. 131).

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⁵⁸ It is also worth noting that the PNT – the technology that provides the digital means through which to submit *solicitudes* – has also itself been the target of criticism of *simulación* because the development of the PNT was the result of an opaque arrangement of public contracts that the Auditoria Superior de la Federación described as "mal hechas y presenta deficiencias e irregularidades en su desarrollo" (Aroche Aguilar, 2017 [n.p.]).

The suspected activities that *daterxs* accused *unidades* of involvement in was wide ranging, from the blanket rejection of all *solicitudes* regarding specific high-profile policies or figures (such as the Comision Federal de Electricidad), to monitoring the patterns of incoming *solicitudes* to pre-empt ongoing transparency investigations, to being purposefully arduous in releasing data to tire *daterxs*. An experienced *daterx* I met in one of Mexico City's hacker spaces recounted a recent experience in which a *solicitud* they had submitted had received a positive response informing them that the data requested had been downloaded to a CD-ROM and was awaiting collection from a specific Federal office. However, on arriving at this office, the *daterx* was informed that no such CD-ROM could be located (Interview A33, February 2020). The few public servants working in *unidades* with whom I was able to engage were quick to dispel such experiences as superstitions and exaggerations, themselves a misrepresentation of the difficult and under-resourced work of *unidades*.

Whilst my collaborators and I were all comfortable with the analysis of open data covering these vast budgets and movement of money, submitting *solicitudes* to procure additional data disclosures was new ground for the three of us. In the hope of developing *solicitudes* that could successfully navigate *unidades* and result in these additional data disclosures, my collaborators and I listened carefully to the guidance of more experienced *daterxs*. For my Jimena and Jaime, this involved drawing on the relationships they had built over longer-term involvement in Mexico's transparency circuitry. For me, this involved piecing together different insights from across previous interviews and conversations, as well as seeking out specific individuals for further guidance at different points along the elaboration of *Burlar al congreso*. A synthesised version of the guidance received:

First, the importance of finding the correct tone of voice for each *solicitud*. *Daterxs* need to think carefully about how each request is written. On the one hand, the use of formal language such as legal terminology may "asustar funcionarios" (Interview A28, January 2020), making them hesitant to release additional data as they speculate on the potential consequences of each disclosure. On the other hand, making it clear that you as a *solicitante* are aware of your legal standing may catalyse additional disclosures as it insinuates awareness of the additional legal resources that can be deployed if the *solicitud* is not met. ⁵⁹ Second, *daterxs* must be precise with their language. *Unidades* are eager to use any minor inaccuracies within a *solicitud* as justification for delays or rejection. Whilst minor errors (such as a spelling mistake

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⁵⁹ At the federal level, this involves submitting a complaint to the INAl's *Sistema de Revisión*, who then issue a legally binding decision as to whether (or not) the *solicitud* must be met.

in the name of the policy under consideration or an institution's name) may not inhibit the overall understanding of a *solicitud*, such inaccuracies will provide easy ground for the *unidad* to reject a *solicitud*.

Third, concealing the objectives of a *solicitud*. Numerous *daterxs* urged us to couch any specific request for data within a broader demand. The rationale for this tactic was that it makes it difficult for public servants to pre-empt any analysis underway. The risk with this tactic was that if you cast the net too wide, *unidades* are likely to respond simply with a hyperlink to datos.gob.mx, and direct the *solicitante* to data already in the public domain. Fourth, timing. If more than a few *solicitudes* are required, the consensus was to stretch out their submission over a long period of time. The influx of a rapid stream of *solicitudes* was likely to raise suspicions and unlikely to engender the good grace of individual public servants working in these *unidades* tasked with providing a response. Fifth, be specific in detailing how additionally disclosed data should be made public. For instance, an excel sheet, photocopies of receipts, files downloaded onto a memory stick, a JSON file and so on. This is to ensure that the data received can be easily integrated into existing analyses. However, as with the first point, such specificity can also increase the perception of risk surrounding the *solicitud*.

While the points raised above were certainly useful, the most unexpected guidance received from our interlocutors was to develop fictional personas through whom we would request these additional data disclosures. Just three individual accounts submitting a mass of *solicitudes* to various entities regarding key social programmes would no doubt raise alarm and endeavours to block our requests. As Jaime described it, we needed a convincing set of characters through whom we could "ocultar el verdadero propósito de nuestra investigación" (Fieldnotes, March 2020). Further, depending on the topic of interest, submitting *solicitudes* made many *daterxs* fear for their digital and physical safety. As a reminder, during this period the Pegasus scandal was very much present in the minds of *daterxs*. ⁶⁰ The digital profiling and surveillance of those engaged with open data-led transparency activities was certainly considered feasible for the Mexican state apparatus. Thus, in the hope of favourable outcomes and for our physical and digital safety, *simulación* was advised as the basis from which to demand additional data disclosures from the state apparatus.

⁶⁰ The Pegasus scandal involved elected federal officials purchasing access to expensive, high-tech spying software to target major and minor political rivals, key civil society voices, and even their families (cf. R3D, 2019).

5e. Implementing simulación

Unlike previous scholarship highlighting that users of formal transparency systems can be unintentionally deceptive as they find themselves unable to navigate the communicative resources required of these systems (Thomson, 2012), during the development of *Burlar al congreso* our objective was to be intentionally deceptive. ⁶¹ My collaborators and I developed a cast of twelve personas through which to develop and submit our requests for additional data disclosures and clarifications regarding existing CP and EOFP data.

Our scheme began with five personas but as our analysis continued and the number of solicitudes required expanded, we developed additional personas. This character list built around the idea of playing in pairs: two lawyers, two journalists, two students, two first-time solicitantes, and four concerned citizens. Our strategy was not to request the same data twelve times, but to use this group of users as a means through which to request data through different registers and according to different positionalities vis-a-vis the state. The reader may ask why we did not create even more characters (one for each solicitud, for example). However, as will become clear below, each of these personas was more than simply a name. Our cast of characters needed to be "disfrazados todavía más" (Interview A41, May 2020) than that, involving a lengthy process of character development that meant that there was a limit on how many personas my two collaborators and I could realistically deploy.

The process of character development began with an initial sketch of each persona's demographics, profession, technical experience, and previous engagements with open data. At this point, there was usually a very clear referent in our minds as to who this persona reflected: a colleague, a friend from university and so on. We then moved to elaborate each persona's reasons for interacting with the PNT, their individual needs and patterns of behaviour that would determine when and how they would engage the PNT. Finally, given their professional backgrounds, goals, needs, and experiences, we took time to consider how each persona would express themselves in writing.

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⁶¹ The reader may fairly question the legal standing of an activity that attempts to deceive public servants. To confirm, this activity did not break any laws. It is worth noting that *artículo 124* of the Federal *Ley de Transparencia* of 2015 states that institutions receiving *solicitudes* "no se podrán exigir mayores requisitos que (I) Nombre o, en su caso, los datos generals de su representate... (IV) Cualquier otro dato que facilite su búsqueda y eventual localización" (2016, pp. 66–67). The law then states that, "La información de las fracciones I y IV será proporcionada por el solicitante de manera opcional y, en ningún caso, podrá ser un requisito indispensable para la procedencia de la solicitud" (ibid.). Therefore, there is no legal obligation to provide a legally correct name or contact details whilst submitting a *socilitud t*hrough the PNT.

For instance, one persona we developed was Teresa. A legal professional living in Mexico City, Teresa was based on many of the lawyers I had interacted with over my prior fieldwork experiences. Although a specialist in corporate law, Teresa partook in pro-bono work when time permitted. Submission of these *solicitudes* formed part of this pro-bono work. Although not particularly experienced in interacting with the PNT, Teresa undertook this task as like any other legal activity: with formality and precision. To write convincingly as Teresa, we had to develop a deep understanding of the legal standing of *solicitudes*. If the formal register was to be adopted, then we had to perform this register meticulously, over-emphasising a technical understanding and making it overt that Teresa was aware of the intricacies of transparency legislation and the legal strength of each submission.

Given the friction that this approach could generate within the corresponding *unidad*, every aspect of the *solicitud* needed to be clear and well-written. Each *solicitud* was then submitted from a laptop located in Mexico City. Given Teresa's pro-bono involvement in this project, submissions would take place sporadically during the late evening when Teresa had finished the day's professional tasks and could dedicate small chunks of time to this project. However, no submissions would take place over weekends as this time was blocked for personal interests. An example of one of Teresa's *solicitudes*:

Estimada Unidad de Transparencia. Con fundamento en la Ley General de Transparencia, artículo 70, numerales VII, VII y XI, solicito, por favor, respuesta a las siguientes preguntas sobre las cifras publicadas en las Estadísticas Oportunas de Finanzas Públicas de la Secretaría de Hacienda y Crédito Público, 2019: A00111600P 'Ayudas y otros gastos (pagado)' llegó a 44052 en diciembre de 2019, aunque el A00111600O 'Ayudas y otros gastos (original)' por este mes era 0.1 y el A00111600M 'Ayudas y otros gastos (modificado)' era bajado a 0. En particular, ¿quisiera saber de dónde provino este dinero? Es decir, la entidad pública que financió esa adecuación presupuestaria. Y, por favor, ¿indique el destino de los recursos subejercidos? Favor de anexar comprobantes hacendarios, facturas, recibos, contratos o cualquier documento similar en el que se registre este ejercicio. Le agradezco su atención y su respuesta. (Plataforma Nacional de Transparencia, 2020a, p. 4)

A formal greeting leads directly into recognition of Teresa's legal standing as an informed citizen petitioning the state. This introduction then transitions into a specific demand based on a single irregularity in the data. The codes and titles that identify each datum are copied directly from the data source to ensure that there are no inaccuracies, despite their format hindering easy comprehension. No value-laden language interferes with the descriptive presentation of the petition, despite the 44,051.9 million pesos difference in original to actual spend being a clear cause for concern. In contrast to the use of a very specific data point

already in the public domain, Teresa's request begins with a wider concern, where the money came from, then filters down into more specific demands for documentation. Instead of concealing this request within broader terms it is precise; although, flexibility is permitted in how Hacienda can provide evidence of this spending. The closing of the *solicitud* maintains a formal tone whilst also trying to induce positive reception from the *unidad*. Given Teresa's precision and technical proficiency, through this persona we submitted several *solicitudes* focused on specific irregularities in CP and EO datasets.

Another persona developed was named Marcos. A seasoned journalist, Marcos was well acquainted with the submission of *solicitudes* and this know-how was to be subtly implied in each *solicitud*. As such, Marcos was no doubt a persona that would have drawn concern from public servants on the receiving end of these requests. Yet, Marcos' interactions with the PNT were not always driven by a particular project or investigation. Given prior experiences, Marcos understood that the chances of submitting a successful *solicitud* were slim and so submitted *solicitudes* more sporadically, engaging them on occasion with the hope of a serendipitous success. Thus, there was little logic or uniformity connecting Marcos' submissions, with *solicitudes* submitted across institutions and topics of interest. Like Teresa, these solicitudes were submitted from a laptop based in Mexico City. Yet, unlike Teresa, Marcos submitted *solicitudes* intermittently at odd times over weekdays and weekends.

An example of one of Marcos' solicitudes:

Por favor, responda a las siguientes preguntas sobre las cifras publicadas en las Estadísticas Oportunas de Finanzas Públicas de la Secretaría de Hacienda y Crédito Público, 2019: (1) En abril de 2019 de A01751000P salió en 1629.7, 29 por ciento del A01751000O. (2) En diciembre de 2019 el A01751000P salió en 3738.1, el 21 por ciento del A01751000O. Mi solicitud, entonces, es la siguiente: Por puntos 1 y 2 ¿cómo se lograron tales eficiencias?, ¿qué proyectos o áreas de gastos no fueron atendidos? (Plataforma Nacional de Transparencia, 2020c, p. 4)

Given the formal context, the directness of Marcos' *solicitud* verges on rudeness. Marcos only uses the corresponding codes from the dataset to identify each data point – no labels – causing additional work for anyone seeking to understand and fulfil this *solicitud*. The inclusion of summary statistics (the percentage differences) makes it clear that Marcos has made the effort to analyse these data and so has some sort of project or investigation underway. A clear structure lays out exactly what is sought, but the way the *unidad* can respond to this *solicitud* is left open. Marcos shows leniency, understanding that it is harder to provide evidence of an under spend than it is an overspend and so a general explanation is requested from Hacienda.

Just as there is no formal introduction, Marcos does not close the *solicitud* with any formalities. This style is risky, relying on the unwritten acknowledgement that any attempt to obstruct this *solicitud* will only result in further, protracted interactions with Marcos through recourse to the *Sistema de revisión*.

A very different approach was adopted through the persona of Carlos. As an adolescent living in the rural region of a peripheral state with a keen interest in current affairs, Carlos had only recently discovered the possibility of submitting *solicitudes*. Carlos is not preoccupied with the legal dimensions of these requests nor with using the responses as part of a wider investigation. Instead, Carlos seeks rapid answers to emerging questions. Less time is taken in the development of each *solicitud* as they are not grounded in a pre-existing analysis. An example of a *solicitud* submitted by Carlos:

Escuche [sic] en la radio que el presidente logró muchos ahorros en la presidencia porque antes se gasdtaba [sic] demasiado en cosas inútiles. me podria [sic] decir si han gastado menos en personal? ¿cuantas personas tuvo presidencia trabajando con ustedes en 2019? van a tener menos en 2020? gracias. Carlos. (Plataforma Nacional de Transparencia, 2020e, p. 4)

Poor orthography populates these *solicitudes* as Carlos is quick to compose and send them. These are submitted via a mobile phone, also contributing to the mistakes present. This choice of device also aligned to our characterisation of Carlos, submitting these solicitudes from a low-income household without fixed Internet and so depended on a mobile connection. Carlos is not specific about the parameters of the response. What is most important is that a response is received, that Carlos feels listened to and engaged by the state apparatus. Unlike Teresa and Marcos, Carlos – with lower levels of formal education and located outside of an urban centre – is not a typical *solicitante*. Find these unidades, aware of their mission to engage populations beyond the privileged sectors of Mexico who typically participate in transparency activities.

