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Title:
A critique of the Internet in Mexico

From coordination without politics to decolonial politics

A critique of the Internet in Mexico: from coordination without politics to decolonial politics

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Abstract

A developmental agenda of economic growth and modernisation, together with the ideal of democratisation, has guided and shaped efforts to expand and promote the use of the Internet in Mexico. Such efforts, while taking for granted the functionality of this technology for enabling political participation, ignore the Internet's provenance and pitfalls. Situating such omissions within the context of Mexico's colonial heritage, the thesis questions: what is the Internet doing in Mexico and how is it related to coloniality? And how has an alternative politics and use of the internet been practiced in Mexico considering this context of coloniality? With a decolonial orientation and drawing on the insight from Science and Technology Studies that understands technological objects as structured in particular ways to achieve particular interests, the thesis analyses the Internet's design in the United States and three prominent cases of Internet use for intended national transformation in Mexico: Enrique Peña Nieto's digitisation policy, #YoSoy132 mobilisations and the Zapatista insurgency. This analysis is developed through the thesis' central concept of 'coordination without politics', meaning that collective coordination and experience are possible when mediated by an external third party, which hinders the emergence of embodied political experiences. This concept is drawn from Giorgio Agamben's approach to instrumentality and the political and oriented by and toward the Zapatista political experience, the latter which works as a contrasting case as it embodies the concept of the political in relation to technology. The thesis argues that rather than a greater degree of political participation the use of the Internet in Mexico has primarily served to reproduce this technology's embedded forms of coloniality as an instrument of coordination without politics, which is only intelligible through the inclusion of a decolonial element in critical and philosophical approaches to the internet. The Zapatistas on the contrary and so far, have not only countered such forms of coloniality/instrumentality but also, regarding Maya cosmology and the practice of intersubjectivity, contribute to our understanding of how to decolonise politics in relation to technology.

Key words: Internet technology, instrumentality, coordination without politics, the political, decolonial thinking.

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Author's declaration

I declare that the work in this dissertation was carried out in accordance with the requirements of the University's *Regulations and Code of Practice for Research Degree Programmes* and that it has not been submitted for any other academic award. Except where indicated by specific reference in the text, the work is the candidate's own work. Work done in collaboration with, or with the assistance of, others, is indicated as such. Any views expressed in the dissertation are those of the author.

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List of Acronyms

ANT   Actor-Network Theory
APIs   Open Application Programming Interfaces
ARPA   Advanced Research Projects Agency
ARPANET   Advanced Research Projects Agency Network
BBN   Bolt Beranek and Newman
BID   Inter American Bank for Development (Banco Interamericano
de   Desarrollo)
BM   Bank of Mexico (Banco de México)
CEFACT   Centre for Trade Facilitation and Electronic Business
CERT   Specialized Technology Response Center (Centro
            Especializado de Respuesta Tecnológica)
CIA   Central Intelligence Agency
CNBV   National Banking and Securities Commission (Comisión
            Nacional Bancaria y de Valores)
CONACyT   National Council of Science and Technology (Consejo
            Nacional de Ciencia y Tecnología)
CPR   Cyberspace Policy Review
CTT   Critical Theory of Technology
CTT-IR   Critical Theory of Technology in International Relations
DARPA   Defence Advanced Research Projects Agency
DCA   Defense Communications Agency
DoD   Department of Defense
DOF   Official Diary of the Federation (Diario Oficial de la
            Federación)
DNS   Domain Name System
EEC   European Economic Council
EFF   Electronic Frontier Foundation
EMS   Electronic Magnetic Spectrum
EDN   National Digital Strategy (Estrategia Digital Nacional)
EOPUS   Executive Office of the President of the United States
EZLN   Zapatista Army of National Liberation (Ejercito Zapatista de
            Liberación Nacional)
FISA   Foreign Intelligence Surveillance Act
GR   Government of the Republic (Gobierno de la República)
HPCA   High-Performance Computing and Communication Act
ICTs   Information and Communication Technologies
INE   National Electoral Institute (Instituto Nacional Electoral)
IMP   Interface Message Processor
IP   Internet Protocol
IPTO   Information Processing Techniques Office
ISC   International Strategy for Cyberspace
ITESM   Instituto Tecnológco de Estudios Superiores de Monterrey
IUE   International Ultraviolet Explorer
MILNET   Military Network
MIT   Massachussets Institute of Technology
MTDM   Media Democratisation Task Group (Mesa de Trabajo para la
            Democratización de los Medios)
NAC   Network Analysis Corporation
NAFTA   North American Free Trade Agreement
NATO   North Atlantic Treaty Organization
NASA   National Aeronautics and Space Administration
NCAR   National Center for Atmospheric Research
NCP   Network Control Program

NDS	[EDN] National Digital Strategy (Estrategia Digital Nacional)
NMRO	Nuclear Monitoring Research Office
NSA	National Security Agency
CNS de	National Security Commission in Mexico (Comisión Nacional de Seguridad)
NSFNET	National Science Foundation
NSTIC	National Strategy for Trusted Identities in Cyberspace
NWG	Network Working Group
OBS	Open Banking Standard
ODI	Open Data Institute
OECD	Organization for Economic Co-operation and Development
OEDN Digital	National Digital Strategy Office (Oficina para la Estrategia Nacional)
OGP	Open Government Partnership
OSRD	Office of Scientific Research and Development
PFP	Pre-emptive Federal Police (Policía Federal Preventiva)
PGCM	Program for an Accessible and Modern Government (Programa para un Gobierno Cercano y Moderno)
PGR	Mexican General Attorney's Office (Procuraduría General de la República)
PND	National Development Plan
PRD	Democratic Revolution Party (Partido de la Revolución Democrática)
PRI	Institutional Revolutionary Party (Partido Revolucionario Institucional)
PRNET	Packet-switch Radio Network
RAND	Corporation Research and Development Corporation
RENAPO	National Registry of Population (Registro Nacional de Población)
RTN	National Technological Network (Red Tecnológica Nacional)
SATNET	Atlantic Packet Satellite Network
SCoT	Social Construction of Technology
SCoT-IR	Social Construction of Technology in IR
SEP	Public Education Secretariat (Secretaría de educación Pública)
SFP	Public Service Secretariat (Secretaría de la Función Pública)
SHCP	Ministry of Finance and Public Credit (Secretaría de Hacienda y Crédito Público)
SOPA	Stop Online Piracy Act
SPAN	Space Physics Analysis Network
STS-IR	Science and Technology Studies in International Relations
TCP	Transfer Control Protocol
TELMEX	Teléfonos de México
TIP	Terminal IMP
UCLA	University of California Los Angeles
UDHR	Universal Declaration of Human Rights
UN	United Nations
UNAM	National Autonomous University of Mexico (Universidad Nacional Autónoma de México)
UNECE	United Nations Economic Commission for Europe
U&CD	Uneven and Combined Development
WSIS	World Summit on the Information Society
1DMX	1 December Mexico City

Chapter 1

Introduction: The Internet in Mexico, coloniality and a decolonial orientation

Mexico was one of the first countries to establish an Internet connection for scientific research and development reasons (Koenigsberger, 2014) and recently its government set digitisation´s national expansion as a state priority (EDN, November 2013). The use of the Internet in Mexico has expanded reaching an estimate of 71.3 million users (or 63.9% of 6-year-old and older population) in 2017 (INEGI, 2018). Internet users have been identified as mainly 18 to 34-year-old men in cities, with a very limited number of users (14%) among the population in rural areas. Such a scenario has become an important referent for a development agenda that entwines technology with economic growth, electoral democracy and modernisation, assuming that rural communities need to develop and thus to have access to the Internet. On such a basis, by 2013 Internet access and universal digital inclusion had already been included in Article 6 of the Mexican Constitution as a right the Mexican state has the obligation to guarantee and fulfill. In general, developmentalism has explicitly pervaded the scope of the Mexican government's national policies regarding the Internet. Particularly, these policies have promoted efforts to transform several sectors of public administration as a matter of modernisation and to address the digital divide. The prevailing idea is that the Internet plays as an equalizer rather than a complex set of interactions that also produces and reproduces inequalities.

In addition to the above, the use of the Internet for activism in Mexico has been mainly interpreted both by activists and scholars through the accomplishments of organisation and the potential of technologies as a tool for protest and a basis for democracy. In such a democratising tone, any systematic engagement with the Internet's drawbacks has been put aside. Moreover, neither government policies nor widespread activism have spurred a questioning of the Internet as a technology–its historical constitution, embedded values and political economy with an origin in a different geography (e.g. Andión, 2013; Avalos, 2014; Bartra, 2014; Candón Mena, 2013; Feixa and Portillo, 2012; Goggin and Albarrán, 2014; Gómez and Treré, 2014; Portillo, 2014; Reguillo, 2012; Rivera, 2014; Rovira, 2012, Treré, 2015, 2013). In both cases, a lack of sensibility toward those excluded by and from the expansion of the

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Internet has led to a lack of systematic enagement with this technology's underside.

Regarding the margins of Mexican society, where originary peoples' traditions, practices and understandings, along with self-determination, have been for centuries unintelligible to colonialism, modernity and developmentalism, inquiry into the causes of such unintelligibility and the effects the Internet has in this sector has been overshadowed by the assumption that what these peoples need is to have access to this technology. Along these lines the Internet has been part of either democratic or economic agendas all across the world, where those deemed as 'underdeveloped', 'Third World' or 'developing' countries struggle to keep up to the pace of connectedness. Unfortunately, this development agenda ignores political and cultural difference and issues like sovereignty and autonomy, tending to reproduce foreign interests and ethnocentric visions and practices that have foreclosed critical engagement originating from communities' own political and historical experience. Originary peoples in Mexico, as many other groups, have thus already been excluded as members of a Mexican society by the same development agenda that puts forth the Internet as indispensable for economic growth, transparency, democracy and modernity. That is, the same orientation that guides the expansion of the Internet is the one that has been product of Mexico´s colonial heritage. In such a context, this thesis sets out the question: what is the Internet doing in Mexico and how is it related to coloniality? And how has an alternative politics and use of the internet been practiced in Mexico considering this context of coloniality?

To illustrate the situation, in November 2017, at the run-up to the presidential elections in Mexico, the Nahua[1] candidate (first indigenous woman to be presidential candidate in this country) María de Jesús Patricio and her supporters struggled to comply to the requirements set by the National Electoral Institute (INE) for the register of signatures required to get the candidate´s name on the ballot. The register of signatures, as agreed and established by the INE was to be done through a digital application that required minimum equipment and broadband specifications in order to run and update the application software and upload the data. As the main support for Patricio comes from originary communities where the majority of the population has no everyday technical experience and lives below the poverty line (a product of centuries of exploitation and discrimination), access to required mobile phones with updated Operating System versions and minimum technical specifications, let alone Internet connection or simply electric power, represented a privilege that indicates the

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[1] Nahua is one of 64 indigenous groups in Mexico.

limitations and short-sightedness of such a democracy promotion institution (Gil, 2017a, 2017b). On the contrary to a foreign reality's assumption of an 'everyday technical experience' (Feenberg, 2010: 203) of the Internet, or a citizenship ready to make a democratic use of it (see Bakardjeva, 2009), the problem in Mexico is that for many of those communities and for the vast majority of their members there is no such experience, even if state institutions and a spreading digitisation of modern life neglect this fact or reduce it to a gap in 'development' or a digital divide.

As Enrique Dussel (1996) has claimed, underneath, and supporting the so-called gap in development, lies the division between the owner of capital and the owner of labor, a division that as a 'point of departure is not something natural. It is a historical point of arrival' (Dussel, 1996: 224). This assertion means that for 'Latin America, a continent of "[the] poor," just as with Africa and Asia, this question is central, essential. The "poverty" of our continents is not a point of departure (due to some uncongnizable [sic] self-incurred immaturity), but the point of arrival of five centuries of European colonialism (within the world system, in which the United States is today hegemonic)' (Dussel, 1996: 224). Eurocentric institutions, though persistently unaware of their own role at an international and political economic level, systematically underpin enduring exploitation structures. In the instance of Patricio as presidential candidate, beyond the critique that the INE has been subjected to in terms of enacting racist, elitist and inefficient parameters of participation, and beyond any possible interpretation regarding a digital divide that needs to be surpassed, the main problem does not seem to be these communities' lack of access to services or the INE´s lack of sensibility and biased and exclusionary attitude and decision-making. Without dismissing the latter, but retaining its significance beyond the blunt terms in which they have been put, the problem is not a 'development' one, either in technological or democratic official and institutional terms. The problem in this case goes 500 years back and persists in the form of ongoing discrimination of practices and knowledges that is not only embedded in the Mexican state institutions and everyday life practice in Mexico but also, as we will see, in many of Western democratic ideals regarding technological practices.

On the contrary to a developmentalist view, what Mexico exhibits is the persistence of exclusion and violence only associated on a political and ontological level with the absence and selective presence of technology, the latter which refers in this thesis to a being that is not of itself and is not valued on itself as its own mode of being but exists only to the extent that it serves another being. This understanding is significant as it considers the value of beings, making visible how those beings deemed as technology are constructed in dependency to another being's purpose, making

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intelligible a difference between western and some non-western worlds like those of many originary peoples in Mexico, the latter in which the consideration from the outset of beings as existing to fulfil one's exclusive purposes contradicts their cosmogonies, cosmologies and philosophies. Therefore, Mexico exhibits a denaturalisation of technological devices in everyday life out of economic discrimination but, more importantly, cultural and political difference. As a scientific, democratic or governmental instrument, the use of the Internet has become increasingly important under the banner and frameworks of scientific and economic development. As a prerequisite towards participation in presidential elections the Internet appears as a constraint and a determinant to political life, which we must consider entails not a persisting 'development' gap but the abuse and disparity of wealth extraction and distribution and the dismissal of other ways of life and knowledges. Such are the same considerations that have lacked further analysis in the instance of Mexico and which have significant implications in both the understanding and practice of politics.

When thinking of the use of the Internet for activism, democracy and national development in Mexico, politics has been understood technically, in terms of organisation, negotiation, confrontation, and participation within an assumed global context of either mobilisations or economic development. Regarding demonstrations where youth dissent and commitment have been notable features (see Avalos, 2014; Chapter 5 in this thesis) attracting academic attention, scholars have linked these demonstrations to other movements across the world, understanding them as part of a broader trend of social and global mobilisation (see Avalos, 2014; Feixa et. al. 2009; Feixa and Portillo, 2012). *Hashtagged* and globally linked, such social movements have been considered as 'new new social movements' (Feixa et. al. 2009) or '*novísimos movimientos sociales*' (Candón Mena, 2013), resting on a technological element, combining information technologies and street mobilization (Avalos, 2014; Bartra, 2014; Feixa and Portillo, 2012; Portillo, 2014; Rivera, 2014) in a network logic for organization and action (Juris, 2008; Rovira, 2012; 2014) and as a form of *tecnopolítica* (Toret, et al., 2013).

Such an idea of *tecnopolítica* is based on a Spanish context of activism and its understanding of technology and politics (see Treré and Barranquero Carretero, 2018); however, it has been quite influential in Mexico. This approach refers to a 'new kind of self-organized collective political behaviour' (author's translation, Ibid: 9), in which digital technologies are central to a 'connected multitude' that is all about the 'capacity to connect, group and synchronize, through communication and technological devices and around objectives, the brains and bodies of a great number

of subjects in time, space, emotion, behaviour and languages sequences' (author's translation, Toret et. al., 2013: 20). The approach emphasises 'the fact that there is no multitude without connection' (Ibid), what, despite the limitations of the concept to explain the phenomenon, was emblematically embodied in Mexico in the #YoSoy132 mobilisations that took place in 2012 and, as analysed in Chapter 6, were only possible thanks to the mediation of the Internet, using the Internet to promote the Internet and official democratic and development institutions.

Tecnopolítica as a theoretical and practical approach, and as exemplified in the social mobilisation #YoSoy132 analysed in this thesis, upholds that networked or Internet-based technologies enhance political organisation and activism, assuming a political sphere, a technological object and a technologically mediated social reality. Accordingly, within this concept of *tecnopolítica* there has been no questioning either of the meaning of politics or the historicity of technological design. On the contrary, there has been an 'extension' of this conception to the 'Latin American context' (Treré and Barranquero Carretero, 2018: 50), mainly to so-called 'Latin American' scholars analysing recent social mobilisations and reiterating the same assumptions and categories of politics and technology. As a result, the Internet has remained the 'black box' that helps explain the events but is never analysed in detail (McCarthy, 2017: 5), let alone on an international and world politics level. Besides the clear notion of informatics as crucial to globalising capitalism and its 4th World War, the current war 'against humanity' as termed by Subcommandante Marcos (1999) of the Ejercito Zapatista de Liberación Nacional (EZLN, Zapatista Army of National Liberation)[2], no historical or political analysis of this 'technology' has been made in relation to its own historical and political (and ontological) consistency and the way in which it encounters difference across the world.

While taking for granted the politicisation of the Internet through development and democratisation, scholars, activists and government have ignored this technology's provenance and pitfalls, which are then exposed when this technology encounters other forms of being, doing and thinking in a multicultural country like Mexico. Such omissions risk reproducing discrimination on the basis of colonial distinctions between those who are deemed superior and more developed according to race, knowledge and possession and those who are deemed inferior, primitive or underdeveloped. But also, these ommisions sanction a technologically mediated everyday experience over a myriad of non-technological possibilities reduced to the impossible. In this light, the

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[2] In this account each World War is determined first, by conquest and reorganization of the territory; second, by the destruction of an enemy; and third, by the administration of the conquered and obtention of benefits. The 3rd World War corresponds to the Cold War and the 4th World War to the current war 'against humanity' (Subcomandante Marcos, 1999).

thesis' main contribution is to position the importance of the colonial element in relation to politics and technology in the analysis of the current expansion of the Internet, destabilising any taken for granted notions of an everyday technical experience in non-Western countries. Such a contribution entails questioning where the Internet is coming from and what political effects the particular way in which it has been structured has when implemented in a country like Mexico. In addition, it means that the use of the Internet can reproduce forms of colonial discrimination and control, which is contrary to influential actors' (for instance the Mexican government's digitisation policy and emblematic activist groups like #YoSoy132) assumption that the Internet means a greater degree of political participation.

On such basis, this thesis follows a decolonial orientation and engages with decolonial border thinking (Anzaldúa, 1987; Mignolo, 2011; Mignolo, 2018), which means inhabiting different worlds at once, dwelling in the border or being-in-between worlds and able to delink from abstract universalisms and those epistemologies that 'make sense of, justify, and legitimize coloniality' (Mignolo, 2018: 14). Therefore, this thesis has been motivated by first-hand experience of the imposition, penetration and expansion of the Internet throughout a multiplicity of social interactions and spaces, which has taken place and is situated in-between Western practices like the university, state institutions and law, on the one hand; and on the other, traditions and practices linked to originary peoples' cosmology like agriculture, language and gastronomy. In other words, the thesis unfolds from the perspective of someone who lives in-between Western and non-Western forms of being, thinking and doing, and is trying to think of the political effects of the Internet through both forms, in terms of concepts coming from a decolonial orientation which engages both with western concepts but with conscience of its colonial forms, and with non-Western forms of doing and thinking.

Regarding everyday technical experience and the Internet, social exclusion has been experienced by the author of this thesis in diverse spaces like school, the office and the household due to the penetration of the Internet, although not dwelling in the social and economic margins of Mexican society. Not having access to online information or having limitations due to outdated equipment as a student or being excluded from job offers and social activities for not having a social media account, let alone the discomfort and mistrust this generates among users and their behaviour toward the non-user, are only examples of how avoiding Internet-based interaction can have further implications within an expanding regime of appearance and an accelerated rhythm and increased intensity of information and commodities flows and imperatives. Moreover, witnessing the emergence and expansion of social media

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platforms in Mexico has given a clear view of how US cultural products (e.g. parameters of socialisation, visibility, use of language and valorisation) permeated a society that to some important extent had been critical of US culture and values. Such platforms were observed as they fostered old and new discrimination practices like the ones illustrated with Patricio's experience. In this light, this thesis seeks to put together a different approach to the implications of using the Internet in a country where the imperative of development and economic growth has been insensitive to and tried to govern difference along the lines of its colonial heritage, while this development imperative unfolds as the main driver of Internet access expansion. In order to do so, this theis draws not only on Western categories seeking to provide contributions to Western knowledge production but is also situated in-between and drawing upon non-Western categories that correspond to Maya cosmology and practice and are grouped within the concept of *intersubjectivity* referring to the Zapatista experience of using the Internet (see Chapter 7).

From within Western academia, this thesis looks at important contributions to understanding the relation between technology and world politics. Recently, approaches like those of Social Construction of Technology (SCoT), Actor-Network Theory (ANT), the Critical Theory of Technology (CTT) and new materialist and posthumanist approaches have emerged as 'fusions of Science and Technology Studies and International Relations' (McCarthy, 2017). As such, these approaches have been grouped as Science and Technology Studies in International Relations (here abbreviated as STS-IR). Among such approaches, Critical Theory of Technology in IR (CTT-IR) and Social Construction of Technology in IR (SCoT-IR) are considered in this thesis as important in-depth approaches to technology within a Western perspective. Such approaches account for the world political scenario in relation to a globalising political economy and the enduring historical structures and values embedded in technological artefacts, including the social, political, economic and cultural dynamics that have shaped technological design. Such emphasis on the interests, values and historicity of technological design is crucial in this thesis to understand the Internet as a technological object within the horizon of Western intelligibility and cultural matrix. However, these approaches have some limitations in analyzing and understanding the implications of technology in countries that were colonized and still have a non-Western heritage. Therefore there is a need to explore the provenance and history of the Internet, understand its design and embedded forms and functions (Chapters 3 and 4) on the basis of a critical engagement with the limitations of STS-IR in analyzing and understanding radically different practices,[3]

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[3] In addition to CTT-IR, alternatives to the 'politicisation' or 're-politicisation' of information technologies from a post-structural perspective have emphasized the constitution of subjects, time and

practices that are exterior to a sociotechnical reality and/or in countries that were colonized and still have a strong non-Western heritage (Chapter 2).

Notably, regarding STS-IR, while questions of ambivalence, or constraints and opportunities that come with technology in Mexico, could be addressed through the contributions of Social Construction of Technology (SCOT) and Critical Theory of Technology (CTT) approaches, there is a clear limitation in terms of its trend towards enclosing technology within a line of development and progress in time (see Chapter 2), which assumes a subject capable of repurposing technology and thus the non-deterministic character of technology. This line of development dismisses situations in which some groups in different geographies (and timelines), and with different metaphysics and ontologies, cannot influence or participate in repurposing technology simply because they do not speak the same language as its designers (either informatics, English or Spanish) and they do not share their culture and practices, which are then being imposed on them in the form of a sociotechnical reality and democratic participation. Participating in repurposing technology would mean to embrace a sociotechnical reality they do not share, becoming literate in foreign practices and contravening these communities' way of life. On the other hand, not participating means fostering, in a straightforward manner, the persistence of the motif of (scientific, technological and/or economic) development and its ethnocentric rhetoric that considers these groups as immature or backward (even in terms of their alleged lack of so-called democratic participation).

Considering the limitations and contributions of CTT-IR and STS-IR in Chapter 2, considering coloniality and moving towards the inclusion of a decolonial element is necessary as it acknowledges that there is no modernity without coloniality and that 'modernity, capitalism and coloniality are aspects of the same package of control of economy and authority, of gender and sexuality, of knowledge and subjectivity' (Mignolo, 2010: 9). In this direction, as political ecology has unfolded a global perspective cognizant of the problematics brought by climate change in the so-called Anthropocene, it has also drawn attention to the socio-technical networks that underpin such transformations at a geological scale (Hornborg, 2001, 2015). Global

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space in relation to information technologies and how they operate (e.g. Barassi, 2015; Hintz, 2015; Kaun, 2015; Reid, 2009). However, those alternatives have not paid greater specific attention to what politics mean and the historical design and development of technology, in this case the Internet, in relation to how subjects, time and space are constituted. For instance, in the case of Julian Reid, (2009), although his critique of connectivity greatly contributes to understanding how subjects are categorized and ruled under the Connected-Disconnected distinction, his main focus has been on connectivity (although under a differential lens) and politics or the political as a category itself has not been explicitly addressed. In turn, CTT-IR, building on Social Construction of Technology (SCoT) and Andrew Feenberg´s (1991, 2002) Critical Theory of Technology, mainly focus on the historicity of technology and explicitly state its concern about 'politicizing technology' as a research guideline.

assemblages of artefacts appear within such approaches and analyses as matter of a highly inequitable world-system (Hornborg, 2001, 2015: 59). From this perspective, 'the steam engine… was made possible not only by James Watt's engineering, but by the eighteenth-century world-system in which capital accumulation in Britain was based on African slave labor and depopulated American land' (Hornborg, 2016: 17).

Technology then, understood as profoundly intertwined with capitalism and coloniality (Hornborg, 2001, 2015, 2016), has triggered a process of epistemological, ontological and practical attention towards embedded forms of coloniality, combining political ecology and decoloniality with a 'pluriversal view of more-than-human ontologies', the latter which has meant advocating non-western forms of knowing and doing as referents of critique (Schultz, 2017: 135). Through decolonial critique, the persistent relation between coloniality (and neocolonial appropriation), capitalism (western industrialisation) and technology is considered without dismissing other forms of life and trajectories of knowledge.

Still, no decolonial critique has addressed the specificities of the Internet. Important contributions to the understanding of colonialism through technological implementations and informatics (e.g. concentration of infrastructure, data ownership, centralised coding, contents and programming) have been made (Anonymous author, 2016; Danezis, 2014; Hill, 2014; Knowledge Commons Brasil, 2014; Martini, 2017; Simmons, 2015; Soundararajan and Flanders, 2017) and technopolitical analyses have considered how technological systems and technical knowledge provide means to shape countries politically, economically, socially and culturally (Hecht, 2011). Nevertheless, coloniality as control of economy and authority, of gender and sexuality, of knowledge and subjectivity, and of being, has not yet been addressed as embedded by design in the Internet. So far, attempts to decolonise the digital maintain the digital as its playground, assuming its place and continuity as part of an assumed everyday technical experience (as analysed in Chapter 2). This thesis, in contrast to such decolonising efforts, upholds the consideration that diverse societies may require 'not only new technological directions and designs influenced by more enlightened normative commitments, but also new social directions which de facto require *less* [or no] technological activity, thus less resource-concentration and inequity, and less environmental "turnover" consumption, and destruction' (Wynne, 2010: xiv, emphasis in the original).

As above, there is still a lack of fundamental reassessment of coloniality as embedded in and entailed by technological and digital expansion through specific design forms, values and interests and through their being technological per se. The

latter means that efforts to decolonise technology and decolonise the Internet have promoted equality and democratisation in the use of this technology without questioning its constructed presence as a technological object and as a technology socially and politically necessary. Moreover, this technological object's links to coloniality by design have been ignored. Critique has remained within the scope of technological development and human rights instead of providing profound inquiry and consideration of non-technological alternatives as a serious option for some political communities. In this regard, the thesis seeks to contribute to existing literature on decolonising the Internet by destabilising the technological object that is to be decolonised, recovering instead the political as experience that conditions the existence of such a technological object and which does not respond to pre-established parameters exclusively set in a Western context. Therefore, the thesis does not engage in the formulation of decolonial digital futures but rather in a critique of technology and the digital that moves towards a decolonial politics in which no being is considered from the outset an instrument. Particularly, the thesis engages in understanding the complex Mexican context in which the Internet is being used, through an emblematic case that offers a contrast to the taken for granted assumptions of the politics of the Internet: The Zapatistas in Chiapas.

The Zapatistas and the Zapatista Army of National Liberation (EZLN by its initials in Spanish), an insurgency mainly composed by originary peoples (see Chapter 7) and with very limited access to the Internet, successfully gathered a support network that made it the 'first major case anywhere' of 'information-age social netwar' and originated in Chiapas, Mexico, in 1994 (Arquilla et al. 1998: 3). The Zapatistas have pointed to the peculiarity of the Internet as it has been designed within capitalist expansion, offering a critique of development agendas and discrimination and making a very specific use of the Internet. Part of a 30-year-long organisational effort toward national liberation and autonomy, the Zapatista use of the Internet was 'the first example of the use of new technologies in favour of a resistance movement… [Which] generated a global virtual community' of support (Rovira, 2003: 57, author´s translation) and has constituted itself as a case 'informing contemporary social movements' (Wolfson, 2012: 149). The Zapatistas were also a crucial actor supporting Patricio´s run for president and the task of calling upon indigenous peoples to organize, not toward taking power in the form of the state apparatus or within official models of democracy, but instead towards the flourishing of originary peoples and practices and the defence of the earth from exploitation, plundering and depletion (Dangl, 2017). With a clear idea of the place of informatics as crucial in the expansion of capitalism and the ongoing exploitation of peoples and the earth, the Zapatistas have been able to use the Internet according to their own political praxis

and far from prescribed models of political participation and citizenship. Their sense of being a community and its political unity as such has not relied on a technological support but on its shared horizon of an autonomous way of coexistence, collectivity and practices like patience, listening, and decision informed by a 'culture of intersubjectivity' that consists in considering all beings as subjects to be respected (Ceceña, 2004; Lenkersdorf, 2002; López, 2015).

The thesis argues that the Zapatista use of the internet as a decolonial element, together with philosophy of technology and STS can offer respite to the problematics of alienation, discrimination, and fragmentation in digitalising contemporary Mexico. Therefore, the thesis starts its analysis with western political theory, using authors like Giorgio Agamben, Carl Schmitt, Michael Marder, Michel Foucault, Andrew Feenberg and Daniel McCarthy and their conceptual languages to parse the significance of what a Zapatista way of life and use can offer not only to alternative uses of the internet but also to alternative experiences of the political. This trajectory entails moving towards the epistemological inclusion of a decolonial element that also considers the historicity of technological design within the broader discussion on politics and technology. In so doing, the dissertation acts as a mediator between western political theory and originary peoples' critique and what decoloniality can offer to critical approaches to the internet and politics.

Ultimately, the Zapatista case in this thesis situates and incarnates, in relation to the use of the Internet, a concept of the political that is initially informed by Western thinkers like Carl Schmitt and Giorgio Agamben (see Chapter 2), destabilising assumptions of an everyday technical experience, a pre-existing technological object, an imperative of modernity and development, and a pre-established political praxis. In this way, by also analysing the design of the Internet in its specific US context, with its embedded values, interests and forms of coordination, the thesis moves towards the inclusion of a decolonial element in understanding the use of the Internet in Mexico, based on the analysis of the reiteration (or not) of the Internet's embedded values, interests and forms of coordination as forms of coloniality. These forms are shown in Chapters 5 and 6 as directly related to technological mediation of collective experiences in Mexico as a form of coordinating action without producing a shared political experience as self-government, openness and awareness of the form of being together of a group in intertwinement with territory.

In light of the above, the thesis also contends that the use of the Internet in Mexico, as it has been widely enacted by government development agendas and activist endeavours, has been as an *instrument of coordination without politics.* This concept

denotes an instrument/being that has been shaped and works according to another's end and economy, entailing a specific form of coordination and ontology but lacking a locally embodied shared political referent and experience. In relation to politics and coloniality, the instrument (as the slave did) does not participate of the definition of its overarching meaning and orientation but has been instead limited to unfold in the way it has been intended or designed to work as it is its own end. This conceptualisation makes visible the colonial forms embedded in both the Internet's design and its use in Mexico by linking coloniality and instrumentality with a different reading of politics (see Chapter 2). Therefore, the concept explains first, how the Internet as an instrument of coordination without politics, internalises, systematizes and reiterates the concealment and indifference towards its overarching economy and design, managing on behalf of others what has been deemed by its designers as a complex system and environment and reproducing thus the limitations in the possibility of participating of the definition of this economy and its orientation (Chapters 3 and 4). Second, the Internet interpreted as an instrument of coordination without politics is understood to bring coordination and collective experience to its users in Mexico by reproducing this technology's embedded values and interests without producing a shared political experience as openness, self-government (decision) and awareness of their form of being together (order and orientation) of a group in intertwinement with territory. Ultimately, the concept sustains the thesis' argument that the Internet has been reproducing forms of coloniality in Mexico that can only be limited by territorially located politics like that of the Zapatistas.

The Internet as an instrument of coordination without politics is interpreted in contrast to the particular use that the Zapatistas have made of this technology. But also, based on the Zapatista Maya roots, a critique of instrumentality contributes to an enquiry into the metaphysics of technology as a questioning of technology *qua* technology. This is a contribution to literature on the relationship between technology and world politics as it links the category of instrumentality to western metaphysics and idea of politics. In other words, such a contribution entails destabilising a pre-established idea of politics and the assumption of an instrumental being as produced within a western cultural matrix.

As developed throughout the chapters, the thesis contends first, that the Internet has been designed to manage, on behalf of others, what has been deemed by its designers as a complex technical and social system, expanding through simplification and adaption to different contexts and ideas but preserving its specific control foundations in capitalist values and colonial practices; the same foundations and management that hinder the possibility of alternative collective practices of self-

government. The Internet, the thesis seeks to argue, has been designed in the US, developed according to western values and interests, and expanded across Mexico as an instrument of coordination without politics. That is, according to the concepts of instrument and politics developed here, a being that brings coordination and collective experience to its users by reproducing embedded values and interests decided by a third party but concealing its end and economy, mediating and thus excluding other situated and embodied political experiences.

In the US, such form of coordination has been situated within strategic economic, scientific and military national imperatives, thus having a more stable direction that has benefited US national security through foreign policy and commercial expansion. However, in Mexico such form of coodination without politics has lacked a shared national orientation and has epistemologically and empirically expanded coloniality by reproducing and responding to foreign forms and interests of domination and control. On that basis, the main form of coloniality embedded in the Internet, the thesis contends, is that it works instrumentally, that is, it works at a distance according to another's end, more generally its designers in western countries. The Internet as an instrument of coordination without politics, it is argued, entails coloniality in a Mexican context as it entails 'thingification' (Césire, 2000) and 'domestication' (López, 2015) from a Maya perspective.

In contrast to an instrument of coordination without politics and its technologically mediated collective experiences, the thesis argues that the Internet has been politicised only when used or neglected with respect to a community´s own embodied mode of being and politics as shared experience and awareness of its collective self and existence, which necessarily traverses its intertwinement with territory. In so doing, the thesis makes a case for postponing the idea of the political in relation to technology and the Internet. The latter as the concept brings together poststructural approaches, the Zapatista experience in Chiapas and Maya cosmovision and philosophy. Additionally, the thesis contends that the notion of technology *qua* technology, of a being that is only valued as it serves another being's end, is a category deeply embedded in Western metaphysics, which needs to be interrogated and destabilised in order to better understand the importance of a decolonial element in explaining and situating technology and politics.

The methodological approach, as detailed below, conceives of foreign interests and control operating at a distance through the Internet but also ultimately situates the critique in Mexico's other realities and the political experience of the Zapatistas. In this way, the thesis mediates between worlds from a situation of standing between

critical approaches to technology (CTT and STS) and the importance of decolonial thinking and doing. Accordingly, the argument moves from the question of digital dominance and control in US/Mexico to alternative embodied politics in which decoloniality and philosophy might converge, making sense of different voices from different geographies while always establishing an embodied dialogue between all the "human and non-human" members involved. In other words, the thesis moves from a liberalist politics of written constitutions to an embodied experience of politics, which matters as the thesis is engaged in a dialogue across worlds and an analytic effort to understand the instrumental and colonial forms embedded in the Internet and reiterated by the practice of technologically mediated collective experiences in order to avoid such forms.

In terms of academic contributions, the thesis seeks to contribute to STS-IR approaches and decolonial thinking by emphasising the importance of historicity and global political economy in understanding the relation technology-politics in the world scenario without being limited to Eurocentric assumptions of modernity, technological development and politics. Instead, the proposal is that a critique of such assumptions opens up reflections in new directions. By inquiring into the cultural particularity of the concepts of technology and politics in prominent approaches to technology and world politics the thesis recovers these approaches' interest in the historical development and social dynamics involved in technological design while advancing critique towards the inclusion of the decolonial in relation to technology and politics. Therefore, the thesis also contributes to decolonial literature as it has not yet systematically engaged in a critical approach to the particularities embedded in a technological device like the Internet. The latter is, as the thesis demonstrates, a specific Western production based on ethno-centric assumptions most often reiterated, hidden and diffused under a veil of universality and neutrality.

Methodology

In order to engage in a critical analysis of the Internet in Mexico with a decolonial orientation, this section briefly outlines the conceptual basis of the thesis, and how it is used in each chapter, and explains its relation to the methods used to select and analyse the information and data gathered. The aim of the methodological approach was to bring Western categories and authors, approaches and privileges into conversation with decoloniality so as to see what Zapatismo can bring to the analysis of world politics and technology, social movement analysis, STS and local non-Western trajectories of knowledge and practice. As mentioned above, on this basis, the STS-IR contribution of accounting for the historicity of technological design is

complemented with a poststructural understanding of instrumentality and the idea of the political, both in turn nuanced and ultimately defined by the Zapatista experience and its Maya philosophical and ethical horizon.

A fundamental concept to the thesis central concept of 'coordination without politics' is that of instrumentality. The Internet throughout the thesis and technology in general are analysed as an instrument, a being not of its own but structured in a particular way according to another being's particular interests that are not only identified as individual ones but also as 'anonymous strategies' (Foucault, 1977: 202) that sediment interests into institutions and proceedings, operating regardless of having or not specific identifiable authors to whom strategies and calculation could be attributed to. In this regard, Chapter 2 explains what a critique of the internet as an instrument of coordination without politics consists of in this case, considering the limitations and contributions of STS-IR and the *tecnopolítica* approaches. The chapter explores what it means to be an instrument of coordination without politics and how that is the case of the Internet through the concepts of instrumentality (Agamben, 2015) and the political (Agamben, 2009; Marder, 2010; Ojakangas, 2007; Schmitt, 1996), although introducing a decolonial orientation in the understanding of the latter concept. The chapter explains the concept of coloniality and points towards the inclusion of decoloniality by opening up a space for a different approach to *the political* – one that is not limited to include human beings – and to the relation between technology and politics, bringing together a poststructural (Agamben, 2009; Marder, 2010; Ojakangas, 2007; Schmitt, 1996) and a Zapatista (Gelman in Ceceña, 2004), Maya-inspired (Lenkersdorf, 1999; López, 2015), understanding of such a concept, to be further developed in Chapter 7.

Regarding the concept of the political, this is initially understood as an experience of openness and encounter in which the existential affinity of those who happen to live together is brought about, offering spatial order and collective orientation to a group of people, and thus entailing a shared existential referent, sense or interpretation and awareness of their being together (Agamben, 2011; Gelman, 1996: 21 in Ceceña, 2004; Marder, 2010; Ojakangas, 2007). Within this understanding, a Schmittian definition opens up within a Western tradition of thought an opportunity to move beyond and into other understandings of living together without establishing an insurmountable gap, which is possible due to Schmitt's rejection of disembodied abstract concepts and his awareness that colonialism was not a political phenomenon (see Marder, 2010: 70). In turn, that other understanding of living together is the Maya and Zapatista experience of politics, which, although having some similarity with Giorgio Agamben's (Agamben, 2015, 2009) proposal for rethinking the political from

within Western metaphysics, opens the possibility to include non-human beings as part of a political community. The two concepts of instrumentality and the political, based on Western conceptualisations and critique in their initial formulations, are brought together into the idea of an 'instrument of coordination without politics', which is used throughout the thesis to describe the Internet in its basic design, expansion and use in Mexico.

In addition to the above, it is important to notice that Giorgio Agamben's critique has not been an epistemological critique of modernity or modern epistemology but a philosophical one of Western metaphysics with an ethical and political proposal. Giorgio Agamben's thought has always been an invitation to turn inoperative Western oppositions and dissociations and its mechanisms of government towards a different political praxis. Ultimately, the idea of an instrument of coordination without politics in this thesis lays the basis for a critique of the metaphysics of technology and argues for the inclusion of decoloniality in critical approaches to technology and politics. That is, a critique of instrumentality as the technological character of technology, but a critique that further unfolds through the Maya *intersubjective* approach of respect and recognition of all beings as being in equality and evenness (Chapter 7). In the same way, the idea of the political is embodied in and referred to the Zapatistas as an existential experience of openness and definition of a relationship among partners on the basis of 'intersubjectivity' and in contrast to 'domestication' (López, 2015) and 'thingification' (Césaire, 2000: 42) as a clear form of instrumentality.

The Zapatista use of the Internet is the analytical contrast in this thesis to other two cases of the use of the Internet in Mexico, which were selected due to their significance in promoting the use and expansion of the Internet in order to transform this country's reality as a nation. The first case is former Mexican president Enrique Peña Nieto's digitisation policy, which marked the overarching entrance and horizon of digital technologies into public administration and its inclusion as a constitutional right. The second case are #YoSoy132 mobilisations, the largest mobilisation organised and coordinated through and around digital technologies, which consolidated the demand of access to the Internet as a constitutional right and spurred optimism amongst Mexican scholars and activists about the opportunities the Internet brings for protest and political participation. Both cases are described through the concept of *an instrument of coordination without politics* as the technological mediation of collective experiences and action.