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⁶² According to the *Encuesta Nacional de Acceso a la Información Pública y Protección de Datos Personales* (2020), only five percent of Mexicans have submitted a *solicitud*. Further, "Ese porcentaje se concentra en personas mayores de 18 años de población mayoritariamente urbana, con educación media superior, superior y de posgrado" (ibid., p. 53).

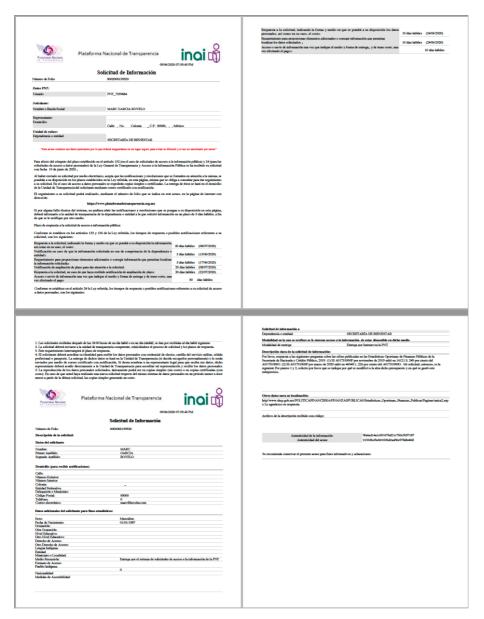


Figure xxvi: Author's screenshot of a completed solicitud submitted via the PNT (April 2020).

Alongside a unique approach to developing and writing their *solicitudes*, each persona was assigned their own email address. These were then used to create user accounts on the PNT.⁶³ We also invested a small sum in purchasing a Virtual Private Network (VPN) plug-in that would allow us to assign a unique Internet Protocol (IP) address to each user, matching the geographical context (such as rural, urban, border town, based in the USA) to each character. As well as maintaining consistency with each characterisation, this was also a security-driven decision as my collaborators and I did not want our personal devices, network, or location data to be associated with any of these *solicitudes*.

⁶³ For account creation, the PNT requires a first name, surname and active email address. No other personal identifying data are required.

In the process of organising and deploying this *simulación*, Jimena, Jaime, and I shared moments of giddiness. In the moments where we were in-person together, we made the most of the opportunity to take on these personas, using props, costume, and other techniques to aid us in the otherwise dull activity of drafting *solicitudes*. For instance, not experienced writing in the formal style required to perform Teresa, I had to work hard to render Teresa successfully in each *solicitud* I wrote. To do so, I tried my best to adopt our imagined characteristics of Teresa: when drafting Teresa's *solicitudes*, I made sure that I worked from a clean workspace, no music playing in the background, time-boxing each submission, and set a word limit on each *solicitud* in order to maintain precision. This process echoed sentiments also gathered in interviews with other *daterxs*, such as one experienced *daterx* who chuckled that during the process of submitting *solicitudes*, "Me he puesto unas máscaras extrañas" (Interview A33, February 2020).

There was also something thrilling in pursuing this almost-illicit activity. As Jaime stated one evening as we wrote as our personas, dressed as these personas, "Me encanta engañarlos" (Fieldnotes, April 2020) – the subject of this deception being the unknown public servant who would receive the *solicitud*. Of course, expressions of enjoyment in being the *embaucador* should not be taken out of context. This project, taking place around my collaborator's professional commitments, often involved working late into the evening and so we sought out amusement wherever possible. Yet, even in later reflections on this process, my collaborators maintained that there was something gratifying in allowing creativity into this otherwise formulaic process: "fue divertido, y bueno, también extraño mezclar este intento de escritura creativa en nuestra investigación" (Interview A44, September 2020).

In line with the guidance received from more experienced *daterxs*, we developed a lengthy timetable to coordinate the submissions of these *solicitudes*. This period lasted from March 2020 to late July 2020. Our intention was to prevent sending a mass of *solicitudes* relating to the same programme or federal entity in close succession. Even if delivered from different accounts, this was likely to trigger additional scrutiny from the receiving *unidades*. One *daterx* I discussed our strategy with joked about how during one project, they had submitted 250 *solicitudes* in one day (Interview A41, May 2020). However, when I asked about the success of this strategy, the response was to be expected: "Todas fueron rechazadas. Claro, eran demasiadas" (ibid.). Therefore, a weekly schedule detailed which *solicitudes* were to be sent to which state entity for each user, including the rough time of the day that corresponded with each persona. For *Burlar al congreso*, in some cases this meant that *solicitudes* written in April were not submitted until July.

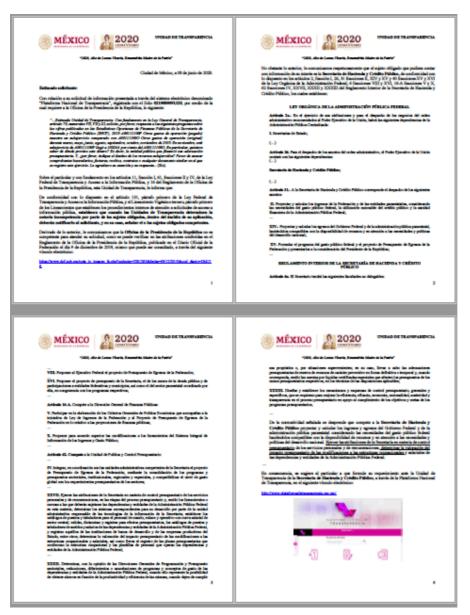


Figure xxvii: Author's screenshot of a typical response received to the solicitudes submitted (June 2020).

Despite lengthy delays in which we were left "waiting" on the state (Auyero, 2012, p. 12), the detailed implementation of *simulación* undertaken during *Burlar al congreso* was rewarded by *unidades*. ⁶⁴ The most successful *solicitudes*, determined by those receiving a response including some form of additional data disclosure, were those sent by the personas deploying the most *simulación*. By this, I do not necessarily mean the most well developed and convincing personas, but the personas most unlike my own and my collaborator's positionalities. We were three urban dwellers with high levels of formal education and digital

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⁶⁴ This acitivty took place during the first wave of the COVID-19 pandemic. This meant many administrative offices were closed, with public servants unable to access their usual places of work. Understandably, this caused additional delays in receiving responses to our *solicitudes*.

literacy. Yet, it was our characters most distanced from this reality that managed to successfully solicit additional data disclosures. These were the *solicitudes* with an informal style, not engaging in technical arguments and sent from VPNs linked to non-urban and/or regions outside of Mexico City.

For instance, one of Carlos' solicitudes, the one noted above in which a request is made to know "¿cuantas personas tuvo presidencia trabajando con ustedes en 2019?", concluded in an additional data disclosure. The response from Bienestar was a PDF of what appears to be a digitally produced table of data (figure xxviii). This has then been printed onto paper and subsequently scanned to re-make a digital copy. The output of this transparency process is certainly not machine readable, a necessary condition of open data. The visual quality of the document is also alarming. The most important digits included in the table of data, those to the right of the table, are so pixelated that even when zoomed in they are almost illegible. Further, many of the variable titles that top each column are so blurred that they risk producing further human errors in their interpretation. Indeed, the additional insight this data disclosure signified for Burlar al congreso was minimal. Yet, this solicitud was successful in navigating the many internal negotiations that blocked other solicitudes. Only through pretending to be Carlos were we able to make these structural transparency mechanisms work. Here, we see that there is not simply a distinction between the structural and symbolic dimensions of the state, one taking precedence over the other, but that simulación can also be essential to the functioning of this formal sphere, with both dimensions working together in tandem (cf. Wacquant, 2009).

Figure xxviii: Author's screenshot of the additional data released in response to solicitud 0210000076020 (July 2020).

A similar *solicitud* to Carlos' was also submitted by Teresa a few weeks earlier but in much more formal terms. Like the example above, it also led with "Con fundamento en la Ley General de Transparencia, artículo 70, numerales VII, VII y XI" and made specific requests regarding the location and training of each *servidor* assigned to work at Bienestar (Plataforma Nacional de Transparencia, 2020b, p. 4). The response from Bienestar to Teresa's *solicitud* concluded with: "se aprecian elementos inexistentes e inoperables" (Secretaría de Bienestar,

2020a, p. 1). Teresa, a persona requiring less *simulación* from my collaborators and me, was almost completely unsuccessful in procuring additional data.

5f. For more simulación

My intention in this chapter has not been to provide more criticism of Mexico's formal transparency mechanisms. To use *Burlar al congreso* as further evidence of failure would be to re-orientate towards a definition of transparency as simply the transfer of data resources that enable the elimination of shadows and masks. Instead, my exploration of *Burlar al congreso* is meant to encourage a shift in the possibilities of open data-led transparency. Rather than criticise this process for being *un*- or *non*-transparent, it is more productive to pay attention to the "making" of transparency (Ballestero, 2012b, p. 237), using these experiences and insights to shape future directions.

In Harcourt's *Critique & Praxis* (2020), there is a call to return to thinking politics and critical debate through the language of *illusion*. According to Harcourt, whilst the term illusion used to appear consistently in social theory (cf. Baehr, 2019), Foucault's scholarship re-directed contemporary debates by deploying the alternative terms, *regimes of truth* (1995) and *power-knowledge* (1998). The benefit of these latter terms is that they emphasise the real effects these illusion-like phenomena can have on material and social relations (Harcourt, 2020, p. 207). Whilst acknowledging the advantages of this conceptual advance, Harcourt proposes a return to this prior term, arguing that illusion can also "be extremely thick epistemologically, as well as resilient" (ibid., p. 208). For Harcourt, illusions are:

the idea of a misleading solid belief that masquerades as truth, but through critique and a lot of work, over perhaps decades or centuries, can ultimately be unveiled, not to arrive at truth but instead at another space that will eventually itself become an illusion, need to be critiqued, and once again be unveiled. (Ibid.)

To do this critical work, Harcourt calls for "constant and better interpretations that do away with illusions, again and again" (ibid., p. 213). As such, there is "no first origin and no resting place" (ibid., p. 214). Thus, "we unveil, and act, and continue to unveil more. But we do not get to solid ground" (ibid., p. 213). Like Taussig's *Defacement* (1999), Harcourt's contribution provides us with a set of terms to think differently about the work of open data-led transparency and consider the possibilities that emerge in the work of undertaking a project such as *Burlar al congreso*.

Harcourt noted, "To move forward, from the perspective of a radical critical philosophy of illusions, we need not simply *understand*, but *deploy* the infinite regress of interpretations" (2020, p. 215 [italics original]).

Today, more than ever, we need to go on the offensive with our critical theory, both in the sense of offering better and more compelling interpretations and in the sense of exceeding the illusions we counter. (Ibid., p. 215)

As proposed in chapter one, I see common ground between Taussig's notion of doing "justice" to public secrets (1999, p. 167) and Harcourts's sense of "exceeding" illusions (2015, p. 215). Both speak to this illusive transparency logic that Taussig gestures to but never fully elaborates in which the circular logic of exposure and recovery can be altered by efforts not to destroy the secret, but to confront these shadows with something equally potent. It involves turning expository practices back on themselves, pushing them to their extremes. Through pursuing this logic, we can force a break in the self-enforcing circularity of concealment and revelation and provoke a shift in the direction of travel. This shift in the ambition of transparency was first explored through 1929: Proceso, in which Proceso Pentágono mounted an exhibition within a state museum that folded together different registers of representation: amateurish mannequins, wire-shaped figures alongside wall calendars, filing cabinets, prongs, straps, and questionnaires that spoke of both real and fictional victims of state repression. Through weaving these multiple registers together, Proceso Pentágono staged a compelling confrontation between the state's shadows and this excessive reality.

Though the resemblances are subtle, *Burlar el congreso* shared in the goal of exceeding the state's shadowy operations. This project involved filling the formulaic text box of the *solicitud* with these fictional personas. In contrast to the PNT user guide that encourages *solicitudes* to be simple and self-contained, these strings of text became provocative sites for varying registers of *simulación*. Linguistic traits and orthography peculiarities were deployed to spark the imagination of public servants as they considered these *solicitudes* and the *solicitante* beyond the limits of the text box. Data points collected from Hacienda's outputs were inserted into fictional narratives, summary statistics were produced and deployed in the context of fake projects, laws and federal reforms were invoked by imaginary citizens. Names, contact details and demographic details were submitted that had no referent outside of *Burlar al congreso*. Temporal considerations were undertaken to enhance these illusions. Corresponding device and network data were produced to add a final touch of fakery. Each *solicitud* folded these different components together into the limited space provided.

As the critique mounted by those such as Villanueva proposes, the PNT and its expansive formal mechanism fakes transparency. They give a pleasant face to a state apparatus riddled with shadows and masks. Yet, *simulación* can also offer the possibility for *daterxs* themselves to take up their own masks, taking on different personas, and seeking to engage the state across multiple fronts, testing and agitating for disclosures that advance our understanding of state activities, decision-making, and the use of public resources. Like the Galería of the Auditoria Nacional, the PNT became a site through which *simulación* met *simulación*, navigated through an active turn to yet more *simulación*. Whilst the scholarship of Taussig and Harcourt are helpful in providing a language through which to conceptualise this shifting ambition of transparency, *Burlar al congreso* offers a contemporary, open data-led example of this in action. In the pursuit of additional data disclosures, we as *daterxs* developed these personas and took up multiple unusual positions vis-à-vis the state. Guided by the broader *daterx* community, we maximised on the digital nature of PNT interactions in order to adopt masks and meet *simulación* with *simulación*.

However, the reader may justifiably question the efficacy of this approach. Months of preparation and waiting seem a significant undertaking if the data disclosures subsequently secured were meagre. At many points during this project, I felt very frustrated with the strategy of *simulación* and doubted the guidance of more experienced *daterxs*. The sporadic arrival of PDFs containing shreds of additional data did not seem to compensate for the months of time and energy my collaborators and I put into developing these *solicitudes*. Even after the submission of 130 *solicitudes*, my collaborators and I lacked the materials required to undertake the analysis contemplated. Yet, whilst *Burlar al congreso* may not be the most successful example of *simulación* in action, or produced a transparency output like *El gasto navideño*, it remains an experience that has been fundamental in my own shift in thinking about the possibilities of open data-led transparency.

5g. Conclusion

This chapter has drawn on my involvement in *Burlar al congreso*, a project in which *simulación* was actively deployed by *daterxs* in order to exceed the *simulación* of Mexico's formal transparency mechanisms. This typical *follow the money* project, focused on the re-direction of federal pesos from congressionally approved budgets, became one in which my collaborators and I developed fictional personas through which to petition for additional data disclosures. Taking on the guidance of experienced *daterxs*, we meticulously planned and developed these personas. This chapter has detailed this work, presenting an unexpected avenue of *daterx* activities. I have also presented the reader with the responses to these

solicitudes, noting that it was the most fictional solicitudes – submitted by the most imaginary personas that we developed – that were most successful in securing additional data disclosures from the state apparatus.

Like 1929: Proceso, I have positioned this process of deploying simulación as indicative of a potential shift in the ambition of transparency from eliminating opacities to matching opacity with opacity – doing justice to secrets and seeking to exceed illusions. Whilst the scholarship of Taussig and Harcourt are helpful in providing a language through which to conceptualise this shift, Burlar al congreso offers a contemporary, open data-led example of this in action. Thus, I have offered revisited Mexico's transparencia simulada, proposing that simulación become one productive position from which to undertake open data-led transparency activities.

Chapter six: Re-thinking algorithms within the transparency toolkit

6a. Introduction

Figure xxix is a still from the first film presented by the transmedia project, DERIVA.MX. This still captures a moment towards the end of this eight-minute film in which this three-by-three grid slowly begins to fill with smaller frames, each black rectangle presenting distinct visual data. Eventually, the audience is confronted by nine simultaneous disclosures. For roughly one and a half minutes the frame holds together these multiple disclosures. The audience sits with this fractured arrangement of visual data. Each of these disclosures is drawn from the DERIVA.MX database. Each is surfaced and projected for the audience according to a process of negotiation between algorithmic operations and the direction of the team's filmmakers. Importantly, the nine frames that come to fill figure xxix are not selected from the database at random but emerge through a set of statistical relationships. These statistical relationships draw from the audience's responses to a survey released in the days prior to the screening. "Julíssa Aguilera" is the name of a member of the audience who participated in this survey. This name is later joined by "Cecilia Mancera", "Nicolás G" and many others. In responding to the survey and supplying input data for these algorithmic operations, they participate in the construction of this filmic output, constructing this space for juxtapositions and contingencies.

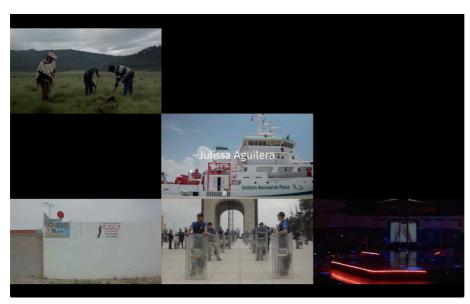


Figure xxix: Screenshot from DERIVA #1 | Centro (2017b).

This study's final empirical chapter focuses on the work of DERIVA.MX. Since 2017, the DERIVA.MX team has utilised "un conjunto de herramientas digitales" in order to "abordar

temas como la identidad nacional, las relaciones de poder, el trabajo, las formas de gobierno y las tradiciones" (DERIVA.MX, 2017a, p. 1). At the time of writing, they have created and released nine films that touch on these different aspects of contemporary social and political life in Mexico. Whilst Transparency Studies scholars tend to turn to a limited number of cultural producers for inspiration, numerous exciting cultural projects from Mexico could have provided the basis of a chapter of this study. ⁶⁵ My decision to focus on DERIVA.MX has two key motives. First, there are significant parallels between DERIVA.MX and the work of Grupo Proceso Pentágono, allowing further space to draw connections across the chapters of this current study. Second, DERIVA.MX does not only offer interesting reflections on the thematic of transparency, but through the process of constructing these films, there emerge alternative directions for the deployment of open data and the contemporary tools of the *daterx*. As such, the work of DERIVA.MX allows me to continue plotting the possibilities of open data-led transparency once we embrace a shift towards doing justice to and exceeding the shadows and masks of the state. Consequently, unlike previous chapters, in this chapter I step outside of Mexico's transparency circuitry and into broader data worlds.

The name of DERIVA.MX is a clear acknowledgement of Guy Debord's writing on the dérive ([1958] 1981), involving the technique of swift passage through varied environments and so challenging the capitalist training of space in Paris' post-war urban development (Yoon, 2013, p. 45). To practice dérive and actively move across segregated spaces is to interrupt these divisions. According to Situationist thinking, the same capitalist training curtailing urban space also constrains forms of communication, in particular cinema and its ordering of time and space (Yoon, 2013, p. 46). Yet, unlike other Situationist thinkers, Debord turned to and deployed cinema and communications technologies, optimistic that the dominant technologies of the day could also be suitable tools for critical cultural production. 66 DERIVA.MX shares in this optimism in the possibilities of contemporary technologies as suitable tools for critical work. This chapter takes up a key contemporary technology: computational algorithms. Core to the transparency toolkit, this chapter argues that algorithms are typically deployed within transparency activities to create an aperture into the complex worlds of open data. This approach has been observed in the previous chapters. The objective of algorithmically produced apertures is to overcome complexity and produce simple outputs from which decisions can be actioned. According to the insightful analysis of scholars such as Louise Amoore (2013, 2020), this reduction of complexity to the singular output collapses space for

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⁶⁵ This usual cultural references in Transparency Studies draw on figures such as Julian Oliver, James Bridle, Trevor Paglan, Laura Poitras and Jill Magid.

⁶⁶ Through engaging in cinematic production, Debord affected a transition from Situationist's *anticinema* towards *countercinema* (Yoon, 2013, p. 47).

politics. However, what draws me to DERIVA.MX is their deployment of data and statistical tools in order to produce complexity, to overwhelm and exceed current definitions and approaches to social issues in Mexico. Their filmic outputs actively work towards multiple, fragmented, and unsettled disclosures that continue to unfold beyond the screen. Through this shift in deployment, algorithms become a tool within the transparency toolkit with renewed potency.

To develop this argument, I first detail how algorithms are typically deployed in transparency projects, with algorithms themselves becoming the objects of transparency demands. I draw on Amoore's application of Judith Butler's (2005) writing within the space of computational operations in order to think about the persistent non-transparency of algorithms. However, instead of settling on a rejection of algorithms as a legitimate tool within the transparency toolkit, I move to considering how the non-legibility of the algorithm can be used in order to create data-led outputs that do not simplify but generate complexity. Continuing with this study's aesthetic approach, this involves a close analysis of the DERIVA.MX method for constructing these data-led, algorithmically directed filmic outputs. This process involves the creation of databases, audience surveys, and the deployment of numerous statistical techniques.

An appreciation of this process has been developed through analysis of the project's films, accompanying documentation, and research interactions with founders of DERIVA.MX. Whilst my only full interaction with a DERIVA.MX film (from initial survey through to post-screening discussion) has been mediated digitally, taking place during the COVID-19 pandemic, I also draw on the experiences of previous attendees and published reviews in order to consider audience responses to these films. ⁶⁷ This leads me to draw on Eyal Weizman's (2014) idea of *forum* to think through the possibilities of these complex transparency outputs produced through these algorithmic processes. This chapter draws to a close the empirical case studies of this study with the hope of opening space to think about how open data and associated tools and methods can be put to use in ways that respond to the expanded ambition of transparency that has driven this study.

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⁶⁷ Relevant to this point is my initial exposure to the work of DERIVA.MX. A research participant suggested that I look into the project. This interlocutor had been participated in the screening of DERIVA #8: justicia as part of Ambulante film festival in 2018. For this audience member, this experience has gone on to inform subsequent activism. Following this research interaction, I began looking further into the project.

6b. Algorithmic apertures

Within transparency projects, the problem for which an algorithm is deployed typically relates to clarifying complexity, with the algorithm a tool able to assist the human user in mastering sizeable (sometimes even *big*) aggregations of data. We saw this dynamic at play in chapter two, where teams of *daterxs* rushed to produce algorithms in the context of the *Datathón Nacional Anticorrupción* (DNA). As we have also seen in chapter three, algorithms are tools whose technical standing allows for their rapid acceptance within spheres ordered by a narrow methodological scope.

As typically deployed, the algorithm becomes a method through which to make the complexity of today's data worlds perceptible to the human user. The algorithm is a "problem-solving mechanism" (Just and Latzer, 2017, p. 239), expected to intervene in this complexity, halting it, and so producing a moment of clarity for the *daterx*. The "algorithmic aperture", the vista that the algorithm opens up is "simultaneously a narrowing, a closure, and an opening onto a scene" (Amoore, 2020, p. 16). Thus, contemporary computational algorithms build on technology's longstanding capacity to shift the parameters of perception (Crary, 1992), prompting calls to not only consider algorithms "in" culture, but also "as" culture (Seaver, 2017, p. 1). In this way, an algorithm's ability to arrange and display ensures that ever-expanding data worlds remain a resource that can be engaged and mastered by the human user.

In constructing this algorithmic aperture and providing a solution to the problem of perceptibility, the algorithm is positioned as separate from the scene exposed, distinguishing between the subject (the human user), the technology (the algorithm) and the object (the datasets of interest). Yet, several challenges emerge to this subject-technology-object schema. For those interested in transparency, the central issue is that there comes to be an illegible algorithm at work. Therefore, although the results of these algorithmic apertures can be advantageous to the transparency actor, algorithms undergo a shift from being powerful tools within the transparency toolkit towards being the actual focus of transparency demands. Transparency actors respond to this illegibility by demanding access to code scripts and, if refused, seeking to reverse engineer their calculative steps (Latzer and Festic, 2019). The "black boxes" (Pasquale, 2015) that have typically pertained to finance, government and advertising – but now "unleashed" (Parisi, 2013, p. 96) across everyday interactions – are forced to unravel. Once the inscrutability of the algorithmic black box is solved, then the algorithm can be re-instated within the transparency toolkit, able to continue generating simplifying apertures in the face of complexity.

Yet, the algorithm never acts alone. Those concerned with transparency have expanded the scope of investigation to include also the datasets analysed by these algorithms. The idea is that greater transparency can be achieved if the creators of algorithms make public the sources of data used to develop and train them. Thus, observers shifted towards considering algorithmic outputs as not only a consequence of their internal mathematical functions but also of their inputs. As scholars who study the intersection of algorithms and dimensions of race, class and gender have so forcefully demonstrated, algorithms are never only "just math" (Amaro, 2021, p. 4).

Responding to this concern, transparency advocates have proposed numerous frameworks and developed guidance on how data should be gathered and processed in preparation for interaction with algorithms. Indeed, a compelling argument for the extension of open data beyond public data resources and into the private sector is that access to these datasets will provide the materials necessary to test algorithms for their bias weightings and coded prejudices (Levy and Merritt Johns, 2016). This demand for access to both data sources and algorithmic logics has become known as *Transparency 3.0* (Taylor and Kelsey, 2016, p. 126). When algorithms are deployed according to these expansive principles then they are once again suitable tools to be deployed, able to be re-instated back into the scope of *análisis integral*.

A premise of the recovery of algorithms and their re-positioning back within the transparency toolkit is that they are indeed objects able to be unravelled, what Manuel DeLanda calls "mechanical recipes specified step by step" (2011, p. 44) and so, their internal logics easily exposed. Yet, the possibility of unboxing the algorithm is one comprehensively critiqued by Louise Amoore (2020). In *Cloud Ethics*, Amoore draws on Judith Butler's (2005) claim of the impossibility of giving an account of oneself and expands it into the computational realm of algorithms. The unequivocal *I*, who Butler argues has been a precondition of traditional ethical deliberation, will always give an account of itself that falls short: "I cannot give an account of myself without accounting for the conditions under which I emerge" (ibid., p. 12). Rather than see this as a limitation of ethical considerations, Butler proposes that ethics should unfold from the premise of partiality.

Just as Butler argues that the identifiable, knowable self is a fallacy, Amoore argues that algorithms and their inputs always proceed from a position of illegibility. Even if the latest transparency protocols are followed and the algorithm is operationalised on *clean*, open data, the algorithm can never be expected to unfold and offer a clear account of its own rationale. The possibility of the transparent algorithm once again comes under question, its place within

the transparency toolkit suspect. This persistent opacity is intensified in the current move towards machine learning algorithms and algorithms deploying neural nets as the parameters of these calculations and the associations of data on which they act are always in flux. Citing Butler, from the perspective of the algorithm: "a certain opacity persists and I cannot make myself fully accountable to you" (Butler, 2005 p. 40 cited in Amoore, 2020, p. 135).

At this point, the *daterx* could propose a pragmatic resolution to this dilemma: algorithms may not themselves fully adhere to our ideals of transparency, but if we remove them from the confines of government, finance, and advertising and bring them back into the arrangement of the good and ethical then maybe they are tools still worth maintaining in the transparency toolkit to deploy productively with open data. However, there remains a broader ethico-political question to be resolved given that, following the algorithmic logic, algorithms encourage the "reduction of multiplicity to one" (Amoore, 2020, p. 17).

Amoore argues that "Algorithms condense multiple potential futures to a single output" such that "at the instant of the actualization of the output signal, the multiplicity of potentials is rendered as one, and the moment of decision is placed beyond doubt" (ibid., pp. 4, 137). This exclusion of abundance sunders the political because algorithmic logics extinguish any capacity to make alternative political claims on the future. Following Amoore, the core political dilemma lies not necessarily in who is deploying the algorithm but in the algorithm's promise to render all political difficulties as resolvable through singular solutions. With the promise of data to render all relationships as sets of attributes, algorithms can then subsequently produce an optimal solution to any problem. Amoore asks, "what kind of new political claims, not yet registered as claimable, could ever be made if its attributes are recognizable in advance?" (ibid., p. 4). In forceful terms, Amoore argues that algorithmic logics "colonize an unattributable future" (ibid., p. 157).