An instrument of 'coordination without politics' means, for analytical purposes in the following chapters, that an instrument works within a 'dispositive operation'

(Agamben, 2015: 72) and a colonial economy that exclude other forms of being. That is, the instrument works according to another's end and economy (that of the coloniser) and thus entails a specific form of coordination and ontology but lacks a locally embodied shared political referent and experience regarding the existential affinity of those who happen to live together. Therefore, in order to analyse and understand what the Internet is particularly doing in Mexico and how it is related to colonialism the analysis of the historical design of the Internet and the cases using this technology to develop and democratise the country through the use of the Internet is performed through the identification of a *dispositif* (Foucault, 1977: 197) as the main method. In a similar manner to theoretical accounts of multiplicity and compounds of heterogeneous elements (human and non-human) that have 'aimed at conveying the intertwined and post-anthropocentric form of society' (Acuto and Curtis, 2014: 5) the current methodology considers that difference between ideas such as 'actor-network', 'actant', 'assemblage' or *dispositif* is one 'of emphasis rather than kind' (Ibid, see also Lemke, 2015). The use of *dispositif* analysis as method in this thesis is in accordance to the theoretical basis of instrumentality and the Internet as a form of coordination without politics (see Chapter 2) as it follows the strategic lines, interests, values and forms of conducting interactions between elements of the same instrument. Ultimately, on this basis, the difference in emphasis with other accounts is the need to unfold a more politically, philosophically and historically centered approach that puts forth a critique of instrumentality as deeply engrained in Western metaphysics. In identifying a *dispositif* as a specific disposition of things and heterogeneous ensemble of elements (including so-to-speak discursive and non-discursive elements), such analysis looks 'for the elements which participate in a rationality, a given form of co-ordination' (Foucault, 1977: 197) but bringing about such forms paradigmatic metaphysical foundation in order to contrast in Chapter 7 such form of coordination with the importance of the earth and autonomy for the Zapatistas and the intersubjective practice of its Maya roots.

The analysis assesses *instrumentality* –the quality of a being that serves another's end only to the degree that it realizes its own end and is indifferent to the overarching economy and the end that defines its own operation (Agamben, 2015: 70) – and identifies the *forms of coordination* or rationalities[4] of government that emerge when a set of elements are oriented to achieve a specific goal (open to strategic reassessment and reordering) (Foucault, 1997b, 2007, 2008; Lemke, 2002, 2011, 2015). This entails first, considering and elaborating on the specific form of instrumentality embedded in the Internet as this technology was designed in the US,

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[4] For a discussion on the specificities of the term rationality as understood by Foucault and questioned by Guy Le Gaufey and Jacques Allain Miller, see 'The Confession of the Flesh' (Foucault, 1977).

one that is argued accommodates diversity through fragmentation and simplification. On such basis, the analysis locates the main ideas, economies and strategic[5] actors – those being able to dispose things through a specific form of coordination, design and expansion of the Internet in the US (Chapter 3) – in order to identify this technology's overarching economy and strategic function. Regarding the latter, Chapter 4 identifies and analyses four forms of coordinating resources operating in and through the Internet –Global Connectivity, Free Internet, Personalisation of Identity and Mediation of Subjectification, which constitute a world-oriented expanding form of government. And second, the analysis entails identifying the forms of coordination deployed in the use of the Internet in Mexico (Mexican government's digitisation policy in Chapter 5 and #YoSoy132 democratisation efforts in Chapter 6) in relation to the previously analysed technological design and its embedded economy.

Chapter 5 identifies three transversal practices that converge in the objective of stabilising and giving certainty to the opening and expansion of financial and telecommunications markets: Connectivity, Open Data and Single Digital Identity. It argues that the strategic orientation and purpose of the Internet and digitisation policy respond to foreign parameters of privatisation and expansion of financial markets. In so doing, it asserts, the state aims at delegating an important part of the constitution of its political subjects and the responsibility of engendering population´s trust to a technological support defined by foreign interests and orientation. The Internet, as an instrument of coordination without politics, conditions the possibility of politics and reproduces coloniality as it remains instrumental to a foreign orientation and management but lacks a shared political referent and commitment.

Chapter 6 analyses #YoSoy132 as *a dispositif* coordinated as a *connected multitude,* where technological mediation allegedly makes possible 'the capacity of connected multitudes (...) to create and self-modulate collective action' (Toret et al., 2013: 19-21). The chapter argues that this collective formation reiterated and made visible the Internet as an instrument of coordination without politics. In other words, the diversity

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[5] The idea of the strategic character of such interventions can be seen either as the means employed and the 'rationality functioning to arrive at an objective' or as 'the totality of the means put into operation to implement power effectively or to maintain it' (Foucault, 2001: 346). As Lemke (2011: 44) mentions, a focus on government rationalities is not an excluding assessment on the gap between reality and programming, or a rationality and its clean enactment through technologies. On the contrary, this stands for an awareness of a 'dynamic relationship' that is possible to grasp through ´the strategic character of government´ and its adaptive openness and ongoing interactive transformation in practice (Lemke, 2011: 44). Thus, we can say that a rationality is to be found in the complex interaction of a multiplicity of agents, among which specific ones enjoy certain prerogatives according to their relative position and overview, entailing awareness of the totality of means to hand and its corresponding end and purpose. About a strategy without a subject - 'so that you get a coherent, rational strategy, but one for which it is no longer possible to identify a person who conceived it' (Foucault, 1977: 202-203).

of #YoSoy132 members and interests was flexibly articulated within a fragmented totality that was technologically mediated in communication and action, reproducing foreign values and interests (like free flow of information, freedom of expression and a free Internet according to US and Western imperatives) while concealing and limiting critical engagement with the extraterritorial elements embedded in this technology

In Chapters 5 and 6 *dispositif* analysis is complemented with discourse analysis (Foucault, 1978, 1997; Mottier, 2005), which, although with important modifications and open to revision over time, also draws upon Daniel McCarthy's (2015: 162-163) content-analysis guide (Appendices A and B), applied primarily to policy documents and public record speeches regarding the Mexican government's digitisation policy in Chapter 5 and #YoSoy132 activism in Chapter 6. In this light, discourses were understood not in opposition to the non-discursive but as 'specific "truth games" related to specific techniques that human beings use to understand themselves' (Foucault, 1997: 224). A 'truth game' refers not to a propositional truth but to 'truth as situated, historical, and finite', to a 'space of self-reflection' where meaning is constructed and subjects and objects are constituted (Wallenstein, 2013: 15) fostering particular interactions and interests through specific techniques (Foucault, 1997; Torfing, 2005; Mottier, 2005).

The corpus in Chapter 5 consisted of 15 policy and policy-research documents around the National Digital Strategy (EDN in Spanish) in addition to EDN online content and related websites. In Chapter 6 the corpus consisted of 10 hours of footage produced by #YoSoy132 on issues related to the Internet in addition to the interviews collected in Muñoz (2012). In this regard, information on #YoSoy132 was complemented with open-ended interviews with members of the group (conducted in Mexico City in 2016) and triangulated together with public record documents and speeches, videos, TV programmes, and existing literature and ethnographic studies, for example the videos broadcast by 'TodosSomos132' and the ethnographic work of Emiliano Treré (2013, 2014, 2015). The analysis of this corpus of texts acknowledges the conditions of production and location with respect to the collective goal (digitisation and development in Chapter 5 and democratisation in Chapter 6), focusing on the *regularities* concerning the Internet and pointing out commonalities in the production of meanings, things and practices by identifying recurring themes, assertions of truth and subject positions. The analysis focuses on how specific discourses or constructions of meaning produced, reiterated and/or transformed specific sets of social relations and the strategic intentions and arrangements supporting them (Foucault, 1978: 8; Mottier, 2005: 256-257). In other words, attention was paid to how different meanings were coordinated to produce a common

understanding and practice of the Internet, entailing specific key themes, assertions and locations of truth, oppositions and subjectifications; and how such constructions reiterated foreign parameters of instrumentality.

The methodology described thus allows for the identification of the form of coordination and strategic functions of specific dispositions of things (Foucault, 1997b, 2007, 2008; Lemke, 2002, 2011, 2015; Wallenstein and Nilsson, 2013) embedded and based on the Internet. The aim is to identify in Chapters 3 and 4 the values, interests and forms of coordination embedded by design in the Internet. Whereas in Chapters 5, 6 and 7 the analysis shows the continuity or not of this technology's embedded forms of coordination. In contrast to Chapters 5 and 6, Chapter 7 analyses a case that allows understand the political implications of using the Internet in a colonial context. The chapter underlines the strategic character of the Internet for the Zapatistas, which has responded to a main political line of attaining 'tierra y libertad' [land and liberty] instead of being the condition of possibility of collective practice. Further analysing the importance of territory as the earth and 'Our Mother' and with it, its politico-ontological character for the Maya peoples that comprise the Zapatista rebellion through the notion of intersubjectivity and the concept of the political, the chapter underscores territory as sign and condition of possibility of community life and collective practice. In so doing, it questions the stable presence of a technological object amongst the Zapatistas and thus the notion of instrumentality discussed in Chapter 2, offering a different perspective in which beings are other than instruments and showing how all beings are alive and should not be considered as being only in relation to another's end. In other words, Maya philosophy can destabilise the predicative basis of technology, contributing in this way to the critique of instrumentality, and also, it can add to the understanding of the political by including non-human beings as members of a political community, Therefore, the Zapatista instance exemplifies what decolonial thinking and doing can contribute to critical approaches to technology and politics. Altogether, these chapters sustain the thesis' argument that the Internet has been reproducing forms of coloniality in Mexico by working and expanding as an instrument of coordination without politics, a situation that demands the epistemological and ontological inclusion of decoloniality as an element of critique and/or territorially intertwined politics to limit the internet's embedded forms of coordination.

The general conclusion of the thesis emphasises the implications of promoting and using the Internet as an instrument of coordination without politics in Mexico and in world politics. On the basis of the preceding chapters it asserts that instrumentality entails by definition coloniality as domestication and thingification of beings and non-

Western embodied politics. The conclusion also addresses some theoretical and practical recommendations towards the consideration of coloniality in analyses of technological design and use but also towards efforts and political experiences of decolonisation. In a world political scenario, it proposes, if politics are to be analysed in relation to technology, coloniality and decoloniality need to be taken into account. Decolonial politics, the thesis concludes, is not an embedded or intertwined element of technology when used in distant locations different from that of its designers.

Chapter 2

On coordination without politics, coloniality and decolonial thinking

This chapter explains what a critique of the Internet as an instrument of coordination without politics entails. The chapter first explains the analytic limitations and contributions of STS-IR and *tecnopolítica* approaches. On this basis, the chapter then focuses on the idea of politics as understood by such approaches, elaborating on a critique of such politics as 'someone else's politics' and linking the latter to the notion of 'instrument', an entity that serves another's end only to the degree that it realizes its own end and is indifferent to the overarching economy and the end that defines its operation (Agamben, 2015). The idea of an instrument of coordination without politics is used to understand a being or an heterogeneous ensemble of beings that, indifferent, does not participate in the definition of its overarching meaning and orientation, which have in turn been decided and controlled by a third party as the instrument's own end. An instrument of coordination without politics, it is argued in this chapter, internalises and reiterates the concealment and indifference towards its overarching economy and design, reproducing thus the limitations in the possibility of participating in the definition or redefinition of this economy and its orientation. On this conceptual basis, the Internet is analysed in the following chapters as an instrument of coordination without politics.

In defining an instrument of coordination without politics, the chapter also emphasises how being cognizant of STS and CTT's main conceptual assumptions – politics, politicisation and technological mediation and futures – renders STS's attention to historicity and *tecnopolítica* limited emphasis on the technological mediation of 'connected multitudes' analytically useful regarding the design of the Internet (Chapters 3 and 4) and its use as a form of collective coordination (Chapters 5 and 6), respectively, as *dispositives*. However, in addressing these limitations, the idea of politics needs to be situated in relation to technology. Therefore, the chapter draws on Giorgio Agamben's (2015) critique of instrumentality as part of a critique of Western metaphysics and as related to coloniality in Mexico in the form of 'thingification' (Césaire, 2000) and 'domestication' (López, 2015). In this light, the chapter develops a different approach to politics through the concept of the political, which combines a poststructural (Agamben, 2009; Marder, 2010; Ojakangas, 2007; Schmitt, 1996) and a Zapatista (Gelman, 1996: 21 in Ceceña, 2004), Maya-inspired (Lenkersdorf, 1999; López, 2015), understanding of the political (to be developed in Chapter 7), explaining

the concepts of coloniality and decolonial thinking in the fourth section as it argues for the inclusion of a decolonial element in critical approaches to the internet. In this way, the concept of the political emphasises the concrete and unmediated experience of politics rather than an abstract assumption of politics as always present in technologically mediated realities or everyday technical experiences. The horizon this chapter points to is revisiting the understanding of the political in relation to technology by acknowledging coloniality and by being informed by a local use of the Internet – the Zapatistas – in arguing for the importance of decoloniality in any critical assessment of this technology. On that basis, the analysis of the political implications of the Internet in Mexico in relation to coloniality is undertaken in the following chapters.

2.1 Con-founding Geographies: Social Construction of Technology, Critical Theory of Technology and International Technological Development

While questions of ambivalence – or constraints and opportunities that come with technology – could be addressed through the contributions of Social Construction of Technology (SCOT) and Critical Theory of Technology (CTT) approaches (grouped as STS-IR), there is a clear limitation in terms of an STS-IR tendency towards enclosing technology within a line of development in time, which assumes a subject capable of repurposing technology and thus the non-deterministic character of technology. This line of development dismisses situations in which some groups in different geographies (and timelines), and with different metaphysics and ontologies, cannot influence or participate in repurposing technology simply because they do not speak the same language as its designers (either informatics, English or Spanish) and they do not share their culture and practices, which are then being imposed on them in the form of a sociotechnical reality and democratic participation. Participating in repurposing technology would mean to embrace a sociotechnical reality they do not share, becoming literate in foreign practices and contravening these communities' way of life. On the other hand, not participating means fostering, in a straightforward manner, the persistence of the motif of (scientific, technological and/or economic) development and its ethnocentric rhetoric that considers these groups as immature or backward (even in terms of their alleged lack of so-called democratic participation), in addition to an ongoing dispossession and concentration of resources.

Social Construction of Technology approaches (considered in a broad sense) uphold technology as socially constructed, comprising artefacts, knowledges and practices, paying attention to the social interactions at stake in the process of technology production and emphasising the possibility of influencing the direction of technological

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development without dismissing the way in which technology reshapes human activities and meanings (Bijker, 2010; Jassanof, 2004; Pinch and Bijker, 1984). In order to explain how a specific technological artefact is present, SCOT approaches have pointed out how, alongside technical considerations the historical process of social struggle between alternative developments is fundamental in the design process of technological devices, introducing different social interests and values as different social groups participate (Bijker, 2010; Feenberg, 2009: 80). From this perspective, technologies appear as processes and not merely as things, which can achieve 'closure' or 'stabilisation' through the standardisation of a design but are always subject to the flux of social forces and therefore the possibility of an alternative development (Bijker, 2010). For SCOT, there is no intrinsic logic of technology, no instrumental rationality distinct from society because society is considered according to ethnocentric assumptions that dismiss other societies that cannot repurpose technology from their own social and political praxis and thus are not present in the social struggle between alternative developments. Therefore, from the outset, in assuming there is no intrinsic logic of technology, SCOT assumes social forces are one and the same everywhere and there are no social groups excluded from the privilege of participation or who do not share a sociotechnical reality and conception of technology.

As SCOT offers 'a mid-range answer to the question of whether society shapes technology or vice versa', considering 'that both elements are central to the development of socio-technical systems at different moments in time, due to both "technical" and social factors' (Manjikian, 2017: 32), these approaches still do not include different geographies that present different processes of social or technical determinism, processes in which some groups do not participate, at the same moment in time. Therefore, technological systems in the present thesis are not seen as having a 'life cycle' or exerting a 'soft determinism' (Hughes, 1987: 55) as there is no technological object or system and there is no subject of an abstract humanity (depersonalized and distant) that can be assumed in other cultural and political contexts as capable of repurposing such a technology unless they assimilate to a technological cultural matrix. While on the one hand, contractedness and determination appear as different phases of technological systems´ 'life cycle', and on the other, determinism appears not as 'a natural fact, but itself the product of closure produced by human agents' (Manjikian, 2017: 31), these same characterizations are restricted to phases in a homogeneous time and to Western metaphysics, not conditioned by different geographies, metaphysics and political ontologies.

Regarding geographies, the importance of the international and world politics has recently drawn on Andrew Feenberg´s (2002) Critical Theory of Technology and the literature on Uneven and Combined Development in relation to technological development (McCarthy, 2015, 2017). In the words of Daniel McCarthy (2017: 61), Critical Theory of Technology in IR (CTT-IR) 'represents a synthesis of critical social theory, Marxist historical sociology and Critical IR Theory', and 'IR scholarship has extended these approaches by considering the role that "the International" plays in constituting the politics of technological design and use'. Drawing upon Critical IR Theory, Critical Theory of Technology and Science and Technology Studies in International Relations, CTT-IR attends to the enduring historical structures of global political economy and cultural power dynamics. These studies have emphasized the importance of the ways in which technological objects and systems emerge in relation to the social and how they play in global politics. While questioning how the social shapes technology and vice versa has been the main subject of inquiry in SCOT approaches, and this task has been 'increasingly influential in studies of world politics' and has inspired and engaged IR scholars (McCarthy, 2017: 2), CTT-IR draws upon Feenberg´s consideration of concentration of power and resources and political economy structures, taking these elements further into analyses of global politics (McCarthy, 2015; see Peoples, 2017). However, the prevailing question has been how to adequately theorize 'the role of technological objects in world politics' (McCarthy, 2017: 2), a matter that CTT-IR addresses mainly through attending to the 'specific role of "the International" in processes of social development' (Ibid).

Arguing that Feenberg does not situate technology internationally and does not pay enough attention to political economy, Daniel McCarthy (2015) points out the importance of situating technology within international politics. Such a conceptualization of technology, drawing upon Feenberg´s CTT, considers 'enduring historical social structures' and 'how structurally located actors are privileged in the design process or the social processes that impel innovation' (McCarthy, 2015: 51). In addition to CTT, this emphasis affirms that 'the International is always internal to the development of technological artefacts, and this imposes a cost upon actors seeking to resist [the] values' embedded into these artefacts (McCarthy, 2015: 160). Regarding how technology operates in global politics, McCarthy considers both the 'central role played by the state in organizing technological development in the modern capitalist societies' and 'an element of lateral causality', challenging the notion that 'technological development is the product of political and social relations bounded by the nation-state, [and] foregrounding the international dimensions of the politics of technology' (McCarthy, 2017: 72).

Within an international system that is 'characterized by uneven and combined social development,' which is to say that 'the international' is composed by 'multiple ("uneven") and interacting ("combined") societies' whose social relations express historical structured 'forms' of agency and unequal exchange (Rosenberg, 2016: 297), technological objects are diffused from 'social forces acting through – and beyond – advanced states… to less advanced states' (McCarthy, 2015: 66). In this light, different ways of innovating in production systems entail particular combinations of national and local institutions and values. The interactions established on an international level are not exclusively mediated by the state but also have a 'lateral' causality where relations of production or 'class struggle between capital and labour and between capitalists in different states' shape the particular development of technologies (McCarthy, 2017: 75).

CTT-IR consequently has made many contributions to the understanding of the international and global politics of technology. This approach constitutes a crucial point of departure for an assessment of how some states and private actors influence and constrain the possible actions of other states and private actors, everytime they comply with the imperative of technological development. Regarding the Internet, this approach helps to understand the historicity of this technology that, biased and sometimes ambivalent, conditions other states and societies. Such an account compels us to analyse the cultural, economic and social intricacies embedded in each technological assemblage.

However, the approach outlined above has limited explanatory reach regarding the possibilities for understanding the political implications of technology in colonised contexts and in this case the Internet in the margins of modernity, or more precisely, in the margins of other political praxes that should not be defined by its relation to modernity. In other words, attention to global political economy and enduring historical social structures, also considering cultural power, allows CTT-IR for 'a more fine-grained appreciation of technological development within a complex, differentiated and multilinear modernity' (McCarthy, 2017: 72). Regarding U&CD, as McCarthy (2017) points out:

> A state, of course, exists within a system of states. The presence of multiple
> political communities shapes the politics of technology in manifold ways… Briefly,
> political communities develop economically and technologically at different rates:
> they develop unevenly. As advanced technological objects are created, they
> spread throughout the international system, compelled by security competition,
> emulation and coercion, among other processes. Once social norms, political

institutions and technological objects diffuse, they combine within 'backward' states to create new social forms (McCarthy, 2017: 73).

Despite recognizing a multiplicity of political communities, their influence on the interpretation of the politics of technology and modernity as complex, differentiated and multilinear, modern technological development and capacities remain the main focus and the point of departure and measure for differentiating processes. As pointed out by Enrique Dussel (1996), political economy is fundamental in criticising this notion of development and differentiating the "Latin-American" horizon from that of Europe and US' present. In other words, 'the International' conditions actors according to social property relations and the broader structures of global political economy in case these actors want to challenge other group´s technological capacities on the same level of competition–playing the same game rules, be it the marketplace or a nationalist endeavour to counter military capacities or even the same everyday technical practice as users. The instrumentality of technology is consolidated as opportunities to develop depend on a group's capacity to repurpose technology through combination within the imperative of technological deveopment.

The same limitation is reiterated once technology becomes the starting point to distinguish, even if not in a normative way (see McCarthy, 2017: 73), 'advanced' (developed) from 'backward' (underdeveloped) states (see also Manjikian, 2017: 34, in terms of primitive and modern see Feenberg, 2010: 109, 208). The consideration of global political economy in SCOT, CTT and CTT-IR still lacks a critique of technological development as technological and as developmental in terms of its failure to consider different ways of life. In this way, and as detailed below, politics is constrained to an ethnocentric consideration in which the politicisation of technology has to attain the parameters of industrial or productive development at the level of design and Western forms of democratic participation. Thus, U&CD and the international help explain in good detail one half of the situation, regarding the design, development and diffusion of the Internet: its historicity. Nevertheless, they do not explain a differential process of politicisation that emerges in the threshold between other political praxes and capitalism and modernity, which is not prone to be reduced to a centrist motion of development either capitalist or modern but expressing its own dynamics and reluctance to be explained through the lens of someone else´s reality and politics.

The following section elaborates on the limitations of STS, CTT and *tecnopolítica* theorisations in accounting for other experiences of the political. The latter approaches assume the meaning and practice of politics and its relation to

technology. Nevertheless, they ignore how such assumptions hinder other situated political experiences from emerging, and thus diffuse technology as an instrument of coordination without embodied, situated and local politics.

2.2 The politics of technology, democratisation and an everyday technical experience as someone else's politics

In CTT and SCOT approaches in general, politics has appeared in the form of interests (e.g. Herrera, 2002) and values that are embedded into technological artefacts which shape and constrain how the object appears and how it might be used, expanding its political effects through reiterating specific uses, values and interests (Bijker, 2010; Bijker et al. 1987; Herrera, 2002, 2003; Manjikian, 2017: 32, McCarthy, 2017). Such is the case as well of radical constructivisms, where the meaning of a technology cannot be reduced to its materiality and 'values (in this case, politics) are imputed to an artifact in the course of their apprehension, description and use' (Woolgar and Grint, 1995: 291, in Manjikian, 2017: 32). Assuming politics as values and interests, politicizing technology appears first as a matter of embedding the interests of a group (be it the majority or a minority) into technological objects, and so shaping these objects according to the group´s set of purposes or main purpose. Then, politicising technology appears as 'showing hidden political dimensions, putting issues on the political agenda, opening issues up for political debate… Technology is socially (and politically) constructed; society (including politics) is technically built; technological culture consists of sociotechnical ensembles' (Bijker, 2010: 72).

This way of thinking of politics and politicization is one that takes for granted the existence of a technological culture and a technical experience. Even in the case of CTT, politics and politicization in relation to the Internet remain within the framework of Western politics as democratic governance. For instance, Feenberg (2014: 110) defines 'technical codes' as 'the rule under which a type of artefact or a whole domain of artefacts is designed', translating 'worldviews and interests into technical specifications that can be implemented by engineers or other experts. The translation hides the social origin and significance of the codes behind a veil of technical necessity' (Feenberg, 2014: 110). In keeping with the idea of politicization in SCOT approaches, Feenberg affirms that 'the task of critique is to reverse the process and reveal that origin and significance', then informing democratic agency (Ibid: 110, 122). More specifically, the politics of the Internet from Feenberg´s (Feenberg and Friesen, 2012; Feenberg, 2014) perspective of 'critical constructivism' refers to the democratic agency that potentially inhabits the Internet in the form of online communities as an expansion of the public sphere (see also Bakardjeva, 2008 for an individualized

account of collective agency on the Internet). This agency is expressed through coordination of these groups´ demands 'for a fuller representation of participant interests' into 'new forms of online politics [that even] extend activity in the public sphere to technical issues formerly considered neutral and given over to experts to decide without consultation' (Feenberg, 2014: 120). Such understanding, applied to Mexico's situation and use of the Internet would not only diffuse an ideal of public sphere as an abstract universal (see Grosfoguel, 2009) but would entail further literacy in foreign languages. Accordingly, Feenberg´s broader approach to politics expresses resignation about the inevitability of the persistence of the capitalist system (see Feenberg, 2010: 122), reiterating an assumed technological reality and technical experience.

Critical Theory of Technology and its 'drive' to democratize technology (McCarthy, 2017: 64) recognize technology´s bias, as its design and production is intended to favor specific interests and accomplish specific goals (Feenberg, 2002: 80-82, in McCarthy, 2017: 69) but reaffirms the ambivalence of every object and the indeterminacy of its future developments as even parts of complex technological assemblages can be repurposed through democratic opening and participation (McCarthy, 2017: 69). Therefore, the bias of technology remains someone else´s instrumental capacity over an object, while ambivalence appears as another group´s possibility of instrumentalising that object, repurposing it always as a technological object and remaining a technological object (see Feenberg, 2002; McCarthy, 2017). In CTT instrumentality persists as the technological character of technology is not actually questioned and as the subject of politics and such technological character are always already assumed.

The same assumptions are present, as will be demonstrated, in the *tecnopolítica* approach diffused across Spanish and Mexican academia after the 15M mobilisations in Spain and #YoSoy132 in Mexico respectively. *Tecnopolítica* has mainly referred both to the use of technological networks by social movements in 'innovative' ways, and 'to previous theorizations that emphasize either […] the emergence of a new political actor (usually dubbed as connected multitudes) or […] the technologically mediated logics of contemporary collective action' (Treré and Barranquero Carretero, 2018: 48). Such approaches, besides describing and promoting a new paradigm of interpretation in which social movements have been inspired by the *network-form* of the Internet (15M[6] in Spain and those inspired by this movement) (Alcazan et al.,

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[6] The 15M or Indignados was a social mobilisation claiming for institutional reforms in government, corporations and media to allow greater participation and accountability in Spain.

2012), also identified and fostered a 'new kind of self-organized collective political behaviour' (author's translation, Toret et al., 2013).

Although ultimately on the basis of a Spanish activist context and understanding of technology and politics (Treré and Barranquero Carretero, 2018), *tecnopolítica* accurately describes recent mobilisations in Spain and some other countries like Mexico. This approach accounts for how 'movements use technology to call for and organize mobilizations' (author's translation, Toret et. al. 2013: 19) and refers to a specific form of coordinating movements and its members as fundamentally mediated by the Internet. Accordingly, this perspective, and the concept of 'connected multitudes', have tried to bridge academic interpretation and activism but have not elaborated on its own notion of political behaviour, thus assuming and reproducing pre-established Western values and norms within the tradition of liberal democracy and the privileges of an assumed Western subject or citizen.

As above, tecnopolítica emphasises and assumes technological mediation (an everyday technical experience) and deems it beneficial by intertwining it with the constitution of a collective self and the possibility of collective action (even in those countries that entail the complexities of coloniality mentioned above). This approach draws upon the idea of a 'network system' as a 'set of nodes, sometimes heterogeneous, with high rates of connectivity, robustness and reciprocity, whose structure is open and polycentric' (Toret et. al. 2013: 19, author's translation). In such a network system, networks are not only useful to 'build up and coordinate collective action but, overall, to interweave the sense of their own actions and to create a constitutive impulse within a frame of action, thought and social structuration' (Ibid). Network communications thus coordinate and constitute themselves 'as coherent units, capable of modulating complex collective behaviours' (Ibid). *Tecnopolítica* emerges then as 'the capacity of connected multitudes, the brains and bodies connected to the network, to create and self-modulate collective action', action that can turn digital activism into street protest (Toret et. al. 2013: 19-21, author's translation).

In such understanding and practice of *tecnopolítica*, the notion of *multitude* (Hardt and Negri, 2004; Pérez de Lama, 2007; Rheingold, 2004) and the role of digital technologies have been central, as the 'connected multitude' is about the 'capacity to connect, group and synchronize, through communication and technological devices and around objectives, the brains and bodies of a great number of subjects in time, space, emotion, behaviour and language sequences', giving accent to 'the fact that there is no multitude without connection' (Toret et. al., 2013: 20, author's translation).

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This approach recognises, in a limited way, that networked or Internet-based technologies enhance collective organisation and activism, assuming a political sphere, a technological object and a technologically mediated social reality. Within this concept of *tecnopolítica* there has been no questioning of either the meaning of politics or the historicity of technological design. On the contrary, there has been an 'extension' of this conception of *tecnopolítica* to the 'Latin American context' (Treré and Barranquero Carretero, 2018: 50), mainly by Latin American scholars not only analysing recent social mobilisations and reiterating the same assumptions and categories of politics and technology but also organising and triggering digital activism (see Devichand, 2015) without questioning the provenance of such innovative uses and interpretations.

As above, both STS and *tecnopolítica* approaches have taken for granted a Western political subject and the desirability of an everyday technologically mediated experience without acknowledging that the politics of technology so far enunciated belong to a particular and concrete situation rather than to an abstract universal to be found embodied in all instances. In other words, the experience, categories and practices that correspond to the category of the political respond to a particular ethnicity. In other non-Western realities such politics as assumed in relation to technology are someone else's (Western) politics, both in definition and practice. Such politics diffuse, as further analysed in the following section, an instrumental mediation whose center of control and design lies elsewhere according to someone else's interests. In this light and as will be demonstrated throughout the thesis, an instrument of coordination without politics emerges where politics and the politicisation of technology are assumed in non-Western situations according to Western ethnocentric parameters.

2.3 An instrument of coordination without politics in a colonial context

While politicisation in a Western context might be understood as a matter of negotiation and flexibility (i.e. debate, transparency, democratisation and participation in design and re-design), in a non-Western context like Mexico, or in-between geographies, a technologically mediated experience of reality entails instrumentality as a form of coordination without locally situated and embodied politics. The politics embedded in technological design are those of its designers and their cultural matrix. Therefore, the lack of access of some populations to the means of participation and basic information of the process that is technology (politics and critique in CTT), let alone cultural differences, forecloses the alleged democratic potentialities of technological objects, as such potentialities are instrumental to development or

subject to having someone else make a better design of the technology for those excluded from participation in the everyday technical experience of modernity.

Drawing on such considerations, the concept of instrument and furthermore of an instrument of coordination without politics are analytically useful with respect to Mexico. Being an instrument of 'coordination without politics' means that technology, designed and used according to specific situated politics, once it traverses cultures and geographies, reproduces such politics in the form of an 'economy'. In other words, distant interests and values respond to a distant other's experience of politics and life (more it is in the case of non-Western societies), while hindering other forms of life and experiences of politics from emerging. Technology's bias regarding politics, to use a CTT notion, does not only refer to whose individual and collective interests it serves but also to the assumption that someone can be served and must be served by technology and the specific practice and understanding of politics it entails. In order to better understand this concept, which is empirically illustrated in Chapters 3, 4, 5 and 6, the concept of instrumentality as part of Western metaphysics and practice and its relation to the political need to be outlined.

Giorgio Agamben has revisited the idea of instrumentality in terms of its being constitutive of technology (2015: 69) and requiring further exploration as it is related to the constitution of the political. Agamben draws upon the consideration of medieval theories of 'instrumental causality', more specifically the one developed by Thomas de Aquinas, and the way in which a fifth causality was integrated in relation to formal cause, material cause, final cause and efficient cause. In this light, it was medieval theologians who theorised the nature of an 'instrumental causality' (*instrumentalis*) as a 'special type of efficient cause' (Agamben, 2015: 70). Instrumental causality, in Aquinas' understanding, has the distinctive characteristic of guaranteeing some kind of autonomy and 'indifference' of the instrument regarding the final cause, while its operation is fundamental for that final cause or principal agent´s action (Agamben, 2015: 72). Therefore, the instrument displays a use according to its own form and shape but at the same time this immanent way of being is used and necessary for a principal cause to be achieved.

> What defines the instrumental cause – for instance, the axe in the hands of a carpenter who is making a bed – is the particularity of its action. On the one hand, it acts not in virtue of itself but in virtue of its principal agent (namely, the carpenter), but on the other hand, it works according to its own nature, which is that of cutting. That is to say, it serves the end of another, only to the degree that it realizes its own end (Agamben, 2015: 70).

The concept of instrumental cause is thus born as a splitting of the efficient cause, which is divided into instrumental cause and principal cause, thus securing an autonomous status for instrumentality (Agamben, 2015: 70). However, it is by drawing upon Aquinas' Summa Theologica that Agamben further describes instrumentality as a 'dispositive operation… an operation that according to its own internal law, realizes a level that seems to transcend it but is in reality immanent to it, just as, in the economy of *salvation*, Christ works *dispositive*–that is, according to an "economy" – the redemption of humanity' (Agamben, 2015: 72). The characteristic gesture of instrumentality is that it conceives an immanent ordering, an economy, in which the instrument remains 'indifferent' but is still, in enacting its own allegedly immanent way of being as autonomy, fundamental to the principal cause. Therefore, the principal cause is always in relation to the immanence of the instrument and the socio-technical ensemble, as this immanence is the way they have been designed as its own nature – the principal actor selecting the characteristics that define the instrument's nature. The instrument only appears autonomous while working at a distance according to a principal cause and within an economy. Whereas '*[t]echnology is the dimension that is opened when the operation of the instrument has been rendered autonomous and at the same time is divided into two distinct and related operations*' (Agamben, 2015: 74, emphasis in original), in this conception, the basic 'autonomous' form of such instrument is always in relation to, or dependent on, a principal cause as part of a broader economy. The object is autonomous only within the economy of the principal actor, an economy of which the object is unaware.

Regarding modern technology, Agamben asserts that this is characterised by an 'obediential potential' in which devices **'**have incorporated in themselves the operation of the principal agent and can thus "obey" its commands (even if these are actually inscribed into the functioning of the [*dispositif*], in such a way that the one using them, in pushing the "controls," obeys in turn a predetermined program)' (Agamben, 2015: 77)[7]. After emphasising instrumentality in such terms, the bias of technology and the Internet comprises the materially embedded values and international and global actors exercising power at a distance through norms (see McCarthy, 2015). But also, what is at stake here is ultimately ontological and political, not only the idea of an autonomous or non-autonomous technology but rather that such attributes correspond to the principal agent´s (designer's) final cause, unfolding as and within

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[7] For instance, as Ana Delgado (2016) asserts, synthetic biology 'turns the dynamics of life itself into a matter of design' and the importance of such designs (e.g. in living biological clocks or living cameras) relies on their 'performative power' or, so to speak, all the activities they do just by living.

an immanent ordering or *oikonomia*.[8] In the end, according to such economy, the intricacies of modern and digital technologies like the Internet and digital platforms, entail an insistent but generally concealed third person or cause as more-than-one final user in operation (see for instance Carr, 2015; Deibert and Crete-Nishihata, 2012; DeNardis and Hackl, 2015; Naughton, 2016; Powles, 2015), blurring the distinction between final actor (or end user) and instrument and hiding its own principal agents and economy.

The above means that the principal agent is not or hardly is to be the final user or consumer employing the technological device to hand. In addition to the proper constituency and practice operated within the limits of the technological device´s form and goal, and the user with the digital device to hand, there is a third cause or agent and an economy to which such instrument corresponds. The Internet, as we will see in detail in the following chapters, entails many different users but one overarching economy and form of coordination. From hardware technology through to software and telecommunications production and management corporations to national governments, organizations and individual everyday users, the Internet is only possible in a diversified relation of more than two users but always responding to a broader economy which just like the 'ego-politics' and the 'theo-politics' of knowledge (Mignolo, 2005) hides the geopolitical location and privilege of its subjects of enunciation and exploitation.

Besides bearing in mind that there is always a third actor, principal actor or actors (or a specific society and culture) to whom design responds, there is a more fundamental gesture of instrumentality: erasing its economy and the subject of enunciation, this subject's interests and moreover his location within a metaphysical tradition and praxis. Such a gesture turns immanent this subject's designs and institutionalises the subordination of other beings and their valorisation within a matrix of functionality, under the assumption of the need to expand as control and domination. Accordingly, Agamben's analysis has asserted that the instrumental cause is linked to the figure of the slave in a fundamental manner as

> …it is implied in the very formula "the human being whose *ergon* is the use of the
> body" and in the definition […] of the slave as the one who, "while being human,

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[8] Agamben (2011: 1) explains that in Christian theology 'the idea of an oikonomia, [is] conceived as immanent ordering-domestic and not political in a strict sense-of both divine and human life', contrary but interrelated to political theology, 'which founds the transcendence of sovereign power on the single God'.

is by nature of another and not of himself." The slave constitutes in this sense the first appearance of a pure instrumentality, which is to say, of a being that, while living according to its own end, is precisely for that reason and to the same extent used for another's end (Agamben, 2015: 75).

As above, instruments are constituted as being not of its own but in relation to their function within a specific economy and principal cause. Such an economy, from a decolonial standpoint, brings about '"thingification", that is, the relations of domination and submission which turn… the indigenous man into an instrument of production' (Césaire, 2000: 42). As Dussel (1996: 5) explains, the exclusion of the slave is not a thing of the past but is linked to the notion of capitalist development,

> …the "delay" of peripheral capitalism is a "before" with respect to the "after" of "late" capitalism. What is not taken into account, in this Eurocentric ideology, is that there is no such "before." Since 1492, the periphery is not a "before," but an "underneath": the exploited, the dominated, the origin of stolen wealth,' accumulated in the dominating, exploiting "center." We repeat: the developmentalist fallacy thinks that the "slave" is a "free lord" in his youthful stage, and like a child ("crude or barbarian"). It does not understand that the slave is the dialectical "other face" of domination: the as-always, the "other-part" of the exploitative relation.

The slave is fundamental to coloniality and capitalism not as part of its past but as its permanent other-part. However, and along the lines of Agamben's (2015) understanding of instrumentality, thingification not only means the exclusion of human beings but also the objectification of the nonhuman (see Schulz, 2018: 51). The thingification of beings as instruments is not only a use of them as objects but a production of them as instruments, letting them be in the way (whatever way) the principal actor (privileged subjects as designers) deems fit. Reducing the gap between human and non-human, this notion of thingification also finds an echo in Maya tradition and the idea of 'domestication' of peoples and other forms of life, which refers to the placing of some other people's 'modes of feeling-thinking, of acting, of being-existing in our hearts […] so we reproduce what they are and how they are' (López, 2015: 268). As developed in Chapter 7, instrumentality not only corresponds to slavery or an unclear legal status in between economy and politics from a Western critical perspective like that of Agamben or Schmitt but also corresponds to coloniality in the form of thingification and domestication.

As the following chapters demonstrate, the Internet has been designed as a technology, instrumentally, within a metaphysical tradition it has been embedded with

as an obediential potential. This embedded potential has determined and accommodated the diverse nature of its components as instruments (doing what they have been designed and expected to do although indifferent [or ignorant] of the broader economy and the principal cause that they ultimately respond to [see Chapters 3 and 4]) and not as political subjects. In contrast to instrumentality and as detailed in the following sections, 'the political' in this thesis opens up not a different use of or participation in designing an already assumed technological object but a different being of the technological object, not limited within the figure of a taken for granted and concealed economy or government but introducing a decolonial element that proposes learning from often undervalued knowledges and praxes.

2.4 Coloniality and decolonial thinking

As Walter Mignolo (2010: 9) points out, a basic understanding of decolonial thinking and doing is that 'there is no modernity without coloniality, that coloniality is constitutive of modernity' (modernity/coloniality). As he further explains,

> while modernity is presented as the rhetoric of salvation, it hides coloniality, which
> is the logic of oppression and exploitation. Modernity, capitalism and coloniality
> are aspects of the same package of control of economy and authority, of gender
> and sexuality, of knowledge and subjectivity (Ibid).

From this approach, modernity and the logic of coloniality are entangled and date back to the sixteenth century. Then, the colonisation of the American continent that began in 1492 constituted the foundational moment of Western modern subjectivity, when coloniality, modernity and capitalism intertwined and deployed diverse forms of domination, control and exploitation (Quijano, 2010; Martínez, 2012). Consequently, in the sixteenth century the capitalist world-system would emerge with the interconnection of world-markets (Wallerstein, 2011) and in the eighteenth century, with the industrial revolution and relying on a racial division of labour – the imposition of indigenous forced labour (Quijano, 2010; see Hornborg, 2016) – Europe would achieve centrality in the world-system (Dussel, 2004).