In collapsing multiple claims into actionable propositions and then from those generating a single output, the principal harm algorithms pose is of "generating the bounded conditions of what a democracy, a border crossing, a social movement, an election, or a public protest could be in the world" (ibid., p. 4). The apertures algorithms create suddenly become not only simplifying but restrictive. Thus, according to Amoore, we must turn our focus from individual "algorithmic wrongs" and towards how algorithms are implicated in "new forms of identifying wrong or truth telling in the world" (ibid., p. 6). In other words, algorithms become the primary generators of what matters:

Where politics expresses the fallibility of the world and the irresolvability of all claims, the algorithm expresses optimized outcomes and the resolvability of the claim in the reduction to a single output. (Ibid., p. 10)

Extending Amoore's argument to the context under consideration: when demands for transparency emerge as a solution to existing problems and failures, any solution that draws on algorithmic logics will also become highly constraining. Any attempts to do so will introduce a calculative gesture that forecloses much of the political possibility at play. This collapsing of the political is a dynamic to be avoided if we, as *daterxs*, want open data-led transparency activities to push towards alternative political arrangements.

Whilst I acknowledge and concur with much of Amoore's analysis, what draws me to DERIVA.MX is their application of algorithmic tools and the prerequisite databases in a manner that – although generative of a single output/ film/ iteration – does not completely collapse this calculative space and avoids drawing out a single possible future. As the still that opened this chapter illustrated (figure xxiv), their films actively work towards multiple, fragmented, and unsettled disclosures that continue to unfold beyond the screen. Through an exploration of DERIVA.MX, I hope to propose a particular mode of deploying algorithmic apertures that, whilst conscious of its own illegibility, does not collapse space for politics. In so doing, I aim to re-instate them within a transparency toolkit that makes full use of the possibilities of an open data-led transparency.

6c. Data inputs

Figure xxx is a still from the most recent iteration of DERIVA.MX, *DERIVA #9* | *sustentabilidad* (2020). In this frame we see an arrangement of two images, one placed squarely on top of the other. Yet, the image in the foreground does not dictate the frame and my attention is simultaneously drawn across both frames. As I now move to detail, this arrangement of visual data is the result of a collaboration between human and algorithmic processes.

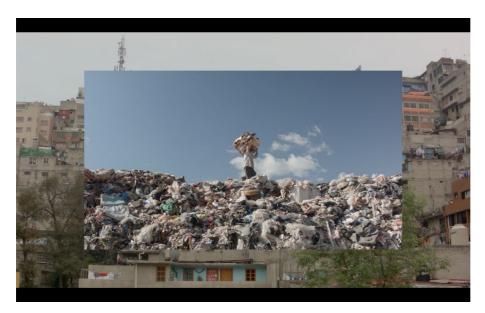


Figure xxx: Screenshot from DERIVA #9 | sustentabilidad (DERIVA.MX, 2020).

Unlike the previous projects explored in this study, DERIVA.MX does not utilise the Mexican state's open data resources. Most of the project's data creation (the filming of visual and audio materials) took place during 2015-2017, with ad hoc trips taking place since. The activities undertaken during each of these trips was documented and shared across the project's social media profiles. These posts capture the DERIVA.MX team at work: their cameras positioned at the edges of crowded squares, capturing landscapes, recording artisans at work. There was no rigid methodology guiding this process of data creation, instead DERIVA.MX undertook an extended *dérive* that expanded beyond the Situationist focus on the urban:

Estamos recorriendo el territorio nacional con el propósito de grabar material en video para formar un archivo de distintos géneros cinematográficos: documental, ficción, entrevistas y testimonios, además de recopilar objetos, documentos escritos, imágenes, sonido y música. (DERIVA.MX, 2017a, p. 1)

Whilst the contexts and activities captured by these social media posts vary, together they present a small, nimble team with limited equipment happening across different sites and capturing individuals, events and scenery that have social relevance in contemporary Mexico. This process of data creation, whilst attuned to different contexts encountered by the team, has no intention of being considered objective or complete. There is no preoccupation with either historicism or an attempt to revise history through these recordings. There is no sense of an authentic record or a truthful testimony, with these visual data not intended to adhere to

⁶⁸ To support production, DERIVA.MX has received funding from prestigious public and cultural institutions such as FONCA, ProCine and Fundación Jumex.

"footage's burden of proof" (Bruzzi, 2000, p. 16), or documentary images' typical "witnessing of reality" (Andén-Papadopoulos, 2014, p. 754). Neither does the team seek to document exhaustively these sites and events of interest. This flexibility in approach means that their process has gathered a heterogenous mix of visual data.

What does unify this diversity is a stylistic language. DERIVA.MX deploy still, wide shots, captured from eye-level, documenting (where possible) natural lighting and diegetic sound. Further, these data are united by the recording apparatuses deployed (digital video and audio devices) and the resulting file formats, with the project's accompanying documentation being precise on these details.⁶⁹ Importantly, the digital nature of these visual data enables their storage and replication. DERIVA.MX exploits this replicability as visual data are subsequently duplicated and edited to conform to one of three narrative units: cápsulas, bases or satélites. Cápsulas are records with a duration of one to seven minutes, "se componen de diversos planos, están editados a mano y exploran un tema específico" (DERIVA.MX, 2017a, p. 3). Bases are records from one to four minutes in duration and "Contienen entrevistas, enunciados, canciones, paisajes, y otros videos que podrían fácilmente ser yuxtapuestos con otros materiales para amplificar, contrastar, enriquecer, o cambiar el mensaje original" (ibid., p. 3). Satélites are single shots from one to sixty seconds which "muestran a personas, lugares, acciones, o situaciones concretas" (ibid.). In many cases, this means a single file is dissected and inserted into a number of subsequent units. The result is that, whilst captured once, data can re-appear multiple times as part of a cápsula, base or satélite.

Once divided, these visual data quickly multiply to form a generous corpus capturing the many encounters from DERIVA.MX's multiple, extended *dérive*. After this process of multiplication, these files are brought together to form one of the project's databases. These edited data are recorded in a database, with each line of the database corresponding to a unique *cápsula*, base or *satélite*. ⁷⁰ Each record then undergoes a process of qualitative coding, with each record acquiring a collection of accompanying labels. At this point, these visual fragments become data disclosures, with each record determined as representing specific themes, processes, or actors.

Some of these labels are easily determined by metadata, such as where and when each record was created. Others relate to dimensions of each record that are rapidly assigned: was

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⁶⁹ The documentation states: "El material de video de DERIVA.MX es grabado en calidad RAW o ApplePRo Res a FullHD (1920x1080) y con sonido estéreo de 24 bits y 96,000 Hz" (DERIVA.MX, 2017a, p. 12).

⁷⁰ DERIVA.MX use MySQL as the database software for the project.

the record captured at day or night; in an urban or rural context; captured in portrait or landscape format. However, most of these labels provide space for subjective interpretation:

Se identifica con palabras aquello que, en el objeto, imagen, sonido o texto, se identifica como valioso en la construcción de un discurso que amplíe las posibilidades de comprensión" (Interview B17, January 2021).

This was, according to members of the DERIVA.MX team, "un proceso arduo" (ibid.). Tagging took place during long sessions of deliberation as each member of the team brought their own experiences and judgements to bear on the classification of each record.

Whilst these data were not created as testimony, each frame was interrogated for what it could potentially disclose to its future audience. However, no decision was final. Instead, labels accumulated against each record as its multiple possibilities were acknowledged. This was a live process with the dictionary of labels itself growing as the database expanded, creating the need to return to, revisit, and re-think each classification. One project document I reviewed had a sizable list of first-round labels including those such as "abandono", "himno", "vaca". After a few line breaks, the text document then proceeds with a section titled, "ETIQUETAS NUEVAS" comprised of a further list containing "comercio", "invasión", "presidente". After another few line breaks, the document closes with the section "NUEVAS NUEVAS", with "carne", "heteronormativo", "higiene" being some of the additional labels listed.

Whilst this classification activity begins to move counter to Debord's intentions with *dérive*, it is an essential step for the DERIVA.MX process. Through this labelling process the associations in each of these visual records produces a database not only in the sense of a collection of data but, more importantly, as "an active site for the execution of operations" (Halpern, 2014, p. 67). Each record becomes computable, searchable, and shareable, awaiting to be called upon through algorithmic selection.

To understand how algorithmic logics are deployed in order to surface these records, I now turn to another important dimension of the DERIVA.MX method: the creation of a second database of audience survey responses.

In the weeks preceding a screening of a DERIVA.MX film, those interested in attending are invited to respond to a public survey hosted on the DERIVA.MX website – a key parallel with 1929: Proceso. Guiding the DERIVA.MX audience towards this online space is not only one of the core transmedia dimensions of the project, data produced through these interactions

are also essential to the construction of the films presented. This marks a clear difference between the deployment of these audience surveys by Proceso Pentágono and DERIVA.MX. Whereas for Proceso Pentágono, this audience involvement was tangential to the overall ambition of the exhibition, for DERIVA.MX these responses are one of the primary inputs to the film that is subsequently projected.⁷¹ These surveys have garnered wide audiences with the most popular, released in advance of *DERIVA #6* | *patria* receiving input from 147 respondents.

In circulating pre-screening surveys, the DERIVA.MX team seek to develop an understanding of the current perspectives of their prospective audience. "Entendemos a la audiencia como un colectivo complejo que expresa intereses en común así como opiniones encontradas" (DERIVA.MX, 2017a, p. 2). Responses to these surveys and the statistical maps they create will determine what eventually appears on-screen:

Estas películas son el resultado de la interacción entre nuestra visión subjetiva (encarnada en la selección del material, el encuadre de las tomas, y la clasificación del archivo) y los intereses, pasiones y preocupaciones que la audiencia ha expresado en el cuestionario. (Ibid., p. 8)

Survey participants encounter several unusual types of question in each survey. Some questions seek a response to a prompt with a limited number of inputs: "Patria es" followed by a map of potential word associations. As in figure xxxi, the participant is asked to choose three words from those listed. Some make obvious sense: "conmemoración", "bandera", "familia". Others offer more obscure associations: "colonialismo", "armas", "protesta" (2017d). These potential responses are a random slice of the labels produced by the DERIVA.MX team and stored in the aforementioned database.

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⁷¹ As evidence of the tangential value placed on these audience responses by Proceso Pentágono, I was surprised that in the remaining archive, few copies of the questionnaires circulated have been preserved alongside other documentation and material from the *1929: Proceso* exhibition.



Figure xxxi: Screenshot of the questionnaire circulated before DERIVA #6 | patria (2017d).

As well as word association, participants may also encounter tasks of visual association: "¿Qué te gustaría ver?" followed by a grid of image thumbnails, each proposing a different narrative possibility for the film to follow. Presented as still frames, each offers extensive room for interpretation as little is exposed of their longer narrative trajectories.

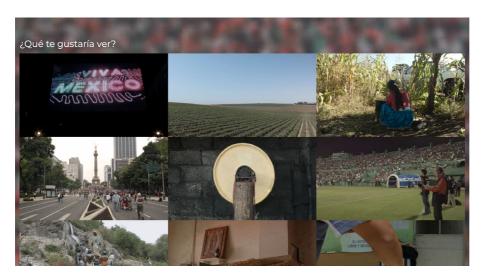


Figure xxxii: Screenshot of the questionnaire circulated before DERIVA #6 | patria (2017c).

The surveys also provide space for free-text responses to open questions: "Que harías tú si fueras presidente de México?" (2017d). The space provided for the audience's input is coded without a character limit, allowing for each participant to elaborate a unique response. Other free-text questions are more direct: "Completa el himno: 'Mexicanos al grito de ______"(2017d).

Despite clear instruction, participants continue to use this space to offer unexpected responses. Some of the responses surfaced during *DERIVA #6* | *patria* include: "Mexicanos al grito de ayuda", "Mexicanos al grito de auxilio", "Mexicanos al grito de mierda" (DERIVA.MX, 2017c). Again, this draws parallels to the questions and inventive responses penned by the attendees of *1929: Proceso*. With these imaginative responses collected in a second database, the DERIVA.MX team do not seek to filter out these deviations but carry them forward into the films screened (figure xxxiii).



Figure xxxiii: Screenshot from DERIVA #6 | patria (2017c).

In the brief window between the close of the survey and the planned screening, the DERIVA.MX team run a series of algorithmic calculations across the two databases in order to construct the film and draw out the individual visual records from the databases to be surfaced during each iteration.

First, the database of survey responses is exposed to the calculative logic of an algorithm that seeks to draw statistical significance from survey responses. Once uploaded to Gephi (one of the open-source software packages utilised by the team) the algorithms conduct an eigenvector centrality calculation on these responses. The objective of this calculation is to produce a co-efficiency reading of importance for each response – the measure of influence

⁷² For instance, questions such as "Marque con una "X" el lugar y la fecha de la acción de secuestro policiaco de Francisco Gòmez Magdaleno", followed by four options from which the visitor may choose (MUAC, 2014a). One archived response to the above question involves an "X" marking in the option "Acapulco, julio de 1975" and the additional annotation "me late, por el calorcito y las gringitas" (MUAC, 2014a).

of a node in a network.⁷³ This results in what DERIVA.MX call each survey response's "centralidad" (Interview B17, January 2021). Conducting this algorithmic calculation allows the team to identify the labels with the greatest interconnections across the survey responses. Importantly, this calculation is not determined simply by the quantity of responses but also by the importance of each node in relation to those with which it is connected in this data space (ibid.).

Other calculations include applying grouping algorithms that separate the pool of participants into sub-groups according to relationships within the patterns of survey responses – what the DERIVA.MX team call "modularidad" (ibid.). Together, these statistical proximities attempt to elaborate the audience's pre-screening understandings and perspectives:

Las relaciones de cada persona con el grupo en términos de intereses similares y reacciones divergentes revelan principios comunes, opiniones minoritarias, temas tabúes, y diversidad ideológica. (DERIVA.MX, 2017a, p. 8)

Whilst these same algorithmic logics are typically deployed in order to identify maximum values, DERIVA.MX use these calculations to uncover anomalies and ambiguities – inputs such as "Mexicanos al grito de mierda" (DERIVA.MX, 2017c). Rather than working to adjust and clean these inputs in the database, these data points are carried forward. To return to the idea of the aperture: the calculations deployed by DERIVA.MX do not seek to reveal a coherent scene but instead partake in the construction of calculative spaces filled with these deviations and inconsistencies. Complexity remains even after the application of these algorithms.

Furthermore, the operational clarity we may have hoped for through the application of these computational logics is contested by the very intelligibility of these algorithmic processes. These algorithms are open-source, Cloud-based tools that are constantly in evolution as their code base updates, responding not only to the particularities of the DERIVA.MX databases but also to the many other datasets that they encounter and run on. The logic behind each calculation and its result cannot be easily accounted for. Instead, each Python script runs and the console returns a set of associations. The DERIVA.MX team then respond to these algorithmically derived associations without full understanding of how they have been produced (Interview B18, January 2021). Despite reintroducing elements of the black-boxed algorithmic decision-making critiqued by earlier waves of transparency scholarship, for

⁷³ For a broad introduction to eigenvector calculations, see: https://en.wikipedia.org/wiki/Eigenvector_centrality.

DERIVA.MX, it is through collaboration with this illegibility that we move towards the possibility of encountering novel disclosures.

The next step in the DERIVA.MX process is to construct films that respond to these algorithmic calculations. Building from the experiences of the filmmakers who form part of the team, DERIVA.MX produce unique iterations that make use of the three types of data (*cápsulas*, *bases* and *satélites*) and pre-defined filmic schemas: "La estructura modular predefinida busca ser una guía rítmica de técnicas de montaje espacial y temporal" (DERIVA.MX, 2017a, p. 9). The objective of these sequences is to ensure that each DERIVA.MX iteration contains enough of a comprehensible cinematic experience for the audience. As I was reminded during my research interactions with the DERIVA.MX team, whilst certainly offering interesting interventions in the deployment of data and computational logics, the project's outputs are first and foremost cinematic outputs (Interview B17, January 2021).⁷⁴

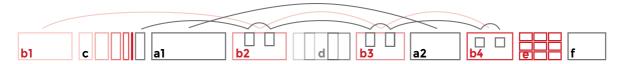


Figure xxxiv: Example schema to structure a DERIVA.MX iteration (2017a, p. 9).

Here, the authorial hand of DERIVA.MX's human elements re-enter the process as they direct how the algorithm's decisions will be visually arranged. Whilst not computationally derived, this schema is not static and offers compositional flexibility as it is adapted between iterations depending on audience feedback and the team's own reflections and desire to experiment with new visual arrangements (Interview B17, January 2021).⁷⁵ As the schema captured in figure xxxiv shows, the DERIVA.MX outputs experiment with the possibilities of the two-dimensional frame projected for the audience. Flat, tabular records in linear rows are transformed into complex visual arrangements that create space for intersections and interruptions. Section "c" depicts a rapid succession of frames cutting from one to another, creating a visual volley of moving images. Section "b2" arranges at least two records as overlays on top of a primary frame, the pixels of each positioned to interrupt and collide with

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⁷⁴ This is a dimension of the project often forgotten about amongst the data and computational elements of DERIVA.MX's. One team member commented how, despite many invites to project at film festivals, DERIVA.MX films are often projected in lecture halls and auditoriums of these film festival and not in the cinema theatres (Interview B17, January 2021).

⁷⁵ The formation of each framework is a process which, had material conditions allowed, the DERIVA.MX team would have experimented with algorithmically producing these schemas. Maybe for instance, the distances between overlays having some mathematical relationship to the distance between nodes in the statistical analysis, or time durations scaled inversely according to statistical significance (Interview B17, January 2021). Yet, as of the time of writing, the construction of these schema remains a manual process.

the others. In section "e" a grid of thumbnails come together, satiating the frame with moving images. Other visual techniques deployed by DERIVA.MX but not included in figure xxxiv include the use of one record as a margin for a primary frame, with the depth of this margin expanding and contracting during the film (as seen in figure xxx). Another technique involves the merging of entire records, with the pixels of each frame slowly dissolving into the other (seen below in figure xxxix).

Once the film's schema is defined, the task of filling each segment with visual data turns us back towards algorithmic calculations. Given the results of the statistical analysis of survey data, algorithms are then deployed to identify the visual records that will populate the schema. For instance, if the statistical analysis determines that the label "urbano" is the core narrative cápsula, then relational calculations are deployed on the associated subset of records (ibid.). These calculations do not simply surface the first associated entry but take into consideration the relations between each record within its wider cluster and other labels of interest for that iteration. The database becomes an active site as the algorithm searches across its records, surfacing nodes that may otherwise remain buried within the database. As the output of this human-algorithmic process of construction, each film becomes a collection of mutating disclosures, displaying complex visual arrays that expand towards non-closure. For the audience responding to these algorithmic outputs, perception becomes a complex task of mapping and negotiating between these disclosures, creating moments of stability amongst these discontinuities whilst also remaining open to the unforeseen within each arrangement.

6d. Algorithmic outputs

DERIVA.MX's seventh film, *DERIVA #7* | *espacio público, juventud y hartazgo* (2018), first screened in March 2018 at the Instituto de Geografía of UNAM. As part of the *Trymexico: Taller International sobre Espacio Público, Juventud y Transgresión*, its audience were participants and attendees of this workshop. Thirty-eight responses were gathered from the survey circulated in the days before the screening and input into the film's construction.

The twenty-two-minute film opens with a still shot of a formation of police officers positioned on Mexico City's Plaza de la Revolución. The police officers, decked in riot gear, have their backs to the camera. We – the audience – lurk behind them at eye level. The stillness of the opening shot then advances into a series of rapid cuts between records. Protest scenes, national celebrations, and border infrastructure move across the screen. It is unclear at this point which of these records, if any, will be the main subject of the film. The audio from each of these records begins to merge, intensifying into a defending medley of urban noise. The

frame then begins to disclose audience responses to the question, "¿Para qué es el espacio público?" The responses that appear onscreen offer a number of explicit propositions to which later visual records interact: "? [sic] no sé, para muchas cosas"; "albergar la diversidad propia de la vida social"; "Para habitarlo". From the very beginning of the film the audience are reminded that their survey inputs have been carried forward into the film. Echoing this sentiment, one of the founders of the project noted to me, "Al hacer visible el origen y las relaciones entre el material, es posible crear nuevos vínculos." (Interview B18, January 2021).

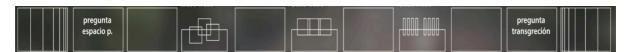


Figure xxxv: Screenshot of the schema for DERIVA #7 | espacio público, juventud y hartazgo (DERIVA.MX, 2018).

We then move into the first *cápsula*. We enter a chapel, the wooden walls sparsely adorned with a crucifix. In the centre of the frame are a group of adolescent worshippers, each wearing a simple white t-shirt and a grey jogging trousers. My mind quickly draws back to the prescreening survey in which the first question posed was: "¿Qué te gustaría ver?", followed by a selection of four thumbnails. One of the options, in the top-left corner (figure xxxvi) was, "Centro de readaptación juvenil". This was the most voted of the four options and so forms one of the two main *cápsulas* of the film. Indeed, the striking thumbnail of the shaven head facing a whiteboard – visible in figure xxxvi – soon appears onscreen, once again making the connection explicit between the audience survey and the resulting filmic output.

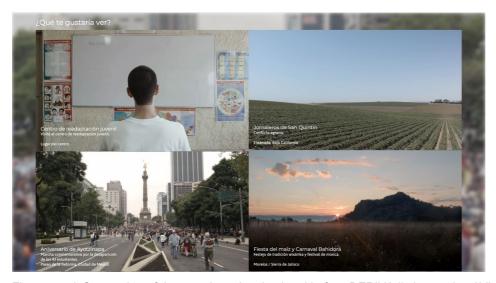


Figure xxxvi: Screenshot of the questionnaire circulated before *DERIVA #7* | *espacio público, juventud y hartazgo* (2018).

Whilst the visuals projected flick between shots of the juvenile centre, the audio captures some of the autobiographical details of these adolescents, and their experiences of Mexico's justice system. As the *cápsula* develops, themes of victimisation and family are explored – labels associated to *juventud* are surfaced from the database. The stillness of these images not only gives us space to concentrate on the testimonies but also to register some of the visual characteristics of the barren setting: concrete floors, bare walls, antiquated technology. In these moments this algorithmic output is more familiar as a documentary evocative of earlier periods in Mexican social realism.⁷⁶

This sequence's sombre visuals contrast with the sharp cut to the film's next record: a *base* bearing the label *espacio público*. It is an urban scene: Mexico City's Zócalo with grey skies, rain, and tightly packed protestors. Despite the moving crowds the camera remains still, at eye-level, and focused on the backs of protestors, creating an unexpected moment of symmetry to the opening scene of police officers. An overlay appears in the top left of the frame (figure xxxvii). Whilst disturbing the original horizon, this horizon re-emerges in the mobile phone screen in the bottom right of the frame. With the audio fixed to the primary image, we are forced to interact visually with this second frame. The opacity of this overlay, the density of its pixels, allows for its visual comprehension despite the chaotic background. Moments later another overlay appears. This second overlay now comes to dominates the frame. Many of its visual features contrast with the existing two records: whilst it captures a crowd on the very same public square, this time it is a nocturnal scene during a public celebration – maybe the annual *Día de Revolución* celebrations. The mood of the crowd in this scene is jubilant, moved by the musical acts, light displays, fireworks.

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⁷⁶ It is tempting to draw parallels between DERIVA.MX and Sergei Eisenstein whose films such as *¡Qué viva México!* (1931) include strikingly composed shots, visual metaphors, rapid editing, and intertextual references. These techniques combine to form what Eisenstein described as his "montage of attractions", in which attractions are defined as "any element of emotionally effective cinematic impact" (Vassilieva, 2017, p. 112). I refrain from drawing further on Eisenstein's concept in relation to DERIVA.MX as I believe that DERIVA.MX do not deploy montage to maximise on emotional impact. Indeed, explicit violence rarely surfaces in DERIVA.MX outputs. This differs markedly from Eistenstein's work in which violent scenes are a prominent feature, to the point of his films being described as "tragic and blood curling", including "the merciless killing and agony of human bodies" (ibid., p. 13).



Figure xxxvii: Screenshot from DERIVA #7 | espacio público, juventud y hartazgo (2018).

Within this arrangement of visual data, we see the clear emergence of records relevant to the theme of this dérive. The public spaces presented become sites for the gathering of crowds, both for political protest and recreation. Not surprisingly, protesta, multitude, and recreación are the labels drawn from the survey responses that directed the construction of this section of the film. It is the weight of each of these record's statistical relationship to the first cápsula of the film, and to the other that draws each of them from the database and into the visual frame. However, when arranged together for collective viewing, these records also give rise to other associations that go beyond these labels. As the third frame appears, protruding into the second frame, I am reminded of the primacy of the urban in representations of violence. The first two frames hold visual and audio data that connect to the Ayotzinapa disappearances. These are then interrupted by this third scene of urban celebration. Crossreferencing these colliding records, I am reminded that it is Mexico's rural, peasant and Indigenous communities who suffer the brunt of violence in Mexico. It is the surfacing of three urban scenes and their attempts at dominance over the other that sparks my focus on a latent theme within the first two frames, despite this rural focus not being an explicit part of the statistical calculations used to construct this frame. It is these interruptions, this amassing of disclosures within the single output that prompts the audience to experiment with the interpretation of these disclosures. Here, the algorithmic aperture does not divide, select and narrow the focus of attention but opens towards multiple connections.

A fourth overlay then emerges (figure xxxviii). This latest disruption captures a middle-class apartment block from below, strutting up into the sky and almost occupying the whole frame. Although hinting to the film's theme of *recreación*, it seems to sit at a further statistical distance

to the records presented thus far. The absence of human bodies and recognisable urban symbols produce a more pronounced visual contrast. Yet, in noticing the beach towels set out to dry on a lower balcony and identifying this as a beachside apartment, my mind is drawn to the shots of Tijuana that previously appeared in the film's opening volley. Presented within this arrangement, this isolated frame suddenly infuses Mexico City's Zócalo with the violence of border regimes. Another unexpected encounter between these records, produced through these frames with an overabundance of data. In response, my mind gets to work making connections that ripple out, unsupervised.

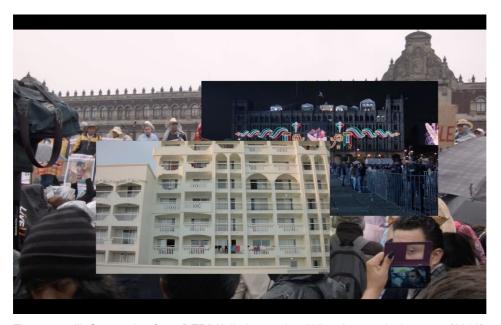


Figure xxxviii: Screenshot from DERIVA #7 | espacio público, juventud y hartazgo (2018).

This abundance of data then dissipates, and the film presents a single, pastoral scene. The second *cápsula* begins. We encounter the testimony of the *Jornaleros de San Quintín*, captured in Ensanada, Baja California. The *cápsula* presents rural scenes of crop production and a gathering of agricultural workers. We hear accounts of worker suppression and anti-union efforts against these workers, despite their constitutionally guaranteed rights. This *cápsula* suddenly seems to respond to the urban-rural tension that emerged just moments before.