Therefore, Enrique Dussel (1996) argues that modernity has not been an intra-european phenomenon but has been constituted in relation to the indigenous world (see also Mignolo, 2010: 12), which

> gave to Europe the first *comparative advantage* that explains, in part (but it is a
> part of the explanation that is never considered in the interpretations of

modernity), the triumph over the Muslim world, vanquished at Lepanto in 1571 (25 years after the discovery and the beginning of the exploitation of the Zacatecas silver mines in Mexico and the Potosi silver mines in Bolivia) (Dussel, 1996: 134).

As a result, Aníbal Quijano explains (2010: 24), 'the cultural repression and the massive genocide together turned the previous high cultures of America into illiterate, peasant subcultures… that is, deprived of their own patterns of formalized, objectivised, intellectual, and plastic or visual expression', forcing them to express themselves through the cultural patterns of the dominant, 'even if subverting them in certain cases to transmit other needs of expression'.

In line with such an account of coloniality as the underside of modernity, Quijano (2010) distinguishes between colonialism as an explicit form of political and economic domination, as constant and systematic 'immediate repression', and cultural coloniality, the 'beliefs and images [that] served not only to impede the cultural production of the dominated, but also as a very efficient means of social and cultural control' (Quijano, 2010: 23). Coloniality in this understanding 'refers to long-standing patterns of power that emerged as a result of colonialism, but that define culture, labor, intersubjective relations, and knowledge production well beyond the strict limits of colonial administrations' (Maldonado-Torres, 2010: 97). In this way, Quijano extended 'coloniality of power (economic and political) to coloniality of knowledge and of being (gender, sexuality, subjectivity and knowledge)' and argued that 'if knowledge is colonized one of the tasks ahead is to de-colonize knowledge' (Mignolo, 2010: 305).

Drawing on the above, decolonial thinking argues that in the formation of a modern subjectivity and a modern European identity the Cartesian *ego cogito* was preceded by 'an unquestioned ideal of self expressed in the notion of the *ego conquiro'* (Maldonado-Torres, 2010: 99). In this light, certainty has been present in modernity in the preceding form of 'the self as a conqueror, of its tasks and missions', and in the form of 'Descartes's certainty about the self as a thinking substance (*res cogitans*)' (Ibid). Therefore, 'the practical conquering self and the theoretical thinking substance are parallel in terms of their certainty' and 'the *ego conquiro* is not questioned, but rather provides the ground for the articulation of the *ego cogito'* (Ibid).

As Quijano (2010: 25) explains, coloniality of power and modern rationality, were conceived 'with the social category of "race" as the key element of the social classification of colonized and colonizers', while 'the old ideas of superiority of the

dominant, and the inferiority of dominated under European colonialism were mutated in a relationship of biologically and structurally superior and inferior'. The *ego conquiro* expressed the will to govern through domination and exclusion of its own exteriority (other forms of life considered as inferior), commanding from and building on its own idea of effective *ratio*. In other words, there was no modern subjectivity before 1492 as 'Europe did not have its own effective consciousness of superiority'; instead, in such terms, 'Europe was conscious of Muslim, Chinese and Ottoman worlds' political, intellectual and economic superiority' (Martinez, 2012: 24, author's translation). It was after 1492 that certainty and superiority arose and a modern European identity and rationality emerged.

After the *ego conquiro* and with the formulation of the *ego cogito*, 'Descartes placed the ego at the foundation of knowledge in a position previously reserved for the "Christian God" (Grosfoguel, 2012: 88). The *ego cogito* was dissociated 'from all bodies and territories', emptied 'of all spatial or temporal determinations' in order to conceive 'the possibility of a knowledge beyond time and space' (Ibid). Accordingly, the ego-politics of knowledge (Mignolo, 2005) is 'nothing less than a secularization of the Christian cosmology of the theo-politics of knowledge', in which 'the subject of enunciation is erased, hidden, camouflaged' (Grosfoguel, 2012: 89). On this basis, from a particular experience and standpoint, universal knowledge was to be enunciated through erasing and ignoring its own particularity as grounded on a subject of enunciation, founding 'the privilege of "European man" in the production of universal knowledges' and meaning that 'a particular defines the universal for the rest of the planet' (Ibid: 90).

In the face of such a privilege, the decolonial option proposes to make visible those loci of unaccounted histories, cosmovisions and forms of life produced as underdeveloped, backward, traditional, barbarian, mystic or subaltern by 'de-linking' from Western epistemologies. Decolonial thinking proposes 'to take seriously the critical thinking produced by "subalternized" subjects from below as a point of departure to a radical critique of the hegemonic power structures and knowledge structures' (Grosfoguel, 2009: 101). In this sense, 'de-linking' is an epistemic shift that entails advancing a 'geo- and body politics of knowledge that… denounces the pretended universality of a particular ethnicity (body politics), located in a specific part of the planet (geo-politics)' (Mignolo, 2010: 307). Such de-linking as an epistemic shift brings about border thinking or border epistemology: standing or being-in-between worlds and knowledges and unfolding worlds and knowledges otherwise (Escobar, 2010) and not within an exclusionary framework.

In line with the above, while great contributions have been made in denouncing practices of colonialism and imperialism through the Internet and on the Internet, the assumption of a technological world and its digital futures remain unquestioned. For instance, data colonialism in the case of aid work and international development has been addressed as 'ongoing Western control over data' and having a 'lack of ethical processes around data collection,' with limited proposals such as local data ownership and consent, thus aiming to prevent exploitation and colonialism. But this remains a task that starts in the "West" with the creation of sustainable models in and by western agencies (Anonymous, 2016). In a similar way, attention has been paid on the need either to evenly distribute the benefits of an expanding Internet (Hill, 2014) or for each community to develop their own infrastructure, programming codes and imagine alternative and decolonized digital futures, without questioning the "digital" in such futures (see Kwet, 2019; Martini, 2017; Ogden et al., 2015). Despite recognising that a 'new form of imperialism, techno-imperialism, is conflated with traditional political imperialism for what concerns Internet governance' the conclusion has been 'that new governance models should be envisaged so as to achieve true democratic and multilateral Internet governance' (Hill, 2014: 78). In this way, this critical approach lacks any assessment of whether and of how coloniality may be reiterated through the terms and categories that frame the discussion, embedded and entailed by technological and digital expansion as being technological in themselves.

Efforts to decolonise technology and the Internet through equality in access, design, production and/or distribution remain within the scope of technological development, power politics and/or human rights, finally proposing 'harm reduction' (see Soundararajan and Flanders, 2017) instead of questioning the colonial character of considering an object a technology. The same happens when violations to privacy and surveillance are taken to correlate to cyber-colonialism and traditional economic domination ('as a legacy of traditional colonialism') (Danezis, 2014), a perspective which despite having enormous relevance in pointing out economic, military and government potential direct control over people, data and resources, remains within the intelligibility margins of competitiveness and economic/technological development. Therefore and so far, attempts to decolonise the digital maintain the digital as its grounding, assuming its place and continuity and dismissing, as analysed in the previous section, the consideration that diverse societies may require 'not only new technological directions and designs influenced by more enlightened normative commitments, but also new social directions which de facto require *less* technological activity, thus less resource-concentration and inequity, and less environmental "turnover" consumption, and destruction' (Wynne, 2010: xiv, emphasis in the original). The preceding sections have explained the contributions and limitations of STS-IR

approaches in this regard. One of the main contributions has been STS-IR focus on the historical and social process of technological and social design. But also, one of the main limitations of STS-IR is the link they establish between development and taken-for-granted conceptions of a technological object, an everyday technical experience and politics, which unfolds into political and epistemological limitations in opening and listening to other already existing and new social directions. On this basis, the thesis does not engage in the formulation of a decolonial politics of technology or the Internet but rather points towards the necessary inclusion of decoloniality in philosophical and critical approaches to technology and the internet by bringing together philosophy of technology, STS, the concept of the political and the Zapatista use of the internet.

2.5 The Political as locus of redefinition of instrumentality

As Walter Mignolo (2010: 352) has explained, de-linking knowledge production from western epistemologies entails 'analysis of the making and re-making of the imperial and colonial differences', in this case, furthering awareness of the constitution of technology *qua* technology. But also, de-linking calls for border thinking to de-colonise knowledge and being, epistemologies and ontologies. On such basis, Mignolo claims, 'new concepts of economy and social organization (politics) will be derived' as 'solutions from the political theories of the West… have been exhausted and without border thinking any exercise in this arena could only lead to spinning the spin within the bubble of imperial modernity' (Ibid).

> De-linking means to remove the anchor in which the 'normalcy effect' has been produced as to hide the fact that the anchor can be removed and the edifice crumbled… The future could no longer be owned by one way of life ('la pensé unique' of Ramonet), cannot be dictated by one project of liberation and de-colonization, and cannot be a polycentric world within Western categories of thoughts (Mignolo, 2010: 352-353).

De-linking and decolonial border thinking – standing or being-in-between worlds and knowledges and unfolding worlds and knowledges otherwise aiming at decolonisation (Escobar, 2010) – together with the Zapatista words and experiences, suggest a call to rethink and elaborate on the concept of the political, not in order to establish a more accurate conceptualisation but to listen to other experiences and knowledges as performing the same concept of the political as an encounter between concrete modes of being.

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As mentioned before, while this thesis pays attention to the use of the Internet in Mexico, the main contrast and departure point for a different understanding of the relation between technology and politics is the Zapatista experience. The reason being that the Zapatistas in many ways recall a pending task of dialogue, not only of knowledges but also of modes of being in Mexico, as a country constituted by a multiplicity of cultures and nations. Therefore, politics are to be discussed on the basis of and as an effort to consider praxes, ontologies and metaphysics that seem to be other. De-linking and learning from the Zapatista experience refers not only to the immediate and exceptional use of the Internet but also to their own understanding and experience of politics as a community based on a spatial relationship with earth and territory, with their own cosmology, metaphysics and ontology. This theoretical outset for an approach to the Internet in Mexico underpins and is complemented by the analysis in Chapter 7. The aim is to relocate attention from the strategic use of the Internet by the Zapatistas, as an instrument directed towards a goal, to a more comprehensive understanding of how politics play in a context of communities where the technological character of technology is set against a different praxis, metaphysical and ontological backdrop, and ethical horizon of intersubjectivity.

Regarding politics, as a Zapatista member asserted: '(…) the future of the EZLN is not defined in military terms but in political terms. We are not worried about the enemy, we are worried about how we are going to define a new relationship among partners' (Ceceña, 2004: 21, author's translation). Along with this emphasis on partnership over enmity, in the case of the Zapatistas a new relationship among partners was to be defined. Underlying such a statement and political praxis, the thesis contends and further develops in Chapter 7, is a basic wisdom and experience of the equality of all things. Therefore, the political in this respect and for the effects of this work is not merely seen as informed deliberation and decision, negotiation or plainly as power. The political as proposed in this thesis, is partly inspired in its politico-ontological aspects in a Schmittian definition as an event constitutive of 'order and orientation' (spatial order and the orientation of a particular community), in which the *self* emerges through experience and reflection, from the encounter with the 'other' as this encounter 'brings about the "existential affinity" of those "who just happen to live together"' (Schmitt in Ojakangas, 2007: 210-214).

As mentioned in the introduction to this thesis, a Schmittian definition opens up within Western tradition an opportunity to move beyond and into other understandings of living together. As it has been emphasised (Marder, 2010: 70-72), Schmitt rejected abstract disembodied concepts like that of a humanity that lacks a body and called

attention to the ambiguous 'legal status of the non-European territory appropriated by Europeans.' The latter 'testifies to the ambiguous mixture of the economic and the political at the origins of colonialism' and conceptualizes colonialism not as a political phenomenon but 'at best… a vivid example of indecision and vacillation between the political and the economic; at worst, and at its most modern, [as] a force of economic appropriation' (Ibid).

From the above recognition of political indefiniteness and exclusion within an economy of appropriation, an other experience of encounter in which existential affinity is brought about is the Maya and Zapatista experience of politics, which can also be interpreted in some similarity with Giorgio Agamben's (2015, 2009, 2000) proposal for rethinking the political from within Western metaphysics and towards turning the latter inoperative. Instead of a Schmittian emphasis on otherness as brought about by enmity, the political is understood here as having to do with the Zapatista assertion regarding how partners define themselves as being together and, as we shall further see in Chapter 7, open and in respect towards every 'other' being (and the multiplicity of worlds that coexist). This 'other' that appears and is recognised can also be seen as the friend: who 'constitutes the political' and shares no positive or predicative identity but the pure fact of existing and 'original con-senting' that his friend exists (Agamben, 2009: 36). From the latter perspective politics appears as a 'becoming other of the self' (Ibid: 34-35) and not exactly a becoming a self from the experience of the other. The different emphasis lies in the importance of war or philosophy (or knowledge about such con-senting as ontology and ethics). This flexibility in the interpretation of the political, in terms of enmity or friendship, does not exclude one another but speak of the political as openness at the level of facticity and the emergence of a collective self from that experience and reflection. In turn, political ontology can be seen as an 'inquiry' into the political and the 'interpretation of… collective existence' (Marder, 2010: 4).

Inspired in the Maya roots of the Zapatista insurgency, as detailed in Chapter 7, the understanding of the political and decolonial politics ultimately refers, in this thesis, to the constitution of a collective heart – *ko 'tantik* – and cosmic-*kolektive Xch 'ulel wo 'tan* –'guardian spirit-consciousness of all that exists' – in *ich'el ta muk'* – recognition-respect for every being, knowing to listen, knowing to feel, being awake – together with an experience and reflection that constitutes itself as matter of interpretation as *sna'el k'inal* – 'knowing the world [saber el mundo], meeting/getting to know the world, knowing to be-exist in it, knowing to direct the word, knowing to live in the *ich'el ta muk'* (author's translation, López, 2015: 267). Therefore, this thesis emphasises the constitution of a collective heart as an open questioning and ethics – the ongoing

drawing and/or redrawing of boundaries between what is a partner and member of a community – or collective existence – and what is not, which is self-aware and unmediated (undecided or alienated) by other groups. Politics initially appears as experience, in a constant revisiting of ontological grounds and the possibility of meaningfulness and vitality to collective existence (Marder, 2010: 4). But ultimately, drawing on the Zapatista experience and *tojolabal* and *tsotsil* – Maya – philosophy in the final chapter of this thesis, politics has to do with recognition and respect, knowing the world, con-senting, co-existence, meaning, practice, form and/or purpose regarding collective unity through and as territory and the awareness of their existential importance, which recalls as fundamental the ethical Maya horizon of the equality of all things and opens up the possibility of including "non-human" beings as members of a political community, as decolonial politics, in contrast to the assumption of a hierarchy of beings and the inferior objects of instrumentality and exploitation.

2.6 Conclusion

The chapter has formulated an approach to technology and the Internet by questioning a taken-for-granted everyday technical experience and concepts like technological development, politics and even technology itself against the background of coloniality. While important contributions have been made to the understanding of technological artefacts, knowledges and practices as socially constructed, the inclusion of a decolonial element offers to listen to unaccounted histories, cosmovisions and forms of life produced as underdeveloped or backward, denouncing the pretensions to universality of a particular ethnicity and a particular geography's knowledge and practices.

The critique outlined in this chapter has considered the analytic limitations of STS-IR approaches by pointing at the link between development, everyday technical experience and the political, and epistemological limitations in opening and listening to other already existing and new social directions. Within this critique, western approaches to technology and the political have not been dismissed but carefully considered and complemented within a shared experience of the political. STS and STS-IR approaches are important as a first analytic step towards conceptualising the thesis' central concept of an instrument of coordination without politics. Particularly, McCarthy's (2015) work has contributed to this thesis in terms of a consideration of the provenance and structure of the Internet in order to contrast such embedded interests and values with the ones reproduced in Mexico when using this technology (Chapters 3 and 4). In addition, while the thesis is critical of *tecnopolítica* as reproducing coloniality (see Chapter 6) this perspective contributes to the thesis in

describing the way in which social mobilisations have been organising as a collective self and performing their own understanding of the Internet and activism. Yet and as analysed, these considerations cannot explain the political (as defined above in this chapter) implications of the Internet in Mexico.

Regarding the Internet's political implications in Mexico, and insofar as the experience, categories and practices that correspond to the category of the political obey an exclusive ethnocentric formulation, such politics have been identified as someone else's (Western) politics, both in definition and practice. Therefore, such politics are seen as diffusing an instrumental mediation whose center of control and design lies elsewhere according to someone else's interests. In this way, the chapter has initially defined an instrument of coordination without politics as that which emerges where politics and the politicisation of technology are assumed according to western ethnocentric parameters but located in non-Western situations.

The 'instrument(al)', as developed in this chapter and throughout the thesis, has been further defined as a being that serves another's end only to the degree that it realizes its own end and is indifferent to its arrangement within an overarching economy and the end that defines its operation. Further situating the categories of technology and politics in Mexico the thesis moves towards decolonial border thinking by considering instrumentality in a colonial context as bringing about 'thingification', the turning of originary peoples 'into an instrument of production' and the objectification of beings (Cesaire, 2000), together with 'domestication' as the placing of some other people's 'modes of feeling-thinking, of acting, of being-existing in our hearts […] so we reproduce what they are and how they are' (López, 2015: 268). Therefore, the chapter has sought to establish the ways instrumentality, colonisation, 'thingification' and 'domestication' intersect.

Drawing on the above, instrumentality not only corresponds to slavery or an unclear legal status in between economy and politics from a Western critical perspective like that of Agamben or Schmitt but also corresponds to coloniality in the form of thingification and domestication as a clear exclusion of other embodied experiences of the political. As a form of coordination without politics, the instrument does not participate of the definition of its overarching meaning and orientation but has been instead limited to unfold in the way it has been intended or designed to work as it is its own end. The Internet as an instrument of coordination without politics, emphasises how this technology internalizes, systematizes and reiterates the concealment and indifference towards its overarching economy and design, reproducing thus the limitations in the possibility of participating of the definition of this economy and its

orientation (to be analysed in Chapters 3 and 4). But furthermore, the Internet as an instrument of coordination without politics brings coordination and collective experience to its users by reproducing this technology's embedded values and interests, the same that have been shaped according to another's end and economy, concealing, mediating and hindering other situated and local political experiences (see Chapters 5 and 6).

Regarding the political as an experience, this concept has been understood in similarity to Agamben's (2009: 36) idea of the political, as constituted by friends and the 'original con-senting' that the friend exists, but more decisively as having to do with a Maya Zapatista approach. The latter emphasises the way in which partners define themselves as being together and, as to be further elaborated in Chapter 7, open and in respect towards every 'other' being (and the multiplicity of worlds that coexist). Therefore, the Zapatista experience of politics is understood as it has to do with con-senting, co-existence, meaning, practice, form and/or purpose regarding collective unity through and as territory (see Chapter 7) and the awareness of their existential importance, which recalls an ethical Maya horizon of intersubjectivity or the equality of all things and opens up, through concepts like *ko 'tantik*, *sna'el kinal* and *ich'el tamuk* the possibility of including non-human beings as members of a political community in contrast to the assumption of a hierarchy of beings and the inferior objects of instrumentality and exploitation. In this way, the chapter is significant for the overall argument of the thesis as it draws the trajectory from western theories and concepts to the consideration of the Zapatista use of the Internet and mode of life as a contribution towards considering alternative knowledges and praxes before assuming an everyday technical experience and analytical concepts like technology and politics. The chapter has set the theoretical background for explaining how the political effects of using the internet in Mexico go beyond taken-for-granted assumptions of technology and politics, putting forth the epistemological inclusion of Maya philosophy and Zapatista praxis as a decolonial element to be taken into consideration by critical approaches to technology and the internet.

Chapter 3

Governing Design/Designing Government

The Internet as an instrument of coordination

The chapter analyses the main ideas, actors and economies involved in the emergence, design and expansion of the Internet by drawing on the notion of *dispositif* (Foucault, 1977) and in order to identify this technology's overarching economy or form of coordination with a strategic function. The chapter explains how this form of coordination entails 'instrumentality' as a specific relation between a certain degree of autonomy of its components and the overall stability of the system or its 'economy' (Agamben, 2009, 2015). Such a relation increasingly conceals its own overarching and single processes, its points of control and decision-making, fragmenting knowledge of the overarching economy of the system by its users and components in exchange for simplification, flexibility, adaptability and functionality. This embedded form of coordination, it is argued, is one that produces, manages and conceals a complex social and technical environment, hindering knowledge and understanding of this technology's operation as a system. In this way, such a form fosters ignorance and fragmentation under the appearance of technology's political neutrality while offering simplicity and delegation of decision-making, not only in the realm of informatics but also in mediating social life.

In relation to the overall argument of the thesis, the chapter explains how the Internet as an 'instrument of coordination without politics', has, by design, internalised, systematized and reiterated the concealment and indifference towards its overarching economy, managing interactions on behalf of others and reducing the possibility of politics and a shared definition of this technology's economy and orientation. The Internet's technological and social development despite having a strategically balanced relation between military, entrepreneurial and scientific interests and values in the US, has increasingly developed into the commodification and mediation of its users (see Chapter 4). Once exported to the world, and as this thesis sets out to demonstrate in the case of Mexico, the Internet as an 'instrument of coordination without politics' has entailed concealment and ignorance without attainable control on a self-determined local collective basis.

As Michel Foucault (1977: 197) proposed: 'In trying to identify [a *dispositif*], [we] look for the elements which participate in a rationality, a given form of co-ordination'. This approach allows understand the Internet through analysing the intersection and disjunction between strategic orientation, values and processes of technical knowledge and development, on the one hand; and technology's concrete operation as comprising a multiplicity of actors and agents, human and non-human, on the other. From this perspective, the particular form of coordination embedded in the Internet, as part and product of broader political and economic dynamics and a national and international context, functions as a 'right disposition of things' in practice (Foucault, 2007: 134-137; Lemke, 2002, 2015), whose form of coordination has developed over time and has its own historicity and symmetries with other practices across social interactions. Throughout such process, the Internet's embedded form of coordination makes sense and is reiterated in its operation regardless of having or not specific identifiable authors to whom strategies and calculation could be attributed to (Foucault, 1977: 202).

The chapter is organised in three sections, which follow the design trajectory and identify its underpinning strategic imperatives and values, emphasising the interactions and integration between the defence, scientific and entrepreneurial sectors in the US. The first section analyses how in designing the Advanced Research Projects Agency Network (ARPANET), beyond the technical realm and ARPA's scientific, economic and military components and members, values like flexibility, adaptability and control corresponded to design strategies and processes of modularity, fragmentation, accommodation of heterogeneity and expansion. The section argues that all these concepts and processes integrated a form of coordination that relied on its capacity to simplify and manage the system to be functional without disrupting it as a whole and superseding fragments' awareness of the overarching logic that governed them altogether. This form of coordination developed not only within a technical realm but also as instantiated in ARPA and its scientific, economic and military components and members oriented towards national superiority, economic efficiency and commercial benefit.

The second section explores the Defense Communications Agency's (DCA) investment in ARPANET's expansion and how through UNIX, main operating system of the Internet nodes, the DCA expanded a form of coordination that managed to accommodate heterogeneity in a symmetrical way to processes of social inclusion and exclusion of social and cultural difference in the US. This section argues that control, despite being evident in DCA's funding and support to the protocol's expansion, was nevertheless complemented with a form of informatic and social

management that simplified processes by bonding them to government control and a national orientation. It did so first, it is argued, through concealment of its own operations, control stakes and security imperatives, and, second, through fragmentation of the system components, where decentralisation and adaptability were seen as oriented by fast-changing markets and technologies.

Finally, the third section analyses how from a security imperative that oriented the initial international expansion of the ARPANET, the Internet would become a general-purpose technology, projected to a global level but whose design distinctively developed in the US in accordance to values of privatisation and economic liberalisation, oriented towards consolidating a global network as a global market familiar to US values. The section argues that while control and the imperative of national security in defence and economic terms has always been present and has crucially conditioned the design and expansion of the Internet, its capacity to conceal internal processes, decision-making and control, according to its technical values, processes and strategies, has allowed its commercial orientation to thrive as if the Internet was a politically neutral technology, autonomous from the fast-changing markets society and this technology's new subject and object of commodification, users, have to adapt to.

3.1 Designing the management of a complex technical and social system

This section identifies the main features, strategies and form of coordinating and conceiving the ARPANET, which was to become the Internet, to understand an underlying common practice and form of disposing components altogether. Such a form of coordination, at a so-to-speak technical level, included the strategies of *modularity* or layering and the accommodation of diversity and heterogeneity in order to avoid disruption and preserve the whole of the network in operation. In order to preserve the overarching operation of the whole network, ARPA needed to manage a complex system through fragmentation and simplification of tasks and knowledge. At an immediate contiguous institutional level, ARPA (Advanced Research Projects Agency) embraced and promoted a very particular form of management that cannot be understood through traditional forms of bureaucracy: an informal management that combined efficient management, subtle control and open systems of free inquiry. These two managerial environments, ARPA conducting federal human and non-human resources for research and development within DoD's effort to achieve technological vanguard for defence, and the network (ARPANET and the Internet) technically coordinating informatic resources to fulfil the aim of networking research

communities, were characteristically flexible and efficient but were supported on a stable although informal structure of control and orientation.

3.1.1 ARPA and new forms of informal management

It was 1958 when the institution that made the ARPANET possible, ARPA, came into existence. This agency was formed amidst concerns about the Soviet Union increasing its nuclear capabilities with the launching of the Sputnik in 1957. The agency was then formed to respond to '"Presidential Issues,'' assignments coming to it directly as the result of White House concerns about its most critical technical concerns' (Lukasik, 2011: 6). It was part of the response of the US defense establishment, mobilizing diverse resources, funding research projects on science and technology and fostering 'high-risk programs to prevent technological surprise' (Lukasik, 2011: 12), all in order to develop military and nuclear capabilities beyond those of the USSR.

From its inception, the agency was flexible and endorsed an informal way of management with less than 200 employees and a 'modest internal structure' of program managers usually 'recruited for only a few years', and who were also 'masters of their subjects, equal to the most expert specialists with whom they work' (Lukasik, 2011: 5). The agency would conceive, fund and manage projects while specialized research and development was a contractors' task, be it academic or industrial. This informal form of management, as a 'corporate research operation', was something that Secretary of Defense Neil McElroy had encouraged and which he was proud of, a practice that he had initially developed in his previous position at Procter & Gamble –'blue-sky' research and vast funding of it in order to 'produce remarkable, if not always predictable results' (Hafner and Lyon, 1998: 17). In general, the agency could combine scientific inquiry and research with flexible empathic, although elitist, management and executive direction; but also ARPA was always conceived as fundamentally dual, military and commercial in application, developing 'technologies that would have both defense and civilian economy payoffs – aiming to make the economy more competitive, while maintaining leadership in defense technologies' (DARPA, 2018: 15).

Under such a flexible management and dual application, as a command and control assignment, the task of networking computing resources emerged as an ideal of J. C. R. Licklider, appointed director of the ARPA program in 1962. Licklider's underlying motive was that of 'cooperative interaction between men and electronic computers', involving 'very close coupling between the human and the electronic members of the

partnership' with the main aims of letting 'computers facilitate formulative thinking' and enabling 'men and computers to cooperate in making decisions' (Licklider, 1960: 4). Regarding a computing network, his motivation and aim was his certainty about 'the need to aid cognition by facilitating the interaction of people and data as broadly as possible—what [he] called the Great Intergalactic Network', and the means towards this ideal was 'a general-purpose network that could be used for as many decision-support purposes as its users had the imagination to conceive' (Lukasik, 2011: 8). Licklider's vision of the network was one of an instrument for decision-making, always linked to problems and ends defined by its designers and that were 'essentially as important, in the research context as in the military context' (Lukasik, 2011: 9).

In 1966 Lawrence Roberts would come to ARPA recruited by Robert Taylor, then director of the Information Processing Techniques Office (IPTO). Formal research on networking and the ARPA Network project started in 1967 (Naughton, 2000: 83). A few years later Stephen Lukasik took over the ARPANET project as deputy director and Roberts developed the idea of a distributed packet-switching network. By 1968 further limited funds and the increasing scrutiny of the US Congress into defence budget complicated the situation making it more urgent, as networking already existing computing resources among ARPA's contractors meant important financial savings and thus served as an important incentive (Lukasik, 2011). The goals envisioned were those of developing advanced research in a new field of study (networking), ensuring financial savings and achieving resource sharing and interaction among research communities but always according to the national and military objective of developing secure and useful communications (Abbate, 1999: 46). However, on the way to achieve that, the network designers realized that the diversity and heterogeneity of computers, systems and researchers would have to be accommodated in order to surpass incompatibility (Ceruzzi, 2003: 194).

Soon after the project started, in 1969, four initial nodes for the network were established at University of California in Los Angeles, Stanford Research Institute, UC-Santa Barbara and the University of Utah, then expanding to fifteen computing centers part of the IPTO and to ARPA research centers by the end of 1971. In this way, the form of coordinating state resources incarnated in ARPA's flexible managerial practice although flexible, always had direction and hierarchy, meaning decision-making capabilities that could make sense of the use and disposition over available resources. As the following sections explain, this managerial style, letting its members to freely do what they know but always in relation to an established direction and purpose, specific cultural values and quite significantly in a Cold War

context, would be reflected upon the technology itself, in this case, the network design and its initial materialisations.

3.1.2 A different emphasis for a network model in a Cold War context: Paul Baran's idea of packet-switching and the evident imperative of command and control

The context and conditions that made the Internet possible were those of the Cold War. Although some of its conceptions can be traced further back to the beginnings of the twentieth century when engineers 'began to think deeply about control, communications, and human-machine interaction' (Mindell, 2002: 5; see Naughton, 2000), it was not until 'mutual assured destruction' (MAD) was assumed amidst an intensive technological development and a corresponding mobilization and administration of resources that the aim of networking control and command communications, and computing and research resources, arose as an explicit state concern (Naughton, 2016). As Paul N. Edwards (1996: 2) has explained, 'the historical trajectory of computer development cannot be separated from the elaboration of American grand strategy in the Cold War'. In the face of a nuclear threat, and the imaginaries of a nuclear exchange, defence efforts envisioned a 'flexible response strategy', comprising ongoing communications and the maintenance of 'central command and control', as the 'highest military priority' (Edwards, 1996: 133). Such a goal was to be achieved by redistributing information and guaranteeing its safe arrival in such a scenario.

Initial concerns regarding a nuclear attack and the need to achieve 'survivability' were main features of the network model developed by Paul Baran in 1962, a research member of the RAND Corporation whose ideas would become embodied, subject to further development and adaption, into the Internet. The principles of packet-switching and 'high levels of link redundancy' were the singularity and foundation of Baran´s design (Hafner and Lyon, 1998: 51; Naughton, 2016: 7), which consisted of a 'distributed communications' system with highly connected switching nodes and a promise of (efficient) 'survivability' and retaliatory capability (Baran, 1960: 3, in Abbate, 1999: 11). In the case of failure of some of the nodes integrating the system, many others would support communications by making sure information found an alternative pathway to its destination. Individual nodes would be intelligent enough to automatically 'switch signals to surviving links' without the need of 'one or a few centralized switching centers' concentrating the capacity (intelligence) to route messages (Baran 1960:3, in Abbate, 1999: 16).

Regarding the innovation of packet-switching, its main characteristic relied on the translation of information into a digital language, enabling the capacity to manipulate all sorts of data in a different (standardizing) manner, fragmenting messages by dividing them 'into axed-size units that he called "message blocks"' instead of dealing with complete messages and its different sizes, risking saturation of the network (Abbate, 1999: 17). In synthesis, this model of networking relied on a basic co-dependence between autonomy and overall operation of the network, just like instrumentality entails an alleged autonomous instrument that (intelligent enough) follows its own design and responds to an overall economy (Agamben, 2015). As Paul Baran affirmed, in this model 'there is no central control; only a simple local routing policy [that] is performed at each node, [and] yet the overall system adapts' (Baran, 1964b: 8, in Abbate, 1999: 13). In the end, despite the complex evolution of ARPANET and then of the Internet, this kind of autonomy-overall system stability relation and the process of fragmenting in order to obtain a basic degree of flexibility will be at the core center of the adaptability, expansion and accommodating capacities of the networks.

Although Baran's model did not succeed in being implemented due to bureaucratic and other technical conditions, his ideas were important in the upcoming plan for networking research resources under the management of ARPA. Besides Baran's role as advisor in the design of the ARPANET, his ideas and model endorsed and resembled specific values. Even though neither ARPANET nor the Internet responded to the sole value of survivability or exclusively served the purpose of keeping command and control under a nuclear attack, 'the packet switching concept did endow the network with some resilient, self-healing properties', and in line with the aim of resource sharing, there was always the 'justification that the computer resource sharing and communication applications of the network would enhance the technology of military command and control' (Cerf, in Veá, 2010: 7).

The telecommunications network design that preceded the Internet exposed a visible and explicit aim of command and control in a context of confrontation. This aim took a new form with ARPA's network design and its informal form of management. In designing the ARPANET, values like flexibility, redundancy, adaptability and control would correspond to processes of fragmentation, accommodation and expansion, which traversed both the technical and social realms. A broader form of coordination instantiated in ARPA and its scientific, economic and military components and members would be then embodied in a telecommunications network. In the end, in designing the ARPANET a specific strategy of modularity, as further detailed in the following section, was employed, which despite not emphasising a command and

control imperative, would develop in correspondence to familiar values like redundancy, resilience, adaptability and flexibility, together with processes of standardisation and fragmentation and a general balance between autonomy and overall stability of the network.

3.1.3 Technical and Social Strategy: Modularity, or the production of ignorance through hidden layers of control and operation

In correspondence with ARPA's informal and decentralised management style, the main strategy to surpass and accommodate diversity and be able to build up and expand the network was *layering* or *modularity* (Abbate, 1999: 50). Layering refers to limiting technical complexity to make it manageable, specifically through its fragmentation into modular blocks or *layers*, which respond to specific functions that follow specific rules of interaction within a system. This same principle of limiting and hiding complex technical processes and interactions would in the last instance allow the computing market to expand by offering more user-friendly interfaces to include users who were unfamiliar to programming (Ceruzzi, 2003: 345). Hierarchy played an important role here as it differentiated between layers, in this case between physical layers and more abstract ones like those of final user-computer interaction through commands and screen displays, or concealment, of such commands and processes. As Abbate explained, this strategy had implications for designing the system but also for managing and using it:

> The designer of a particular layer needs to know how the layer is expected to interact with other layers but does not need to know anything about the internal workings of those layers. Since the layers are independent, they can be created and modified separately as long as all those working on the system agree to use the same interfaces between layers. Thus, layering has both technical and social implications: it makes the technical complexity of the system more manageable, and it allows the system to be designed and built in a decentralized way (Abbate, 1999: 51).

As above, knowledge was limited to an expectation of interaction with other layers, working together but independently and fitted together and synchronised through using the same interfaces. This process meant losing specific knowledge of the intricate processes such a technology involved, developing an independent task and relying on the way exchange and interaction had been established to be. Decentralisation depended on a minimum common understanding of how things were to engage with each other and what it was expected from such engagement, enacted both by designers at a social and managerial level and by the components of the

network and computing systems at a technical one. Then, in addition to coordinating human and non-human resources and establishing a minimum of knowledge and compatibility in interaction, the network being developed required accommodating the heterogeneity of computers by means of a packet-switching software employed in common. Standardization was necessary to guarantee distribution.

At first, instead of having to design a packet-switching software adapted to each type of computer, the packet switching operation was developed by an additional interface consisting of minicomputers named 'Interface Message Processor' (IMP) (later terminal IMP (TIP), which interfaced terminals using an IMP to connect several hosts to the network). The same principle of limited knowledge and minimum standards of interaction were iterated as IMPs played as nodes of the network and interfaces to the hosts or the terminal of hosts. These nodes formed the *subnet* and oversaw fragmenting messages into packets, adding a standard header containing source and destination as well as control information, transporting the packets and reassembling them (point-to-point transmission) before delivering to the host (Abbate, 1999: 61). As well, the IMPs directed traffic control and routing of messages, making the routing system distributed and adaptive. As much as nodes were independent in terms of routing decision-making, hosts needed to know nothing of how this subnet worked (or it would mean dealing with more complex ways of storing and processing more information; undesirable in economic and military terms of efficiency and rapid response).

Just like Baran's model, IMPs allowed the overall system to keep working under disruption, being flexible enough to distribute the routing task and minimize 'dependence on any one component' (Abbate, 1999: 62). In this manner, control and functionality were guaranteed through hierarchy and division, not only at a technical level. As part of the developing process for the initial ARPANET, the system had independent IMPs with whom students could not experiment on their own and which were encased into military weatherproof hardware, thus maintaining, stabilizing and automatizing functions while displacing direct human intervention in favour of remote monitoring and control. In the end, this rationality of modularity and separation in order to coordinate made it possible to conceive a network composed by a communications layer and a host layer, each with diverse although coordinated tasks – the former switching packets through the network and the latter offering final-user resources.

In the same way that network functions were distributed according to layers, the organization of the project distributed tasks among groups: the communications layer

was under development by the private corporation Bolt Beranek and Newman (BB&N), UCLA and the Network Analysis Corporation (NAC), while the host protocols were assigned to the Network Working Group (NWG). Layering offered a way for users to ignore complex technical and social processes in operation while using the system, turning it into an instrument, not only in terms of the computing system but also in terms of its human social institutions[9]. Each component appeared to be and function on its own, independently, while developing a specific task and being able to make decisions regarding that task. However, members of the system were not of its own or operated on its own, they were dependent on the system and the task they oversaw. On the other part, users and the overall system ignored the singular existence of components outside its operating functions. They only existed as long as they developed their task and were turned invisible within the significance of a higher function (a user would never notice there is something wrong with a singular component if it does not manifest itself into a visible problem in the functionality of the system). The system was not dependent on any single component, as it had already decentralized its operation in terms of managing the flow of information. Decentralisation entailed disposability of singular components.

In terms of host protocols, the same prerogatives prevailed in its definition: minimum level of standardization in order to keep interoperability and avoid chaos, and further fragmentation of its layers (functions) to achieve such standardisation. In terms of management, flexibility and collegiality were upheld as the NWG in charge of the design lacked established authorities and expertise on the new subject. The group was evolving formal standards informally[10], but consensus on protocols reached by the group ARPA would certainly turn into policy (Abbate, 1999: 74). Freedom or autonomy were given final meaning by turning it within the control of ARPA and its broader security agenda into policy. For instance, the informal management ARPA engaged with was always tempered by limits on how and to what extent external users could participate into the design of the network: there was a capacity to manage the extent to which users outside of the ARPANET project could modify or attempt innovation of the system, moreover while standards were in process of being set (Ibid). ARPA held the authority to make plans for the network rather than resting with individual users.

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[9] The Network Control Center was established in 1970. It monitored and offered information and trouble assistance, supporting and promoting user indifference for the operation of the communications layer and thus working as a 'managerial reinforcement of ARPA's layering scheme' (Abbate, 1999: 66).
[10] For instance, Requests for Comments [RFC] were documents designed to promote the sharing of ideas and discussion on technical proposals in a new open field of inquiry, RFC were a standard for no standards of ideas, where all ideas were acceptable to open debate and informal communications that evolved into technical standards.

Modularity and accommodation of diversity were the technical and social strategies employed and embedded in this technology, fragmenting into "autonomous" functions and accommodating diversity and heterogeneity according to a minimum of rules of interaction in order to manage a complex technical and social system and successfully expand it. This layering strategy increasingly concealed the established hierarchies and the allocation of decision-making capabilities along with knowledge of the overarching operation of the system. This flexible and subtle form of management entailed certain degree of decentralisation, as each component had a function but none of them was indispensable. A specific balance between autonomy and overall stability of the system was achieved 'instrumentally' (Agamben, 2015) as autonomy that enacts design as the instrument's own nature, indifferent and built to perform its functions without knowing anything about the principal end this performance is serving at a systemic level.

The following section engages with the analysis of the parameters of control and orientation of the overarching economy of the networking system being designed. Although generally dismissed in favour of a more academic and scientific reading of the motivations that promoted and designed the Internet (Townes, 2012), the following section argues that military, entrepreneurial and scientific interests were intertwined in the design and expansion of the Internet, conditioning participation and shared knowledge through concealment by design. Just like instrumentality, the principal actor and his agenda are generally ignored by the elements of the system, which, limited to perform according to their design, reproduce an economy that conceals the principal actor's ends as the instruments' own nature.