As the second narrative thread of the film, this *cápsula* occupies a significant temporal period of *DERIVA #7*. Yet, it was the option offered to the audience during the survey that garnered the least votes. Indeed, this *cápsula* was surfaced because of its statistical insignificance when compared to the broader cluster of records addressing *espacio público*. The DERIVA.MX process relies on these algorithmic calculations to also challenge its audience: "El algoritmo

complace, pero también enfrenta y cuestiona a los espectadores" (Interview B17, January 2021). Like the disrupted frame that led me to consider the rural resonance of the Ayotzinapa disappearances, this *cápsula* offers a sobering foil throughout the film that continues to thicken the field of associations and resonances. Whilst the frame projected has simplified, now consisting of only one record, the underlying process of filmic construction still pushes away from reduction and simplification.

Multiplying, entangling arrangements emerge again later in this film as we encounter a man in a polo-shirt and glasses, surrounded by a stockpile of essential goods. He speaks directly to the camera, inviting us to think about the harsh realities that push Mexican and Central American migrants to push northwards. During this dialogue, the opacity of the image lessens, and the frame becomes saturated by other images that momentarily collide with the narrator. This narrator figure becomes submerged into a rapid flow of pixels. At this point, the DERIVA.MX process seems to be acting in a frenzy, this human-algorithmic process departing from any sense of rationality and control. I lose sight of the narrator for a moment and focus shifts to the other visual possibilities that transpire just below the surface of the frame.



Figure xxxix: Screenshot from DERIVA #7 | espacio público, juventud y hartazgo (2018).

Some of these scenes are legible, such as a protest banner being carried through an urban highway. Others are not so easily deciphered: the silhouette of a labourer at work taking shade against a steep earth slope and a shirt-clad bureaucrat, although, it is not clear if this is one record or two, or where one begins and another ends. Then, an image of a bullet-ridden government building in rural Guerrero. Yet, we know from the narrator's dialogue that he is

located close to Mexico's northern border. New associations are made between these semilucid frames: themes of marginalisation, safety, escape are certainly present. However, I cannot compose such a neat interpretation of this shifting aperture. The significance of this base, its full disclosure remains unattributable in this moment of rapid disclosures.

In these moments, this data overload could be read sceptically as a reverse turn towards spectacle – a betrayal of Debord's original proposal for dérive. Yet, this overload, far from being a criticism of these films, highlights the way the DERIVA.MX process does not create the illusion of a singular, contained disclosure. We never reach full disclosure but experience multiple disclosures through which we perceive numerous messy and ambiguous possibilities. The film closes with the projection of audience responses to the open question, "¿Cuando crees que es necesario transgredir?" Individual responses contrast against the fireworks of a public celebration. Following the film's complex array of disorientating records the audience are drawn back into proximity with the film as they are reminded of their participation and coauthorship of this output. Then, another accelerated sequence – mirroring the film's opening volley – draws our attention to labels in the database that remain to be explored further: *infancia, identidad nacional, impunidad*. These are left as unanswered provocations and the film ends with recognising its own partiality.

The audience's experience is summarised well in the DERIVA.MX manifesto, published online in 2016: "La deriva despierta, acelera, y expande" (2016 [n.p.]). In contrast to the open dataled transparency activities that we have seen in previous chapters, in which outputs are intended to be whole, stable and complete entities that secure a single interpretation, DERIVA.MX explicitly uses databases and algorithmic calculations to create outputs with multiple, fragmented disclosures. Each DERIVA.MX film takes shape through an arrangement of these partial disclosures. These *cápsulas*, *bases* and *satélites* move us through each film, but each film also moves beyond these individual records. The audience, sitting with these arrangements and working between and across them, deploys their own narrative-interpretive capacities to perceive new disclosures and potentially reimagine the ways we recognise these political phenomena, their causes and consequences. As with every public screening of a DERIVA.MX iteration, the auditorium then opens for reflection and discussion.

6e. The multiple algorithmic aperture

Encountering these outputs, we are permitted to embellish, make connections, and draw unorthodox conclusions that go beyond these individual records. DERIVA.MX thus takes advantage of cinema's power to position its audience as "interlocutor" (Nichols, 1994, p. 54),

deciphering the contents of the frame and simultaneously implicating these with our own experiences. Yet, Claire Birchall (2014) has documented how narrative-interpretative forms of disclosure – scandal, gossip and conspiracy theories – have been unduly shunned in contemporary transparency discourse, particularly in response to the growth of data-led transparency (or, what Birchall terms *e-transparency*) and its promise to excavate disclosure of any moral, legal or epistemological dilemmas.⁷⁷ As has been discussed in part two of this study, to draw on narrative-interpretive interpretation is to infringe on the permitted boundaries of *análisis integral*. If towing the line of a contemporary transparency professional, our response to any hints of the narrative-interpretative should be to reject these contingent disclosures outright.

There have been numerous arguments offered to counter this rejection of narrative-interpretive disclosures. As Birchall summarises, these arguments have somewhat divergently positioned narrative-interpretive forms of disclosure as vital to social cohesion or, narrative-interpretive forms of disclosure as disobedient to dominant ideology (ibid., pp. 80, 81). In their different ways, these arguments re-ascribe value to these contentious forms of disclosure despite the continued dominance of data-led models of knowledge production. Scandal, gossip and conspiracy are not distractions but can indeed – to greater or lesser extents – be insightful endeavours. These modes of disclosure that rely on narration and interpretation are no longer obstructions to furthering transparency but can sit somewhere adjacent to the preferred techniques of data-led disclosure.

Extending Birchall's efforts, the work of DERIVA.MX contributes to the recovery of the narrative-interpretative but with distinct nuances. Importantly, the DERIVA.MX method does not sit in contrast to data-led disclosure or as an appendage to more formal methods of transparency. Instead, it pushes to expand the possibilities of data-led disclosure. DERIVA.MX explicitly deploys algorithmic calculations on interpretatively derived data to construct these interruptions, discontinuities and simultaneities that then require further narrative-interpretative exploration. It is not that traces of narration and moments of interpretation have slipped into the analysis and can either be excised or excused. Instead, narration and interpretation are actively called upon and incorporated into the process of data-led disclosure.

Further, the DERIVA.MX audience is not simply called upon as recipients of neatly parcelled disclosures to be picked up and re-circulated in public spheres. Instead, the disclosures that

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⁷⁷ Here, I also follow Birchall in understanding *narrative* as the process of "creating causal links between events" displayed onscreen, and *interpretation* as the subsequent process of "reading these links in order to uncover meaning" (2014, p. 80).

populate DERIVA.MX films are constructed through audience participation and then extended through discussion and deliberation with this audience. Audience members not only participate in the construction of these films, but also in the individual and collective process of exploring what is revealed through each of these outputs. The audience comes to make sense of these disclosures through shared interpretation of the presence and absence of these hard edges, the merging of pixels, these collisions, interruptions and associations.

Turning to Eyal Weizman, these filmic outputs and the space for reflection created following each screening provide for moments of *forum*: "the space in which the results of an investigation are presented and contested" (2014, p. 9). Weizman goes on to describe *forum* as a space for triangulation between a contested object holding its traces of violence, the forensic interpreter and the assembly of a public gathering (ibid., p. 10). In later work, Weizman describes forum as a commitment to "conceive, assemble and construct" spaces of confrontation, not only rational confrontation but ones in which participants "feel pain and act collectively" (2017, pp. 64, 68). Whilst Weizman's concept of forum emerges directly from an interest in forensics investigations and the etymological root of *forensis* – and so carries with it this specificity in its deployment – it is a useful provocation in that it locates political importance in these public moments of data's disclosures, triangulation and interpretation.

As films projected for audiences, these DERIVA.MX outputs come under collective scrutiny. Members of the audience, collaborators in the production of each iteration, have space to reflect on the different arrangements presented. Responses to DERIVA.MX iterations involve "speculation, experimentation, and imagination" (Birchall, 2021, p. 87). As one reviewer noted: "Lo interesante del proyecto radica en entender qué está pensando la gente de su país y cómo se relaciona con los acontecimientos de todos los días" (Cato, 2017 [n.p.]). As a further reviewer stated: each member of the audience is propelled to "tomar una postura" (Moreno, 2017 [n.p.]) considering the disclosures on-screen. This process moves these individual moments of narrative-interpretative meaning-making forward into a collective endeavour. Or, as another reviewer put it: a form of "construcción comunitaria" (Sandoval, 2018 [n.p.]). The individual *dérive* and the subsequent process of interpretation becomes distributed across the forums that DERIVA.MX create.

Whilst each output abandons the audience, leaving them without clear answers to these provocations, each audience member becomes disloyal to the algorithmic output, filling the gaps as needed. Each interpretation provokes hypotheses that must remain to some extent unvalidated. No decision or interpretation is positioned beyond doubt and so these multiple disclosures are productive of non-closure. Politics emerges in these intransigencies, in the

struggles and clashes between these arrangements and the subsequent processes of meaning-making. These then unfold further from these cinematic encounters into unknown future interactions. Therefore, we see a shift in emphasis of these data-led disclosures from closure towards rupture. As one of the reviewers continues: the strength of DERIVA.MX is its capacity to "trazar nuevos caminos" (Sandoval, 2018 [n.p.]) to themes, phenomena and questions relevant to contemporary Mexico. These arrangements, emerging from databases and a result of algorithmic operations, unfold towards multiple potential futures.

Weizman's turn to the concept of *forum* builds from Jeremy Gilbert's earlier writing on the "real acts" of "'publication' or 'publicity'" that involve "go[ing] beyond the mere telling of secrets" (2007, p. 38). For Gilbert, going beyond mere secret telling "involves the making-public of some situation or information such that it can be made an object of collective discussion and potential intervention" (ibid.). This also echoes the work of Taussig and Harcourt that has interwoven this study. If, following Gilbert's broader argument, today "we lack sites for the collective production and legitimation of social knowledge" (ibid., p. 23), each iteration of DERIVA.MX provides a partial response to this absence. Each of these iterations and its screening produces moments of data-led disclosure that "recreate the space where the public sphere used to be" (ibid., p. 37). However, this is not to say that these forums produce consensus. There is a sharing and triangulation but not necessarily a conclusive settling on a single interpretation.

In the digital iteration of DERIVA.MX in which I participated, and the video footage of in-person screenings that I have been able to access, the subsequent audience interactions and conversations are challenging and critical. This observation was also confirmed during my interactions with previous attendees and with members of the DERIVA.MX team. Sometimes, audience members seek something akin to data's "radical contextualization", demanding "an account of the conditions, assumptions, and politics that informed the production and gathering of the data in the first place" (Birchall, 2021, p. 87). There are challenges proposed to the very process of data collection and analysis that DERIVA.MX undertake. However, most offer reflections and observations that respond to the multiple disclosures to which they have just participated and observed, with audience members pushed to disrupt and re-think rather than renew. These reflections are then responded to by other audience members and *forum* continues through presentation and contestation.

Returning to Amoore: in the case of DERIVA.MX, the algorithmic output is not "a single value distilled from a teeming multiplicity of potential pathways, values, weightings, and thresholds" (2020, p. 139). Through DERIVA.MX and its data-led, algorithmic process we see how data

are purposefully tangled to push forward this multiplicity that resist producing a single account of the theme under consideration. These films favour intersecting, colliding, and potentially transformative disclosures. The apertures that these algorithms open are messy, often chaotic, in flux, in excess of their constituent parts, expanding away from the idea of the singular output. Whilst it may seem unreasonable to stretch the algorithmic logic this far, incorporating into it these narrative-interpretative realms, as the work of Orit Halpern (2014) has demonstrated, the origins of the mathematical sciences from which computational algorithms emerge are anything but rational.

6f. Conclusion

Typically, open data projects utilise algorithmic operations to describe, attribute and cluster data. This allows for the definition of a set of causal relationships to be defined and a single onward trajectory to be determined. However, DERIVA.MX use data and algorithmic processes to push us to remain open to how phenomena are recognised and understood in contemporary Mexican society. As noted earlier in this chapter, "El algoritmo complace, pero también enfrenta y cuestiona a los espectadores" (Interview B17, January 2021). The outputs that emerge from this process acknowledge different relations between actors, causes and consequences. There is no attempt to set definitive boundaries but instead to create space for forum and the possibility of non-closure. Initial interpretations are soon exceeded as collisions and intersections across disclosures push us towards further associations. It is this shift in the possibilities of these data-led disclosures that draws this project into such sharp distinction with the transparency activities explored in part 2 of this current study.

Proposing scattered, contingent disclosures that require a narrative-interpretive response is certainly not a common approach adopted in contemporary data-led transparency projects. However, given the paradoxes and failings charted in previous chapters around data-led disclosure and its foreclosure of politics, it is a direction that I believe worthwhile revisiting. Moving forward with this messy, expansive form of disclosure requires that transparency professionals become comfortable with uncertainty, with disclosures that circulate in changing and partial ways. It demands that the broader transparency circuitry acknowledge that it is never simply the data disclosure that can provide the solution. Instead, the disclosure becomes the premise for subsequent deliberation, learning and future decision-making. Open data and calculative logics do not seek to secure the future but open towards multiplicity. Politics and the consideration of alternative political arrangements are an unavoidable outcome of this process, expanding the possibilities of open data-led transparency.

Conclusion

This study has contributed a novel analysis that responds to Mexico's sudden emergence at the vanguard of global open data rankings and transparency indices. In doing so, I have sought to create some needed space in a rapidly condensing field of *good* data and *bad* data studies. Whilst resisting any naïve associations between transparency and freedom, enlightenment or certainty, this task has been undertaken with the intention of re-positioning open data as a useful resource that must be defended and maintained. Beyond yielding technical solutions, open data's usefulness pivots on their representational richness, able to be engaged and deployed in ways that outdo the shadows and masks of the state. In this way, open data provide us with a crucial material for understanding state activities and decision making, with the potential to catalyse shifts towards other political arrangements.

Advancing an aesthetic approach, I stepped into the spheres of activity that now accompany open data. Through being in a close, responsive exchange with open data and daterxs, I have been able to pick up on the forces that shape the engagement and deployment of this material, mapping both constraints and possibilities. I have taken seriously the confusions, slippages, and adaptions involved in contemporary open data work. This has necessarily involved a shifting, evolving gaze that has brought together multiple perspectives into this analysis. I have then triangulated these insights with additional research materials collected in archives, press, and official sources. Further, by primarily considering open datasets and activities relating to public spending activities, I have focused on datasets that usually pass under the radar of social and cultural researchers. As such, chapters two, three, four and five have each addressed open datasets produced by federal agencies that concern different budgetary operations at the core of contemporary spheres of power and influence: federal spending on publicity, public infrastructure, and welfare programmes. Influenced by a recent turn towards considering data "settings" (Loukissas, 2019, p. 2), I have presented the reader with chapters that consider the particular characteristics of these open datasets, and the unique engagements and deployments they solicit. In priviledging empirical detail that build from these rich settings, I recognise that the resulting chapters may only provide limited potential for broader comparison. However, this study has favoured developing theoretical positions

through the interpretation of empirical materials gathered during this author's period of fieldwork.

In part two of this study I detailed the narrowing of the possibilities of open data-led transparency. I detailed this narrowing through a three-part heuristic comprising scale, scope, and proximity. Chapter two began the elaboration of this narrowing through the dimension of scale. After detailing the rapid expansion of Mexico's open data infrastructure and its promise of open data at scale, I noted that this promise of scale must be situated within efforts to further centralise power in Mexico. Rather than repeat previous modalities of power, this scaling of open data pointed to a more contemporary, intricate logic at work. Yet, during research activities such as the Datatón Nacional Anticorrupción, I observed daterxs shunning these broad panoramas of the state apparatus and instead re-orientating their work towards detail, towards condensing datasets, and limiting the breadth of their analyses. I proposed that this exhibits a moment of counter-conduct, deployed by subjects typically considered to be docile in relation to the state apparatus. In chapter three, I explored the discursive gesture of análisis integral, deployed by stakeholders and gatekeepers in the production of El gasto navideño in order to guide the production of transparency outputs. Rather than reading this gesture as indicative of a naïve alignment between datafication and empiricism, I thought more deeply in terms of the settings in which daterxs work and attempts by Mexico's transparency circuitry to distance their own activities from the precarious position of the *periodista*. This created space to consider the increasing correspondence of threats of violence across both physical and digital spaces. Yet, at moments in which the openness of open data could not be overcome, I observed the deployment of an additional discursive gesture: análisis artesanal. Despite the digital nature of open data activities, in chapter four, I presented the reader with one of the ways that *daterxs* are kept in both physical and metaphysical proximity to the state apparatus. Through consideration of my participation in #DatosEnLaCalle, I focused on the translation of open data from the computer screen to physical encounters with public works. Prompting reflection on the process of framing these investments and the difficulty of abstracting or displacing the state from the frame, I argued that proximity constrains the representational possibilities of open data outputs. This, in turn, ensures that open data come to add weight to the state.

Whilst the general trend across the materials I gathered was towards a narrowing of open data-led transparency, taking into consideration the many inconvenient facts that also emerged during this project, part three turned to tracing expansive possibilities. Throughout part two of this study, I noted moments in which the multiple representational dimensions of open data came to the fore. In part three of this study, I paid closer attention to the openness

of Mexico's federal open datasets and *daterx* activities. With subtle resonances of *1929: Proceso*, these moments gesture to open data's potential to be deployed in ways that seek to outdo the shadows and masks of the state.

Shifting the ambition of open data-led transparency, the subsequent chapters focused on these expansive possibilities. In chapter five, I sought to re-position simulación from being a critique of Mexico's formal transparency reforms to grounds from which to catalyse open data activities. Engaging and deploying simulación, as done in the project Burlar al congreso, involved a fascinating blend of numerical calculations and narrative elaborations. Although a great deal of effort went into securing a very minor additional data disclosure, this experience was formative in how I came to consider open data activities as a sphere in which daterxs counter simulación with simulación. Chapter six then looked outside of Mexico's transparency circuitry and into the field of contemporary cultural production. Through doing so, I presented further material to think through how open data can be engaged and deployed in order to push towards other political arrangements. In chapter six, I explored how data and algorithmic processes can be utilised in order to present audiences with multiple, colliding, and confusing disclosures concurrently. With this process often resulting in a fascinating excess of visual data, colliding revelations and concealments, I considered how data could be deployed within transparency activities that produce the possibility of non-closure, and subsequent space for political contestation. As such, we can come to imagine activities that suitably and forcefully respond to the "polymorphy and pluri-functionality of the state apparatus" (Jessop, 2016, p. 242).

Following my guiding interest in presenting data settings, chapters five and six provided very specific cases of these expansive possibilities in action. In this concluding chapter, it is necessary to provide further consideration of how these expansive possibilities may be engaged and deployed more broadly. Reflecting expansively, not only on the projects making up this study but also across my broader fieldwork experiences, I can imagine numerous paths forward. For instance, *daterxs* taking on different personas in order to undertake analyses, or analysing open datasets from different perspectives in order to draw out alternative (not necessarily hidden) patterns and insights. This could involve datathons organised around speculative issues and subject positions. It could also involve *daterxs* pretending that they do not grasp any data skills, turning up to transparency offices in person and demanding outputs in non-digital formats, then comparing these materials to open data resources and focusing on the experiences of working with these varied materials. It may also include testing secondary or alternative hypotheticals with available open data, disrupting the ways we determine a successful analysis. Engaging and deploying these expansive possibilities could

comprise the creation of fictional institutions that aggregate and split data according to different priorities in order to draw unexpected relationships amongst datasets. It may involve purposely using permitted tools and techniques incorrectly, for instance, playing with the statistical rules deployed in the production of synthetic data. Or, purposely deploying predictive models in areas with sparse data in order to produce abstract forecasts. *Daterxs* could also turn to outlier modelling, drawing attention to anomalies and working with their openness in order to re-contextualise other analyses. It should certainly involve experiments in how open data analyses are subsequently presented: visual, sonic, and tactile outputs that make the most of this abundance of open data. It must also include new voices and actors in open data work, not to assimilate them into the practices of *análisis integral*, but to work forward from expected starting points. Finally, it is important to emphasise that this sphere of expansive activity should not replace existing spheres of open data work. As noted throughout this study, *daterxs* have diverse motives for engaging in open data activities, with many of these interests not relevant to these expansive possibilities. Rather than seek to impose a new model on this social world, it is more productive to complement and extend it wherever possible.

The reader may well question how this expansive ambition for open data-led transparency sits with other arguments drawn out in the chapters of part two of this study: first, that daterxs themselves tended to narrow their own analyses; second, that the transparency circuitry seeks to maintain a division between this field of activity and periodismo. Responding to the first point, it is worth noting that the above stated activities could be applied according to a narrow scale, with daterxs maintaining their focus on a single dataset, policy, or institution. The openness of open data does not have to correlate to grand panoramas, as established in chapter two. However, this point does highlight the need for evolving the support and incentives around open data-led transparency activities. Prompting an extention to the existing culture of open data work towards something more expansive will require time and resources. It will necessitate datathons that bring together diverse groups of participants, presenting them with different tools and methods, allowing space for different outputs, with stakeholders and gatekeepers adapting their criteria for recognising success. With this change in support and incentives, daterxs can continue to pursue niche interests and very particular lines of investigation, whilst applying refreshed approaches that respond positively to the openness of open data.

The second consideration, relating to the physical and digital safety of *daterxs*, is of utmost importance. It is certainly reasonable to suggest that my own process of arriving at the core threads of this study is a consequence of my own privileged position. As noted in the chapter one, I was able to leave the field and continue my academic activities from a safe environment.

I do not have to give much consideration to the longer-term impact that my *daterx* activities and outputs may have on my physical and digital safety. Indeed, this point was raised to me as I discussed my initial ideas for this thesis with close collaborators. Conscious of this privilege, I remain drawn to the point made in chapter three that unexpected figures – magicians, alchemists, priests – continue to surface throughout data discourses. Although not as fanciful as these figures, I propose that *daterxs* continue to avoid an association with figure of the *periodista* – and so hopefully remaining in a safer physical and digital circumstances – through working more closely with cultural producers and artists. As the success of DERIVA.MX highlights, there is ample space for productive collaborators across these spheres.

Whilst the label *artista* brings with it its own considerations, it may provide a productive space from which *daterxs* can mount their analysis and investigations. Here, it is pertinent to remember the example of Proceso Pentágono. As artists, they were permitted to take up space within Mexico City's Auditorio Nacional and use federal funds in order to produce the installation of *1929: Proceso*. As artists, they were able to turn the state's own representational repertoire towards the task of exceeding the shadows and masks of the Mexican state. Whilst much has changed since the climate in which Proceso Pentágono worked, there seems additional space for experimentation and critical conversation within Mexico's cultural spheres when compared to others.⁷⁸

Further, whilst the Mexican state has shown itself to be very adept in using the latest cyber espionage tools (cf. Marczak et al., 2018; R3D, 2019), a closer alignment with the figure of the artista may allow the daterx the option of obscuring, disguising, and/ or not accurately attributing their work. Whilst producing polymorphous and pluri-functional vistas of the state apparatus, daterxs can shield themselves from some of the potential consequences of these activities, therefore, circumventing the heightened espionage of state entities. Discharged from the obligations imposed by análisis integral, they may be able to withhold their own personal data from the pursuit of open data-led transparency – a subtle politics of refusal in the context of expanding data worlds. At this point, it is worth noting that DERIVA.MX may have even over exceeded in their myriad disclosures. The reader will remember that in some

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⁷⁸ As anecdotal evidence of this point, a basic word search of the textual transcripts of López Obrador's morning conferences provide only twenty-one references to the term *artista* during the first three years of archived transcripts (https://lopezobrador.org.mx/transcripciones/). However, it is well known the President uses these conferences in order to attack critical voices and opponents, with regular (almost daily) critical references to particular *periodistas* and investigations (Arista, 2021). This suggests that artists and their interventions pass under the radar of the President. Although, a notable exception to this came in 2019 with Fabián Cháirez's painting, *La Revolución*, that depicted a visibly queer Emiliano Zapata on horseback, presented in the Palacio de Bellas Artes. This artist and their work received severe criticism from López Obrador.

of their films, the screen is populated by the names of audience members who submitted responses to the surveys circulated in advance. Whilst I cannot be certain that these names are legal names, this projection of names seeks to make these contributors knowable. If being part of these forum-like spheres of open data-led transparency activity requires being known and identified individually, then we potentially hit upon traces of a totalitarian transparency that cannot tolerate any contributor who is not singular and knowable. Instead, referencing back to Butler (2005) and the impossibility of this task, I would propose exploring options for differing and denying this knowability. Moving closer to the sphere of the *artista* and further from that of the *periodista* may allow space for this.

Once able to secure the exercise of these expansive open data-led transparency activities safely, the outputs that emerge from this expanded approach could still be identified as merely contributing to an increasing flow of data-related content that have little consequence. Following Jodi Dean, contributing to this circulation of content in "dense, intensive networks of global communications" may only result in "reliev[ing] top-level actors (corporate, institutional and governmental) from the obligation to respond", with little potential for these outputs to achieve any "dominance" or "stickiness" (2009, p. 21). According to Dean, the communicative capitalism to which these outputs would contribute is inadequate for political work, as this multiplication of positions without antagonisms "hinders the formation of strong counterhegemonies" (ibid., p. 22). Yet, contributing open data-led transparency outputs that catalyse political work has been the guiding objective of this study. Therefore, Dean's argument weighs heavily in any assessment of the future relevance of these activities.

Responding to this objection, I argue that *daterx* activities are in themselves a partial corrective to the dynamic identified by Dean. As noted in chapter two, more and more open datasets have been produced and disclosed as part of Mexico's push to top global transparency rankings and indices, drawing increasing spheres of state activity into this centrifugal force. As well as diluting the potency of each previous contribution, this results in a sphere of data that are not even analysed: "unsupervised landfill" (Asay, 2013 [n.p.]) that become an underclass of "stranded data" (Singh, 2012, p. 28). Yet, evading this outcome, *daterx* activities ensure that at least subsets of open data are engaged and deployed. Thus, increasing *daterx* activities would mean fewer datasets end up in this metaphorical landfill. As the chapters of part two have evidenced, these open data sets can be engaged and deployed in ways that reveal different political forces at work. In addition, as the chapters of part three evidence, open data can also be deployed in ways that challenge these forces. The idea of multiple disclosures in chapter six is particularly relevant for thinking about how open data can provide material for antagonism, with these disclosures presenting conflicting and competing data that

do not settle towards a singular output or resolution. Forum certainly may not map onto Dean's expectations of *counterhegemonies*; however, they remain potent spaces through which open data can have a lasting impact well beyond the moment of initial disclosure.

Whether this expanded set of open data activities can subsequently generate a response from the top-level actors that Dean identifies is yet to be seen. However, as chapter two also indicates, the deprioritisation of open data may well evidence their capacity to catalyse antagonisms. Further, as the PRI-state's response to 1929: Proceso affirms, attempts at doing justice to and exceeding the shadows and masks of the state are taken seriously by the state apparatus. Therefore, a combination of these two spheres of activity does indicate a potentially significant path forward for the possibilities of open data-led transparency.

Through a similar line of argumentation, we can propose a response to the critique that a data overload leads to a divorce between transparency and visibility. Whilst Flyverbom offered an exciting addition to transparency literature in the movement towards a prismatic model, with transparency activities producing "selective and surprising visibilities" (2019, p. 162), Flyverbom's contribution also collapses "transparency work" into "visibility management" (ibid., p. 144). Birchall has subsequently drawn on this move to argue that transparency requires more than just visibility management (2021, p. 180). I agree with Birchall that transparency work requires more than what Flyverbom provides space for. Transparency work must be reconnected with more than just visibility, expressed in the shift in the ambition of transparency that has threaded through this study. As noted in the paragraph above, the expansive possibilities of open data-led transparency provide for more than the management of visibility. The antagonism and contestation catalysed by these activities may also, hopefully, move us towards alternative political arrangements.