3.1.4 Points of authority and what government means: Military, entrepreneurial and scientific control and orientation

Despite the flexibility and common background and collegial style of technical procedure, ARPA held authority and the key decision-making position, determining the direction of the project, mediating any disputes between members of the project and limiting the degree of external participation. This was clearly seen for instance when Charles Taylor, IPTO director in 1965, recruited Lawrence Roberts from the Lincoln Lab by conditioning funding to his participation in the project (Lukasik, 2011: 11). Such enforcement capacity became quite evident when Roberts recalled a fundamental dynamic saying: 'The universities were being funded by us, and we said: "We are going to build a network and you are going to participate in it"' (Roberts, 1989: 16). The collegial style, flexibility in management, and the open inquiry model

(doing basic research while postponing its explicit military and defence application) were framed and made possible by the funding scheme and decision-making capacity of ARPA and the state apparatus. Therefore, although there was vast space for freedom of inquiry and freedom in terms of technical management and problem-solving, the US government through ARPA integrated the system on the basis of an already existing cultural environment of elites and social networks, producing new managerial forms.

The actors involved in the project shared a common practice and values as they came from a common background and as ARPA, in connecting research centres, gathered computer scientists from all across the country, also aiming at generating a shared sense of purpose and values, a shared sense of community through a task in common. There was a collegial style amongst members of a managerial and scientific elite. As Lukasik would explain, ARPA made an 'extraordinary effort… on recruiting [what he considered] the best people for its programs', which implied as well that 'ARPA operated based on partnership with, and consensus among, its world-class contractors. It was not about to pull rank and tell national experts they were wrong, a position that would be inconsistent with why they were part of the ARPA program' (and as it was a relatively new development where not much experience had been garnered) (Lukasik, 2011: 11). Despite the participants' temporary adscription, be it a private corporation like BB&N, a university like UCLA or the IPTO, they were all represented in the effort to put together the network and collaborated despite competition among them.

In addition to a sense of purpose, underlying social schemes and practices allowed members social mobility, performing as scientists and entrepreneurs or scientists and managers, or even scientists, managers and future entrepreneurs. This is the case of Robert Kahn and Lawrence Roberts, the former assistant designer of the ARPANET, coming from BB&N and working on the Internet, and the latter already director of IPTO in ARPA by 1969. In an entrepreneurial fashion, Roberts for instance, 'began looking for ways to spread ARPANET out of the US' and by 1971 had programmed a demonstration of ARPANET for which Kahn was the main responsible (Townes, 2012: 49). According to Vinton Cerf (Cerf and Kahn, 2006), another member of the project, BB&N had gotten interested in the possibility of commercial networking and that manifested itself in the form of a company called Telenet´ (Cerf and Kahn, 2006: 35-36). The idea of Telenet came from BB&N and was planned and created by Steve Levy and Robert Kahn a few months before the latter joined ARPA and almost a year before Roberts left the agency to join Telenet as president of the company. The same happened with Barry Wessler, member of DARPA who later joined Telenet.

As Vinton Cerf (Ibid: 36) claimed, it was a 'small community' and there was 'an amazing amount of interaction and coincidence'. The 'government' ARPA practiced was a government consisting of individuals like the researchers and entrepreneurs involved, the managers of ARPA were scientists as well and had been involved in military and government affairs in addition to their provenance from high rank corporations and potential as entrepreneurs at any time (Hafner and Lyon, 1999). Therefore, to divorce state management, research, and military and entrepreneurial interests and values becomes increasingly difficult considering the high degree of 'interaction and coincidence', as Cerf claimed (Cerf and Kahn, 2006: 36), and as it was the same government and cultural structure that allowed all these interests and values to interplay. In simple terms, informal and new management mechanisms and high mobility within a community of elite members allowed innovation, efficiency and adaptability of immediate goals, although always framed by entrepreneurial, scientific and military efforts to obtain national benefit.

Silicon Valley and the computing industry preceded ARPA's environment of innovation and freedom of inquiry, or participation and collegiality, as such an environment was related to government participation and management. All within a defence and security-related economy. This industry did not develop in the United States out of nothing; it did not simply 'blossomed' to use the words of Steve Blank (2011), who is clear about the benefit unclassified companies have had in writing the history of Silicon Valley. As an expression of a 'new culture of technical entrepreneurship', Route 128 was substituted by Silicon Valley, while the Massachussets Institute of Technology (MIT) was replaced by the Universities of Stanford and Berkeley and the US Navy and the US Air Force were substituted by DARPA (Ceruzzi, 2003: 140).

This transition started during WWII, when the state systematically began recruiting the best faculty members and graduate students for weapons laboratories. The US government set up the Office of Scientific Research and Development (OSRD) in 1941, which meant calling for researchers' collaboration with the government. Researchers worked as civilians and maintained a certain degree of freedom in the way they organized themselves around technical production: developing research within the university while receiving government funding and classifying research products. After the war, in the case of the University of Stanford, where the Central Intelligence Agency, the National Security Agency, the Navy and the Air Force had invested interests, Frederick Terman, dean of the School of Engineering, disposed all university resources as available for those graduate students willing to develop

private companies, start-ups that would become defense contractors, encouraged by Terman and his own experience developing technology during WWII (Blank, 2011; Saxenian, 1996). Terman, and William Shockley and the rise of risk capital in 1958, changed the relationship between start-up companies and entrepreneurs and universities. As Blank (2011) emphasizes, companies were not only producing components but entire systems for the military as contractors. This is how Silicon Valley was made possible, with the crucial support of universities and government amid a shared call for entrepreneurial effort and national superiority and combining the right dosage and version of freedom of inquiry, spontaneous innovation, national security and central management.

As AnnaLee Saxenian (1996) emphasised, Silicon Valley employed a 'network-based industrial system'; understood as a whole that nevertheless required the 'system´s decentralization', unfolding as a network in 'the pursuit of multiple technical opportunities through spontaneous regroupings of skill, technology, and capital', just what technological development in informatics demanded (Saxenian, 1996: 9). Like ARPANET, the innovating firms of Silicon Valley were 'organized to adapt continuously to fast-changing markets and technologies' (Ibid.), and the way they did so was through an entrepreneurial scheme of flexibility and high-risk high-gain in research and development; funded, oriented and managed within national defence prerogatives but always consistent with commercial applications. This means that from the beginnings of the informatic boom in the US, collaborative work between US government, universities and private sector was fostered by academic commitment to the war effort and National Security first, in Terman´s case, and to commercial benefit in the case of his colleagues and students.

The foundations of Silicon Valley and ARPA are the best examples of how free inquiry, National Security and commercial benefit intersected in an entrepreneurial effort of national superiority, in which decentralisation and adaptability were oriented by fast-changing markets and technologies. The following section explains how in correspondence to the informal forms of management that appeared in the US, the Internet would emerge through a standard protocol, concealing its control elements and limiting knowledge within the imagination of a flexible and decentralised technology.

3.1.5 The internetworking/Internet project and the Transfer Control Protocol/Internet Protocol (TCP/IP): Management through a simplified version of the system

By 1975 a packet radio network (PRNET) was already experimentally running based on the ARPANET technology but for radio transmission. By then, also satellite technology was also being fostered and envisioned as a global system: the Atlantic Packet Satellite Network (SATNET) project. In the case of PRNET, the aim was to develop 'packet switching in command-and-control in battlefield conditions'; in the case of SATNET, the aim was 'linking seismic monitoring stations in Scandinavia (established to monitor Soviet nuclear testing) with the US' (Naughton, 2016: 9). By the second half of the 1970's three networks (ARPANET, PRNET and SATNET) were working on packet-switching technology and the effort to incorporate them in an overarching 'Internetwork' brought the necessity to develop a shared language or protocol.

Although it was not an explicit element of ARPA's project of networking, the internetworking project was developed in the process of networking military technology by the US military. Crucially, as the internetworking project aimed at interconnecting heterogeneous networks, it required a host protocol or transmission standard to be implemented (O'Regan, 2012: 104). Even more flexible and decentralized than ARPANET, ARPA contractors Robert Kahn and Vinton Cerf would manage to model this new network of networks, starting in 1973 with an idea for 'A Protocol for Packet Network Interconnection' (Cerf and Kahn, 1974). Such standard protocol would connect and adapt once disparate networks and still appear seamless.

The protocol was the Transmission Control Protocol (TCP) and was designed to work on reliable and unreliable networks (like PRN). TCP would verify packets, correct errors and control the data flow. It integrated the divided functions of the subnet and the host protocols of the ARPANET. In 1978 the TCP was divided into a Transmission Control Protocol (TCP) and an Internet Protocol (IP), the first a host-to-host protocol in charge of ordering packets and overseeing and controlling data transfer, and the second in charge of routing and fragmentation of packets, selecting paths for 'moving data across a network' (Galloway, 2004: 42-44).

> This flexible routing system is achieved through a "hopping" process whereby data is passed from computer to computer in sequence. None of the computers in the chain of hops knows definitively where the desired destination lies. But they do know in which general direction the destination is… Each node in the network

knows not where the final destination is, but simply which direction, or "next-hop,"
will get it closer to its destination (Galloway, 2004: 45).

Fragmented and flexible but always oriented, the form of coordination that is the protocol corresponds to the overall strategy of modularity and the underlying commitment of its designers to manage complex processes and accommodate difference through limitation of knowledge and simplification. In this way, the Internet is modulated and 'Information does flow, but it does so in a highly regulated manner' (Thacker, 2004: xiv). Despite concealing it in the form of flexibility, 'the founding principle of the Net is control, not freedom— [as] control has existed from the beginning' (Ibid).

'TCP/IP is a modular *family* of protocols' that contains and provides 'a wide range of highly segmented functions' (Hall, 2000: 6). This protocol is a common and all-encompassing language and orientation for segmented elements and functions; it 'is not a single monolithic protocol, but instead is a collection of protocols that range from application-specific functions like web browsing down to the low-level networking protocols like IP and TCP' (Ibid). Information is controlled and regulated although such controls have been embedded deep into a shared language and its imagination of autonomy: the network being 'made up of intelligent end-point systems that are self-deterministic' (Hall, 2000: 6). As it has been defined, the '"Internet" (with a capital "I") refers to the specific global network of TCP/IP-based systems, originally consisting of ARPAnet and the other research networks' (Hall, 2000: 5). Envisaged as global, self-determination depends on being part of a globalising and seamless network that offers an increasing variety of "general-purpose" applications.

While layering produced ignorance about the complex and overarching operation of the system, the US government through ARPA's management directed and integrated the whole technical and social system. Researchers did not have to know anything about the workings of other layers of the system but shared a common orientation, imperative and social values. Within technical task groups a collegial style was implemented that was only possible amongst members of a managerial and scientific elite carefully selected by ARPA officials. The informal management style with a command and control imperative consolidated then into a protocol, implemented hierarchically and designed to maintain the appearance of a seamless, scientific and general-purpose network that simplifies communications. In terms of instrumentality and the concealment of the principal actor and its 'economy', *this appearance as seamless and its concealment of control* would last and eventually become an imperative clearly expressed by Google's Eric Schmidt when stating 'that

"the Internet will disappear",' referring to an all-encompassing mediated experience – the Internet of things – in which tech companies would manage the environment for users, creating a 'seamless experience that makes the line between reality, technology and technology companies impossible to distinguish' (Simmons, 2015).

Knowing-nothing-about has been a recurrent theme throughout the hierarchical layering of ARPANET, the internetworking project and the Internet, helping to manage a complex environment and offering a simplified version of the system, hiding diversity and accommodating it within an established function and standard of communication, always aiming at the ongoing expansion of the system. Accordingly, as the protocol developed and initially expanded, ARPA was increasingly seen as ill-suited as a communications services provider. The interest in encouraging and promoting the adoption of TCP moved beyond the limits of ARPA researchers and into the international arena as a successful instrument of coordination whose control features were embedded although increasingly concealed.

3.2 Expanding the protocol: Managing diversity through governed distribution, simplification and concealment

As part of broader instrumental dispositions directed towards the expansion of mediation, economic benefit and 'simplification' of communications and interactions, the Internet depended on the standardisation of the TCP/IP protocol, making operating systems include the protocol by default. DoD's decision-making and control position made possible such expansion and was crucial to establishing a market. In this way, the establishment of a networking industry marketplace was dependent on state direction and funding, meaning that the protocol and operating systems and infrastructures were conducted and adapted accordingly. In the same way, the international expansion of the Internet depended on the expansion of open operating systems like UNIX, which included and distributed, for free, the TCP/IP protocol thus enabling heterogeneous systems and computers to connect to the Internet. Beyond a happy or for-free technical coincidence at the level of computing resources, this technical and increasingly global level of operation and coordination of computing and networking technologies expressed broader social and political underpinnings, mainly linked to National Security and social stability through accommodation of diversity.

The Internet and software programming (e.g. UNIX operating systems) were similar in terms of flexibility and accommodation of heterogeneity in the management and control of technical complexity. These similarities, beyond the technical sphere and underpinning Eric Schmidt's ideal above, point to the symmetries between managing

a complex system in computing and networking developments and doing so in terms of political and social life. The following sections underscore generally unacknowledged and concealed vectors that bridge social, cultural and computational environments using one common form of administration and set of values, a *dispositif* that would instrumentally and strategically conceal the indissociable links between state government control and commercial opportunities within the aim of national superiority, on the one hand; and on the other, the general system's operation of managing a complex system on the basis of fragmentation, simplification, minimum standardisation and limitation of knowledge and participation.

3.2.1 Defense Investment in the Commercial Potential of the networks

Despite the evident promotion of the protocols and packet-switching by the DoD through the DCA, these agencies' interest was not only set in military terms but in terms of a general use of packet-switching. Expansion of the network had already been envisaged and commercial applications and competitiveness were seen as beneficial to US networking industry, the military and civilians (Kuo, 1975: 13, in Abbate, 1999: 135). Once DCA took over control of the ARPANET, freedom was tempered with a higher degree of control, fostering the expansion of the protocol and consolidating its commercial potential. Activities related to freedom of inquiry, collegiality and informality now had to comply with more formal management, recognition and observance of ownership permission in information sharing and identification of users in terms of network security (the latter as personal computers already appeared in 1975 and hackers could penetrate restricted areas). As part of a more controlled management of the network, identification of users (logins and passwords) as a practice emerged as an important trait of the Internet amid the expansion of personal computing and military management and consolidating security both in commercial and military terms.

The final decision to push for general implementation of the protocols would come not from the research community but from DCA and its interest to boost the World Wide Military Command and Control Systems. The DCA decided to implement TCP/IP in all ARPANET nodes, considering that costs would fall thanks to the use of commercial technology and as result of a competitive dynamic in components market (Abbate, 1999: 134-140). As a main strategy of wide diffusion of the TCP/IP, ARPA would start funding implementations for different operating systems. That is the case of both Unix, which incorporated the protocol thanks to the funds the agency conceded to BB&N, and IBM (Ibid). In this way, in the case of UNIX, DCA harnessed the open system's strategy of 'free adoption' for spreading a standard and achieving its own

goals (Ceruzzi, 2003: 285), and in the case of IBM, it covered the main commercial production of computing resources. Both means would prove fundamental as well for international diffusion and expansion of the Internet.

In 1981 a deadline was set for all ARPANET nodes to replace the Network Control Program (NCP) with the TCP/IP by January 1983. Flexibility was forced into an expansive network of networks, in a decreed and enforced manner. In addition to the order, ARPA's funding of the computing industry to implement TCP/IP on their operating systems accomplished its general diffusion among computer scientists by 1990 (Abbate, 1999: 143). After the ARPANET split into MILNET, operational military network, and ARPANET, a research oriented one, in 1983, its international expansion could be now mainly attributed to scientific concerns and interests. However, it is crucial to notice how the US government was interested in spreading the protocols for free rather than considering them a commodity. In this sense, Europe and Japan 'got infected with TCP/IP for free (as it were)' as their research communities imported workstations running BSD UNIX' (Townes, 2012: 57). In so doing, military concerns of heterogeneity, decentralization, as much as simplicity and adaptability of network protocols, related to survivability and robustness of the system, were not only quite useful for civilian applications but depended on the expansion of the network. During this development process, commercial application was still limited but not absent. Furthermore, it was the specific interplay between government, scientific and private corporate actors and dynamics of direct control, informal management and free inquiry and research development, which in a broader social and political scope gave it the perfect formula for future commercial success, fostering, offering and then conducting the standard protocol to manage and accommodate heterogeneity without disrupting the whole system or, in this case, US political economy.

3.2.2 Harnessing the fragments of a complex system and accommodating heterogeneity in informatics, security and social life

In relation to US imperatives, the protocol constituted a fundamental management style to be expanded and exported through higher degrees of control, necessary in order to force flexibility into expansiveness. Through DCA, direct control propelled free development into commercial success, informatically and technically. Preinstalled, free and open software was fostered by DCA to expand the protocol. In the case of the UNIX system, necessary to run the Internet nodes, this operating system worked by hiding internal operations, simplifying processes, accommodating multiple languages of coding and distorting clarity in particular ways. This logic, beyond the informatic sphere constituted a process of social management that

promised to simplify operations through concealment and fragmentation. No true way in coding had its symmetries with social reality as neoliberalism diffused specific ways of accommodating cultural diversity through the management and accommodation of identities (or so-called politics of identity).

In relation to the broad intricacies, interplays and correspondences between public service, defence, private corporations and researchers in connection with social, cultural and computational environments, UNIX and the Internet mirrored each other in terms of their social implications. Accordingly, Tara McPherson (2009) has identified *modularity* and *diversity* as rules and strategies that emerged not only in computer programming but also in response to security imperatives proper to the Cold War era and that permeated into the broader cultural, racial, academic and political areas of life in the US. These imperatives emerged as fundamental to operating systems in computer programming in line with developments in hardware design starting in the 1950's (Kernighan and Plauger, 1976; McPherson, 2009).

Modularity had an important role in hiding information about the functioning of the system, fragmenting knowledge of the whole into interchangeable parts and functions. This is the same operation Unix, 'created as a multiuser, multitasking system for use by programmers' (Byrd, 1997), performed as the operating system of 'the most common nodes on the Internet´(Ceruzzi, 2003: 247). This operating system was designed to comprise autonomous yet flexible elements, embedded with the philosophy of providing 'simple, yet powerful utilities that could be pieced together in a flexible manner to perform a wide variety of tasks' (Byrd, 1997).

The Unix system endorsed coding as a clean exercise and connected independently designed tools for general purpose tasks, tools that were replaceable without disrupting other parts of the whole system and making the system ´hidden from the user, silent in operation' so 'the user can´t tell what state the system is in' (Norman, 1981: 1). Instrumentality, hiding the frame of reference of the system's end and concealing its intricacies through "general-purpose" applications, guaranteed that the instruments' nature/design although appearing autonomous, corresponded to the system's overall economy. In situ, while 'hidden data are often talked about as a matter of simple standardization and efficiency… they also clearly work in the service of new regimes of security, not an insignificant detail in the context of the cold war era' (McPherson, 2009). Such regimes included practices of hiding information through 'pipe' mechanisms in order to avoid a 'clear-text version of the data' (Kernighan and Plauger, 1976: 3), strengthening encryption and secrecy. Thus, as McPherson (2009) explained, 'programming manuals and UNIX guides again and

again stressed clarity and simplicity (don't write fancy code; say what you mean as clearly and directly as you can), but the structures of operating systems like UNIX function by hiding internal operations, skewing "clarity" in very particular directions'.

In addition to modularity, Unix accommodated heterogeneity. The 'Unix tradition [included] a healthy mistrust of "one true way" approaches to software design or implementation. It [embraced] multiple languages, open extensible systems, and customization hooks everywhere' (Raymond, 2003: 50), just like the form of coordination and management embedded in the Internet and its TCP/IP protocol. As McPherson insisted, in a broader context, this form of coordinating diversity, along with that of modularity in the development of computing systems, would resemble 'the tenets of neoliberal multiculturalism' and 'post-Fordism, a mode of production that begins to remake industrial-era notions of standardization in the 1960s: time-space compression, transformability, customization, a public/private blur, and so on' (McPherson, 2009). But not only that, for McPherson it is social life in the US that was reflected in these forms of coordination, in which 'neoliberal pluralism' works as a cover for more explicit racial logics in that country (Ibid). 'These covert racial logics take hold at the tail end of the civil rights movement at least partially to cut off and contain the more radical logics implicit in the urban uprisings that shook Detroit, Watts, Chicago, and Newark… Across several registers, the emerging neoliberal state begins to adopt the Rule of Modularity' (Ibid). This can be seen, according to the author, in 'the emergence of identity politics in the 1960s as a kind of social and political embrace of modularity and encapsulation, a mode of partitioning that turned away from the broader forms of alliance-based and globally inflected political practice that characterized both labour politics and antiracist organizing in the 1930s and 1940s' (Ibid). Such broader forms of association were weakened by the expansion of communication and digital technologies along the process of trans-nationalisation of production and the spread of financial capitalism (Harvey, 2007; McCarthy, 2015: 86, Spivak, 2015).

Modularity and diversity were 'meant to decrease "global complexity" and cleanly separate one "neighbour from another"' having an impact and correspondence with politics and the increasingly niched and regimented production of knowledge in the university after World War II', itself transforming from bureaucratic into Taylorist[11] and

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[11] According to the *Encyclopedia Britannica* (no date), Taylorism is the 'system of scientific management advocated by Fred W. Taylor. In Taylor's view, the task of factory management was to determine the best way for the worker to do the job, to provide the proper tools and training, and to provide incentives for good performance. He broke each job down into its individual motions, analyzed these to determine which were essential, and timed the workers with a stopwatch. With unnecessary motion eliminated, the worker, following a machinelike routine, became far more productive'.

then managerial forms of organisation (McPherson, 2009). Universities in the US performed a regimented production of knowledge, bringing knowledge together as functional, rather than truthful, within a system whose principal end is generally unknown. In turn, informatics bridged and concealed the social system's general economy of harmonising military, economic and scientific interests. Along these lines, designers' prerogative to create and manage a complex technical and social system on behalf of others concealed its forms of coordinating difference and reordering inclusion and exclusion, bringing together knowledges and practices without a general sense of its overarching economy and purpose or an effective way to participate in its overall definition, but introducing 'decentralised', fragmentary and simple understandings and meanings regarding these economy and goals. In managing a complex environment modularity as a form of coordination accommodated difference but concealed its own parameters of inclusion and exclusion, the latter increasingly subtle and more effective.

3.3 Commercialising the Internet: Privatisation, decentralisation and new markets

The social and cultural context in the US not only affected the design of the Internet and its embedded values but also contributed to reduce the visibility of government participation and importance in the production of a new market. Once entrepreneurial efforts were put in place and a market had been consolidated through federal support and funding, the Internet acquired a more politically neutral image through privatisation. As a general-purpose technology, its distributed organisation and control appeared as a fully decentralised network underpinned and possible thanks to scientific and research interests and agendas. However, it was the combination between an informal management and control exerted by the government, the free inquiry model followed by scientists and researchers, and the entrepreneurial effort always present amongst participants (i.e. government, science and business altogether) that made the network and its ongoing expansion possible. More importantly, as the following subsections show, this combination became possible as it was based on shared values of private property, commercial opportunity and defence applications, whose sense of purpose and orientation consisted of commercial benefit and national superiority through adapting to new fast-changing markets and expanding into a global marketplace of new resources. In this new global marketplace, instrumentality would be consolidated in a new form with the emergence of users as main resource of commercial value.

The following sub-sections show how the characteristic form of management of the Internet and its relationship to federal support is a reiteration of the form of coordination and strategy present in ARPA, the consolidation of the computing industry and the emergence and burgeoning of Silicon Valley after World War II. Such a relationship introduced a broader form of establishing collaboration and coordination within national limits and between high-level actors in the US. As a result, this relationship enhanced the active role of the state in terms of funding, coordination and decision-making, while maintaining and administering scientific practices of open inquiry and exchange of information, collegiality and decentralisation. Beyond its digital tenets, such form of management has entailed a dynamic interplay between National Security, defence concerns, economic and technological development, network protocols and structure, on the one hand; and, on the other, open inquiry and basic research, decentralisation, collegiality, spontaneity and innovation, drawing attention to either of them depending on the circumstances but generally consolidating the capacity to hide its control and direction prerogatives.

3.3.1 Exporting a protocol: The international expansion of TCP/IP and governed decentralisation

The initial International expansion of the ARPANET was only possible within the military and defence prerogatives of data provision to US policy makers about Soviet nuclear testing (Naughton, 2016: 9; Townes, 2012: 50) and its opportunities for commercial and scientific development expectations of researchers. The idea of the network's global expansion was always present among the architects of ARPANET and the Internet, not only regarding a globalizing economy led by corporations and the military apparatus, but also yielding the more ingenious scientific minds, revolving around ideas of a network that would connect the entire world, a 'global' expectation of expansion or 'dreams of worldwide networks of computers' (O'Regan, 2012: 103). This was as much the case of Licklider, Cerf and the scientists working at Bolt, Beranek and Newman, as it was of command, control and communications imperatives among the military (Cerf and Kahn, 2006: 37). However, the decisive matter would be national security in military terms. This means that the first international connection of the ARPANET was possible thanks to the Nuclear Monitoring Research Office (NMRO), which was looking to connect a seismic station in Norway to ARPANET in order to have a faster way for data transmission to the US. Despite researchers' efforts in the US and abroad to establish a connection to the UK, where Donald Davies had developed important research on packet-switching technologies, it was too expensive and the UK connection only came as a result of

connecting the Norwegian seismic monitoring station (Lukasik, 2011: 15; Townes, 2012: 50). The tempering element in the balance between research interests and security was then dependent on the latter and its broader dispositions within a national security agenda.

In turn, the Internet seemed to find general acceptance as an international technology (as 'it is difficult to imagine that any other sort of Internet could have replaced what was already *the* Internet by the early 1990s') when 'the countries connected to the TCP/IP Internet included most of NATO, most of the OECD and all of the G-7… [and] most of the critical *users* – especially academic computer scientists – in these countries were using TCP/IP' (Townes, 2012: 62). A crucial underlying principle of the network was and is that 'the larger the network is, the far more efficient it becomes', according to the 'law of large numbers, in as much as a large population of unknown players or messages collectively behave in a very predictable fashion, a fashion we can write down exactly. And therefore we can predict the performance of the network when it is large' (Kleinrock, in Herzog, 2016). The Internet was expanding both civilian and commercial, but also military, nodes across the world, to be connected according to their own (designed and embedded) way of imagining and designing management. If we consider a protocol as 'a distributed management system that allows control to exist within a heterogeneous material milieu' (Galloway, 2004: 8), then the US has been exporting a distributed 'matrix of practical reason' (Foucault, 1997b: 225), a subtle embodied technique that corresponds to a broader disposition of things (Lemke, 2015). This means that this protocol as a *dispositif*, entails a strategic general orientation and spatial order, those of national security, commercial benefit and global expansion, and a form of coordinating a heterogeneous ensemble accordingly. As a flexible and distributed system and form of coordinating, governing or disposing things within an economy that displays freedom and innovation, the Internet persuades and convinces, simplifies and manages a complex technical and social environment on behalf of its users, in order to expand its reach, while concealing its economic foundation and its constitutive complexity and overall structure as a whole.

Layering and modularity were crucial for the stable development of the system, managing disruption by isolating components through fragmentation without disrupting the whole. The decentralized nature of control made it robust, resistant to disruption, while its adaptability was always in relation to its expandability, both relying on a simplified version of the whole and reducing the intricacies of and for its new elements. Everything was open to instrumentalisation within the system: its components were considered autonomous to the extent they performed the task they

had been designed to perform without understanding or participating of the definition of the overarching economy that governs them. Decentralised authority and distributed management were a function of control at a distance and from within. Therefore, the growth of the Internet can be understood as a decentralised process whose expanding motion was already prescribed in its design; once the protocol was standardized, the network was expected to grow on its own and diffuse operation responsibility. Further additions would follow on combining centralisation and decentralisation, for instance the Domain Name System (DNS) and efforts to organise network resources. However, the main values and social structure endorsed were stable. Beyond characterisations of the Internet as an open field of participation and scientific, active commitment, specific frameworks for social groups, interests and values were defined from its beginnings.

3.3.2 From computer programmers to final users: Privatisation as a shared cultural value

As John Unsworth (2001) has put it, 'UNIX is deeply indebted to culturally determined notions such as private property, class membership, and hierarchies of power and effectivity'. Additionally, the author argues, 'the constellation of cultural elements gathered together in UNIX's basic operating principles seems particularly Western and capitalist—not surprisingly, given that its creators were human extensions of one of the largest accumulations of capital in the Western world' (Ibid). A statement not only applicable to Unix but to the Internet and many other technologies spurring at the time and more specifically related to US cultural values as confronted and harmonized with national security imperatives.

Regarding the Internet, once ARPANET systems were outdated and the NSFNET took over the sites of ARPANET, the next step in the expansion of the network was privatisation and commercialisation of its products. Then, the 'issues that the NSF faced in trying to privatize the Internet were in some ways very characteristic of US attitudes toward the role of the federal government', as people in the US 'tend to disapprove of government involvement in providing commercial goods or services […] (Abbate, 1999: 195). In this way, the development of the network responded to cultural values and was conditioned by its rentability in its expansion as a finished product. The state cannot sell services to its citizens, as this contravenes well-established values of equality of opportunities and competitive self-interest of individuals safeguarded in private property. However, in many instances the state can set the entire conditions for the emergence of new markets by funding and managing research and development (see Chapter 4). Commercial networks emerged quite

quickly as the Internet was privatised, arising from NSFNET's spin-offs, just like Telenet emerged from ARPANET, or from large already existing communication carriers (Koenigsberger, 2014). Commercial opportunity was fostered by the state, and its contractors were tailored to profit from it.

Privatization and decentralization obeyed to revenue expectations and national benefit not only stated in formal policies or programs but embedded in a more complex context and set of relations and values. In the last instance, shared values and interests commonly acknowledged as politically neutral or commercially and scientifically oriented fostered capitalism and its renewal, and they they did so while paying blind eye to government funding and involvement. As McPherson (2009) has pointed out:

> Computer programmers in the 1970s are interestingly situated. They are on the one hand a subculture (often overlapping with the counterculture), but they are also part of an increasingly managerial class that will help society transition to regimes of neoliberalism and governmentality. Their dreams of libraries of code may be democratic in impulse, but they also increasingly support postindustrial forms of labor (McPherson, 2009).

This kind of ambivalence and unintended collaboration accommodates alternative thinking into diverse forms of unfolding capitalism. This instrumental situation harmonizes democracy and freedom with developmentalism and security through concealing the general economy of the system or making it tolerable, even desirable, within a common set of values, be it competitiveness and rejection of state provision, or freedom and democracy through digital literacy and technology.

Computing programmers were key in helping transition to neoliberalism and the computing industry crucial in increasingly attracting people into a shared set of values that portrayed the Internet as a politically neutral technology, a super-information highway and a new market. However, internationalisation of the TCP/IP protocol did not come from a worldwide or international community of programmers and users who agreed on such protocols as the best fit to this community's shared needs. To globalise it had to standardise, accommodate and turn its components compatible, all within a decision-making process that stayed anchored in the US and the homogenisation imposed by the DoD and the imaginations of a global network upheld by ARPANET designers. The internationalisation of the Internet was possible only within the security imperatives of nuclear monitoring, imperatives that once the protocol expanded as a managerial style were concealed under commercial

practices. Privatisation and the creation of new markets were values that allowed the network expand and be further commercialised, always fostered and funded by the state according to long-established US values and ideals.

While it was difficult at first to make sense of the commercial benefits of the Internet outside its scientific, defence research and security applications, during the 1990's it became clear how the current main asset of the Internet, people, started taking central stage in its expansion, as the intricacies of a complex technical and social system kept being presented in more simple terms. Overall, the privatisation of the Internet would correspond to the emergence of Web browsers and the expanding diffusion of personal computing. From the personal computer to the World Wide Web, everything was done to guarantee people were attracted to computing and its networking possibilities. The computing market was seducing people into learning how to use computers, and the Internet. The Web was making things easy and allowing users to create and diffuse more contents and media in increasingly alternative ways. Multimedia features could accommodate different technologies and types of information while favouring electronic commerce (Hughes, 1995), fueling an expanding market and a 'technical utopia' of an 'information superhighway' shared by designers, businesses, politicians and individuals (Flichy, 2007). The following section explains how the globalising expansion of this 'general-purpose' technology was promoted and supported by the US government on the basis of capitalist expansion. As a consequence, the expansion of the Internet would increasingly transform users into exploitable data and thus increasingly mediate social interactions.

3.3.3 The flexibility, adaptability and expansion of US governmental, entrepreneurial and scientific orientation: Towards a global marketplace of new resources

Once the Cold War was over, the military imperative modified from weaponry to information technology but the central role of US government continued, expanding the coordination model initiated with ARPANET and the Internet and further developing its commercial value in a global market. What private industry and free inquiry could have never developed on their own, a globalizing and public appealing technology, was in turn developed while supported by US government funds and (informal) management.

By 1989, the potential of the Internet and computing expansion for the US as a dominant nation was expressed by Senator of the US Al Gore in his High-Performance Computing and Communication Act (HPCA) and then developed into Bill Clinton's High-Performance Computing and Communications Initiative. This

meant more federal resources for the IT sector and stronger bonds between government, private industry and academia. Private-public partnerships were endorsed and promoted by the federal government, drawing a closer link between federal research laboratories and the potential commercial ventures for new products. And once again, research products were not immediately out, dealing with a competitive international market, but research was 'precompetitive and generic', aiming to standardise and find application in 'specific industrial sectors for product-based research and development' before exporting its products to foreign markets (Jablonski and Powers, 2015: 58).

A global market and the imperative of global expansion were being steadily constructed through a complex dynamic of public and private funding jointly prompted towards a new space and market. This new market, and new world (see Gore, 1994), required legal modifications and the liberalization of the telecommunications economy in the US and abroad (Cowhey et al., 2009; Hills, 2007), allowing the rhetoric of free flow of information, now invested with all the economic power of commerce, to expand through economic and governance models like the Internet governance model, where private actors are favoured under the cover of civil society organizations (Carr, 2015; Powles, 2015; Jablonski and Powers, 2015: 62).

Increasingly, the IT sector in the US was crucial for US and world's economy with estimates of '40 per cent of productivity growth between 1995 and 2002 [being] down to communications technology' (McCarthy, 2015: 87), until the dot-com bubble crisis. In 2001 the inflated value of the telecom and Internet industry shares led to the asset bubble collapse and huge losses in the sector. Then, while venture capital fled, the government was in a good place for a crucial move that would relaunch the industry. The CIA through its venture capital firm In-Q-Tel would start funding entrepreneurial efforts, linking 'technology companies with real-world problems–via its massive intelligence apparatus–' and serving as indicator of potential development and profitability in a struggling uncertain sector, bringing confidence and attracting additional private investment for start-ups (Jablonski and Powers, 2015: 66). Once again, the US federal government was able to safeguard and fund a space for field research, fostering its development and supporting it as a basis for more meaningful commercial and security developments.

The reemergence of the sector however, would rely as well on the awareness of the fundamental resource and product of the Internet: people. The crisis required a shared effort of renewal, and the Web 2.0 and social media platforms would perfectly underline the new resource scope that was being called upon to support the industry,

although drawing on the promotion of already existing applications sold as novel in order to convince investors into the new start of the industry. Web 2.0, with its main alleged characteristics – 'radical decentralization, radical trust, participation instead of publishing, users as contributors, rich user experience, the long tail, the web as platform, control of one's own data, remixing data, collective intelligence, attitudes, better software by more users, play, undetermined user behaviour' (Fuchs, 2017: 34) – were an updated version and extension of ARPANET and the Internet's necessity of expansion. Expansiveness, once crucial for technical improvement, predictability of network performance (see Kleinrock in Herzog, 2016) and technological vanguard, became the foundation of commercial profit through market and resource expansion and the predictability of both market and individuals' behaviour. As Fuchs (2017: 35) remarks, Tim O'Reilly, who coined the term Web 2.0, recognized this term was meant to attract investment through restoring confidence, but more important, O'Reilly recognized too the importance of users in co-creating 'the value of platforms' (e.g. Google, Facebook, Amazon, Wikipedia).

Global expansion into a global market emerged as a US imperative and more federal resources and the liberalisation of the telecommunications market followed. The main resource of this expanding market was clear: users as information resources and co-creators of products and data, which accounted for the value of platforms. Ultimately, instrumentality in the form of concealing decision and its processes was a constant in this form of coordination and general orientation of the network. The Internet as an instrument of coordination, in hiding its internal processes and managing the technical and social environment on behalf of users, began instrumentalising these same users by turning them into an exploitable resource: an instrument that behaves according to its own nature but for that same reason behaves according to a general economy and someone else's end.

3.4 Conclusion

The chapter has shown how the Internet was designed and shaped instrumentally. As a *dispositif*, the Internet has fostered the imagination of a neutral and decentralised technology while serving a specific economy and particular interests that correspond to a Western and US cultural matrix. What has been argued in this chapter is that within such an economy and principal end, a complex technical and social system needs to be managed and diversity accommodated without the elements and users of the system knowing about the overall operation of this system, which runs according to capitalist imperatives of commercial benefit and national superiority and through advancing the creation of a seamless experience ignorant of this technology's

mediation of reality. This chapter is significant for the overall argument of the thesis – that the internet has been reproducing colonial forms rather than politics and that a decolonial element needs to be included together with philosophy of technology and critical approaches to the internet in understanding this technology and world politics – as it identifies the basic form of coordination embedded in the internet and that is being reproduced in Mexico. Accordingly, such forms of coordination have only become intelligible through analysing the historicity of the internet's design and by inquiring through the concept of instrumentality and the political, which destabilise taken-for-granted assumptions on the neutrality of critical approaches to technology based in a western cultural matrix.

Notably, there has always been a flexible relation between control and free development in designing the Internet, in which the former, despite always being present, increasingly adopted an informal management that corresponded to the values and processes required to fulfil the task of building up a network of communications and computing resources sharing. Across different levels of technical operation, the underlying imperative of knowing nothing about other layers operation was iterated (instrumentality), which is related to the systemic invisibilisation of control and the emphasis on free development and innovation. This means that an expanding but concealed practice of control and standardisation through hiding operations and points of authority underpins the more popular, although always limited, aspects of free inquiry and development of applications and content on the Internet.

The emphasis of the Internet's embedded form of coordination has relied on its alleged capacity to create, simplify and manage technical and social complex systems to be functional. It has done so first, by turning systems and components flexible and then, through fragmentation and accommodation of diversity without disruption of the whole system, superseding fragments' awareness of the overarching logic that governs them altogether. Therefore, flexibility has been endorsed while maintaining limitations and control. In the end, such form of management works as a form of coloniality as it is a dispossession of people's knowledge and decision on setting the conditions that govern/mediate their lives (the political). Such form of coloniality has become visible through analysing the design of the internet and its strategic arrangements and will become visible in the case of the operation of the Internet through the so-called Web 2.0 (Chapter 4), the Mexican government's digitisation policy (Chapter 5) and #YoSoy132 (Chapter 6). A characterisation that corresponds to the concept of instrumentality (Agamben, 2015), as explained before and fully addressed in the following chapter 4.

Chapter 4

Governing the Internet and governing through the Internet:

A globalising instrument and its coordination of resources

Drawing on the notion of *instrumentality* (analysed in Chapter 2) this chapter identifies the distinctive form of coordination embedded in the Internet, which was detailed in the previous chapter, as able to instrumentally condition other societies' behaviour and knowledge at a distance. It then identifies and analyses four forms of coordinating resources operating in and through the Internet that constitute a world-oriented expanding form of management. The chapter argues that the form of coordinating resources embedded in the Internet and its more recent developments (Web 2.0 onwards) consists of a mediation and management able to accommodate different agents, ideologies and economies, even ontologies, through commodification and within an alleged neutral and tolerant whole that conceals its own overarching logic and economy and with that, its stable mediating capabilities. This way, the Internet has been consistently, by design, conditioning the possibility of a shared collective existential experience and orientation amongst its users. The chapter contributes to the overall argument of the thesis that states that ultimately, the Internet has been designed to manage intricate technical and social processes on behalf of others, expanding, through simplification, adaption and mediation, to different contexts and ideas as an instrument of coordination without politics, which preserves and conceals its specific control foundations in capitalist values and colonial practices.

The chapter is organised into three sections. The first section explains how instrumentality is related to the Internet´s embedded form of coordination, detailed in the previous chapter, through specific attributes, strategies and values (fragmentation, simplification, functionalisation, flexibility, accommodation, limitation of knowledge). The section identifies and analyses four distinctive forms of coordinating resources expressed in new ways of conducting the government of the Internet and governing through the Internet: Global connectivity, Free flow of information, Personalisation of identity and Mediation of Subjectification. The section argues that control is exerted through these forms of coordinating resources based on concealed and specific capitalist imperatives and agendas that increasingly mediate

the constitution of persons as social and economic subjects and limit the possibility of shared collective existential orientation, understanding and conviviality. These same forms of coordination are to be identified in the following chapters as they are reiterated by the Mexican government's digitisation policy and #YoSoy132 promotion of the Internet as a constitutional right.