A subsequent concern is the relative weightiness of the insights and outputs developed through these expansive open data-led activities. Part of adopting an approach that considers the polymorphic and pluri-functional dimensions of the state is that many of these spheres are in flux, with no ground for a stable object of study that will provide for enduring insights. However, as this study has sought to argue throughout, transparency should not be thought of as synonymous with a fixed insight or vista. Instead, transparency involves creating the conditions for inquiry, understanding, and subsequent debate and contestation. To reiterate, *daterxs* and Mexico's broader transparency circuitry must become accustomed to outputs that feel less grounded, sometimes transient, but whose weightiness emerges through their potential to create the conditions for disagreement, collaboration, and hopefully, the impetus to think and move towards alternative political arrangements.

The alternative political arrangements towards which these expanded transparency activities may animate us also require some speculative consideration. Whilst streams of scholarship that have responded to the advance of global digital technologies (of which advances in open data form a part) argue that these advances have resulted in "state[s] is in decline" (Owen, 2015, p. 9), with state interactions with these "spaces of flows" (Castells, 2010, p. 442) meaning that their constitutive elements are "transferred upwards, downwards and sideways" (Jessop, 2016, p. 189), this study points us in another direction. Instead, I have provided evidence for the claim that whilst state formation is certainly in a process of adaption and contestation, the Mexican state remains something with continued physical, digital, and metaphysical presence. Chapter four highlighted that far from being displaced, open data also provide for an augmentation in how the state comes to be known and experienced through this flow of digital material. Instead of lamenting or becoming complacent with the idea of states in decline, we must recognise a mutual strengthening across digital and physical spheres - if this division can even be drawn. This conclusion also sits at a distance from a contemporary trend in scholarship that emphasises the territorial challenges and coercive alternatives encountered by the Mexican state on a daily basis. My intention is not to negate these important contributions, but create space for acknowledging the ways in which the state is also renewing its presence in a sphere of activity that attracts less scholarly attention. Again, we must acknowledge the polymorphous nature of the state.

Therefore, the alternative political arrangements to which open data may lead certainly do not mean a *state-less* future. Returning once again to chapter four, open data cannot be deployed without re-invoking and re-enforcing the state. Therefore, whilst pursuing open data-led transparency will hopefully push towards creating different configurations of social, political, and economic resources, these arrangements will likely cooperate with a state apparatus. However, if anonymity and deferral are pursued, then this cooperation may not necessarily lead to *daterxs* being overseen by and surveilled by the state.

Another dimension of these future political arrangements to which this study provides insight is the role of Mexican civil society. At the point of writing this conclusion, I have come to recognise that the methodological choices made during the fieldwork of this study mean that I have re-produced a broad state/civil society dualism. However, I hope that the individual chapters of this study have somewhat complicated and nuanced this broad binary. In chapters two and four, any neat boundary between these camps is blurred as the transparency circuitry came to draw particular data-producing agencies and institutions into close relationship with civil society actors. Chapter four also highlights how state entities seek to draw daterxs close, providing an extension of the state's verification efforts.

efforts were listened to and incorporated back into open datasets was also questioned. Conversely, in chapter six, I detailed how *daterx* activities are interrupted by state attempts to prevent the further release and clarification of open datasets. Undertaking this research project, I also witnessed the revolving door between state entities and civil society organisations, with individuals swiftly moving across and between roles within these spheres. Indeed, many of my research connections were facilitated by close professional and personal relationships between individuals across this supposed divide. Again, any strict boundaries between these spheres become complicated to maintain.

Together, the threads of this study resonate with Alejandra Leal Martínez's perspective on Mexican civil society as forming a politically ineffectual force, simply "la suma de ciudadanos autónomos" (2014, p. 444). Leal Martínez laments the recent formalisation of Mexican sociedad civil as it has come to supersede the highly political configuration of *el pueblo* and so the delegitimatisation of acts of collective action – the actions of "una colectividad más amplia y difusa" (ibid., p. 448). Yet, as chapters three, five, and six have proposed, open dataled transparency activities can also provide space for the re-politicisation of *daterx* spaces and outputs. Whether it is expanding the methods of analysis through the opportunities presented by *análisis artesanal* or drawing more fictional actors and interests into *daterx* activities, there have been numerous moments in this study's chapters that indicate and catalyse a fissure from this "suma de ciudadanos autónomos" (ibid., p. 444). Indeed, collaboration – as difficult as it has sometimes been – has been at the core of this study's method.

If we seek to follow Leal Martínez's lead in prompting a return to something akin to *el pueblo*, chapter six also offers instruction. In the formation of forums around these data-led outputs, audience members "strive with others" (Brown, 2005, p. 43) in order to understand, organise, and alter these visual options and their implications for recognising and proposing solutions to contemporary phenomena. The production of disagreement and dispute remains a collective task in which different interpretations concur and concede, reflecting the overlapping visual frames of these data-led films. Of course, the forums that take shape around individual open data-led outputs are unlikely to become stand-ins for *el pueblo* as "la colectividad nacional legítima" (Leal Martínez, 2014, p. 443). However, they do gesture to a more collectively driven and mediated form of power that can promote sustained, productive antagonism with the state.

This study has also sought to intervene into how we come to value open data and, by extension, data more broadly. Whilst I have not sought to propose a particularly unique definition of open data, I have attempted to work outwards from open data's varied

engagements and deployments in order to consider their implications for how we can think about this material. By underscoring the openness of open data, taking seriously the multiple representational dimensions that each datum and dataset hold when put to work by daterxs, I have emphasised their potential to do more than merely count and quantify. Each dataset has been considered for its ability to disclose not only digits, but also the social, political, and cultural forces that produced these digits, as well as the absences and inconsistencies that always circulate them. In adopting this position, I have seen value in what other researchers may have dismissed or disapproved about these federal open datasets: their errors, gaps, and inconsistencies. Seeing the relevance of these, I have argued that they should be carried forward in order to develop unexpected insights and understandings of state activities and decision-making. As detailed in chapter four, it was in fact these errors, gaps, and inconsistencies that initiated a broader investigation leading to substantial interactions with unidades de transparencia. Through these interactions, catalysed by open data activities, I came to be more aware of my own shifting understanding of transparency. Therefore, by shifting what is meant by the openness of open data and seeing value in this openness, this study has offered a direction forward that breaks with influential contributions on the "tyranny of openness" (Morozov, 2013, p. 99).

As a consequence of this move, the argument of this study could be taken as a call against the development of more accurate, more automated data production processes across Mexico's state apparatus. This puts this author in a difficult conundrum: I either argue against the development of fuller open datasets that could be of real advantage to daterxs involved in more orthodox open data work, or I limit the future relevance of the argument of this study. However, just as this project has worked against any simple assumptions of raw data, similar caution needs to be maintained when considering full, complete or cooked datasets. As assembled abstractions (more capta [from captare] than data [from dare]), datasets will always contain gaps and inaccuracies. Whilst these may not be as immediately obvious as many of the examples in this study, there will always be space to interrogate these errors, gaps, and inconsistencies. For instance, it was the notable fullness and accuracy of Proyecto Tamaulipas Constituciones that drew my attention, leading to reflections on the weightiness of these abstractions, and their need for additional representational repertoires. Therefore, I am confident that advocating for the maintenance and improvement of Mexico's federal open data will not necessarily reduce the long term relevance of the arguments presented in this study.

However, as noted in chapters one and two, the priorities of Mexico's current federal executive mean that any advocacy for improved open data processes and disclosures are, in the contemporary context, likely to go unanswered. With the majority of the fieldwork for this study taking place during the first two years of López Obrador's administration, I end with a short reflection on how this administration is moving forward with a very different conceptualisation of transparency and sense of the political arrangements to which this transparency may lead. Whilst bleak and certainly distressing for many of my research participants, these recent advances underscore the very political contours of transparency, and the need to shift the ambition of open data-led transparency.

For López Obrador, pulling federal support for open data initiatives, refusing to provide responses to increasing numbers of *solicitudes de información*, and permitting the dissolving of more *fideicomisos* and *auditorías* are not actions that curtail transparency.⁷⁹ Instead, much like Donald Trump's presidency in the USA, there is not a turn away from transparency but a movement towards a different understanding and configuration of transparency, and the political arrangement that it engenders. For López Obrador, the *cuarta transformación* provides the coordinates that guide this approach to transparency.⁸⁰

Within this discourse, López Obrador is self-portrayed as an honest and humble president intent on reforming the crooked ways of doing Mexican politics. Therefore, instead of articulating transparency in technocratic, informational, or dataphilic terms, there is a turn to moral qualities. These moral qualities, honesty and humility, have historical resonances with the discourse surrounding Mexico's previous generations of regional *caudillos* (strongmen), that themselves drew on the Catholic ideals of "honesty, legitimacy and accountability" (Pansters, 1996, p. 252). Therefore, López Obrador's approach to transparency is partially new, partially revived from the past. Whilst situated at the apex of the state apparatus, López Obrador simultaneously calls for the state to refrain from hiding itself and the truth from the public. In offering both the new face of the state and the face of its transformation, López Obrador has spent significant time signalling this personal modesty and honesty.

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⁷⁹ As an example of this: as of the close of 2021, none of the signature infrastructure projects of the first half of the López Obrador administraton (Dos Bocas, Tren Maya, aeropuerto Felipe Ángeles, Corredor Interoceánico del Istmo de Tehuantepec) have been subject to independent auditing or review processes (Casar, 2021). Further, analysis of the first year of the López Obrador administration show a near tripling of the "inexistencias declaradas como respuesta a las solicitudes de acceso a información" by central government entities when compared to the Peña Nieto administration (Linares, 2020 [n.p.])

⁸⁰ Whilst the *cuarta transformación* is a relatively new ideological position established and pushed by the MORENA party, in earlier political roles (for the PRI and later, PRD) López Obrador also sought to impede and dismantle budding transparency initiatives. For instance, whilst Mayor of Mexico City (2000-2005), López Obrador refused to provide a budget or office to support the new measures established in the federally mandated *Ley de Transparencia* of 2002, with subsequent implications for the compliance of the Mexico City government with this law (Martínez, 2004 [n.p.]).

Yet, in offering unmediated evidence of transparency, dispensing with the need for any other transparency materials (such as open data), López Obrador simultaneously collapses Mexico's state apparatus (and any shadows and masks it harbours) into this singular transparency token. Thus, in a forceful way, disregading interest in them. As Rosa Castañeda and colleagues note: "La puesta en escena incluye a un hombre, en el papel de pueblo, barriendo el poder establecido con una gran escoba" (2020 [n.p.]). As such, emphasis is placed on a very different set of transparency activities: daily press briefing (*mañaneras*) with (supposedly) unhindered interactions between the President and the national press; the opening of historic sites of power, such as Los Pinos, to the public; and, as highlighted in chapter three, actions that emphasise the divergences between predecessors and the current administration.⁸¹

In many ways, the *cuarta transformación* and its grounding in Liberal thought and preceding Liberal transformations (such as the Mexican Revolution) echo some of the classic political texts considered in chapter one. For López Obrador, as for Bentham and Weber, individuals invested with power are not to be trusted, and so structures must constrain and punish any digressions. The *cuarta transformación* has eliminated legal loopholes that allow space for graft by individual public servants, ensuring rule-based conduct within the state apparatus, and amplifying punishments for engaging in illict and corrupt activities. If any evidence emerges that contradicts the integrity of the President, then the administration simply claims to be in receipt of *otros datos*. As Amparo Casar notes, "Una gran cantidad de datos falsos ha esparcido el presidente durante los más de dos años de administración" (Casar, 2021 [n.p.]). ⁸² Here, we see active attempts to not only obfuscate, but also to challenge the terms through which truths can be established (Arendt, 1977).

As for Bentham's publics who do not sit within the priviledged sphere of institutional gatekeepers, this is a transparency that is simply presented to citizens for their appreciation. This is not a transparency in which citizens are invited to participate in, or one that can be subsequently interrogated through investigation and examination. As a consequece of this unidirectional approach speculation, experimentation, and imagination are also disqualified.

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⁸¹ A clear example of this came in 2020 when López Obrador made the extradition files of General Salvador Cienfuegos Zepeda, produced by the security forces of the USA, made accessible to the public via a government website. However, despite the fanfare, "el gran parte del documento fue testado, es decir, aparece subrayado con negro, lo que impide su lectura" (Daen and Aguirre, 2021 [n.p.]). In the opening days of 2022, López Obrador undertook another personal display of transparency by publicly re-inviting Julian Assange to seek asylum in Mexico. According to the official public statement, Assange is "una persona movida por ideales y principios, y pienso que por ese hecho debiera ser merecedor de compasión" (Calero, 2022 [n.p.]).

⁸² These have included claims that the reforms introduced through the *cuarta transformación* have saved over 10,000 million pesos – a figure equivalent to the annual budgets of numerous federal agencies combined (Casar, 2021 [n.p.]).

This new transparency relationship is "más primario" but also "más vertical" (Sánchez Talanquer, 2021b [n.p.]). The political arrangement to which this transparency reconciles itself is one in which any plurality is restricted, where the singular, non-data-driven solution dispatched from the mouth of the President marks the only path forward. In other words, a rapid advance into authoritarianism (Bartra, 2021; Loaeza, 2021; Sánchez Talanquer, 2021a).

In the face of this burgeoning authoritarianism, which sets an uncertain scene for open data and *daterx* activities, I hope that if nothing else this study contributes to a partial documentary archive of the open data work that has taken place across Mexico during this window of dataphilic transparency. If this sphere of activity undergoes a process of rot, like open data themselves, we must remember that this is a very deliberate, managed process. However, echoing the optimism present throughout this study, I hope that we can utilise the interruption caused by López Obrador into Mexico's paradigm of transparency not to resist and reestablish, but to "push beyond" (Galloway and Thacker, 2007, p. 98). This will require engaging and deploying open data in ways that push them "further than [they are] meant to go" (ibid.). Hopefully, applied with the ambition of outdoing the shadows and masks of the contemporary state apparatus.

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