4.1 On instrumentality and the Internet: Who controls what and how?

An instrument is 'a being that, while living [acting] according to its own end [and form], is precisely and for that reason and to the same extent used for another's end,' although remaining unaware of such an end (Agamben, 2015: 75). Regarding modern technology, Giorgio Agamben (Agamben, 2015: 77) has asserted that this is characterised by an 'obediential potential' in which devices 'have incorporated in themselves the operation of the principal agent and can thus "obey" its commands (even if these are actually inscribed into the functioning of the apparatus, in such a way that the one using them, in pushing the "controls," obeys in turn a predetermined program)'. In this light, modern and digital technologies as the Internet and digital platforms, entail a third person or cause as 'more than one' agent and user in operation (see for instance Carr, 2015; Deibert and Crete-Nishihata, 2012; DeNardis and Hackl, 2015; Naughton, 2016; Powles, 2015). This consideration blurs the distinction between final user and instrument while concealing the operation and decision of principal agents as those who understand and define the economy and principal ends of the system, programming and incorporating their operation into technological devices.

The principal agent is not or hardly is to be the specific subject or so-called final user employing the technological device to hand. Instead, in addition to the principal agent's or designer aims and interests–the proper constituency and practice operated within the limits of the technological device's form and goal– and the agent with the digital device in hand, there is a third cause or agent always making use of such instrument. That is to say that the Internet, as we will see in detail in the following sections and chapters, entails many different processes and users whose presence and operation are not visible. This multiplicity of interactions, the intricacies of the system, is managed, simplified and concealed by design. Take for instance the case of the infrastructure of the Internet, hardly accounted for by common users who ignore the transatlantic submarine cables that connect different regions and countries; or the unawareness of the fact that "the cloud" always entails data storage infrastructure; or at a more local scale, ignorance of whose companies' cables have been deployed and operate within which block and neighborhood. Another example is

the ignorance that prevails regarding the algorithms used to process data and the privacy terms and conditions of online platforms.

From hardware technology to software and telecommunications production and management corporations through to national governments, organizations and individual everyday users, and by design, the Internet is only possible in a diversified and hidden relation of more than two users and more than one instrument. Once the final users' data and behaviour started being the main resource of the Internet and its new Web 2.0 platforms, users increasingly became instruments, labour (Fuchs, 2014) and resource in a network that conceals its own orientation, operations and control over its resources.

One of the problems here is to know whether, when and how an instrumental or a principal cause and actor are at stake: i.e. whether, or in what proportion, a user is using or being used. In the end, what is at stake is the possibility for users of being other than objects of administration, data packets and thus instruments (while doing what they "need" to do and what they "like" according to its own end, they are fundamental and used for another's end). This means, in terms of the use of the Internet by, say, governments different to those with privileged positions, like the US, in the tech and computing industry and Internet governance structure, or social movements and activist groups with immediate goals, being able to know whether and how these other agents can move off the margins of a specific governmental configuration. In order to achieve such knowledge, the specific form of coordination working on and through the Internet is explored in more detail in this chapter as responding to US values, interests and forms of management. Following this line of argument, the form of coordination and rationality of government embedded in the Internet corresponds to the conditions in which control is meant to remain in the social structure of the US while autonomy and flexibility are instrumentally required.

Embedded in the Internet, and as detailed in the following sections, is a form of instrumentality that has unfolded into a huge capacity to articulate autonomy and diversity within a specific understanding and practice of capitalism. This economy and its specific form, previous to and over the years the Internet has been developed (see the previous chapter), has acknowledged the necessity to manage complex processes through the fundamental assumption that reality (or in the computing technical sphere the system or the network) can and must be simplified through fragmentation, functionalisation and appropriation, turning it flexible and adaptable. Such a reality or system entails the possibility of autonomy and freedom in terms of commercial opportunities, self-interest and social existence framed within a shared

motivation and sense of national superiority. As detailed in the previous chapter, the design and broader disposition of the Internet stands for the capacity to coordinate and manage, make sense and spread the efficient interplay between flexibility, adaptability and autonomy, on the one hand; and control, expansion and general orientation, on the other. By design and through limitation in the production of shared knowledge and truth about the whole system, such form of coordination hides its points and logics of control while emphasising its flexibility. Through the lens of such a dynamic, more recent forms of coordinating and designing the Internet (the so-called web 2.0 and the cybersecurity and social media) become visible once its state and commercial dynamics are not seen as divorced but as constitutive and indissociable parts of a whole. Therefore, security and control concerns involving surveillance, along with freedom concerns about the flow of information and freedom of expression, unfold together through four basic rationalities currently underpinning the Internet: *global connectivity*, *free flow of information*, *personalisation of identity* and *mediation of subjectification*.

4.2 Government at a distance: *Global connectivity, Free flow of information, Personalisation of identity and Mediation of Subjectification*

As explained before, the Internet does not only resemble freedom or autonomy, it is not only about open inquiry and communications, but has always been dependent on the capacity to enact control in terms of technological vanguard, resource sharing, safe communications, financial savings and market expansion and military and civil applications in order to deliver national benefit. As such, the development of the Internet further intertwined a control imperative and the flexibility and advantages of autonomy, although in a qualitative and quantitatively differentiated way. The form of management that corresponds to such intertwining entails a more complicated logic, once the primary object to be managed and exploited stopped being computing resources and communications and started being everyday life data and people. This section draws upon Agamben's (2015) conception of instrumentality to distinguish the actors that have shaped both dynamics of control and autonomy, mediating subjectification within and regarding the Internet. Considering the link between control and freedom as expressed in new ways of conducting the government of the Internet and government through the Internet, this section analyses how commercial interest and US security are intertwined in the main rationalities of the Web 2.0 (mainly in terms of commercial security) and how these rationalities constitute an extension of an overarching disposition of things. Once the Internet surfaced as a mediation of subjectification hand-in-hand with commercial and state prerogatives, it is argued, it started developing a governmental task, instrumentally mediating and orienting the

constitution of persons as social and economic subjects through managing, on their behalf and at a distance, their sociotechnical reality.

4.2.1 A resource for security and freedom: Data

The Web 2.0, despite its promise of participation ('radical decentralization, radical trust, participation instead of publishing, users as contributors, rich user experience, the long tail, the web as platform, control of one's own data, remixing data, collective intelligence, attitudes, better software by more users, play, undetermined user behaviour' [Fuchs, 2017: 34]), has expressed a general economy of data exploitation and commerce, alongside behavioural modelling, profiling, prediction models and law enforcement. In this general economy, one crucial element – resource – unites freedom and security through commerce: Big Data.

The concept of Big Data refers first, to the shortcomings of traditional data management techniques and tools in relation to the vast amount of data generated in everyday life through digital devices and services (Panneerselvam, Liu and Hill, 2015: 3). Then, it refers to an ideal and a way of understanding reality that entails a 'change in scale' and state, from causality to correlations. Regarding the latter, it entails an optimistic ideal of being able to extract new knowledge and profit from massive data through analyses 'one can do at a large scale that cannot be done at a smaller one' (Mayer-Schönberger and Cukier, 2013: 17). In this understanding, the world can be quantified and managed in large numbers and with ever-increasing ranges of accuracy, demanding and fostering ongoing technological development. However, despite these technical and idealist images, Big Data emerged as well as a general lucrative practice in a 9/11 context and its security imperatives (Fuchs, 2017: 53) and has been crucial since then, with its obstacles to surpass, for US economy to prevail and expand in the world economy (McCarthy, 2015: 87).

Accordingly, the capacity to process large amounts of unstructured or 'raw' data, which accounts for the vast majority of data production, into 'structured' and more useful data, was a task highly developed by corporations like Google, Facebook, and Twitter, as their massive data input was mainly unstructured and required refinement (Panneerselvam, Liu and Hill, 2015: 3). In this data economy real time results in data processing were expected and such corporations developed an ever increasing storing and processing capacity through hardware and algorithms – a capacity fostered by the US government and security sector.

As mentioned before, US government agencies like the CIA were crucial in the reboot of ICTs industries in Silicon Valley, sponsoring and fostering research and development with intelligence and military application but more than useful for civil commercial applications (e.g. Keyhole, a mapping software acquired by Google and founding core of Google Maps and Google Earth; or Systems Research Development [SRD], a data mining tool for law enforcement, now property of IBM) (Henn, 2012; Jablonski and Powers, 2015: 66-67). In this scenario of industrial recovery and security mobilization, data production, processing and exploitation were at the center stage. And following the expansion of digital devices and applications among civilian users, the freedom of participation and communication experiences were now bounded to parameters of security in technical, commercial and state-government terms. Big Data came to be a preeminent practice and ideology related to ICTs and the Internet, bonding together government agencies, private corporations and security contractors into the mass exploitation of data (Fuchs, 2017: 53) and the consolidation and securing of cyberspace. Therefore, implying that the world and everything in it is to a large extent quantifiable, predictable and exploitable, a (Big) Data economy is one in which data is a commodity and algorithms a technology for both information and surveillance industries, and where surveillance operations and marketing end up being the same (see Vanian, 2015). Combining joy, participation and commerce under the guise of freedom, with surveillance and control under a commercial and military security imperative, big data finally consolidates itself through a more secured venture labeled as 'cyberspace'. But also, data generation and exploitation underpins coloniality as 'control [or management] of economy and authority [and] of knowledge and subjectivity' (Mignolo, 2010:9) through the embedded rationalities of the Internet, which entail expansion, instrumentality and 'thingification' and turn 'man into an instrument of production' (Césaire, 2000: 42) and security calculation.

4.2.2 Global Connectivity: Global interoperability, cybersecurity and global commerce in everyday life

In such a big data economy, besides security and commercial overlapping in technological applications, a more explicit and visible framing of the Internet through security is associated to cybersecurity. As commercial possibilities for the Internet further developed in the 1990's, its link to national security followed suit. Commonly referred to as 'a collaborative system that embodies all of the successful features of the World-Wide Web and other community-friendly services' (Hughes, 1995: 35), by 1998 Cyberspace[12] was already a national security policy area of its own under Bill

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[12] Cyberspace in cybersecurity policy refers to 'the interdependent network of information technology infrastructures, and includes the Internet, telecommunications networks, computer systems and

Clinton's Presidential Decision Directive 63, which established security measures for protecting cyber systems. Following such objectification and securitization of cyberspace, in 2003 President George W. Bush defined it as 'the nervous system' of critical national infrastructure (Reveron, 2012: 5), and in the 2005 National Defense Strategy, it became a theatre of operations potentially altering 'long established concepts of warfare'. In addition, the 2008 National Defense Strategy acknowledged the capacity of individuals and small groups to attack and 'disrupt commerce and daily life in the US'; along with the 2010 Quadrennial Defense Review that stated cyberspace as a domain for defence activities next to land, sea, air and space. As cyberspace and cybersecurity developed, the former was constituted as an organic extension of the US, from an operations domain to US daily life basis and its corresponding place in national security as a global technology. Accordingly, the 2009 Cyberspace Policy Review (CPR) assumed the importance of 'a globally-interconnected digital information and communications infrastructure' as critical for 'the U.S. economy, civil infrastructure, public safety, and national security" (Executive Office of the President of the U.S., 2009: iii). While the 2011 National Military Strategy emphasised the potential of cyberthreats and the limitations of international law in dealing with it, putting forth the importance of active engagement and effective operation. Engagement that needs to be fostered, as clearly stated in the 2014 Quadrennial Defense Review, through DoD's investment in its development and innovation capacities 'within the defense sector and beyond' (Secretary of Defense, 2014: VI).

Underpinning the above-mentioned measures, 'strategic thinking equates national security with global security in a world inhabited by threats without borders'; where threats are so diffused and individualised that 'traditional nation-state approaches to national security cannot address contemporary challenges like those in cyberspace' (Reveron, 2012: 10). Accordingly, the US is compelled to appropriate cyberspace both through innovation and investment and through securitizing it against threats. As the Internet commercialised and spread, it gained a central role in US economy, not only producing profit but producing new ways of coordinating and producing resources. As its importance increased, it became a distinctive object and domain to secure; however, its basis is not far from the values and strategies the ARPANET had already embedded in its operation.

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embedded processes and controllers in critical industries,' and adds that 'common usage of the term also refers to the virtual environment of information and interactions between peoples' (*CPR* 2009: 1). Also, cyberspace in this understanding is regarded as a new domain in warfare, where 'an operational environment must consider the five domains and the EMS [Electronic Magnetic spectrum]. The four traditional domains (air, land, maritime, and space) and the EMS exist naturally. The fifth domain, cyberspace, is manmade' (Department of the Army, 2014: 1-3).

When designing ARPANET, BB&N and ARPA already imagined an ever-expanding network integrating every piece of informatic hardware, which made it more resilient, robust and efficient. This gesture of embedding a globally expansive rationality into the Internet and endorsing it through specific security policies reaffirms the link between security and government, although, more recently, some authors give government control a distinctive guise as a latecomer in harnessing the Internet for security purposes (see Reveron, 2012: 8; Deibert and Crete-Nishihata, 2012).

When Obama´s International Strategy for Cyberspace (ISC) emphasised the necessity of openness and interoperability of cyberspace, it did so along the lines of making it secure and reliable, able to 'retain the trust of individuals, business and governments' and 'resilient to arbitrary or malicious disruption' (Executive Office of the President of the U.S., 2011a). Its openness and interoperability, and the importance of the imaginary of the global, has been stated in terms of security and in terms of everyday life interconnectivity, demanding a supranational government and law enforcement in an international society beyond borders. This supranational momentum has been fostered by the natural expansiveness of the network and its users' increased need for this technology, followed by US central role as designer, leader and governor. As expressed by the Obama's administration, echoing the US Chamber of Commerce, in the 2009 Cyberspace Policy Review, it is a shared task of government and private sector to 'ensure the stability and global interoperability of the Internet, while increasing security and reliability for all users' (Executive Office of the President of the U.S., 2009: 21). Achieving global interoperability of networks is not only one of the most important concerns of the US in terms of cybersecurity or even security rhetorics; it has been fundamental for the existence and basic operation of the Internet since its inception and has developed inextricably linked to security measures that have moved beyond the technical and communication realm into more deeply embedded ways of living everyday life. As global security and global interoperability of networks are conjoined into the Internet through a *global rationality of government*, two other rationalities emerge as in-between commercial and state security: the free flow of information or *free Internet* and the *personalization of identity*.

4.2.3 Internet Freedom and the Free Flow of Information or the mediation that fragments collective meaning and orientation before capitalism

Internet freedom was declared a human right by the United Nations Human Rights Council in 2012 and reaffirmed in 2014 and 2016, condemning intentional disruption

of Internet access (see Boyle, 2016). However, Internet freedom was long before promoted by the US government, along with the free flow of information and other human rights. As emblematically synthesized in relation to the three main concerns of the ISC (Executive Office of the President of the U.S., 2011a) (an open and interoperable, secure and reliable, and stable through norms cyberspace):

> The United States is committed to international initiatives and standards that enhance cybersecurity while safeguarding free trade and the broader free flow of information, recognizing our global responsibilities, as well as our national needs. Too often, such principles are characterized as incompatible with effective law enforcement, anonymity, the protection of children and secure infrastructure. In reality, good cybersecurity can enhance privacy, and effective law enforcement targeting widely-recognized illegal behavior can protect fundamental freedoms. The rule of law—a civil order in which fidelity to laws safeguards people and interests; brings stability to global markets; and holds malevolent actors to account internationally—both supports our national security and advances our common values (Ibid: 5).

According to such an account, the role of the US regarding cyberspace entails diplomacy, defense and development, all in order to achieve market expansion, law enforcement and defense under US parameters. In this respect, the promotion of a free Internet and a free flow of information by US foreign policy can be interpreted as part of a strategy of liberalisation based on opening foreign markets and expanding liberal democracies (Carr, 2013; Jablonski and Powers, 2015: 37; McCarthy, 2015). A drive that, in the US, 'has informed international communications strategy and policies in their political and economic aspects' since the first decades of the 20th Century (McCarthy, 2015: 74). The institutional power of the Internet helps to achieve the international order the US envisions and expresses through its foreign policy goals, aiming to extend capitalism as an economic and cultural order (Foley, 2007).

Complementing such a foreign policy approach and program, at least after the First World War[13] and more intensely during and after the Second, US efforts to seduce through propaganda, broadcasting an "American Way of Life", have drawn on ´diplomatic programs that were designed to persuade, inform, and attract global public opinion in the service of American national interests´ (Graham, 2015: 1). Such efforts have then produced and used international cultural norms and symbolic – liberal– values that advance their own goals. That is the case of numerous efforts by

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[13] Jablonski and Powers (2015: 37) refer to 'an 1869 memo from U.S. Secretary of State Hamilton Fish describing U.S. policy "to initiate this movement for the common benefit of the community and civilization of all"'. Free flow of information, global communications, world peace and access to foreign markets constituted the equation.

the Obama administration to promote the use of the Internet even for social mobilisation abroad (see US Department of State, October 2009). For instance, Hillary Clinton's support to circumvention technologies and sponsorship of the World Youth Summits (see Mejías, 2013) speak of how US government harnessed digital technologies and the Internet in order to advance US foreign policy interests in specific countries.

While in the 1980´s people would be attracted to computing appliances and were becoming literate into a user-friendly version of them, creating a huge market for the computing industry, the 1990´s would start selling communication services that increasingly focused on people and data. By the 2000´s, it would be clear that people are not only harnessed as customers but as instruments of data production and commodities, and by 2009 with Clinton's international promotion of digital activism (Ibid), diplomatic channels could be restated through new ways of enhancing public diplomacy by the US via the Internet and social media platforms. The normative framework of Internet freedom and human rights appeared then as both 'expression of US structural and institutional power' and an ideology central to US foreign policy, particularly clear since Hillary Clinton was Secretary of State (Carr, 2013: 622).

In addition to the Internet´s supporting normative and ideological framework, the multi-stakeholder model of global Internet governance – which brings together the private sector, the public sector and civil society – has been a reinforcement of the current status quo in international politics. This model has benefited the actors involved in this technology´s design and development, dating back to the support Bill Clinton´s government provided to the development of the US private sector and the Internet (Carr, 2015). It is a model dominated by the interests of the US (Powles, 2015), in which civil society figures as a legitimising actor under the predominance of US multinationals and US and aligned governments (Carr, 2015: 642). But furthermore, it is a model that entails a form of managing participation on a world level by specialised elites, coordinating different transnational and national actors and promoting Internet exceptionalism through multi-stakeholderism or the exclusion of 'sovereigntist and anti-marketisation [advocates and] perspectives on Internet governance… from the debates' (Chenou, 2014: 206).

Nonetheless, even leftist and progressive activists and intellectuals have endorsed Internet exceptionalism through the multistakeholder model and the promotion of a free Internet. While emphasising civil society's participation potential, these activists have ignored that Internet exceptionalism has largely responded to right-wing ideals and values. As David Golumbia (2015: 15) explains:

Certainly, many leaders in the digital technology industries, and quite a few leaders who do not work for corporations, openly declare their adherence to libertarian or other right-wing ideologies. Just a brief list of these includes figures like Elon Musk, Peter Thiel, Eric Raymond, Jimmy Wales, Eric Schmidt, and Travis Kalanick. Furthermore, the number of leaders who demur from such political points of view is small, and their demurrals are often shallow. But the group of people whose beliefs deserve to be labeled "cyberlibertarian" is much larger than this. The core tenet of cyberlibertarianism—the insistence that "governments should not regulate the Internet"—appears to be compatible with a wide range of political viewpoints. As EFF's senior global policy analyst Jeremy Malcolm […] has written, 'Even politically progressive activists are inclined to be more distrustful of governmental intervention online than offline, in an expression of "Internet exceptionalism"' (Ibid).

As above and as analysed in Chapter 6 regarding #YoSoy132, a specific governance model that benefits the commodification of data and users has been supported by a diversity of ideological allegiances based on unawareness and a common imagination of the Internet as exceptional and apolitical. However, it is not only that governments should not regulate the Internet but that governmental control takes a very specific shape close to the US government model and its flexible form of management. In a context of Internet freedom and exceptionality, big technology corporations want 'a government that's strong enough to enforce its dominant private power over the economy and citizens and protect its wealth, but too broken and too alienated from the public' (Ames, 2015). A very specific practice of government is thus endorsed through Internet governance based on a very specific US balance between military, corporate and civil agents and its capitalist foundations – for instance, the assumption of data and information as a commodity.

Once information became the crucial asset of the market, it increasingly turned into a tradeable good to liberalise and exploit under the moral rhetoric and economic instrumentation of the free flow of information. In doing so, the political implications of denying sovereign governments authority over it (i. e. allowing third parties´ law enforcement and broad decision-making) have been concealed. The logics of economy have been superimposed to political reasoning while expanding the decision and action of the US and allied governments and technology and analytics companies, be it through government agencies or private corporations. This means that decision moves beyond the sovereignty of states, consolidating information into an exploitable asset under the shelter of an international trade law that benefits a global market of established actors (Jablonski and Powers, 2015: 10; Reid, 2009:

609). Ultimately, this works according to a 'trend of using telecommunications laws and information technology (IT) related exports to promote US political economic interests around the world´, in which ´the view of information as something apolitical, culturally neutral, and able to be bought and sold as part of the global exchange of goods and services´ (Jablonski and Powers, 2015: 22) has been fundamental for accessing data, exploiting it and manipulating truths and knowledge according to specific agendas (see Ames, 2015 on Google; Grasseger and Krogerus, 2017 on Cambridge Analytica).

As a form of coordinating and disposing things (Foucault, 2001; Lemke, 2015), beyond laws, exports and the rhetorics of freedom, the 'free flow of information' in US policy has meant more than 'a strictly formal right to access information' (McCarthy, 2015: 111). Furthermore, and in line with the analysis in the previous chapter, it is the Internet´s form and 'material, physical norms and rules [that also] constrain the way in which technology may be used, and thus practices that one may enact' with such a technology (McCarthy, 2015:67). Which means that by 'including and excluding certain practices… [a technology] prevents and promotes goals in line with the goals of its designers' (Ibid.), something that in the case of the Internet will become visible while promoting a specific architecture and governance of the Internet that forbids governments' regulation. Instead of simply being a limited right or being insufficiently enforced, free flow of information assumes and imposes (by hiding its own ideological and practical interests and material processes while accommodating and exploiting others' ideas, concerns and actions), that access must not be denied or restricted based on ideological, cultural or symbolic political reasons (other than those endorsed by the US and allied countries)– but must be on the basis of market or 'capital accumulation' (McCarthy, 2015: 121) and other US security concerns.

Such implicit discriminations of the free flow of information are also accompanied by a more explicit exercise of censorship and prosecution, dependent on specific Western cultural values and security concerns. However, its subtler cultural and symbolic discriminations have a wider impact on how individuals are produced as subjects, in terms of what Jodi Dean (2009) calls 'communicative capitalism' and which refers to a 'political-economic formation' that furthers the downturn of 'symbolic efficiency': a rupture in collective signification, the fragmentation of the recognition of the 'other´s symbolic weight' in the overwhelming flux of contents (or the decay of a shared and collectively meaningful truth), and the proliferation of uncertainty when it comes to politics (Dean, 2009: 162). The latter means that the 'other', be it an individual or collective speaking from another knowledge, ideology or culture, is from the outset distant and reduced to content and data to be managed and sold as a commodity, not

counting as subjects but rather as instruments within the logic of profit that undergirds the most popular and successful Internet platforms. As Christian Fuchs (2018) has explained regarding the most popular social media platform:

> Facebook is the epitome of digital capitalism: It treats personal data as a commodity in order to sell targeted advertisements. In 2017, Facebook's profits amounted to $15.9 billion in 2017. Targeted advertising is driven by algorithms that are blind for the content of what is being advertised. For Facebook, it does not matter if the ad is about chocolate cookies or fascism – it only cares about selling targeted ads for the sake of profit. It is therefore no surprise that Facebook has tolerated highly problematic data practices. Its logic is that the more online activity, data and meta-data is generated, the more potential profit emerges (Ibid).

Digital capitalism has been to a great extent (although in a restricted manner) ideologically blind and flexible. Digital platforms have been able to reduce truth and ideology to ideas as commodities, which can be used only when developed according to the rules of the game of social and economic profitability and western national security. This way has been elusive, turning flexible and adaptable through dispossessing in a subtle manner other knowledges of its collective existential meaning and orientation. In the Internet environment, ideas can bloom in heterogeneity as long as they do not disrupt overarching and expanding capital accumulation or national security. In the first and the last instance, everything that can be turned into a commodity, can be tolerated, offering some sense of ideological and cultural neutrality under the image of a free flow of information but hiding its control and management decision capabilities and their supporting ideologies and way of life.

Once information and expression are assumed to flow free according to the idea that governments should not regulate the Internet, its cultural bias and content discriminations are concealed, inhibiting awareness and delegating information, communications and even behaviours management to a third party. This means that the possibility of producing overall shared knowledge and meaningful collective truth is obfuscated by the amount of information and the social limitations this technology has by design in being limited to manage social reality in simplified versions. Being able to accommodate heterogeneity through flexibility, harnessing alternative visions – opinions and practices – of social organisation and economy and increasing varieties of user-generated-content and communicative exchange deemed as flexible and open 'free' performances, the Internet's ability to produce shared common knowledge (beyond basic digital literacy and commodification) is limited by design. Multiple instrumental truths and fragmented meanings or islands of information (see Berners-Lee, 2010) turn difficult the production of meaningful and purposeful shared

knowledge and truth in an overall implicit and concealed economy. In turn, instrumentality opens up the possibility of an expansive practice of *agnotology* (see Proctor and Schiebinger, 2008), as the intended production of ignorance and ambiguity, or perhaps more recently, a matter of 'post-truth', 'fake news' and manipulation as in the US-UK elections and Cambridge Analytica case, all of which develop in line with the delegation of the management of a complex technical and social system and decision.

According to the above, a ´free Internet´ and the ´free flow of information´ benefit a process of mediation that fragments not only information but also social subjectification. This mediation maintains stable although adaptable points of authority and decision, managing complex processes on behalf of users and by design, intended to spread US ideals and values within a specific economic model, thus promoting US and allied agendas and corporations dominant place in technological and security industries and coordinating relations among international actors and individuals. Such mediation, however, is only possible through more elaborated forms of coordinating individual users that articulate specific US and Western cultural practices and everyday habits: personalisation of identity or the production of a single digital identity and the mediation of subjectification.

4.2.4 Personalisation of Identity or the production of a single digital identity

As already mentioned, the free flow of information as a form of coordination that works according to a cultural bias and a practice of delegating decision and knowledge, overlaps with other two rationalities and unfolds from and into the flexibility and fragmentation of truth in terms of collective existential meaning and experience: *personalisation of identity* and *the mediation of subjectification*. Connecting commercial interest, law enforcement and military security, personalisation of identity has been a pressing concern in both commercial and defence areas and in-between them. First, it emerged as a military issue in the management of access to the ARPANET and the implementation of passwords and accounts; disrupting some other civilian or community-based practices that produced alternative personalities and characters online and marking the turn from 'anonymous' to 'nonymous' online environments (see Zhao et al., 2008). Then, once the Internet was open to commercial use, Internet Service Providers would employ them to control clients' access to the network. Once the Internet was reconfigured through reinvestment and data mining after the dotcom crisis, personalisation of identity became something joyful and desirable through social media profiling, and, in the last instance, corresponding to the urge of data mining under 'real name' policies (see

Fowler, 2012; Van Dijck, 2012; Zhao et al., 2008). This way, a single profile seeks to integrate different social roles (Fuchs, 2017: 50), thus mediating, generating and administering social relations (including the one with one´s own self), communications and the exploitation of vast amounts of data produced by such mediation. Moreover, pursuing personalisation under a single identity entails a rationality that conjoins economic exploitation of data and transactions, law enforcement, and cultural values of individualism, success and competition.

As expressed in the 2011 US National Strategy for Trusted Identities in Cyberspace (NSTIC), counting with trusted identities means 'enhancing online choice, efficiency, security and privacy', all by making online transactions more secure (Executive Office of the President of the U.S., 2011b). The aim then, in commercial and security terms, is to achieve an identity ecosystem 'in which individuals and organizations will be able to trust each other because they follow agreed-upon standards to obtain and authenticate their digital identities and those of devices' by having 'a single unique digital identity' (Stallings, 2016: 26). Nonetheless, trusted personalised identities are not only crucial for commercial and security purposes through cybersecurity; moreover, its cultural appeal is deeply embedded in profiling, or personal profiles, which has become a core practice of social networking digital platforms (e.g. Facebook or YouTube) and which establishes a persistent link to cybersecurity and US values.

Networking digital platforms offer common users the possibility to model and display themselves in private/public networks through the construction of a personalised database and its established parameters of accumulation and individualisation (friends, likes, images, comments) (Marwick, in Fuchs, 2017: 35). While making this practice a user-friendly and joyful experience, these platforms mine data and organise it into profiles that are being sold to third parties through advertising or profile packets, thus exploiting users' free labour (Fuchs, 2017; Terranova, 2004). While freedom of expression, communication and participation through personalisation and other assumed cultural parameters are experienced by an increasing number of users worldwide, a particular US cultural assumption underpins commercial, social and national success: that political participation depends on private property as associated with liberty and recognised by the law to juridical persons (i.e. property means the right of economic exploitation and thus freedom). This basic assumption has entailed the need for US ongoing expansion and intervention (Walker III, 2007: 22). In a system where political interest and effective participation arises from property and economic interest (Hofstadter, 1948), the *personalisation of identity works as a vector that communicates through ownership* private property, social

recognition and the law. In expanding this vector, US and Western cultural, social and legal practices are expanded (see Chapters 5 and 6).

4.2.5. Mediation of Subjectification

Alongside global connectivity and the free flow of information, the personalisation of identity that is increasingly practiced on the Internet entails a *mediation of subjectification*. This mediation, as the intervention of third parties and the extent to which they condition the field of possibility of personalisation and social communication, involves a series of, although flexible and generally subtle, stable ways of coordinating things, behaviours and knowledges. This, despite promoting and enabling user-generated content and social exchange of information or even participation,

On the one hand, regarding forms of coordinating and managing personalisation, knowledge and behaviours, private companies perform as information intermediaries and administrators. These companies even enact global governance by deciding on design and user policies, therefore affecting the rights of its users (DeNardis and Hackl, 2015: 2). While in very specific contexts these platforms and the personalisation of identity they entail may offer the possibility of civility when commenting online (see Fredheim, Moore and Naughton, 2015), DeNardis and Hackl (2015: 9) assert that 'a more visible quality is that social media platforms are choke points that individuals essentially must pass through to participate in significant parts of the online public sphere'. Besides the evident fact that these platforms' decisions affect free speech online (see Rosen, 2013), as this is an explicit concern of their service policies, it is less evident how they decide and design first, 'the intermediation of user-generated content'; then, 'the possibility of interactivity among users and direct engagement with content;' and finally, 'the ability for an individual to articulate network connections with other users' (DeNardis and Hackl, 2015: 2). In simple terms, these platforms sanction users' name and password, model, manage and convey their public speech[14] by deciding what and when content may not flow, what information they share with third parties and when they censor an account.

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[14] A 'digital public sphere', despite its commonly valued importance in terms of free speech and democratic participation, entails the very specific understanding and form of administering such freedom. As Jablonski and Powers point out, in treating communications and expression within a public sphere, commitments to privacy are overlooked and dismissed superseded by a more evident security prerogative. 'Looking back, Clinton's articulation of the Internet-freedom paradigm—which inculcated the Internet as a shared, public space—wasn't simply lofty neoliberal rhetoric. It was, […] a deliberate framing of human rights online that protects free speech but not the anonymity of that speech or the secrecy of one's communications. According to Western legal doctrine, once one enters a shared, public space, their individual rights are curtailed in order to preserve the security and integrity of that space' (Jablonski and Powers, 2015: 201).

Social media platforms mediate content 'via their ability to delete or block' it; they mediate with subscribers, 'via the technological affordances of system design and via terms of service'; also they mediate 'with governments, by serving as the intermediaries that carry out delegated law enforcement and delegated censorship'; and finally, they mediate 'with other institutions, via protocols, business models and technological interfaces' (Ibid). Each 'information choke point' –according to DeNardis and Haeckl (2015)– determines the way in which information is flowing. Underneath its technical architectures and policies, these authors explain, 'design choices and business models predicated upon identity infrastructures and metadata aggregation' threaten first, 'anonymous speech and individual privacy' by collecting metadata, identifying private information and disclosing it under consideration; second, 'the ability to express ideas' or 'freedom of censorship' by being delegated this function by governments or under their own consideration; and finally, 'interoperability and permissionless innovation' by a closed design and a proprietary approach (DeNardis and Hackl, 2015:2).

Every time these platforms, or this form of coordinating online personality and interaction, are able to approve and assign a profile, offering users a personality, teaching them how to socialize and become visible, these platforms personate individuals as profiles, sanctioning individual, collective and – increasingly bounded to commercial and national security – legal existence [15]. As such, in terms of representation, this means that the elements being mediated are displaced toward the periphery of decision-making. Perhaps potentially included, although always postponed, under the new parameters of digital literacy and participation of civil society, users are also and first of all, authorising a third party as the entity to decide over the parameters and values of personation and the basic terms of interaction and constitution of a collectivity. This way, and in addition to the lack of control users have over algorithms and their own produced data, these platforms are playing as institutions that 'alienate humans from the control of and influence on setting the conditions which govern their lives' (Fuchs, 2018).

On the basis of third parties hidden procedures and decisions over the terms that govern personation in a digital environment and its social, legal and political consequences, we must remember and emphasise that the most popular and widely expanded social media platforms are US corporations and as such involve a distinctive link of collaboration with the US government. In line with national security

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[15] Something exclusively attributed to the State or local and religious communities' authorities as the Third Person that sanctions law and social and political existence (see LeGaufey, 2000).

and cybersecurity prerogatives, and the longstanding background of US politics, US guidelines reiterate the fundamental partnership and 'shared responsibility' between Federal government and technology companies at home and abroad (Executive Office of the President of the U.S., 2011a: 11). This bond, in the case of big data corporations like Google, Facebook and Yahoo!, among others, has also developed into more explicit information sharing and collection of data and censorship and surveillance capabilities granted to the US government under programs like PRISM[16], Xkeyscore or MUSCULAR (Jablonski and Powers, 2015: 189; Greenwald, 2013). Furthermore, as we have seen, such close relationships obey a more general, grounded and overarching dynamic in the US. This means that, for non-US users, in the last instance, mediation entails foreign entities not only spying or surveilling but also modelling the way in which users see and govern themselves and the ways in which they relate to the society and the world they inhabit. Although not exactly and always a direct government of things in terms of explicit commands and hierarchical imposition (implying confrontation and dissent), informal management emerges as the basic, generally assumed and subtle rationality of government that entails a basic underlying consent, which currently is the will to use social networking platforms and the Internet, to socialise, communicate, participate and be seen, always, as part of something, but, always, as mediated in a specific way.

4.3 Conclusion

The chapter has identified the embedded form in which the Internet coordinates its components and resources by questioning the design and inquiring into the instrumental character of the internet. This form of coordination has developed from the technical sphere always linked to commercial and security concerns through to the explicit US national agenda and digital platforms' practices of personalisation of identity and mediation of social interactions. This form of coordination has accomplished to turn social interactions flexible enough and calculable as data, fragmenting information and users' behaviour in order to simplify and functionalise, managing the diversity of social and economic processes and knowledges and offering simplified and digested versions that can be easily managed by users.

The chapter has also shown how the transition and further embeddedness of security concerns into technological development has expressed corresponding dynamics and rationalities, binding commercial parameters and security logics into social media

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[16] This program allowed the NSA and FBI access to information and to collect data from technology companies like Facebook, Google, Microsoft, Yahoo! or Apple, in compliance with the Foreign Intelligence Surveillance Act (FISA) (Jablonski and Powers, 2015: 187).

platforms and applications. These rationalities have been fundamental for US commercial expansion and security. Which is to say as well that the Internet and social media platforms express the entanglement between autonomy or open possibilities for communication, entertainment and commercial development, on the one hand; and control linked to national and economic security on the other. The Internet, from the technical and material design of its connections through to its protocols, applications and use of those applications, is clear as a space secured and governed, even if informally, by US national values and prerogatives.

The correspondence between the form of coordination of the Internet and US values and prerogatives skews simplicity in certain directions, making exchanges efficient in economic terms and according to specific cultural values and aims (accommodating heterogeneity) but opening a gap in collective awareness and shared existential experience. By expanding the rationalities of free flow of information, global interoperability and personalisation of identity, the Internet expands a particular social, legal and economic dynamic founded on control, private property and individualism. These technologies condition the ways in which these technologies can be used but also and more importantly, they condition the way in which individual and collective subjects are constituted. The values and interests embedded in the Internet are situated and its instrumental form is bonded to such a situation. Once exported and across nations and cultures, knowledge of the overarching economy of the system, together with its embedded values and interests, are concealed and thus express an instrumental form of coordination that conditions at a distance the emergence of alternative, non-capitalist, forms of self-government.

The chapter supports the argument of the thesis that states that politics cannot be assumed as inherent to technological artefacts and systems and moreover, that the Internet, on the basis of its embedded rationality and forms of coordination, reproduces forms of coloniality in countries like Mexico, a case which needs to be analysed and understood by including a decolonial element. Also, as this chapter has identified the embedded rationalities of the Internet, the following chapters question the instrumentality of this technology and analyse to what extent, in a situated colonised context, the Internet reproduces colonial forms of expansion and control according to its own law and autonomy (embedded forms of coordination, interests and values). This means, in terms of the use of the Internet by the Mexican government (Chapter 5), the Mexican activists of #YoSoy132 (Chapter 6) and the Zapatistas (Chapter 7), whether they have been able to distance themselves from this form of coordination and move into their own constitution as agents that self-govern and decide upon the political – shared existential – location of the Internet.

The Mexican state, Digitisation and the Internet in Mexico

Instrumentality and the engendering of trust as scientific and economic development

The administration of Enrique Peña Nieto, a PRI member, as president of Mexico (2012 – 2018), established *digitisation* as the need to massively adopt and incorporate ICTs in all aspects of everyday life of people, organisations and government in Mexico (Gobierno de la República, November 2013). This chapter analyses how and to what extent the use of the Internet in Mexico's digitisation efforts has been one of an instrument of coordination without politics, which means analysing whether digitisation has reproduced colonial forms of expansion and control according to this technology's embedded forms of coordination, interests and values or instead, it has been part of an effort of self-determination and shared collective decision. The chapter demonstrates how digitisation has assumed and fostered the necessity to mediate social interactions through technology and how it has been rhetorically oriented by the motto of belonging and becoming part of a 'Society of Information and Knowledge' (Ibid). Such a motif, the chapter argues, has justified the adoption of the Internet and digital technologies as a politically neutral and economically useful technological fix. In so doing, the Mexican government has defined its practice under foreign parameters of modernisation and a developmentalist scheme of aspirations, thus reproducing 'modernity... as the rhetoric of salvation' and hiding 'coloniality, which is the logic of oppression and exploitation' (Mignolo, 2010: 9). Such reproduction and concealment tied to the liberalisation of the economy and deployed on the basis of liberalising instruments (on Peña's reforms see Dyer, 2014; el-Erian, 2014) that allow further exploitation of resources (including data) by unaccounted actors.

Overall, it is argued that from scientific and economic development to the opening to financial markets, the Mexican state and the Internet have been set to work instrumentally under foreign parameters and interests, fostering the control of resource circulations by financial capitalism. This chapter is significant to the overall argument of the thesis – that the internet has been reproducing colonial forms rather than politics and that a decolonial element needs to be included together with philosophy of technology and critical approaches to the internet – as it identifies the

reproduction of the basic forms of coordination embedded in the internet. Therefore, the chapter exemplifies the question of US digital dominance in Mexico in order to move, in the following chapters, toward an alternative politics and use of the Internet, which does not aim to sanction an everyday technical experience but rather aims to situate the internet according to its design and its use in relation to colonial forms and practices.

In the following sections, the chapter analyses the arrival of the Internet in Mexico and the Mexican state's digitisation effort through the lens of a *dispositif* (Foucault, 1977; Agamben, 2009). The first section argues that the connection was an effort assumed by those involved as merely 'scientific', research-oriented and politically neutral and that such a scientific imperative limited the intervention of the Mexican government insofar as the Internet expanded within the parameters of a developmentalist uncritical commitment. Then, the chapter analyses the Peña administration's strategy and process of digitisation (the strategies, programmes, official documents, legislation and implementation of technologies) through a discourse analytic approach and the lens of a *dispositif*, identifying three transversal practices that converge in the objective of stabilising and giving certainty to the opening and expansion of financial and telecommunications markets: Connectivity, Open Data and Single Digital Identity. These three forms of coordination correspond to those forms embedded in the expansive design of the Internet: Global Connectivity, Free flow of information, Personalisation of Identity and Mediation of Subjectification (see Chapter 4), and shape digitisation as market-oriented in a liberalising fashion. The second section underscores how the strategic orientation and purpose of the Internet and digitisation policy have corresponded to foreign parameters of privatisation and expansion of financial markets. In so doing, it argues, the state delegates the constitution of its subjects and the responsibility of engendering population´s trust to a technological support defined by foreign interests and their orientation. The Internet, the second section explains, conditions the constitution of a national community as it remains instrumental to a foreign orientation and management.

5.1 The Mexican connection to the Internet

The arrival of the Internet in Mexico is analysed in this section as part of a *dispositif*: 'a given form of coordination' between the elements of a heterogeneous ensemble that has 'a dominant strategic function' (Foucault, 1977: 194 – 196) and produces its own subjects (Agamben, 2011). The analysis of a *dispositif* entails identifying how this form of coordination brings together such heterogeneous elements and how these elements are produced and interplay in relation to a strategic imperative. In the case

of the arrival of the Internet in Mexico the Internet achieved the image of a politically neutral scientific instrument. This section explores the imperative and the strategy, or lack of one, that made possible and necessary such consideration and connection in order to understand how the Internet has increasingly expanded in Mexico as a mediation of social interactions and instrument of foreign interests through digitisation.

As Gloria Koenigsberger (2015) details, the Internet arrived in Mexico through the field of astronomic research in 1988, 'as a tool for basic scientific research whose primary objective was allegedly the expansion of knowledge for knowledge itself' (author's translation, Koenigsberger, 2015: 13). Such a gesture of reducing the Internet to a tool for research, oriented towards a scientific production of knowledge, consistently minimises the interests that led this technology's expansion and standardisation across the continent and the world (see Chapters 3 and 4). But also, such understanding lacked shared strategic meaning and limited the intervention of the Mexican government insofar as *developmentalism* – the general assumption or acquiescent subjection to foreign parameters that establish hierarchies of progress and knowledge as different degrees of development within the opposition between developed and underdeveloped societies – marked the Mexican adoption of the Internet and framed it within an uncritical commitment to foreign political, economic and scientific agendas and their technological implementations.

The image of the Internet as a politically neutral scientific tool began in 1985 when Mexican astronomers from the Institute of Astronomy of the National Autonomous University of Mexico (Universidad Nacional Autónoma de México, UNAM) sought to connect to the NASA-funded Space Physics Analysis Network´s (SPAN) infrastructure to access the databases and computing services provided through this network. However, the incompatibility between hardware and software (the second one produced and freely distributed by US observatories) was one of the first obstacles to establishing remote access to US databases (Koenigsberger, 2015: 85-86). The first viable opportunity to have an Internet connection arrived once the scientific research institutions and universities in US expanded the NSFnet (National Science Foundation) and joined ARPANET.

After a series of communications between Mexican academics and scientific institutions in the US (SPAN/NASA, IUE [International Ultraviolet Explorer]), the Defence Advanced Research Projects Agency (DARPA) of the US Department of Defence gave permission to establish an Internet link between the United States and Mexico. The link included ITESM, NSF, NASA and UNAM (Koenigsberger, 2015:

155). In Mexico, the funding was granted by UNAM and ITESM (Instituto Tecnológico de Estudios Superiores de Monterrey) as they 'were responsible for the funding and installation of that part of the Internet link which is in their country', while NASA and NSF provided 'funding for the satellite dish and associated equipment to connect it to the Internet at NCAR' [National Center for Atmospheric Research] (author's translation, ibid). The link would be established using the Mexican satellite *Morelos* (Ibid: 161). UNAM granted funding for the connection between its main campus and the NCAR´s land station, while the computer with the TCP/IP code was later on provided through a collaboration agreement with the University of Massachusetts by the end of 1988. The network established then in Mexico was an extension of the US backbone and network; the US node in Boulder, Colorado mediated communications from UNAM to ITESM (Koenigsberger, 2015: 190).

Throughout the above events, the Mexican government was initially concerned about communications across the national territory but never presented consistent opposition to depending on US government institutions like DARPA (Ibid: 192). The scientific emphasis given to the Internet had much to do with this. On the development of the Internet connection to the NSFnet, as an astronomer committed to the development of her own specific scientific research, Koenigsberger supported the idea of 'taking advantage of already existing technologies, independently of where they came from, and of investing in developing our own technology only for convenient or necessary situations' (Ibid: 174). A perspective that existed in contrast to the idea of developing national capabilities for coding and establishing 'our own' (Mexican) code for a national network, as expressed and supported by the Institute of Astronomy´s Director in 1988, Alfonso Serrano (Ibid: 174-175). The specialisation and focus on particular fields of research and the professional commitment to the development of specialised research inhibited and fragmented the local and national re-design and re-appropriation of the scientific network that was being promoted and the Internet link and protocol that constituted it. Mexico was articulated as part of the US network and the advent of the Internet's commercialisation further inhibited the Mexican government's participation beyond the boundaries of scientific research promotion. The allegedly scientific and academic nature of the initial connections to the Internet would eventually and increasingly turn into commercial services.

Starting in 1990, federal funding from Mexican government institutions like CONACyT (National Council of Science and Technology) and SEP (Public Education Secretariat) supported the acquisition of computers and equipment (Agencia Informativa CONACyT, 13 June 2016; Islas, 2011), along with efforts by TELMEX (by the time already privatised and privately owned by Carlos Slim) to monopolize the

production and installation of optical fibre. In 1992 the group MEXNET was formed and the Internet expanded as Mexican universities were connected to UNAM, ITESM or independently to other universities in the US as in the case of the Universidad de Guadalajara with UCLA (Islas, 2011). In 1994, MEXNET and CONACyT proposed the creation of a National Technological Network (Red Tecnológica Nacional, RTN) and by October 1995 commercial domains surpassed the number of those from education institutions. By 1996 RTN was already established as an academic backbone to be marketed for commercial services, while TELMEX was already commercialising backbone connections and services (COFETEL, 2002 in Merrit, 2011).

As above, connection to the Internet in Mexico was promoted and supported by scientists both in Mexico and the US, with a huge dependency on the latter. Dependent on US scientific facilities and developments like software and hardware, the Mexican institutions' endeavour to fulfil academic requirements in terms of efficiency and flow of information was deemed valuable on its own and absent of political implications. This meant that despite the nuances of coding and operating information transfer packages not entirely familiar to Mexican scientists, these were seen as technical problems to surpass in order to be connected and part of a selected group of 'advanced countries' (see Islas 2011; Koenigsberger, 2015). The Internet was never questioned as a matter of national politics or autonomous technological development despite subtle hints of such concern among Mexican academics like Alfonso Serrano (Koenigsberger, 2015: 174-175). The combination of a motif – developing scientific knowledge and being part of an elite of developed and technologically advanced nations – and a specific form of technical management showed itself pervasive and long-lasting, despite its economic adaptations. The Internet then turned from an academic-oriented network into a commercial one, limiting Mexican government intervention. However, the assumption of its scientific knowledge-oriented character has endured despite its market-driven expansion and implementation. The Internet was assumed as a desirable component of everyday life, concealing the specific interests and values involved in its development (see Chapters 3 and 4). Accordingly, as we will see in the next section, recent efforts to strategically diffuse Internet access through digitisation have been linked to an increasing liberalisation of the country's economy and subject to specific market-oriented parameters and goals, although under the banner of national development, participation and quality of life.

5.2 Digitisation as a *dispositif* and a Digital Mexico

Since Peña's government started its mandate, a telecommunications transformation has been encouraged as part of a broad political, economic and social reform process (Tuckman, 2014). This reform, which was allegedly accomplished in its main normative corpus throughout 2013 (a dozen reform bills[17] and its secondary and regulatory laws – five of them requiring amendments to the constitution) (see Dyer, 2014; el-Erian, 2014), started its implementation in 2014. As part of the reform process, the commitment to expanding access to the Internet took the form of a digital policy whose fundamental purpose, as established in the National Digital Strategy (EDN in Spanish), was to accomplish a *Digital Mexico* through *digitisation*. As a concept, digitisation 'describes the political, economic and social transformations associated with the massive adoption of Information and Communication Technologies' (ICTs) (author's translation, Gobierno de la República, November 2013: 9).

As mentioned before, the analysis of *digitisation* as a *dispositif* entails identifying how 'a given form of coordination' brings together an ensemble of heterogeneous elements, how these latter interplay in relation to a strategic function (Foucault, 1977: 194-196) and how they produce its subjects (Agamben, 2011). In this case, insofar as digitization was deemed a strategic imperative by the Mexican government, the analysis starts by inquiring through this assumption and employing it as a point of departure. This means that digitisation plays here as the starting analytical point as it clearly expresses the self-constitutive practice of the Mexican government in relation to the Internet. From this digitisation agenda the multiplicity of elements, its form of coordination and its overarching strategic imperative (general sense of purpose and orientation through layers of meaning) are identified through a discourse analytic approach and by drawing on Daniel McCarthy's discourse analysis guide (McCarthy, 2015; see Appendices A and B). The section contends that the overarching production of knowledge and practices around the Internet and the Mexican state and the deployment and coordination of resources – policies, laws, personnel, technological systems and money – work within a *dispositif* whose strategic function has been to maintain the benefits of well-established actors and the right conditions for market operation through liberalisation and control over the circulation of resources.

Digitisation was composed of multiple elements in addition to the EDN action plan. These included: the *National Development Plan* (PND in Spanish) *2013-2018* (GR, 20

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[17] Reforms in education, telecommunications, labour, transparency, political/elections, energy, financial services, tax and revenues, anti-trust, Federal District political reform, National Criminal Procedural Code, and right to respond.

May 2013), the *Constitutional Reform on Telecommunications* (GR, June 2013) and the *Mexican Political Constitution*, the *Program for an Accessible and Modern Government* (PGCM in Spanish) –containing the digitisation index as the measurement instrument (GR, 30 August 2013), the *Investment Program in Transport and Communications Infrastructure* 2013-2018 (GR, July 2013), and the controversial *Federal Law of Telecommunications and Radio and Law of the Public Radio System of the Mexican State* (GR, July 2014). The main regulatory international components were: the Open Government Partnership[18], the G8 Open Data Charter, the Regional Digital Market, Pacific Alliance[19] Digital Agenda[20], World Summit of the Information Society, Internet Governance Forum, eLAC2018: Regional Digital Agenda for Latin American and the Caribbean, and the OECD Ministerial Gatherings of Digital Economy. Each of these regulatory documents, programs and actions mobilise different agents and produce multiple but nevertheless interacting effects.

Across such elements and their respective agents and effects, binding local, national, regional and world scenarios, three transversal recurring practices were identified: Connectivity, Single Digital Identity and Open Data. These forms of coordination reproduced those of global connectivity, free flow of information, personalisation of identity and mediation of subjectification embedded in the Internet expansion (see Chapter 4) and which have been crucial for US (and allies) foreign policy aims and interests. The overarching orientation of the *dispositif* unfolds through such transversal practices as privatisation and the generation of economic value, opening Mexico's economy to better-established foreign markets while allegedly opening opportunities for new national agents to compete. In doing so, government institutions operate according to foreign standards regarding austerity, transparency and legal and procedural certainty for private property and investment.

5.2.1 The National Digital Strategy and a new relationship between the State and Society

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[18] Barack Obama as President of the United States launched the Open Government Partnership (OGP) in 2011 at the U.N. General Assembly meeting along with Brazil, Indonesia, Mexico, Norway, Philippines, South Africa and the United Kingdom, 'to provide an international platform for domestic reformers committed to making their governments more open, accountable, and responsive to citizens' (OGP, no date).
[19] Regional Integration initiative integrated by Chile, Colombia, Mexico and Peru, created on 28 April 2011 (México Digital, 30 September 2015).
[20] 'During the 11th Pacific Alliance Summit, held on July 1, 2016 in Puerto Varas, Chile, by presidential mandate, the Digital Agenda Sub-group was created in order to build a roadmap that would allow the four countries to implement, develop and deepen specific issues in accordance with what is established in the telecommunications and electronic commerce chapters of the Commercial Protocol of the Pacific Alliance' (Alianza del Pacífico, no date).

The National Digital Strategy (GR, November *2013*) in its main document established five objectives that are representative of government efforts towards a 'digital Mexico': *1) Governmental Transformation* – which aims to 'construct a new relationship between society and government', *2) Digital Economy* – focusing on the development of a 'digital economic ecosystem' through the 'assimilation of ICTs in economic processes,' *3) Quality Education* – integrating 'ICTs to the educative process, both in educative administration and in the teaching and learning processes, as well as in teacher training,' *4) Universal and Effective Health* – which aims to 'generate an integral digital health policy,' and *5) Citizen Security* – 'using ICTs in order to prevent social violence, articulating the efforts of citizens and authorities' (author's translation, Ibid). Towards the achievement of such objectives the EDN has deployed several resources and actions through implementing 5 enhancers (habilitadores) or instruments: *Connectivity, Digital Inclusion and Skills Development, Interoperability and Digital Identity, Juridical Framework,* and *Open Data*.

Without asserting the effectiveness of the strategy in toto or regarding the totality of its explicitly stated objectives, despite the serious limitations in its reach (DeLoitte 15 March 2018), it is evident that the action plan has mobilised and put forth its agenda to a large extent, with 2017 as a crucial year for its accomplishments, including bringing international participation into its scope. For instance, and as detailed in the following paragraphs, the government awarded to Altan Redes the construction of a core national network and has supported more overarching initiatives and collaborations regarding financial services and markets like that of Open Banking, sponsored in part by the United Kingdom's Prosperity Fund and the UK Embassy in Mexico, the latter in relation to the Financial Technologies Law recently approved in 2018 and the increasing participation of joint think tanks and start-ups working on the exploitation of open data and blockchain technologies for public administration tasks and proceedings. Despite the limitations above, digitisation has resulted in a financial agenda, privatised the expansion of telecommunications infrastructure and opened the communications market and the circulation of data and resources to be exploited privately and transnationally.

As originally stated by the Program for an Accessible and Modern Government (PGCM in Spanish), its Objective 5 was 'to establish a National Digital Strategy that accelerates Mexico´s insertion into the Society of Information and Knowledge' (author's translation, GR, 30 August 2013: 27). This objective was justified in turn by the necessity 'to impel a government centred on democratic values which contribute to building up a new relationship between the state and society, centred on the individual and its experience as user of public services (author's translation, GR, 30

August 2013: 27). This impulse was to be 'added by using ICTs, allowing the development of government´s modernisation and the improvement of public goods and services provision [assuming] counting with digital enhancers like connectivity, affordability (asequibilidad), inclusion, digital literacy, interoperability, and use of open data as well as an adequate juridical framework to those effects' (Ibid).

The motif of Mexico being part of a 'Society of Information and knowledge' is present across different documents without ever being clearly explained. For instance, in the EDN, Digital inclusion is defined as 'the democratisation of access to ICTs so that the whole population can insert itself successfully in the Society of Information and Knowledge' (author's translation, GR, November 2013: 16). Regarding the EDN objective of Quality of Education, the task is defined as 'to integrate ICTs into the educational process, both in education management and in teaching-learning processes and teaching training and the diffusion and preservation of art and culture, to allow the population successfully introduce itself into the Society of Information and Knowledge' (author's translation, GR, November 2013: 22). Indeed, the orientation and matter of the EDN is the Society of Information. The PGCM also conceived the EDN as 'a strategy on the subject of the Society of Information and Knowledge and Internet Governance', whose 'primordial intention [was] to draw the government closer to people' making clear that the Federal Public Administration was to adopt ICTs as a strategic tool expected to 'contribute to generate a real opportunity to close the economic and social divide in Mexico' (author's translation, GR, 30 August 2013: 13). (Ibid).

As above, the Society of Information and Internet Governance were subjects of the strategy. However, across the EDN and digitisation as a *dispositif*, the Society of Information and Knowledge appears as the end and goal of digitisation, a motif as the advent of a different society through a technological fix whose economy is unclearly stated but that generates 'a real opportunity to close the economic and social divide in Mexico' (Ibid.). Reducing the multiplicity of elements involved in Mexico's economic and social divide, this idea is, of course, in relation to the clear statement of the EDN that:

> the strategy emerges in response to the necessity of taking advantage of the potential of Information and Communication Technologies (ICTs) as a catalyst element for the country´s development. The incorporation of ICTs in all aspects of everyday life of people, organisations and government, has multiple benefits that translate into an improvement of the quality of life of people. Empirical evidence has demonstrated that digitisation impacts the growth of Gross Domestic Product

(GDP), the creation of employment, innovation, transparency and the effective
delivery of public services, among other aspects […]

With conviction that the path of digitisation is the way to a higher development of
our country, the National Digital Strategy Coordination Office will dedicate its
efforts to accomplish the objectives of this document, for the wellbeing of Mexico
and all Mexicans (author's translation, GR, November 2013: 7).

The articulation between digitisation, economic measures, development and
prosperity is consolidated as a conviction in the EDN, stating as a clear referent the
World Economic Forum and the Global Report on Information Technologies 2013 (a
gesture mimicked by Brito, member of #YoSoy132, see Chapter 6), which states that
'regardless the weak economic growth in the world in the last few years, digitisation
contributed 200 thousand million dollars to world production and created
approximately 6 million employments during 2011' (author's translation, GR,
November 2013: 13). The truth that supports these claims and reaffirms the 'path of
digitisation' as 'the way to a higher development of the country' (Ibid) is the alleged
empirical evidence provided by such report. On such basis, development is the task
and goal whose meaning is given through certain parameters of economic growth and
is now being produced as dependent on the incorporation of ICTs in all aspects of
everyday life, conditioning understandings of what constitutes improvement of the
quality of life and thus the actions undertaken on that basis. Then, as a technological
fix, the relationship between government and people and the quality of life of people
depend on technology to make possible the transformations required and conceived
as pertaining to the Society of Information and Knowledge. A society regularly
reiterated, as the ultimate destiny of societies and whose definition, let alone that of
digitisation, remains unclear in the EDN.

Ultimately, such unclear status of the Society of Information and Knowledge presents
'modernity… as the rhetoric of salvation' (Mignolo, 2010: 9) and requiring further
definition that is not to be found within the explicit statements of digitisation. The only
clear statement of digitisation is that ICTs need to be massively adopted. This,
because the definition and meaning of digitisation and the Society of Information and
Knowledge, its sense of purpose and sense of orientation, lie elsewhere, just like the
experiences and interests to which they primarily and instrumentally respond. As
digitisation increasingly pervades aspects of everyday life it fits within an economic
agenda defined elsewhere rather than in Mexico and supports foreign referents of
prosperity and quality of life that reiterate specific lines of action in favour of foreign
interests.

Regarding the objective of establishing a National Digital Strategy (EDN) contained in the PGCM, the index used to measure the country's development towards the stated goals is the digitisation index established in a study by Raul L. Katz, Pantelis Koutroumpis and Fernando Callorda[21] (2013). In this study, 'The Latin American path towards digitization', they define digitisation 'as the social transformation triggered by the massive adoption of digital technologies to generate, process, share and transact information' and present 'a methodology followed to calculate the Digitization Index, a concept originally developed by Booz & Company, the global management consulting firm, with the support of the authors' (Ibid: 6). While the definition of Society of Information provided in the EDN resembles the above definition of digitisation, in contrast the EDN entirely dismisses the information process (to generate, process, share and transact information) and pays no attention to who generates, processes, shares and transacts information.

On the assumption of an ongoing technological revolution 'often called the "Digital Era"' (or the 'Digital Knowledge Era as mentioned in the PGCM (GR, 30 August 2013: 13), the Digitization Index 'represents an attempt to quantitatively measure cross-country progress along the digitization development path' and 'towards this new era' (Katz et al. 2013: 6). The authors 'argue that the holistic adoption and usage of information technology results in enhanced effects that go beyond the contribution of specific platforms. Furthermore, to achieve a significant impact, digitization has to be widely adopted within the economic and social fabric of a given country' (Ibid: 7). Therefore, the EDN promotes the massive implementation of digital technologies in Mexico. It is the massive adoption of ICTs by individuals, enterprises, societies and governments that is seen as significant and fundamental to fulfil the promise of development. And correspondingly, the colonial form associated to this massive implementation unfolds as the index 'indicates that countries are clustered as Digitally Constrained, Emerging, Transitional or Advanced, with varying degrees of contribution of digitization to economic growth' (Ibid: 6). In this manner the study works as a developmentalist/colonial assessment 'of Latin American countries in terms of their progression to digitally advanced societies' and a prescription as 'the region now can follow the path that developed nations already blazed, learning from their best practices' and taking 'advantage of mature technologies and markets, and the resulting price reductions'; always considering that 'the acceleration between stages may derive from increased market liberalization, growing affordability of

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[21] Based at Columbia Institute of Tele-Information in New York and at ESEADE Business Administration Department in Buenos Aires respectively.

technologies, growing availability of skills, and the government plans to develop ICT in the region'(Ibid: 19).

In other words, the measure of the status of the countries as 'digitally advanced societies', according to this study and index', is how much digitisation contributes to economic growth. The end goal of digitisation is to foster economic growth and its meaningfulness to Latin America is seen through the lens of progress and the expectation of becoming a 'digitally advanced' society (Ibid). This motif is reproduced across different texts and recalls the context of Mexico's first connection to the Internet, when it represented the opportunity to join 'a selected group of developed countries' (Koenigsberger, 2015; see Islas 2011). In addition, it recalls the EDN in relation to the PND's fifth National Goal, Mexico with Global responsibility, which states that 'within the global society, Mexico requires to take back a more active role' seeking 'integration with developed nations' (author's translation, GR, November 2013: 33). Becoming a developed nation orients the process of digitisation undertaken by the Mexican government. However, the public orientation and rhetoric of the process still relies on the eschatological assumption and rhetorical asset of a Society of Information and Knowledge to which the population and the country need to arrive.

As Armand Mattelart (author's translation, 2002: 168) concisely synthesises, the notion of a Society of Information emerged in the Post-Second World War era in opposition to those nations deemed as totalitarian. Although this notion has been more recently associated to 'the thesis of the end of ideologies', it has also been associated to vindications of 'class struggle, commitment, the intellectual who protests'. However, the author explains (Ibid: 108), the 1972-1973 crisis triggered the adoption of this notion by the Organisation for Economic Cooperation and Development (OECD) as well as by United Nations (UN) and the European Economic Council (EEC). It was initially linked to the crisis of the economic model but then referred to the governability crisis of 'great Western democracies' (Ibid). The idea of a technological fix, 'that new technologies [could] solve the economic crisis as well as the political consensus crisis' soon followed and was diffused through a report commissioned in 1978 by French president Giscard D'Estaing to Simon Nora and Alain Minc, the Nora-Minc report[22] on the informatisation of society (Ibid). In 1995 the G7 group ratified the concept of a global society of information in Brussels, which

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[22] The report explained: 'The insight about informatics and society reinforces the conviction that the balance of modern civilisations relies on a difficult alchemy: dosage between an increasingly vigorous, even if it is to be better limited and defined [acotado] of state prerogatives and an increasing exuberance of civil society. Informatics, for good or wrong, will be a basic ingredient of this dosage' (Mattelart, 2002: 111).

promoted the liberalisation of telecommunications as main imperative to improve productivity, technological innovation and cultural plurality (Mattelart, 2002: 127). Finally, by 1998 a 'process of deregulation of financial networks and telecommunication systems' constituted the departing point of the official recognition by the World Trade Organisation of deregulation 'as the principle of a new economy and a new society' (Ibid: 168). Deregulation and the advent of a Society of Information (a technological fix) have since been inextricably linked as responding to great Western democracies' considerations and decisions.

As articulated in the EDN, the notion of a Society of Information expresses the assumption of a technological fix that works under the ideal of liberalisation – the deregulation of financial and telecommunications networks on a world level and the retreat of public property – as the means and end of an alleged new society and economy. In correspondence to market virtues and a process of liberalisation promoted in the name of the Mexican society, the overarching orientation of digitisation as a *dispositif,* as further analysed in the following subsections, has been towards opening national resources (e.g. the generation, processing, sharing and transaction of information) to exploitation and the privatisation and commodification of its products, operationalised through three transversal recurring practices: Connectivity, Personalisation of Identity, and, Open Data. These practices, it is argued, reiterate the expansive forms of coordination of the Internet (global connectivity, free flow of information, personalisation of identity and mediation of subjectification) and delimit the constitution of the Mexican state in relation to the Internet and the Mexican population as users of the Internet.

5.2.3 Connectivity

One of the enhancers or instruments deployed across the elements of the digitisation *dispositif* is Connectivity, which the EDN refers to as 'the development of networks and amplification in deployment of better infrastructure across the national territory, the amplification of the capacity of existing networks, and the development of competition in the ICTs sector to stimulate price reduction' (GR, November 2013: 26). It is important to note that this expansion is said to arise from the awareness that 'the basis of a Society of Information and Knowledge lies on the development of better infrastructure, reason for impelling the deployment of networks and competitivity' (EDN website, Connectivity). In line with the liberalisation process triggered by Peña's reforms, the emphasis of connectivity is on infrastructure, which is argued for in terms of providing economic opportunity (mainly to foreign investment and entrepreneurs as it allows up to 100% of foreign investment thanks to the Constitutional Reform on

Telecommunications[23]) and international alliances to the well-established national actors.

Infrastructure, national expansion, private investment and price reduction were to be accomplished in an eminently international and private fashion. In order 'to improve the quality of life of people', the PGCM established, 'it has been proposed to strengthen the inclusion of private resources for investment in public infrastructure through the scheme of public-private associations', through which the State 'grants the best conditions for investment' (GR, 30 August 2013: 12). In addition, the Investment Program in Communication and Transport Infrastructure (GR, July 2013) states that the objective of the initiative in relation to the Transversal Strategy of Democratising Productivity included in the PND 2013-2018 is 'to develop logistic infrastructure that integrates all the regions of the country into the national and international markets, so that enterprises and productive activities can expand across the entire national territory' (Ibid: 21). As such, the objective of integrating the country to international markets is reiterated across different documents of the *dispositif*.

Katz et al.'s paper (2013: 8) equally asserts that 'Network Capacity' is based on 'international network links' as 'international bandwidth is crucial in order to provide adequate throughput to remote sites' and as national bandwidth networks are never enough. As well, the international plans and regional digital agendas subscribed by the Mexican Government (e.g. RedGEALC, Open Data, Open Banking) combined internationalisation and openness to private exploitation. Overall, the aims and international agenda included in the EDN relied on the wide expansion of the Internet and thus required the construction of a Red Compartida (Shared Network), a virtualized core network[24] that offers service to retail operators but not to final users, so that along with reduced investment costs for such operators, more competitors would enter the market, decreasing the cost of services for final users and thus expanding service provision to unattended regions.

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[23] Despite including universal access to information and communication technologies as a constitutional right, and the creation of regulatory institutions, the reform was criticised, among many other points, for allowing foreign investments up to 100% while closing opportunities for indigenous groups to participate in the sector (Aristegui Noticias, 23 March 2013; BBC, 22 March 2013). On its part, the 'YoSoy132' movement questioned the lack of support the reform brings to communitarian and indigenous media and the right of the audiences to better content or to a minimum of social content (García, 2013).
[24] A core network that functions over the use of 90MHZ out of the 700MHZ spectrum through a commercial use concession in abidance to the Article 16 transitory of the Mexican Constitution (OEDN, no date b). The aim is to reduce required investment by retail operators and make for them profitable to enter the telecommunications market through a wholesale network with national coverage designed, built and operated by a company that offers and is not able to sell services to final users but only to Telecom service providers or retail operators, who would enjoy reduced operation costs.

In order to guarantee connectivity infrastructure, in 2017 the public-private agreement between Altan Redes, the Secretariat of Communications and Transport (SCT) and the Federal Telecommunications Institute (IFT) was established with the aim of reaching 30% of population provision by March 2018. Altan Redes, an international consortium created in 2016 and based in Mexico City, counted as its majoritarian stakeholder the Marapendi Holding, an infrastructure fund for investment in OECD member countries administered by Morgan Stanley Infrastructure with 33.38% assets, followed by the Mexico-China Fund with 23.36%; Caisse de depot et placement du Quebec, one of the major pensions administrator in North America with 12.68%; Hansam, property of the lawyer Miguel S. Escobedo with 9.35%; FFLATAM trust that emits bursary certificates constituted in INVEX with 6.54%; Megacable and Axtel, Mexican Telecomm Companies that will participate of the capital without right to vote; and finally, World Bank's IFC and Eugenio Galdón president of Multitel Group with 3.34% respectively (Martinez, 2016). This consortium then selected Nokia 'to design, build and operate the new nationwide LTE and 5G-ready wholesale network in Mexico in what [was] Nokia's largest-ever contract win by scale in Latin America' (Nokia, 30 March 2017). As Nokia optimistically stated, 'the innovative and unique "Red Compartida" public-private project is the first of its kind worldwide and expected to attract more than USD $7 billion in investment over nine years' and is 'financed by international and local investors ranging from financial institutions and development institutions to industrial partners in Mexico' (Ibid).

As such, besides the sudden emergence of a consortium formed by multinational groups ready to undertake such an important task, the nature of the quest is outstanding in terms of its sui generis nature, not only for being a virtualized core network operated through a public-private agreement and deploying 4.5G Pro radio access based on AirScale[25], but for granting vast majority to foreign interests and being mostly worried about providing competitive investment opportunities to retail operators on a network that would be, according to the rhetoric of the EDN, the foundation of so many transformations on which the quality of life of the Mexican people depend. Instrumentally, the network and its imperative suit perfectly US efforts of expanding the Internet according to a specific economic model that gives access and control to privileged transnational actors. Therefore, it contributes to the US imperative of Global Interoperability and 'a globally-interconnected digital information and communications infrastructure' deemed as critical for 'the U.S. economy, civil infrastructure, public safety, and national security" (EOPUS, 2009: iii) (see Chapter 4). But also, in deploying infrastructure within liberalising models the network reproduces

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[25] Using wireless connections through antennas instead of deploying vast networks of optical fibre cable.

the Internet's embedded ways of coordinating and producing resources instrumentally: at a distance and according to someone else's politics and interests, just as in the following cases of Open Data and a Single Profile Identity.

5.2.4 Open Data

The public-private contract between the Secretariat of Communications and Transport and Altan Redes was the first to adopt the Open Contract Data Standard for a public-private association modality. A standard that has been promoted by Transparencia Mexicana, the EDN Office, National Institute of Access to Public Information INAIP, the Open Contract Alliance[26] and the World Bank (Red Compartida, 31 January 2017) and which ends up justifying its own existence asserting that 'Open data on infrastructure and other public procurement is essential to support investment and integrity' (OCP, 20 February 2018).

Open Data as an enhancer [habilitador] stands out from among the rest of the EDN enhancers as it traverses all of them and the EDN objectives. Beyond or before any assumptions of the goodness of achieving transparency or making information on public contracts and government proceedings open in order to eliminate corruption from public administration, there is much more about opening data in terms of financial and political benefits than those usually made explicit by its advocates as transparency or efficiency. Indeed, the Mexican government has stated its own transformation – the foundation of a new relationship between government and society – through its entire reliance on digital technologies and based on the Internet, the parameters of efficiency and efficacy in public expenditures dictated by the Inter American Bank for Development (BID in Spanish) (i.e. adopting the index of Management for Results 2010) and its commitments to Open Data (GR, 30 August 2013).

As established in the PGCM 2013-2018, 'an accessible [cercano] and modern government' is 'not only a government that spends less, rather it is one that spends better' (author's translation, GR, 30 August 2013: 1). And the way to spend better is by achieving 'a government with policies and programs framed within a public administration oriented towards results, that is efficient, has evaluation mechanisms that improve its performance, that optimises the use of public resources, that

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[26] The Open Contracting Partnership was conceived in 2012, hosted by the World Bank Group until the end of 2014. Its members and advisory group are composed by policy experts, leaders, campaigners, businessmen, investment and corporate finance workers, constituting a multi-stakeholder initiative that works 'to open up government procurement and make sure problems get fixed' (Open Contracting Partnership Website/About).

simplifies normativity and government proceedings, is accountable in a clear and opportune manner to citizenry, and that uses new ICTs' (Ibid: 4). In this description, besides the enlisted administrative skills and virtues, ICTs are assumed as necessary.

The way of using ICTs is by making 'intensive use' of them and impelling 'transparency and accountability on the basis of a basic principle imprinted in article 134 of the Constitution: "the economic resources (de que dispongan) available to the Federation, the states, municipalities, the Federal District and political-administrative organs of its territorial demarcations, will be administered with efficiency, efficacy, economy, transparency, and truthfulness (honradez) to satisfy the objectives they are destined to" (Ibid: 3). ICTs are explicitly intended to bring efficiency, efficacy and transparency, even accountability in order to satisfy the established objectives; however, truthfulness is somehow different, included but never explicitly reiterated across and throughout the elements of digitisation.

Among the conditions and properties the Mexican State must observe, truthfulness, sovereignty and independence were mentioned when quoting the supreme law of the country (Ibid: 17) but never discussed or included again to be observed as central to government practices when planning, designing and deploying digitisation. Truthfulness however, was reiterated in a different manner, not in relation to sovereignty or independence but to managerial skills and attitudes as trust. Peña's administration explicitly, although quite sporadically, mentioned and tried to address the issue of trust.

> The PGCM has as fundamental purpose that we Mexicans regain trust in government, through the establishment of a correct public management oriented toward results, that optimises the use of public resources, uses new ICTs, strengthens transparency and accountability and integrates different government and civil society efforts with the primordial goal of leading Mexico to its maximum potential (Ibid).

As above, the means to regain trust in government are those of public management techniques. Within such techniques, new ICTs have a fundamental role, as they make possible to attain transparency and accountability. Undertaking foreign agendas and measurement indexes, the Mexican government instrumentally orients and is oriented through borrowed aspirations. The true way, it is assumed, to gain back trust in government is elsewhere: uttered by the BID, embodied in so called new ICTs and in specific measures towards transparency, accountability and the integration of a very

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specific sector of a particular civil society – the innovative and tech savvy one as detailed below.

The transformations required by the state to gain trust back and establish a new relationship with society are based on a specific set of technologies that work through the assumption of the anticorruption and positive nature of transparency and accountability. That is the case of Open Data and its assumed benefits for transparency and accountability. It has been said that in Mexico, 'an Accessible and Modern Government is an open government that, efficiently, fosters greater accountability' (Ibid). However, there is no clarity about for whom accountability and transparency work, as the latter has been deemed the watchword of 21st-century liberal democracies and as 'open government initiatives routinely prize visibility over intelligibility and ignore the communicative basis of trust' (Moore, 2018: 416).

Open Data has been meant to produce 'a change in governmental management culture [cultura gubernamental de gestión] and the use of public data as tools to foster entrepreneurism, innovation and generate efficiencies with the government' (OEDN, no date g). The enhancer is thus defined as 'impelling the publication of open data to create an ecosystem of co-creation of public services, to trigger innovation and entrepreneurism in order to transform information held by the government into an asset of social value' (OEDN, no date c).

Innovation, entrepreneurism and social value triggered by Open Data are linked to the PGCM line of action 5.7.3, which 'promotes trust in proceedings and digital services, digital economy and electronic payments' (OEDN, no date g). As such, Open Data traverses all the elements of digitisation as a *dispositif*, from Governmental Transformation, through to Digital Economy, Educative Transformation and Universal and Effective Health, and to Civic Innovation and Citizen Participation as it promises to build trust across a wide scope of affairs on an instrumental basis. Trust is therefore means to the aim of triggering entrepreneurism and innovation as social-value generative aspects of open data.

While social aspects like public funding and social services to unprivileged sectors of the population are intended to increasingly run through mobile devices and platforms, which avoids duplicating funding and allows diffuse information on specific health and social conditions requiring attention[27], the entrepreneurial and developmentalist aspect of it takes over, subject to foreign parameters and validations. This is the case

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[27] For example, the program Prospera Digital gives a monthly stipend to single mothers and the Data for Development initiave of a maternal mortality project in Mexico

of Prospera Digital and its aim of expanding financial services and the use of financial products, also termed as 'financial inclusion'; the case of 'Data for Development' aims at 'designing evidence-based public policies through deep and technical analysis of open data of big size' (OEDN, no date f). The latter project's agenda is set according to foreign initiatives like 'Data Science for Social Good' and the attribution of Mexico as a 'developing country'. It is important and significant to consider here that communication resources of initiatives based on open data were published in English with no Spanish version available, showing a lack of intervention of the Mexican Government and an overreliance on foreign actors and products over national ones (see UoCh, no date; OEDN, no date d; GR, no date). As analysed below, social initiatives and transparency were quite limited while the financial use of open data received greater attention, projection and deployment linked to a very specific type of civil society digitisation puts forth.

The Open Data enhancer unfolded in a subtle manner throughout other enhancers and across the EDN Objectives, crucially producing and fostering a specific type of civil society constituted around the values of entrepreneurship, creativeness and innovation. While inciting public institutions and citizens to share all kinds of data, access to the possibilities of exploiting those data and innovating with them in an entrepreneurial manner is restricted to specific resources and managerial techniques: it is restricted to a limited sector of society and a technosocial culture that, as the infrastructure being set, is international and speaks in the language of informatics (and English) towards global interoperability (see the initiatives below). As the Open Data definition specified: it is 'public information available online for free, in formats legible to machines, and that hold a license to be used, reused and redistributed freely by everyone and that are only subject to the requirement of attribution' (author's translation, GR, November 2013: 39). In other words, such information is only intended to be free online and insofar as it is legible to machines. Considering the digital divide in terms of access and digital skills that the EDN is pretending to address, the social sector included in this civil society that is producing a new relationship with the state is quite limited, whereas the need for expansion of technological mediation is assumed as global. Open Data takes global interoperability and the free flow of information as conceived by the US government (Chapter 4) a step further into the interoperability of all sorts of datasets (see ODH, 2018).

For instance, the 'Labora' initiative has been supported and funded by the UK Embassy in Mexico through the Prosperity Fund and is a collaboration between the EDN; the Open Data Institute (ODI), co-founded by Sir Tim Berners-Lee, founder of the World Wide Web, and Sir Nigel Shadbolt to connect, equip and inspire 'people

around the world to innovate with data' (author's translation, Labora, no date); and Demos[28], which designs 'business models that help solve the most urgent social problems, while generating economic value' (Ibid). Labora is said to contribute to the PGCM lines of action in that it promotes the use of open data by social, entrepreneurial and governmental sectors; it impels citizen participation through innovation competitions and digital skills promotion campaigns; it establishes and operates a Model of Governmental Innovation based on the co-creation of solutions through citizen participation; it promotes financial inclusion through mobile banking schemes; it promotes innovation in ICTs to generate products and services of high aggregated value; it takes advantage of ICTs to impel civic innovation; and it supports the development of a market of digital goods and services (offer and demand) (author's translation, OEDN no date e).

The Labora initiative was based on the methodology the ODI has used to incubate new open data enterprises in the UK and Europe and on 'the experience of Demos in entrepreneurial activities of technology aiming to have social impact' (author's translation, Labora, no date). The self-description of the Labora initiative in Mexico emphasized that '[this] collaboration between the Federal Government, a local social enterprise and an international institute brings the best of local knowledge, international experience and government understanding, thus creating a truly unique network' (Ibid). While appealing, this definition obscured, on the one hand, the UK Embassy´s role and the importance of funding, and, on the other, assumed local knowledge as embodied in an internationalized group of (social) entrepreneurs members of a privileged sector of the Mexican society.

Regarding such kinds of entrepreneurial civil society, Demos was also called 'C Minds' and is part of other UK Embassy funded initiatives like Open Banking (analysed in the next section). This entrepreneurial and innovative element stood out as prominent and undermined lower profile efforts regarding socially focused initiatives. In other words, the Open Data schemes run according to the liberalising and commodifying imperatives that uphold the Internet expansion and not according to non-economic value generating initiatives. In this sense, trust in government is to be found where there is economic value and aspirations of innovation and development, following foreign standards and measures that respond to different circumstances and experiences where the social can be monetised. That is not only the case of Labora but also of other initiatives like OD100MX (México Digital, 26 November 2014) and Datalab/Goblab (Coordinación EDN, 18 April 2017).

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[28] The group is some other times labeled as C Minds and is part of ther UK Embassy funded initiatives like Open Banking, as analysed in the next section on Digital Identity and the Single Profile Identity.

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The entrepreneurial emphasis of Open Data must be considered against the backdrop of investment and economic interests, which are explicitly expressed by the ODI when it asserts its advocacy to expand UK´s presence in the world. Such advocacy, the ODI asserts, enables 'the UK to build on its established strengths in data and data analytics, break new ground in creating value from data across industry, and ensure that the UK remains at the forefront of data innovation globally' (ODI, no date b). In this light, Mexico is experiencing an Open Data venture whose condition of possibility is the liberalisation of the country set by Peña Nieto´s reforms, but whose entire coherence and strength comes from the outside, from the expansive design of the Internet and US Internet policies and the UK effort to strengthen its presence in data innovation. Of course, this entails the diffusion and promotion of certain technologies that come with the monetary and logistic support of international partners, which explains, for instance, the recent and accelerating developments towards new financial services.

Prospera Program and Open Banking as enabling financial inclusion in Mexico are agendas set by financial institutions, developed by the kind of civil society that is considered specialist in data and public policy – entrepreneurial, innovative and digitally literate and specialised, funded by governments like the UK, whose data analytic and programming industry is well-established and looking for expansion opportunities. As the ODI promotes itself to potential members, it is a matter of a 'revenue-generating partnership' (ODI, no date a) whose Global Network Directory includes transnational corporations mainly from the UK and other Western countries.

Specifically, Open Banking is a project of the ODI and the British Embassy Mexico City, part of the Prosperity Fund; it is developed by C Minds[29] (which used to be PIDES Social Innovation) and has been supported in Mexico by the National Banking and Securities Commission (CNBV, Comisión Nacional Bancaria y de Valores), the Bank of Mexico (Banco de México), the Ministry of Finance and Public Credit (SHCP, Secretaría de Hacienda y Crédito Público) and the EDN Office. As the report 'What is the potential for Open Banking in Mexico? Recommendations and roadmap for adopting an open banking standard' by the ODI, the UK Embassy and C Minds asserted, the introduction of an Open Banking standard is feasible thanks to the recent passing 'of the Law to Regulate Financial Technology Institutions (known as the FinTech Law) on 1 March 2018' (Beardmore at al., 2018).

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[29] The C Minds website describes the group as 'an impact innovation agency with over 10 years of experience that designs and deploys strategies for economic and social development, that works 'mainly in emerging economies, enabling cross-sector collaborations and harnessing the power of disruptive technologies' (C Minds, no date).

Regarding the Shared Network project, commentators have considered Mexico as innovative, as it 'became the first country to regulate its FinTech sector' (nonetheless, guaranteeing low profile actors exclusion) and as 'this [FinTech] law lays the groundwork for an Open Banking Standard (OBS) by requiring financial institutions to establish open application programming interfaces (APIs) with the aim of making financial data open, while respecting privacy and commercial confidentiality' (Ibid). However, the emphasis of such a project has been on making financial data open, while privacy and confidentiality have been treated in increasingly contradictory terms. Among the products to be developed with the OBS were those building 'reputational profiles or "personas", or sets of parameters that belong to the same individual, via an algorithm' (Ibid: 39). Whereas the end of implementing an OBS is unclearly established as 'to help people to transact, save, borrow, lend and invest their money' (Ibid: 15), the kind of initiatives that create reputations and follow individuals' behaviour – deciding on their behalf through an algorithm – seem increasingly oriented towards a cashless society of trusted individualised identities (see Chapter 4). mediated and oriented towards strengthening and protecting mainly the financial industry from fraud while enhancing market expansion.

As open data leans towards entrepreneurism, the management of a complex technical and social system as the main function and form of coordination embedded in the Internet consolidates here its market imperatives and through massive implementation, supported by the expansion of social media platforms and current government and international efforts, is projected to reach further into everyday life as an 'instrument of coordination'. Such an instrument mediates and fragments behaviours and social interactions into data, Accommodating such data for analysis and intervention, such form of management produces identities and adapts social interactions, subjectifications and government actions to foreign standards, values and agendas set by favoured actors, turning users into instruments and diffusing coloniality through 'thingification' or the turning of 'man into an instrument of production' (Césaire, 2000: 42) and enhancing control and coloniality through a mediation that hides its own points of attribution and decision (also see Chapter 3).

As above, Mexico might become an innovator in terms of its liberalising efforts and fostering of digitisation. A sui generis case or a sort of financial and digitisation experiment trying to expand financial markets (see also Withers, 2017) in a country where the informal economy has about 23% of participation in the GDP (Inegi, 2017) and the state is concerned about tax and revenues capture. In such circumstances, when C Minds (no date) declares that it counts with a 'civic and social technology

development lab [that] allows [them] to develop Machine Learning, Blockchain, Big Data and other new technology-based tools to support [their] ground-breaking initiatives', it is about announcing the tools to be employed not only towards the financialization of the economy and the digitisation of the financial, the governmental and the so-called innovative creation of social values. It is, more crucially, about the way in which truthfulness and trust are thought of being attainable, currently, only through specific technologies. Among such technologies, Blockchain, in the name of transparency, represents the vanguard and promise to guarantee certainty and confidence, first of all, to financial markets and tax and revenues capture in countries where financial inclusion is a catchword (see EDN, SFP and Campus Talent Mexico, 2017; on the case of Kenya see Gebre, 2018).

5.2.5 A Single Digital Identity

Another crucial enhancer included in the EDN was Interoperability and Digital Identity. As an element of the digitisation *dispositif*, interoperability has remained limited within the explicit objective of Governmental Transformation, while Digital Identity– in terms of a Single Digital Identity– traversed the *dispositif* as a fundamental goal and practice that supports the potential of digitisation as a market-led project. A single digital identity was fundamental to develop at least 13 out of the 23 Secondary Objectives of the EDN and has developed in line with the personalisation of identity promoted by US government and corporations according to commercial security measures and cultural economic values (Chapter 4). Connecting commercial interest, law enforcement and military security, personalisation of identity has been a pressing concern in both US commercial and defence areas and in-between them. With worldwide presence through corporations like Facebook, Google or Apple and their shared parameters of producing an identifiable, exploitable and accountable individual, such form of coordinating resources entirely corresponds to the expansion requirements of financial markets and enhanced state reach regarding tax and revenues and social services.

Besides resource management, the personalisation of identity that is increasingly practiced on the Internet entails a *mediation of subjectification* (see Chapter 4). The importance of third parties and the extent to which they determine the field of possibility of personalisation and social communication, despite not being unilateral and promoting and enabling user-generated content and social exchange of information or even participation, comprise a series of, although flexible and generally subtle, stable ways of coordinating things, behaviours and knowledges. Blockchain, closely related to Open Data, has been deemed as increasingly crucial in terms of the

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feasibility of developing a single digital identity in Mexico. Present explicitly in the Governmental Transformation and Digital Economy objectives of the EDN document, Blockchain is part of developing projects concerning Federal Public Administration and public service proceedings, like those of Open Contracts and Individual Certificates. But more important, Blockchain is intended as the foundation of digital official identification and the validation and actualisation of legal effects, both fundamental to guaranteeing certainty to financial markets and – mainly foreign – investment through securing transactions, safeguarding profits and increasing consumers' confidence under the banner of fighting corruption.

As asserted in a document available only in English both on the EDN website reporting on the activities of the Blockchain HackMx 2017[30] (EDN, SFP and Campus Talent Mexico, 2017) celebrated in Mexico City, and on the UNECE (United Nations Economic Commission for Europe) Website[31] (UNECE 2017) on the UN/CEFACT (Centre for Trade Facilitation and Electronic Business) Conference[32] on Blockchain, 4 October 2017 in Rome, Italy:

> The use of blockchain technology in the public sector represents the possibility of providing highly secure and reliable digital services, at low cost, based on open technology, and a transparent process de facto for all participants; which significantly increases confidence in public institutions and effectively fights corruption (UNECE, 2017).

Security, reliability, low cost, open technology and transparency increase confidence and fight corruption. The above assertion goes hand in hand with the aim of transparency and accountability as related to open data, in terms of the broad transformation the Mexican government required to regain the Mexican population´s trust in institutions. As Ethereum, a proposed Blockchain supplier for the initiatives, promotes on its website, you can 'kickstart a project with a trustless crowdsale' (Ethereum, no date). By using this tool, 'you can create a contract that will hold a contributor's money until any given date or goal is reached… without requiring a

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[30] Blockchain HACKMX is 'an initiative of the National Digital Strategy and the Ministry of Public Administration, in collaboration with Campus Talent Mexico. The main goal is to promote government digital innovation using emerging technologies to generate case studies within to improve the delivery of digital public services, and to escalate the benefits of digital government' (EDN, SFP and Campus Talent Mexico, 2017).
[31] The website (UNECE, 2017) contains the presentations of the attendees to the UN/CEFACT Conference, where Yolanda Martínez Mancilla, Head of Mexico's Digital Government Unit, presented on 'Government: How to stimulate blockchain innovation in government'.
[32] 'This Conference seeks to establish some clarity and a collective understanding of the potential of blockchain technology for supporting trade and trade facilitation as well as the other business and government activities where the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) has projects' (UNECE, 4 October 2017).

centralized arbitrator, clearinghouse or having to trust anyone' (Ibid). And you no longer need to 'find a trustworthy CFO to handle the accounts, run board meetings and do a bunch of paperwork' (Ibid). Now 'you can simply leave all that to an Ethereum contract. It will collect proposals from your backers and submit them through a completely transparent voting process' (Ibid). However, trust in this ethereal environment comes instrumentally embedded, as 'one of the many advantages of having a robot run your organization is that it is immune to any outside influence as it's guaranteed to execute only what it was programmed to' (Ibid).

Ethereum, as many other Blockchain suppliers, is 'a decentralized platform that runs smart contracts: applications that run exactly as programmed', thus, allegedly, 'without any possibility of downtime, censorship, fraud or third-party interference' (Ibid). Moreover, this supplier asserts, 'these apps run on a custom built blockchain, an enormously powerful shared global infrastructure that can move value around and represent the ownership of property' (Ibid). 'This enables developers to create markets, store registries of debts or promises, move funds in accordance with instructions given long in the past (like a will or a futures contract) and many other things that have not been invented yet, all without a middleman or counterparty risk' (Ibid). In a general sense, this is the promise that comes with the task of identification: trust and certainty regarding the ownership of property, control over circulations and a robot as mediator instead of a personally acquainted and trusted middleman.

In such a narrative, a robot can run processes effectively and make middlemen unnecessary for those entrepreneurial citizens that can create and innovate on their own. Yet, these entrepreneurs have already been constituted into those external supports that are machines or robots; blockchain is the middleman transformed through the desire of achieving a perfectly instrumental environment. This is instrumentality as the 'obediential potential' in which blockchain and a single digital identity 'have incorporated in themselves the operation of the principal agent and can thus "obey" its commands (even if these are actually inscribed into the functioning of the [*dispositif*], in such a way that the one using them, in pushing the "controls," obeys in turn a predetermined program)' (Agamben, 2015: 77). The program's designer is concealed once the program becomes an abstract law, a pure form of 'coordination without politics', and allegedly no trust in people is required, only trust in applications 'that run exactly as programmed' and are 'immune to any outside influence' (Ibid). This concealment of mediation works according to the appearance of a seamless Internet-mediated reality, where trust in people seems to vanish and brings about the fantasy of immunity with its autoimmune dangers and its hidden ongoing updating process of drawing the limits between inside and outside. That is, of assuming who is

able to decide/design the platforms, to impose the technology itself as a form of government over the "non-technological", "non-digitised" or "disconnected beings", and who is considered as a neutral designer and governor of property rights, circulations and overall, individuals and collectives.

All such processes are forms of 'coordination without politics', performed hidden from public understanding and responding to someone else's political experience and interests, not only due to a digital divide and digital literacy but thanks to the same form of coordination embedded in the Internet, performed by foreign and/or exclusive actors on behalf of others. The same operation designed to hide its overarching economy and instrumental assumption responding to accelerating times of production and control in designing the Internet now reaches further into everyday life of foreign countries and promises to bring transparency and trust based on the universalisation of a local experience. The political as an encounter in which existential affinity is brought about (see Chapter 2) is replaced by efficient immediate and distant coordination. This is the case of developing a Mexican Blockchain 'to generate use cases of Blockchain technology within the public sector,' part of the Blockchain HACKMX 2017 (EDN, SFP and Campus Talent Mexico, 2017: 11).

The parts of a digital ecosystem in Mexico to be integrated with Blockchain have been identified as: *eFirma* (or e-Signature) for legal and state-citizen proceedings; *Digital Identity* as a full accreditation of identity of Mexicans at home and abroad; *Public Registry of Property* for the verification of information on property; *Certificates of deposit* and the verification of the authenticity of deposits of the Register of Certificates, Warehouse and Goods (RUCAM by its initials in Spanish); and *Transactional Transfers Supports* to trace transactions of 'supports granted to a property or a beneficiary' in order to avoid duplication of funding (Ibid). The creation of a Single Digital Identity is present across such digital ecosystem. *eFirma*, *Digital Identity, Public Registry of Property, Certificates of deposit and Transactional Transfers Supports* are intended to work on the basis of identifying the person that subscribes to specific processes, biometrically enhanced by the Digital Identity initiative and National Registry of Population (RENAPO) metrics but also linked to public health services provision through the development of a public repository of electronic medical prescriptions and a Single Health Profile. As a practice oriented towards a Single Profile Digital Identity, this personalisation of identity, even if not fully operational in a health services provision environment, works well for so-called financial inclusion and the possibility of turning people into users of financial services and the Internet as there needs to be an individual – consumer and tax payer – accountable for each transaction.

Insofar as a single digital identity might turn every process more efficient and transparent for managerial purposes and help the government comply to internationally established austerity measures, the emphasis is always on private property. As part of this Digital Identity and in relation to representing ownership of property, the *dispositif* includes the 'digital management of the national territory with cartographic bases, cadastral data and the Public Registry of Property' (author's translation, GR, November 2013). Along with the Open Data agenda, this mapping out of the territory and its turning visible of the ownership order behind it also helps bring certainty to transactions and the commodification of the territory, fragmenting it through the homogenisation and standardisation of an order of visibility and transaction which is abstract and disembodied. The territory as embodiment of the political (see Chapter 7) is here replaced by the imperative of management and instrumentalisation. This order complies with the privatisation of land ownership and exploitation according to the Constitutional Reform of the Article 27, which in 1992 allowed communal land to be sold as private property, making possible the partition and commodification of what used to be inappropriable communal land (see Chapter 7). The set of Pena Nieto's reforms followed on this process of privatisation.

Clearly stated in the first page of the Blockchain HACKMX 2017 document (EDN, SFP and Campus Talent Mexico, 2017), the Constitutional Reforms put forth by Peña Nieto´s administration set the perfect environment for a Digital Ecosystem in Mexico (on Peña's reforms see Dyer, 2014; el-Erian, 2014). In line with these reforms, 'Internet access became a constitutional right' (EDN, SFP and Campus Talent Mexico, 2017), a Universal Digital Inclusion Policy was established 'by law', competition in the telecommunications sector was allegedly granted through an 'autonomous regulatory entity' – the Federal Institute of Telecommunications (IFT, Instituto federal de Telecomunicaciones in Spanish)' – and a 'legal framework for telecommunications and up-to-date broadcasting' was established (Ibid: 4). Digitisation was conceived to expand articulated in a heterogeneous ensemble (infrastructure, Internet access on an individualised basis, digital inclusion supported by the state apparatus and all the legal instruments for competition, an Open Data agenda extended in the name of free circulations and the objective and practice of a Single Digital Identity promising control over all kind of resources) towards the financialisation and liberalisation of the economy under the form of managing intricate processes and a complex environment on behalf of users.

Digitisation and its three transversal practices and aims required and enhanced the liberalisation reforms of Peña. The Internet is projected to expand conditioning the

operation of the Mexican government and increasingly mediating its functions and, more importantly, defining the relationship government-society, promising *trust* through technologies and exploiting their taken for granted value as politically neutral, progressive and beneficial to society. Therefore, the digitisation process is projected to become a technological fix to the Mexican Government's failure in achieving the economic and political stability of public institutions. Once again, technology as Open Data in relation to transparency and Open Government, and the commitment to the development of Blockchain technologies, operate as instruments that promise to regain *trust* through the instrumentalisation of users, territory and concealment of control and management. Such a lack of trust entails a lack of legitimacy and politics on the basis of everyday social interactions and the mediation (intervention) of a disregarded third person or technological fix.

5.3 Conclusion

Through the NDS Peña's government showed allegiance to developmentalist notions of economic growth and modernisation. Digitisation from this perspective, has been the pathway and transformation led by specific nations and societies that have known and can show the way and good practices to be undertaken by other developing nations and societies that must learn how to implement and use these technologies. Through digitisation, the state has been constituted into the actor that grants technology – and the Internet – its status as the engine of the country´s development. In this light, the state must guarantee universal Internet access and its underlying demand for connectivity infrastructure, together with a very specific type of civil society in order to develop its efficiency and efficacy in the co-administration of all kind of resources. Such a civil society is the entrepreneurial, innovative and financial-leaning one, compliant with basic assumptions on economic growth and development. Therefore, openness, accountability, transparency and participation have been understood within digitisation through the lens of liberal democracy and private property. In correspondence to this, *the strategic function of the ensemble of institutions, practices and devices – of the dispositif – is the market-oriented expansion of the Internet and the achievement of market stability and security on the basis of privatisation and the creation of economic value (portrayed as confidence and trust) and through the mediation of everyday life interactions and the identification, control and management of resources and circulations as guaranteed through Global Connectivity, Open Data and a Single Digital Identity*.

As analysed in this chapter, Global Connectivity, Open Data and a Single Digital Identity reproduce Global Interoperability, Free Flow of Information, the

Personalisation of Identity and the Mediation of Subjectification as forms of coordination designed in the US according to this country's politics, values and interests and upholding privatisation and entrepreneurism at a global scale. This analysis is significant to the overall argument of the thesis – that the internet has been reproducing colonial forms rather than politics and that a decolonial element needs to be included together with philosophy of technology and critical approaches to the internet – as it has identified the reproduction of the basic forms of coordination embedded in the internet in the Mexican government's digitisation effort in order to then contrast these forms with the Zapatista practice. Accordingly, the overarching form of coordination embedded in the Internet (Chapter 4) and reproduced by digitisation consolidates this technology as an 'instrument of coordination without politics' in Mexico. The way in which the Internet fragments knowledge of its overall economy and hides its points of authority and decision, generating an idea of neutrality, is entirely reproduced by digitisation. Through the implementation (and imposition) of technologically-enabled forms of coordination and supported by social media platforms expansion and current government and international efforts, the Internet is projected to reach further into everyday life, mediating and fragmenting behaviours and social interactions and translating them into data while hiding its own points of attribution and decision (also see Chapter 3). In accommodating and simplifying such data for analysis and intervention, this form of management produces (legal and exploitable) identities and adapts social interactions, subjectifications and government actions to someone else's (privileged) standards, values and agendas. In this way, it coordinates users as instruments and diffuses coloniality through 'thingification', the turning of 'man into an instrument of production' (Césaire, 2000: 42) that obeys a 'predetermined program' (Agamben, 2015: 77) and forecloses the experience of politics as an existential encounter with the other (Chapter 2).

Connectivity, Open Data and a Single Digital Identity aim to render individuals and territory (i.e. digital identity and digital territorial management) legible through a cartography of instrumental design, thus offering investment and entrepreneurism the possibility of tracing and giving clarity to transactions in a country where communal property, informal markets and cash flow are still strong. Therefore, digitisation works in favour of those actors whose social legitimacy does not strive from local dynamics and experiences. On the contrary, it is juridical certainty and clarity that are being shaped to favour private property through the state, bringing certainty mainly to corporate and foreign actors. Acoordingly, the legislation on telecommunications and the different regulations related to ICTs have been biased to benefit and establish a basic coordination with those liberalising reforms Peña administration enforced and

implemented. Overall, through digitisation and in implementing ICTs to achieve development, economic growth and quality of life, the Internet and the Mexican state are being produced and performed as instrumental, unfolding their own way of being according to someone else's parameters of operation and goals and fostering and promoting the interests and mediation of specific banking and financial groups, tech and data analytics companies and privileged countries. Therefore, the chapter has exemplified instrumentality regarding US and allies digital dominance in Mexico in order to move toward an alternative politics and use of the Internet by not sanctioning an everyday technical experience but rather situating the internet according to its design and its use in relation to colonial forms and practices.

Chapter 6

#YoSoy132 and the Internet

On connected multitudes *and the flexible coordination of fragments*

In 2012, public mobilisations under the banner of #YoSoy132 stood against the manipulation of information and the imposition of the Institutional Revolutionary Party's (PRI) presidential candidate Enrique Peña Nieto on the forthcoming electoral results by media corporations. #YoSoy132´s aim was to democratise media in Mexico though they eventually tried to redefine their collective organisation as anti-neoliberal, aiming at the transformation of the country´s political system. The movement soon included a vast array of activist groups and collectives in assemblies, mobilisations and protests. These actors and organisations, identified as #YoSoy132, not only employed the Internet and social media platforms to organise and mobilise their actions but also promoted universal access to the Internet as a constitutional right and foundational element of democracy.

This chapter argues that, despite the fact that gathering such a diversity of participants and their collective experience as #YoSoy132 was possible due to the use of such technologies, the constitution of a 'connected multitude' (Toret et al, 2013) was only possible as a *dispositif* (Foucault, 1977). As a dispositif, the 'connected multitude' reproduced the form of coordination without politics embedded in the Internet. In other words, in the instance of #YoSoy132 there was no multitude as diversity was flexibly articulated within a fragmented totality while concealing and limiting critical engagement with instrumentality as control and extraterritorial elements embedded in this technology. In so doing, this chapter advances the overall argument of the thesis that states that the use of the Internet in Mexico has reproduced colonial forms rather than politics, the former intelligible only through detailed analysis and the convergence of philosophy of technology, critical approaches to the internet and a decolonial orientation. In other words, the Internet as an 'instrument of coordination without politics', denotes an instrument/being that makes collective coordination and experience possible as it is mediated by an external third party, hindering collective knowledge and the emergence of shared political referents and experiences.

The Chapter is organised into four sections. The first section sets the context of digital activism in twenty-first century Mexico and problematises the limitations of the concept of *tecnopolítica* (Toret et al. 2013) in accounting for concentration and hierarchy in information content, diffusion and strategic and tactic planning. The second section outlines the emergence of #YoSoy132 in 2012 and analyses their use of the Internet and social media, or their constitution as a 'connected multitude', as a form of coordination and *dispositif* (Ibid). This section demonstrates the centrality of the Internet for collective organisation and action and the dependence of #YoSoy132 on this technology as a collective for meaning production and orientation. The third section analyses the values and meanings of these technologies for members of #YoSoy132 and the actions such meanings mobilised through discourse analysis (Foucault, 1978, 1997; Mottier, 2005). This section shows how the use and understanding of the Internet by #YoSoy132 reiterated the values and use promoted by US foreign policy and its rhetorics on the Internet, particularly, how both actors tended to oppose state forms and self-determination in supporting a free Internet. The fourth section explores how #YoSoy132 did not account for the underside of using the Internet and social media platforms in terms of censorship, surveillance, data gathering and extraterritorial reach of US government and corporations, using and understanding the Internet as essentially democratic or, in its defect, as the most efficient and necessary communication alternative. This section identifies a consistent opposition and dissociation between control and democracy and argues that the form in which #YoSoy132 coordinated itself as a collective, was one without shared political and ideological referents. In turn, the Internet's embedded form of coordination, fragmenting and accommodating diversity, occupied the space of such shared referents and concealed its market-expansion and control orientation and capitalist foundations.

6.1 Digital Activism in twenty-first century Mexico: Tecnopolítica *and the concealment of hierarchies and strategic usage*

Regarding digital activism in the twenty-first century, Mexico has been the locus of several digital mobilisations in response to variegated social concerns. *Hashtags* have emerged since 2009 (Rodriguez Cano, 2016: 44, see Appendix C) denoting the use of social media platforms for reaching audiences, organising participants and expressing demands and proposals. These mobilisations have been quite visible through its presence on Twitter and around particular issues including elections in 2009 and 2012, corruption scandals and tragedies, organized crime-related violence and social response, prepotence, discrimination or unpopular policies, misleading and inconsistent judicial and criminal prosecutions, fast track approved and inconsistent

and negligent legislations and law proposals, state-related violence and abuse of power, and gender-related violence.

In demonstrations like #YoSoy132, #Detenme1Dmx, #PosMeSalto, #YakiriLibre, #ContraElSilencioMX, #NoMásPoderAlPoder, #AyotzinapaSomosTodos, #AlertaXochicuautla among others, youth dissent and commitment were notable features (see Avalos, 2014) that attracted academic attention. Scholars linked these demonstrations to other movements across the world, understanding them as part of a broader trend of social and global mobilisation (see Avalos, 2014; Feixa et. al. 2009; Feixa and Portillo, 2012). *Hashtagged* and globally linked, such social movements were considered as 'new new social movements' (Feixa et. al. 2009) or '*novísimos movimientos sociales*' (Candón Mena, 2013), resting on a technological element, combining information technologies and street mobilization (e.g. Avalos, 2014; Bartra, 2014; Feixa and Portillo, 2012; Portillo, 2014; Rivera, 2014) within a networked logic for organization and action (Juris, 2008; Rovira, 2012; 2014) and as *tecnopolítica* (Toret, et al., 2013).

Notably, all such readings of social movements as part of a global trend, have kept an accent on the importance of a global space interconnected by networks or working as a network whose paradigm is the Internet (Castells, 2012; Feixa et. al. 2009; Toret et al., 2013). In this light, movements are generated within the framework of blogs and social media platforms and its collectivity is rooted on emotional responses to shared perceptions of reality (e.g. injustice and insecurity) in order to then potentially develop into social change (Castells, 1996). These perceptions of specific situations have been important for collective formation and actions; nonetheless, what has been crucial is technological mediation. The idea of *tecnopolítica* in Spanish academia, whose authors (Toret et al., 2013) counted #YoSoy132 as part of this 'new kind of self-organized collective political behaviour' (author's translation, Ibid.: 9) has emphasised such mediation and turned it into the main element from which a collective is produced, merging it into one single self. In this chapter, *Tecnopolítica* is identified as a specific form of coordinating movements and its members as fundamentally mediated by the Internet, as 'connected multitudes' (ibid). Particularly, this section argues that *tecnopolítica* as a concept and as a practice, conceals points of concentration and delegation of self-government, self-awareness and decision. Such concealment and delegation of decision have been scarcely addressed (Rodríguez Cano, 2016, 2018) and more crucially, have reiterated the same forms of management embedded in the Internet and analysed in Chapters 3 and 4.

Drawing upon the idea of a 'network system' as a 'set of nodes, sometimes heterogeneous, with high rates of connectivity, robustness and reciprocity, whose structure is open and polycentric', *tecnopolítica* is seen as 'the capacity of connected multitudes, the brains and bodies connected to the network, to create and self-modulate collective action', action that can turn digital activism into street protest (author's translation, Toret et. al. 2013: 19-21). In this conception of *tecnopolítica*, the notion of 'multitude' (Hardt and Negri, 2000; Pérez de Lama, 2007; Rheingold, 2004) and the role of digital technologies are central, as the 'connected multitude' is about the 'capacity to connect, group and synchronize, through communication and technological devices and around objectives, the brains and bodies of a great number of subjects in time, space, emotion, behaviour and languages sequences' (author's translation, Toret et. al., 2013: 20). This concept emphasises 'the fact that there is no multitude without connection'.

Connected movements, allegedly open and polycentric, perform *tecnopolítica* as strategic and tactical use of digital tools for organization, communication and collective action' (Toret et. al. 2013: 20). On this basis, two main limitations arise regarding collective unity and strategic reach, as movements become dependent on a technological support. The first issue is the concentration of followers and the flow of communications by opinion leaders (Mejías, 2013: 41). The second issue is the conformation of unity relying on the aggregation of individuals through the mediation of technology (Castells, 2009; Toret et al. 2013). This constitutes a fragmented and contingent totality whose unity is based on the disposition of private individuals and heterogeneous groups to be aggregated into instrumental collectivities – means and not end of collective action (Milán, 2015). Concentration of followers and the flow of communication is discussed in the following paragraphs in order to emphasise how polycentric mobilisations are still organised through a hierarchical status regarding number and strength of connections or followers and concealed potential strategic and tactical use. The issue of fragmented collectivities is analysed in sections 2, 3 and 4 with a focus on the flexible and fragmentary form of coordination of #YoSoy132.

Regarding polycentricity and alleged self-organised collective political behaviour (Toret et al, 2013: 9), alongside the increasing numbers of people supporting the topics on Twitter and speaking their minds on important issues in Mexico, the role of public opinion leaders has remained fundamental. Such leaders have offered visibility and expansion capacity to these topics, actions and proposals (Rodríguez Cano, 2016: 42). More specifically, it has been the participation of a very specific plurality of actors and already visible 'new media' which is crucial. Actors with a shared interest

in shaping public opinion from an opposite stance to that of official media and corporate entities like Televisa and TVAzteca, have put forth democratisation of media against concentration of power in media and telecomm corporations and democracy promotion in general. For instance, in an analysis of twelve demonstrations[33] (Rodríguez Cano, 2016: 45), a few social media accounts[34] were demonstrated as decisive for promotion, persuasion and action as they achieved 'highest resonance' among their public. In this vein, activists and collectives, citizens, journalists, businessmen, entertainment artists and public figures, and academics (Ibid), respectively followed in audience those media accounts. Mobilisations were thus not void of direction and decision-making as this was preferentially concentrated on specific groups, which is one of the limitations of the concept of technopolitics.

Besides polycentric mobilisations still being organised through a hierarchical status regarding number and strength of connections, there was a concealed and exclusive strategic and tactical use related to decision-capacity over public message and actions. As Mukul Devichand (2015) noted from an interview with a Mexican blogger who started a campaign to turn the #YaMeCansé[35] into a global trending topic and who has been at the core of many other protest trending topics in Mexico, there are national and international political ties not explicit in this modality of operation, hidden as well from the spontaneous supporter and member of mobilisations.

The Mexican blogger, a freelance social media marketing consultant and free time activist asserted his operations were inspired in the paradigmatic rise of *tecnopolítica* and the study of 'online tactics' employed by the 15M movement in Spain (Devichand, 2015). An inspiration expressed as well by members of #YoSoy132, saying for instance, that 'when the 15M emerged, they thought Mexico should rise up as well'; for many of its members, the 15M 'politically fed this movement' (author's translation, Muñoz, 2012: 206). Despite the interviewee´s assumption that '[p]eople are not dumb, they know this is all tactics' and the certainty that 'you have to apply pressure to change things' (Escorcia in Devichand, 2015), there is a whole set of political and strategic lines that are not immediately clear and much more complex than merely using digital technologies as tools and taking for granted horizontality in local and global struggles for rights. There was an elusive tactical and strategic field and

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[33] Including *#JusticiaABC, #SoyProle, #QuitaUnAnuncio, #YoSoy132, #MarchaAntiEPN, #TodosSomosPresos, #LadyProfeco, #LeyBala, #PosMeSalto, #PrensaNoDisparen, #EPNvsInternet* and *#EPNbringThemBack.*

[34] *Sopitas, Animal Político, Proceso, Aristegui Noticias* and *CNNMexico.*

[35] This was the hashtag used to protest against the government for the events in Ayotzinapa and in response to the expression used by Jesus Murillo Karam, Mexican attorney general, who asserted 'I am tired' when being questioned in a press conference about the missing students in order to close the conference.

different allegiances in the use of these technologies that were not yet clear. The concept of *tecnopolítica* as employed so far has remained unable to grasp these complexities. The following sections explain how these gaps and concentrations of strategic and tactical vision and capacity of diffusion were possible within a collective mediated by the Internet in its self-constitution. The argument these sections advance is that a specific form of mediation, a flexible coordination of fragments, concealed not only concentration of decision over the interpretation of the situations experienced and the possibility of support and actions to diffuse (regarding media actors and their concealed allegiances), but also international or extraterritorial ties (values, interests and control) that are subtly reinforced together with their colonial assumptions where there is lack of shared political referents and orientation.

6.2 The *tecnopolítica* of #YoSoy132: A connected multitude *and the self as constitutively mediated by the Internet*

On 11 May 2012, Enrique Peña Nieto, the official candidate of the PRI (hegemonic party in Mexico for 70 years until 2000), attended an event at the Universidad Iberoamericana[36] (Iberoamerican University, Mexico) to present his national project. At the university, the candidate was received by several students who were holding banners with challenging messages on them, handing out flyers[37], wearing masks of a controversial Mexican ex-president (Carlos Salinas de Gortari[38]), showing red painted hands resembling blood[39] and yelling at him (Huffington Post, 30 June 2012; Goggin and Albarrán, 2014: 34; Bartra, 2014: 32).

By the end of the candidate's presentation many of the students criticised and challenged Peña Nieto on his actions as governor of the State of Mexico, when the Policia Federal Preventiva (Pre-emptive Federal Police, PFP) enacted violence and repression ordered by the Federal government on the 3rd and 4th of May 2006 against the people of San Salvador Atenco, which is located in the State of Mexico and was governed by Peña Nieto from 2005 to 2011. The violence enacted was supported and legitimated by mainstream and politically tied media. The outcome was more than 200 detainees tortured, two young citizens killed, and 26 women and some men victims of sexual assault as a form of torture and punishment recently

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[36] The Universidad Iberoamericana is owned by the Jesuits order in Mexico and its students are generally members of high-income sectors of society (Volpi, 2012; Goggin and Albarrán, 2014; 34).
[37] The flyers contained information on the events of San Salvador Atenco in 2006.
[38] A controversial figure in Mexico who as president signed the North American Free Trade Agreement with the United States and Canada and is hold responsible for the financial crisis in Mexico in 1995. This same character has been linked to Enrique Peña Nieto´s close political group.
[39] The blood of the women killed during his government in the State of Mexico and the blood of the people of San Salvador Atenco.

implemented by the federal forces (Pastrana, 2011). Though the event was already coming to an end, the candidate took back the microphone and responded to the students. He stated that he did not regret deploying public force against the population, as it was a 'determined action' he assumed personally to restore order and peace, 'within the legal right to the employment of public force by the Mexican state' (see Portillo, 2014: 183). The response accentuated the discomfort and indignation of the students, who increasingly yelled at him while recording with their mobile devices and uploading to digital platforms the images of the events. This was immediately followed by the 'trending topic' #EPNIaIberoNoTeQuiere (#EPNtheIberoDoesNotWantYou) (Bartra, 2014; Goggin and Albarrán, 2014: 34; Portillo, 2014: 183-184; Guillén, 2013) and the walkout of the candidate as resentment against him increased and he was forced to leave the university.

Once the events and the footage recorded by the students were made public through digital media platforms and the web, efforts were made by politically tied media to contain and counter the material. 'Online', such media employed #LaIberoConPeña (#TheIberoWithPeña) and #EctivismoConEPN (#EctivismWithEPN). On TV, radio and newspapers the events were either concealed, biased or supported the declarations of PRI leaders, members of the political class and officials. Such versions recalled the events dismissing the students as 'infiltrates' of the Partido de la Revolución Democrática (Democratic Revolution Party, PRD) and other leftist organizations (Goggin and Albarrán, 2014: 35; Rivera, 2014: 63-64). In a media landscape in which the most popular electronic medium is television and its political importance as main source of political information reaches 76% of a Mexican population (INEGI-SEGOB, 2012) and Televisa – the world's biggest Spanish-language broadcaster with the strongest ties to the dominant political and economic groups in Mexico (Villamil, 2010) – and TVAzteca – which since 1993 adapted to the business model of the first (Gutiérrez Rentería, 2007) – are the two largest conglomerates with a common affiliation (see Goggin and Albarrán, 2014; Barrera, 2012), not many options to counter such accounts were available.

Nonetheless, some of the students who participated in the demonstrations uploaded and started the ongoing transmission of the YouTube video broadcast entitled '131 Alumnos de la Ibero responden' ('131 students of the Ibero reply'). The video was coordinated through Facebook and became a 'global trending topic' that lasted for 12 hours (Rivera, 2014: 64). It was addressed at those who questioned the students' identity and showed 131 students stating their name, holding their student cards and uttering their ID numbers as a way to exercise their 'right to reply' before the accusations. This reply received increasing support through digital platforms (mainly

Facebook and Twitter) and soon students from other universities, academics, and other members of civil society nationally and abroad adopted the `hashtag´ #YoSoy132[40]. They were standing against what they claimed was the imposition of the PRI candidate as forthcoming president by media, as well as the dominant role of Televisa in the cultural industry and political scenario, demanding both impartiality in the information provided by media and the inclusion of young people in a 'democratic' electoral process through the creation of a 'pro-democracy student network' (Guillén, 2013: 474).

The students' effort sought to draw attention to media concealment and manipulation of information, and took the form of the so-called #MarchaYoSoy132 [#Iam132March]. With a non-partisan commitment, defending access to information as a 'human right' and standing against biased information, these public demonstrations were organised through Twitter and Facebook on 18 May 2012 (Candón Mena, 2013). Visibly comprising students of private and expensive universities, these initial demonstrations were able to 'destabilize the stereotype' of the protester as generally associated with public universities' students (Rivera, 2014: 65). Furthermore, participants were familiar and literate in the use of mobile devices and social media platforms as these technologies were already embedded into everyday life, as 'instruments' used on a daily basis, now serving to protest (see Rovira, 2014: 51). In the same line, more demonstrations followed mainly organised through digital platforms and messaging applications like WhatsApp although increasingly gathering a diversity of actors (Muñoz, 2012).

The day before Peña Nieto's visit to the Universidad Iberoamericana on 11 May, students coordinated their actions and distributed tasks using social media platforms. Despite many of those students not knowing each other in advance, they communicated through the WhatsApp platform and decided to make some materials for the demonstration (María, in Muñóz, 2012: 32). In the same line regarding the coordination of #YoSoy132, several members stated that 'social media made the movement possible, [platforms] were a conscience liberation agent… giving students the possibility to reach other people' (author's translation, Magaly, in Muñóz, 2012: 240). As many members recalled, 'social media [made] possible the articulation of the movement and the aggregation of diverse sectors of young population attracted by the cause of the 132; information [was] dispersed much faster, which [was] a great advantage for the capacity of mobilisation' (author's translation, Tania, in Muñóz, 2012: 240). 'The appropriation of social media [was] useful to turn them [the

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[40] 'YoSoy132' (I am the 132nd) intended to express a personal solidarity through the identification of the beholder as participant and member 132.

platforms] into flows of information and a link for decision-making and actions' (author's translation, Vladimir, in Muñóz, 2012: 241). As another member asserted (author's translation, Claudia, in Muñóz, 2012: 232), for #YoSoy132 social media platforms 'potentialized this [as] they have made communication faster, more effective and wider… the use of technology with such immediacy, gives way to a new form of wider and more diverse mobilisation… using mobiles, Twitter, YouTube, Facebook for calling upon to mobilise and inform'. More specifically, as other members asserted, Facebook was crucial for groups in other state to establish contact with #YoSoy132 in Mexico City and push the latter to decentralise the organisation and recognise that #YoSoy132 in the city was not the totality of the movement but only a part of it. In the same way, digital platforms made it possible to establish and organise groups and assemblies beyond Mexico (Muñoz, 2012: 204).

'Anyone could act for democracy on behalf of @YoSoy132 as long as they respected the principles agreed at the first Inter-university General Assembly: pluralism, pacifism and non-partisanship' (author's translation, Muñoz, 2012: 204). As the number of movements and groups joining or acting under the 'brand' 'YoSoy132' increased, they established meetings, assemblies, an interuniversity council comprising more than 130 local assemblies (each one representing one or more universities), and 7 commissions (security, logistics, juridical, human rights, citizen watch and communication and press release) (Attolini, 2012). Their aims were no longer limited to the democratization of media but now included a broader and more explicit notion of the problems the country was facing, soon tending towards becoming an anti-systemic movement. #YoSoy132 was thus constituted as a mobilisation against corporate media and Peña's candidature and an anti-systemic call, enacting demonstrations, campaigns supporting an informed vote, platforms against electoral fraud and other forms of collective action, all possible thanks to a shared discomfort and the well-established presence and mediation of ICTs, digital platforms and the Internet.

Consequently, while objectives and spaces of incidence beyond digital platforms were to be defined and coordinated, digital technologies and the Internet were the starting point for being involved and part of the group, making it more difficult for those who did not have digital profiles to be seen, participate and follow the events. As narrated by Magaly (in Muñóz, 2012: 241), 'a lot of people [opened] their Facebook and Twitter accounts because of the movement… [and] more people – like community radio stations – saw the necessity to connect in order to participate'. Similarly, Emiliano Treré (2015: 912) suggests that it was through using digital platforms that 'Mexican students were able to oppose the negative identification fabricated by the PRI,

reclaim their role as heirs of a long tradition of rebellion, generate collective identification processes, and find "comfort zones" to lower the costs of activism, reinforcing their internal solidarity'. #YoSoy132 used the 'social media frontstage (YouTube videos, Facebook posts, Twitter tweets, etc.) […] the social media backstage (Facebook chats and groups) and the WhatsApp ecosystem in order to negotiate and reinforce their collective identity on an everyday basis' (Ibid).

The Internet and social media platforms managed, on behalf of #YoSoy132 members, the difficulties that entails inhabiting different locations and not knowing each other. They brought members together and made some sort of intersubjectivity possible not on the basis of a living together and a collective existential experience but on the basis of a practice of personalisation of identity (Chapters 4 and 5) and mediation of everyday life interactions as forms of coordination that make possible a functional and temporary aggregation of subjects. Technological support in this case responded, as Stefania Milan has characterised (Milan, 2015: 887), to an emphasis on the importance of private individuals as such, personalising them and putting forth their own experiences in contemporary mobilizations where the '"collective" was experienced through the 'individual' and the group is the means of collective action, rather than its end'. Which is to say that the individual was constituted within the limits of the platform, then grouping in a collectivity as the result of individual aims and disperse shared emotions, which grouped around a perception of reality and a specific aim (Castells, 1996) that although fulfilled temporarily did not have the collective as its end.

Furthermore, besides the use of the Internet and social media platforms for collective identification, decision-making, diffusion and organisation of demonstrations, platforms were also used to participate in the electoral process. Most significantly, #YoSoy132 organised a debate between candidates, broadcast through YouTube. The organisation, pointing towards the democratization of media, called on the four presidential candidates directly, based on their claims to hear and address the concerns of the youth. The call was made through a video broadcast on digital platforms (Másde131, 6 June 2012) and would open a space for the participation of people through these same platforms, so they could send questions for the candidates to respond (CNNMéxico, 19 June 2012; Proceso, 6 June 2012). Although the PRI candidate Enrique Peña Nieto refused to participate, this third debate (Másde131, 19 June 2012) was successfully held and transmitted via YouTube (despite some technical issues and its exclusion from national TV broadcasting) on 19 June 2012. This event has been considered one of the main accomplishments of the movement (Rivera, 2014: 66), despite its limited reach within the population as it

was not televised and would be mainly followed through the Internet by users who 'were already informed about the elections' (CNNMéxico, 19 June 2012).

As above, #YoSoy132 was an expression and promotion of *tecnopolítica* as 'the capacity of connected multitudes, the brains and bodies connected to the network, to create and self-modulate collective action' that turns digital activism into street protest (author's translation, Toret et. al. 2013: 19-21). According to this understanding, #YoSoy132 as a collective subject was a 'connected multitude' (Toret et. al., 2013: 20), connected, grouped and synchronised through digital devices and the Internet. The main cohesive element, able to link, coordinate and gather together the scattered emotions, discomfort and anger of a multitude, was the Internet and the devices that operate on it and through it, bonding individuals and profiles and minds and bodies with digital platforms and the streets. However, what is left unattended in the notion of a connected multitude is that the self in self-modulation and collective action was entwined with digital technologies to the extent of reproducing the Internet's embedded forms of coordination (personalisation of identity and medition of subjectification), maing collective coordination and experience possible only when mediated by an external third party. Along the same lines, these technologies and the way they were used, as shown in the next section, reiterated fundamental values of the free Internet agenda as it has been promoted by the US government and foreign policy, mainly regarding a clear anti-state tendency abroad and a fragile flexibility.

6.3 Reproducing globalising strategic arrangements: The priority of freedom of expression, free flow of information and the free Internet

At the First Joint Pronouncement made public on 23 May 2012 and broadcast via YouTube (Yosoy132Oficial, 29 May 2012) and other digital platforms on 29 May, the members of #YoSoy132 characterised themselves as 'a movement preoccupied with the democratisation of the country', a preoccupation followed by their belief 'that a necessary good for it is the democratization of media.' Their 'desires and demands [focused] on the defence of freedom of expression and the right of the Mexicans to information. Understanding both elements was essential to form a conscious and participative citizenry' (author's translation, #YoSoy132, 2012: 314). 'In essence, [they declared] our movement aims towards the democratization of media with the objective of guaranteeing transparent, plural and impartial information, in order to foster critical thought and consciousness' (Ibid).

As the movement claimed, they aimed to 'make fundamental principles of democratic life an effective practice. There cannot be citizenship without full freedom of

expression, which is why we show our most resolute solidarity to all those who have seen their voices silenced' (author's translation, #YoSoy132, 2012: 315). Here, an association of meanings between democratisation of media-freedom of expression-right to access information-the foundation of a citizenry and the democratisation of the country (or democratic life) was produced and bonded to Mexico´s context of violence in the reference to 'all those who have seen their voices silenced' (author's translation, #YoSoy132, 2012: 315). The importance of and the actions proposed to democratize media in #YoSoy132's joint pronouncement were prompted by democracy as a solution to a country's numerous political and social problems. The latter issues were comprised within the urge of becoming citizenry - an active political subject assuming a commitment to solidarity with those 'oppressed' and 'silenced' (author's translation, #YoSoy132, 2012: 315). In their words:

> The situation in Mexico demands that we, young women and men, take the present in our hands. It is time to fight for change in our country, it is time to fight for a freer, more prosperous and just Mexico. We want the current situation of misery, inequality, poverty and violence to be resolved. We, the young women and men of Mexico, believe that the current political and economic system does not respond to the demands of all Mexicans (author´s translation, #YoSoy132, 2012: 313).

Drawing on Mexico's situation of 'inequality, misery, poverty and violence' and the inadequacy of the political and economic system, which 'demands' action from 'young people', the country's reality and the 'Mexican youth' spoke through #YoSoy132 as both the casting subject and the subject being called upon (Ibid., 313-314). These assertions of truth about Mexico's reality and common experience of insecurity were used to sanction the values of freedom of expression and information as fundamental for democratic life. What was overall assumed is that democratisation of the country and a democratic life were objectives in common to all the population, valuable of themselves; and drawing on such assumption, democracy was given content through a chain of signification between democratisation of media-information-citizenship-democratic life-solution to Mexico's situation. The values of freedom of expression and information were then put forth as a natural alternative to a national reality, as the following lines expressed:

> We, the united students of this country, believe that a necessary condition to amend this situation is to empower the common citizen through information, as this allows better political, economic, and social decisions. Information makes it possible for citizens to demand from and criticize in an informed manner their government, political actors, entrepreneurs and society itself. Therefore,

#YoSoy132 makes the right to information and the right to freedom of speech their main demands (author´s translation, #YoSoy132, 2012: 313,).

The central importance of 'information', and even its agency, arose in relation to the possibility of transforming the condition of the 'common citizen' into a critical and active subject who is recognised first in the 'Mexican youth' and then in the 'united students' on behalf of whom #YoSoy132 claim to speak. Citizenship was not possible 'without full freedom of expression' (Ibid: 315). What was at first deemed as an opinion was then produced as a fact of 'information making possible' an active engagement in politics and economy and thus, justifying information and freedom of expression as the main demands of a movement that merges and becomes indistinct from the Mexican youth.

Through assembling already common understandings and meanings regarding the everyday experience of poverty, violence, inequality and misery and the production and reiteration of subjects that corresponded to a 'critical', 'conscious and participative citizenry' capable of 'demanding and criticizing in an informed manner' (Ibid: 314), #YoSoy132 identified itself with the Mexican youth and the united students, shaping its identity within the broader discourse of democracy, freedom of information and freedom of expression. But also, through such constructions of meaning, they reproduced, produced and sustained specific practices (use of digital technologies, voting, informing) and social relations within specific strategies, not only at a local level but also at a transnational level. On that basis, in the Manifesto broadcast via YouTube and other digital platforms (Yosoy132Oficial, 29 May 2012), #YoSoy132 looked to 'promote an informed and reasoned vote' making clear their belief that in those 'political circumstances, abstentions and the null vote [were] ineffective ways to advance the construction of our democracy'. The causal relationship as an assertion of truth that was produced between freedom of expression and information, as 'essential to form a conscious and participative citizenry', and the promotion of 'an informed and thoughtful vote' made clear the correspondence between democratic participation – the task of advancing 'our democracy' – (voting and committing to freedom of expression and information and dismissing 'abstentions and the null vote') and resolving the current situation in the country (author's translation, #YoSoy132, 2012: 314).

Towards the democratization of media, their first demand was 'real competition in the media market, particularly regarding the TV duopoly, Televisa and TVAzteca'.

Amongst other demands regarding national media,[41] the second one was noteworthy: 'making the right to the Internet an effective constitutional right, in the terms established by our Constitution in its first article' (author's translation, #YoSoy132, 2012: 314). Access to the Internet was listed as the second demand out of seven, just following the demand for 'real competition in the media market'. In this way, meanings were brought together in order to produce the Internet as a human right and to include such right in the Mexican Constitution. Within the broader discourse of liberal democracy (competition, freedom of expression and freedom of information as fundamental for citizenship), #YoSoy132 produced the Internet as essential for democratisation of media and democratic life, in opposition to Mexico's condition of corruption, insecurity, poverty and violence, where the national media and political system needed to be democratized and transformed. In contrast to national media and the other six demands contained in the document, the 'right to the Internet' was the only demand referring directly to the constitution. This way #YoSoy132 ratified and produced the Internet as indispensable for the country and worthy of development efforts in promoting its inclusion in the fundamental law of the state and with that, its integration into state institutions and practices with its capacity to produce far-reaching effects, coinciding in a fundamental way with Peña's digitisation effort (see Chapter 5) and the global connnectivity endorsed by the US government.

Overall, the production and assertion of the intrinsic democratic and instrumental value of the Internet is something that was assumed from the beginnings of the movement and to its last and more disaggregated actions. #YoSoy132's clearest values were *freedom of information and expression*, *justice, non-partisanship* and *democracy*. Such Values had, as the following lines demonstrate, a clear correspondence to the Internet and internationally diffused values on Internet freedom and freedom of information. According to such commitments and values and regarding the Internet, #YoSoy132's counter-proposal of a 'new media system' to the Telecommunications Reform proposed by Peña (7 November 2012), demanded that Mexico build infrastructure to guarantee free access to the Internet of at least 1Mbps, allowing new providers of Internet connections to compete in the market share. This demand was quite similar to the one implemented by Peña's digitisation (connectivity) in line with US global connectivity rationality. Both aimed to expand Internet infrastructure and access to foster competition. Consequently, in April 2013, the Mexican Congress approved the reform on Telecommunications and Broadcasting

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[41] Regarding other media, they called for the conformation of instruments that could guarantee the watch of social interests in radio, TV and press contents; that permissions to transmit on public channels should be subjected to public contest (auction) in the diversity of schools on communication; to open spaces for debate between students and media on the demands exposed; and security to be guaranteed for the members, journalists and everyone who expresses himself freely.

(Proceso, 19 April 2013). The reform established universal broadband access to information and communication technologies as a constitutional right. Despite such a recognition of the Internet, and the creation of regulatory institutions in telecommunications, the reform was criticised, among many other points, for allowing foreign investments up to 100% while closing opportunities for originary groups to participate in the sector (Aristegui Noticias, 23 March 2013; BBC, 22 March 2013).

On its part, 'YoSoy132' questioned the lack of support the reform provided to communitarian and indigenous media and the right of the audiences to better content or to a minimum of social content (García, 2013). However, and notwithstanding the differences between the official proposal and the ideal of media endorsed by #YoSoy132, a basic correspondence between the two, regarding the necessity to guarantee universal access and support the expansion of new information and communication technologies, persisted. A shared commitment was expressed in terms of a national infrastructure capable of carrying broadband access as a feature of an appropriate process of democratization and competition in service provision. In this way, competition and fundamental rights, together with freedom of information and expression, were produced as essential for democracy.

In light of the Internet as a constitutional right and the need for infrastructure and competition, some other important features of the Internet and social media need to be addressed. More precisely, the understanding and contact with international actors was crucial, framing the understanding of democracy, freedom of information and their reliance on the Internet and digital platforms. The case of Operación 1DMX (1 December Mexico City) was illuminating in this instance as it not only demonstrated how the Internet was seen and experienced as a liberation technology but also how its intricate pitfalls and extraterritorial element linked to state actors were obscured and dismissed under the priority of enacting activism through the adequate timing and reach offered by technological supports.

Operación #1Dmx was the banner and call that grouped different collectives and organizations, including #YoSoy132 as one of the main actors, in order to protest against Peña Nieto when he was sworn in (Nájera, 2014a). Against the protestors, the police enacted several arbitrary arrests (Aristegui Noticias, 11 April 2013) and infiltrated members as agent provocateurs to trigger violence and justify repression (Gilly, 2013; Nájera, 2014a). Protestors, bystanders and journalists recorded such events. After the demonstrations, the group #1Dmx used the website 1dmx.org to gather, organize and publish evidence, mainly videos and photographs but also testimonies and chronicles, documenting the repression, police abuse and arbitrary

detentions, intending to reconstruct the events and counter the official version of them (Favela and Lecona, 2012).

The website 1dmx.org gathered crucial data for the liberation of many unjustly apprehended individuals and was also a source of information and important feature in the organization of new mobilizations. Within a year, by 2 December 2013, however, the website was taken down by the US Embassy in Mexico, the Specialized Technology Response Center (CERT) that is part of the National Security Commission in Mexico (CNS) and branch of the Federal Police under the Secretariat of Government, and the US domain provider *GoDaddy*, a US based corporation and 'the world´s largest domain name registrar' (García, 2014: see O´Brien, 2014) that was hosting 1dmx.org.

A first email from the domain provider justified the suspension presuming violations of its terms of service. As the activist group requested the domain provider to inform them about the presumed violations, *GoDaddy* replied via a second email that the order to suspend the domain was part of an ongoing law enforcement investigation and they needed to contact the officer in charge: Special Agent Homeland Security Investigations, US Embassy Mexico City (Cabrera, 2014a). Embassy staff refused to give any information, so the activists requested a defence in court and filed an injunction against ten dependencies of the Mexican federal government (García, 2014). Only two of the addressed institutions refused any response: the National Commission of Security and the Secretariat of Government. Days later, an employee of *GoDaddy* replied to the activists that the Mexican agency that requested the U.S. government to suspend the domain was the *CERT*. The group made the case public and a few hours later the website was re-established without any mediating explanation either on behalf of the domain provider or the government institutions involved in Mexico and the US (García, 2014).

After the website was re-established #YoSoy132 broadcast an Internet TV program (on Channel #TodosSomos132) on censorship in Mexico, titled 'Censura de Internet en Mexico' [Censorship of the Internet in Mexico]. The program emphasised the fundamental importance of freedom of expression as a human right. As well, the program mainly consisted of a conversation between three members of #YoSoy132's Media Democratization Task Group (Sofia de Robina, Carlos Brito and Yoalli Rodriguez) and short videos intermittently displayed and related to the topic. In this case, the continuity of the construction of the Internet relied on the different elements integrated during the program. Of crucial importance are the broad discursive

articulation of meanings and practices within the general meaning of the Internet, which reveal the order of meanings for understanding international society.

Along such lines, the Internet represented a transformation in 'the way in which much more easily we can have access to information, flows of information, or increase the number of people that can be there,' in our presence (author's translation, Sofía in Todos Somos 132, 2014). The power of the Internet in everyday life was acknowledged by #YoSoy132 in the potential for connectivity, as 'many people, more and more, want to use the Internet more and more, and now you have it connected everywhere' (author's translation, Brito in Todos Somos 132, 2014). This diffusion of the Internet was also based on the multiplicity of applications this technology provides, 'tools' for 'everything' like music, photos, meeting people, etc. (author's translation, Yoalli in Todos Somos 132, 2014), which are characterised as an essential part of this technology and many times even understood through a synecdoche of social digital platforms, called the 'networks' and the totality of the Internet (the 'networks' or social media platforms as being the Internet).

In the members' account (Ibid), the overall contraposition between state government and the Internet was translated into an opposition between freedom of expression and censorship. As a member commented on their use of digital platforms, the Internet challenged national governments as 'many people, more and more, want to use more and more the Internet, and now you have it connected everywhere' (author's translation, Brito in Todos Somos 132, 2014). The Internet, being a 'freedom tool', threatened and at the same time lured the ambition of once unaware governments.

> So [governments] suddenly realised, these men [in government], that they had two choices: one, to allow this freedom tool to challenge them. More and more people communicating, people informing themselves, what was very easy to control before: perhaps newspapers, may be for the press, to buy two or three journalists and it´s done, the information never again comes to the light (author's translation, Brito in Todos Somos 132, 2014).

The other option at stake was control, as governments 'came up with the idea of controlling it [the large net of communications] in many different ways, each one for its own aims' (author's translation, Brito in Todos Somos 132, 2014). Governments recently became aware of the power of the Internet, aiming to control this 'too powerful' technology for their own interests (ibid). Governments 'want to turn the Internet into a tool for domination, a tool for control, a tool for espionage, a tool for

becoming that state which seems science fiction-like' (Brito in Todos Somos 132, 2014). This understanding expressed the basic opposition between, on the one side, the power of information and communication; and on the other, state control and censorship. In general, throughout the program 'Censura de Internet en Mexico' [Censorship of the Internet in Mexico], dichotomies were articulated within a coherent proposal of action and understanding of the Internet and the international context revolving around three key themes: the Internet and human dignity, state control and the international society, and the US and the censorship mechanism.

Drawing upon a human rights discourse, the production of the Internet reproduced human dignity in a sort of contraposition but also rhetorical reconciliation with the security concerns that prevailed to a large extent in Mexico. The condition according to Brito was that 'if we want to have dignifying lives, we all have to participate in the defence of human rights', because human rights are about a 'person´s dignity', and 'dignified people [*la gente digna*] question, dignified people [*la gente digna*] participate and take away spaces from them [the Mexican government]' (Brito in Todos Somos 132, 2014). #YoSoy132 again reaffirmed that freedom of expression was a 'fundamental right for democracy', 'necessary' for democracy and its process of selection of political representatives. 'Any other right might be fundamental but debatable, while freedom of expression is key' (Brito in Todos Somos 132, 2014), as it is 'linked to all of the other rights' as it 'is necessary for demanding other rights, for setting out whatever' you want to set out (Yoalli in Todos Somos 132, 2014). Freedom of expression 'protects' the Internet (ONG Derechos Digitales in Todos Somos 132, 2014) and the appropriate use (active, critical and free) of the free Internet is performative of the exercise of freedom of expression and the circulation of information, which as a human right represents the 'dignity' of subjects.

For the members of the Media Democratisation Task Group (MTDM), the opposition between a freedom tool and government control implied subjects of liberation and subjects of control within a broader system of meaning – that of human rights and liberal democracy. But also, subjects were produced within the strategic arrangement and techniques of persuading people to use and defend the Internet, the latter being constantly produced as vital for the defence of human dignity. Moreover, by locating freedom of expression as the key right, Brito not only defended the possibility of citizens and journalists to communicate and produce trustworthy information in a context of insecurity and corruption of media and government institutions, but also, and more important, in an international context, supported a vision that prioritises Article 19 of the Universal Declaration of Human Rights (UDHR) on freedom of expression over Article 29 on communities self-determination.

Prioritizing Article 19 over Article 29 of the UDHR is the same understanding of international communications and information US foreign policy has been promoting for the Internet and the free flow of information in relation to human rights. 'The importance of freedom of speech and expression as a universal human right – is constantly expressed throughout US discourse. Its initial crystallization occurred at the end of the first phase of the WSIS [World Summit on the Information Society]' (McCarthy, 2015: 103).   In this vein, liberal values are the basic condition for sovereignty, as 'US policy- makers simultaneously work to undermine the legitimacy of the right to self-determination for other states' (Ibid: 104), conditioning other conceptions of sovereignty depending on the extent to which communities and states recognise individuals' right to freedom of expression under specific cultural values (Carr, 2013; Jablonski and Powers, 2015; McCarthy, 2015). The 'free flow of information' in US foreign policy and under specific cultural values means that access must not be denied or restricted on the basis of ideology or politics but mainly on the basis of market or 'capital accumulation' (McCarthy, 2015: 111-121).

#YoSoy132, in advancing their demand for access to the Internet as a Constitutional right (see also Chapter 5 on Data for Development), reiterated liberal values that implied a particular kind of 'coordination without politics' and instrumentality. One that privileges a third actor's sanction of individual freedom of expression and access to information under market conditions over communities self-determination and politics. Taken for granted as fundamental for democracy and bonded to human rights, the use of the Internet unfolded within an opposition between free flow of information and state efforts to regulate and filter information. Consequently, *tecnopolítica* and instrumentality acquired a post-national nuance consolidated through digital activism (Rodriguez Cano, 2018); local networks were always linked to international ones, although dismissing its instrumental link to coloniality. Instead, the Internet was reaffirmed in its basic composition as a freedom tool at risk of being controlled by states, thus misused regardless of self-determination and other definitions of sovereignty.

The Internet was reaffirmed as liberating (Todos Somos 132, 2014), despite acknowledging its being a space for state propaganda, control and surveillance. The Internet was then 'difficult' to control thanks to its being 'new' and different from other easier to censor traditional media and was overall in opposition to governments across the world and the control they exerted over other 'old' media (Brito, in Todos Somos 132, 2014). This way, the Internet was produced as ambiguous: a freedom technology at risk, 'attacked' by the state (Brito, Sofia, Yoalli in Todos Somos 132,

2014), turning the once 'idyllic' dream of the Internet as free of censorship (Yoalli in Todos Somos 132, 2014) into a 'myth' (Brito in Todos Somos 132, 2014). The response of the group, which as we will see corresponds to that of a large number of members, was not to stop using the technology. Instead, many considered that the Internet's essence was at risk by hosting state activities. Instead of revisiting the whole idea and commitment to the Internet, MTDM members reinforced such commitment by drawing upon its essential characteristic of 'absolute freedom' and calling on activists not to fear the technology but, on the contrary, to use it (Brito in Todos Somos 132, 2014).

> We shall not fear the Internet, in fact, if the Internet grew [*creció*], grew to its current extent, it is because of its principles. It has many; it is a series of elements that allows the net to function this way. And one of those principles is around an absolute freedom. This point cannot be argued. Internet either is free or is not Internet, is something else, something completely different (Brito in Todos Somos 132, 2014).

What was to be done was to defend the Internet according to its founding principle of freedom and its mission of reaching everyone, as a 'human right'. The prevailing understanding was that the Internet must be defended, used and trusted in its essence, which is alien to state interests as it represents the values of human dignity and democracy. The latter, trust, responding to the proposition of the NGO *ONG Derechos Digitales* [NGO Digital Rights], which promoted the slogan *No Temas a Internet* [Do Not Fear the Internet]. Overall, however, the Internet was continuously produced as a natural space for public engagement and protest. This technology was endorsed as a ´public space´ where freedom of expression must prevail as essential for democracy. What was at stake in the Internet was human dignity as founded on the aim of freedom of expression and the ideal of democracy. In this light, the representation of international society, implicitly and explicitly reproduced, was one of struggle between democratic forms of organization and state-governments.

A ´healthy democracy´, the members of #YoSoy132 argued (author's translation, Todos Somos 132, 2014), comprised freedom of expression as the possibility of having a ´voice´, enhancing and allowing the free flow of information, the documentation of events, creativeness, pacific struggle and protest, along with the production of content, revolutionary knowledge, science, and transparency as possibility of knowing what is 'really going on'. Despite resembling the Internet as a technological fix as promoted by digitisation (Chapter 5), all of the latter attributes were mainly opposed to censorship, secrecy, national law, control, violence,

repression and silence, amongst others like control, espionage, religion, traditional media and lies. The Internet for #YoSoy132 entailed both a more positive transformation of everyday life and a risk of censorship, as the Internet as a ´public space´ could be subject to state surveillance, meaning 'conceding part of your life' to the government' (author's translation, Sofía in Todos Somos 132, 2014). Nonetheless, for both #YoSoy132 and Peña's digitisation, the Internet was always to be embraced as a Constitutional right.

An optimistic and instrumental account of technology as a ´freedom tool´, present from the beginnings of #YoSoy132 (e.g. Mario, Magaly & Tania, in Muñoz, 2012: 231-234), and a pessimistic one as being rendered useful as a ´tool for domination´ and control are the understandings that made sense of the use of the Internet in a situation of surveillance, control and censorship. However, the essence of such technology, its absolute freedom and its relation to human dignity, predominated and over-determined the negative aspects that endangered its essence. In the last instance, risk prompted the need to act and engage in a deeper commitment as the importance of freedom of expression was consistently produced as the possibility to speak and therefore to be heard and become democratic. #YoSoy132 used the Internet as instrument of coordination, assuming and promoting it as essentially democratic and endorsing the liberal values of a free Internet and the strategic arrangements that underpin the promotion of such values.

6.4 On coordination without politics *as the flexible management of fragments and the absence of political referents*

This section analyses the understanding of the international scenario regarding the US role and the adscription of responsibilities in the censorship of 1Dmx in order to understand the activists' lack of critical engagement and their ongoing use of the Internet despite being aware that the Mexican government had put citizens under systematic surveillance and that foreign or 'extraterritorial' elements were implicated in any local use of this technology. Such analysis sheds some light on the form of coordination that prevented #YoSoy132 members from questioning and understanding the relationship between freedom and control through the extraterritorial element of the Internet. In other words, this section shows how instrumentality and a flexible form of coordinating diversity concealed the intertwinement between freedom and control and, moreover, lacked and hindered the advent of a shared political experience – the embodied encounter that 'brings about the "existential affinity" of those "who just happen to live together" [Schmitt, 1993: 210]' (Ojakangas, 2007: 210-212) – and the shared referents of order and

orientation. The Internet's embedded form of coordination occupied the space of such shared referents and concealed its already existent and distant (someone else's) ones. Finally, the form of collective coordination and organisation of #YoSoy132 is characterised as fragmented and flexible, dependent on the Internet and social media platforms' mediation and concealing its extraterritorial and colonial elements.

Members of the #YoSoy132 MTDM interpreted the censorship of the 1Dmx website on an Internet TV programme (Todos Somos 132, 2014). Throughout this transmission a specific construction of meanings, regarding the Internet and the Mexican and US government and major Internet companies, produced and reproduced a specific use of the Internet within a strategic arrangement and a set of international and transnational interactions that reiterated national governments as main actors of control on the Internet. Carlos Brito, member of the MTDM, claimed that 1dmx.org was taken down by a 'censorship mechanism' in which, 'men, men and women, […] collaborate so that you, I and nobody can say "things" on the net'. His claim was that the US (US Embassy in Mexico) and Mexican governments (the Federal Government, the Government Secretariat and the National Council of Security) and the domain-name provider *GoDaddy* were part of such mechanism (Brito in Todos Somos 132, 2014). Among these actors, however, Brito attributed responsibility according to their interests and their importance within an overall understanding of the Internet in which the Mexican government was the main responsible for censorship and the main threat to the liberating essence of the Internet.

Within #YoSoy132 and #1dmx understanding, the US commitment to a free Internet was seen as matter of pure rhetoric or 'empty words' (author's translation, Brito in Todos Somos 132, 2014). In a similar way, 'they [agents of the US government] use copyright enforcement as an excuse' for installing an economic integration through the Trans-Pacific Partnership (Ibid). In this light, the 'censorship mechanism' and the specific 'collaboration' of the US government through the US embassy, were seen as having a careless attitude, just going with it. As Brito characterised what he thought happened in this instance, agents of the US Embassy said: '[the Mexican government] is asking me to censor this website, nothing happens, I will go with it' (author's translation, Brito in Todos Somos 132, 2014). US government 'collaborated' in a form of passive and careless attitude, simply responding to a request from a foreign actor.

In a similar way, the Mexican government appeared particularly, in Brito's narrative, as 'men' in the federal government who 'decide to take down' the website as part of a

general effort of 'criminalising' public spaces (the Internet), 'creating criminal figures or digital crimes, because of their intent of regulation' (author's translation, Sofia in Todos Somos 132, 2014). The Mexican government – they explained – argues insecurity on the Internet as a pretext to control the opinion that criticises them: 'they [the Mexican government] are making us [the Mexican people] think that there really is a chaos and we need "daddy" government inside to control it and to tell us what we can and cannot say' (Ibid). The relation between state and the Internet was in this way reduced to an intent of regulation of freedom of expression relying on a common understanding and gendered discourse that has been prominent among activists, denouncing Mexican government's paternalism as useless offerings and harsh measures in the name of public order. Finally, in such a narrative, *GoDaddy* was responsible as well, but its collaboration was also nuanced. The company was characterised as a 'seller', an 'enterprise' through which the Mexican government via the request of US Homeland Security censored the website. In Brito's characterisation of the events, GoDaddy complied with the US government request by saying: 'The Mexican government requested the US government so, and what they request to me is to censor a website for them. Then fine, I will do it, I don´t want to get into trouble' (author's translation, Brito, in Todos Somos 132, 2014).

#YoSoy132 emphasised the responsibility of the Mexican government and recognized the collaboration between the three actors involved, which were in contraposition to the values of democracy and human rights. As Brito argued, 'no Law forces GoDaddy to take down a website', 'no law nor any international agreement foresees that the Embassy proceeds in that manner with Mexican matters and, as I said, there is no authority in this country with the faculty to do so' (author's translation, Brito in Todos Somos 132, 2014). The three actors were pointed out as 'violating human rights', and more precisely freedom of expression, therefore understanding the international operation of the Internet beyond any established law as a human rights problem regardless of borders. However, in the MTDM members' characterisation and understanding of the events, GoDaddy in the end was 'complying' to the demands for information of 1Dmx; as it 'informs' the group as a result of the constant 'pressure' they exerted and as the company was concerned about staying out of trouble. The legitimacy that arose from a private domain as opposed to a state domain was important and was evident as well in the group's search for 'international response' and the support of international NGOs and collectives (e.g. Article 19, Anonymous). This support was expected to come once protests on the 'networks and the streets' were internationally visible (Más de 131, 2014).

As above, the case further produced an opposition between state control and free Internet among the activists. This was important not only due to the censorship and lack of transparency in the attribution of responsibilities, but also in virtue of how it pointed at the contradictions between, on the one hand, claims by US and Mexican governments about endorsing Internet freedom and freedom of speech; and on the other, their censorship actions. As Luis Fernando García (2014), the lawyer of 1Dmx mentioned, there are several issues that remain unattended concerning 'discussions on Internet governance, where it is becoming more and more frequent to use or invoke words associated to the legal language of human rights' (author´s translation). When compared with the ongoing effort of the Mexican government to control information on the Internet through reforms whilst declaring an overall commitment to freedom of expression on the Internet (see Lagunes, 25 November 2013; Operación1Dmx, 4 March 2014), or the US discourse on 'Internet freedom' – although it supports censorship in obscure circumstances (Ibid) – García (Ibid) concluded that:

> Repeatedly, it has been suggested that the power of both the United States and the major Internet companies, based within its territory, are actually a boon for free speech on the Internet. With the approval of many, it is often referred to as "imperialism of the first amendment". Maybe it's time to revisit those claims, because in cases like that of 1dmx.org, it is precisely the extraterritorial element that has led to the possibility of there being an act of censorship (openly violating the prohibition of prior censorship unequivocally embodied in the Mexican Constitution and the American Convention on Human Rights), and worse still, it has greatly hindered the possibilities of defence and punishment of those responsible (author's translation).

Garcia´s emphasis on this ambiguity (free speech – censorship), for once not seen as a clear opposition, rested on the extraterritorial element he refers to. In his account, this extraterritorial element played a determining role both for Internet freedom and the act of censorship. Thus, he called to revisit the claims over this extraterritorial element and vague allusions to human rights. However, his account remained unclear. García did not explain whether such an extraterritorial or instrumental element – as it obeyed a third party's decision – was constitutive of the Internet by design and there was a more basic correspondence between Internet governance, 'the legal language of human rights' and censorship. Such an explanation would have been relevant considering the role of US government and Internet corporations in promoting both freedom and control on the Internet. Ultimately, this line of inquiry was hindered among #YoSoy132 members by their need to use this technology and these corporations' services and by endorsing hegemonic values embedded in the

Internet's design. The provenance of such values as particular interests and prerogatives of control was then obscured and concealed.

As it has been pointed out before regarding the predominance of Article 19 of UHRD on freedom of expression over Article 29 on communities' self-determination in a world context in which US foreign policy undermines the legitimacy of the right to self-determination for other states, freedom of expression and Internet freedom (embraced by #YoSoy132) have not been mere rhetorics for the US: supporting either one or the other has been a matter of convenience[42]. Regardless of the contradictions and such values and meanings' importance in supporting a specific foreign policy and strategic arrangement, underlying and accommodating the opposition between freedom and censorship for #YoSoy132[43] was the common agreement on the need for these technologies, taking for granted its place within social endeavours of democratic engagement and its necessity as a human right. Despite knowing that platforms were objects of censorship and surveillance (Gómez and Treré, 2014: 506), a consistent imperative of using these technologies, as they facilitated fast, cheap and far-reaching capabilities, persisted within #YoSoy132.

For instance, awareness of censorship was not something new for the activists. The group 1Dmx knew about *GoDaddy*'s previous participation in some websites censorship and about its support regarding the Stop Online Piracy Act (SOPA). Despite this awareness, they used the domain provider's service arguing that 'it was the most popular one' (Cabrera, 2014a). The collective dismissed extraterritorial government and corporate decision on whether freedom of speech or censorship were endorsed within the same space[44], while a common or 'popular' understanding was more important for deciding whether or not to use a digital platform. In this case, a common understanding – in an alternative activist intent (1Dmx) – relied on the basic components of US predominance on the Internet (GoDaddy), even while trying to counter the concentration of power in national politics. This exemplified how knowledge of such 'extraterritorial element' of Internet governance, both as freedom and control, did not really open a critique of the centrality of digital technologies for

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[42] For instance, Hillary Clinton's support to circumvention technologies and sponsorship of the World Youth Summits (see Mejías, 2013) speak of how US government harnessed digital technologies and the Internet in order to advance US foreign policy interests abroad, while the San Francisco's Bay Area Rapid Transit (BART), a local agency in the United States, blocked mobile phone service in order to 'disrupt political protests' after deciding to privilege commuting necessities over public demonstrations and free speech (Calperin, 2011).

[43] Mainly the groups comprised in the Media Democratisation Task Group and those members who conformed digital rights advocacy NGOs [e.g. Luis Fernando García and Carlos Brito in R3D for digital rights defense).

[44] On how corporations affect freedom of speech online see for instance DeNardis and Hackl (2015) and Rosen (2013).

mobilisation and, moreover, for the country as a constitutional right. Instead, instrumentallity was endorsed as a broader strategic arrangement in which foreign actors define and decide at a distance the way in which the Internet and its subjects are shaped, used and understood, constraining the possibilities for a different practice. Through coordination, mediation conditioned according to another's interests, values and economy, instrumentally defining other collective formations as advocates of a free and liberal democratic Internet by providing them with an instrument of coordination that ultimately benefits US foreign policy and commerce. The commitment to the Internet as essentially liberating and popular guaranteed its surveillant character – perhaps not entirely as planned by the Mexican government[45] but leaving unaltered US government and corporate platforms prerogatives.

The same stable overall commitment to the Internet, despite its surveillant and repressive capacities, was expressed by #YoSoy132 when it became known that the Mexican Government was eavesdropping on profiles and hacking accounts (see Ahmed, 2018; Privacy International, June 2018). In these cases, and as it was mentioned before, it must be considered that mobilisations were already integrated by young individuals for whom 'communication technologies [were] not something "new", but something perfectly "natural"' (Gómez and Treré, 2014: 502). As Treré (2013) significantly emphasised regarding social media platforms, 'these were not new technologies emerging from a void in order to create revolutions' but 'daily communication practices' that left a stamp on the overall representation and dynamics of the movement through the 'hashtag' that precedes the 'brand' #YoSoy132 (117). These practices were able to produce a 'new habit of everyday life as well as public… life' (Goggin and Albarrán, 2014: 38). Nonetheless, despite people being (instrumentally) formed and shaped in relation to these technologies, making them fundamental for their everyday interactions, digital technologies were not 'inherently emancipatory and positive for the movement,' as sometimes were matter of conflict and negotiation regarding issues of organization and some awareness of Mexican government´s surveillance practices (Treré, 2013: 118).

As Gómez and Treré (2014) mentioned, based on interviews with some participants of the movement, 'issues of data exploitation, surveillance and threats to privacy relating to the use of social media,' as well as the status of these platforms as 'owned and controlled by US corporations' were 'rather neglected in the academic literature

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[45] The Secondary Laws on Telecommunications were published on 14 July 2014 in the Diario Oficial de la Federación (Official Diary of the Federation) (DOF, 14 July 2014). The final document did not include online censorship but surveillance, signals interruption and other measures justified by national security concerns, corporative bias in favour of dominant actors and other exclusions of social actors remained.

on #YoSoy132' and 'never thoroughly discussed' within the movement (Gómez and Treré, 2014: 505). Whilst data exploitation did not produce any discomfort, surveillance and control – limited to its exercise by the Mexican government and after the protests on 1 December 2012 – started to attract attention and were asserted as a main concern. After the surveillance software named *Finfisher* was revealed as an acquisition of the Mexican General Attorney's Office (PGR, Procuraduría General de la República) and employed since 2012 (Gómez and Treré, 2014: 506), some members started deleting their accounts out of fear.

In such a situation, activists accepted the use of personal data by corporations (Gómez and Treré, 2014), which is not rare or exclusive of the Mexican context but can be seen all across the world through the lens of 'ignorance' or 'resignation' (Naughton, 2015) and has been embedded in the Internet by design (Chapters 3 and 4). Nonetheless, concerning government surveillance, activists 'did not deal with these issues rationally, expressing instead a general sense of paranoia around social media such as Facebook and their use of mobile phones' (Gómez and Treré, 2014: 505). 'Social media paranoia' as it was denominated, was not enough yet to urge the activists to elaborate on their prefiguration or to reconsider their generalized use of digital technologies. It was rather dismissed as unknown external or 'mysterious' dynamics and 'almost immediately discarded,' both by the imperative necessity to communicate and by the idea that if the government wanted to spy on them, they would do it anyway (see Gomez and Trere, 2014: 505). It was instrumentality as the underlying strategic arrangement with its proviledged actors and the social relations etablished on the basis of the Internet's design as intertwined with several diffused everyday practices and imperatives that defined intelligibility and action for #YoSoy132.

Even though many of the members of 'YoSoy132' participated in 'Operación 1dmx,' and experienced censorship as ultimately sanctioned by foreign agents, the presence and extent of any profound critique or understanding within the Media Democratization Task Group of the ties between Internet Governance, digital technologies and international politics, beyond global trends of activism, remained practically non-existent. As the presence of digital literacy and the mediation of everyday life communications and collective action made possible the emergence of #YoSoy132 as a 'connected multitude', activists were subject to the form of coordination enbedded in the Internet.

The Internet as an 'instrument of coordination without politics' offered simplicity and accommodated heterogeneity while hiding the overarching end and economy of the

system, fragmenting knowledge and awareness (Chapter 3 and 4) of the mediation that made possible their collective actions. Accordingly, *the imperative to communicate* effectively and efficiently, together with digital literacy and the popularity of social media platforms for activism, overcame the fear of being under surveillance and reassured the urge to communicate. Therefore, the overall and simple representation of the Internet projected in public message by #YoSoy132 as a basic feature for democracy and human life prevailed. In rhetoric and demonstrations this technology and the 'digital human rights' it entailed needed to be defended from the malpractice of the Mexican government according to constitutional guidelines and international human rights standards and instrumental to US values and interests conditioning national sovereignty abroad. The Internet, with its corporate and hegemonic arrangements (its meanings and use), persisted as a reference for liberation where no other ideology or referent enjoyed the trust of the group (just like digitisation envisaged trust as embedded in digital technologies, Chapter 5); in mediating everyday life and becoming imperceptible as instrumental to someone else's interests, the Internet persisted as a taken for granted 'instrument of and for coordination' whose users/activists did not happen to live together (see also Chapter 7) but only to protest together through the most effective means.

More precisely regarding political referents and ideological consensus, a vast majority of members of @YoSoy132 identified themselves with indignation (as 'indignados') – non-organised young people with no unique ideological reference but variegated forms of resistance and protest (author's translation, Pineda, 2012). Autonomist positions like those of originary peoples' struggles for territory represented a minority (ibid). Although the context of protest and alternative organisation in Mexico had sedimented some of the basic principles of Zapatismo – horizontality, direct democracy, no interest in taking power and non-partisanship – #YoSoy132 could be interpreted as experiencing a 'political vacuum' and absence of shared horizons and political referents: a vast gap which groups of the revolutionary left could not save (author's translation, Modonesi, 2014: 147), except for the Internet and digital platforms. Despite the diversity of ideologies and positions within #YoSoy132, all of its members had been marked as a whole by their technological support and private universities positions: their collective identity preceded by a hashtag (author's translation, Pineda, 2012: 10).

'Internal fragmentation was the vice and virtue of #YoSoy132'; virtue, as assemblies' autonomy –inspired by communitarian practices legacy of Zapatismo but proved limited when translated to urban spaces – 'made it possible to operate freely showing an impressive dynamism that would have been restrained by consensus building'

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(author's translation, Modonesi, 2014: 147). Vice, because in their lack of explicit ideologies and shared political referents, in addition to suspicion of any institutional or partisan mediation or leadership, #YoSoy132 enacted what has been described as extreme horizontality and extremely long assembly meetings mainly due to the plurality of groups and tendencies it comprised, as well as the impossibility of one of them becoming hegemonic or drawing stable alliances in that direction (Ibid).

'[#YoSoy132] was an accumulation of protests, not an integrated one' (author's translation, Rodrigo in Muñóz, 2012: 32) described a member referring to 11 May 2012 at the Universidad Iberoamericana. Accordingly, this common feature of #YoSoy132 pervaded their coordination unfolding both as plurality and fragmentation. No clear referents or ideology offered cohesion[46] (Modonesi, 2014). Young people using social media platforms for protest found a rationality of organisation and coordination in platforms like Facebook, YouTube and Twitter but lacked a shared existential awareness and orientation on what the common ground and horizon was for and as a collectivity. For #YoSoy132 general assemblies and meetings became massive and prolonged, finally fragmenting the movement. There was emotion and indignation, a common representation of the grievances committed by government and media corporations, and finally a medium through which members found each other as experiencing the same reality and wanting to do something about it. Their acting together as a collectivity, acknowledging and pointing at each other as part of the same experience, started with the Internet and digital platforms. Then, such a way of organising people as a multitude did not rest on and did not bring a shared understanding of social reality or a shared order and orientation to what society they wanted. The Internet provided a way of managing things as connected, flexible and fragmented. In a context of absent political and ideological unity, the Internet sufficed and put forth its constituting values, meanings and form of coordination – fragmenting, functionalising, accommodating diversity and simplifying interactions in a sociotechnical reality on behalf of others – as #YoSoy132.

Nevertheless, fragmentation and loss of political referents does not mean here an underestimation of the experience it represented for the participants and members of the mobilisation. #YoSoy132 was definitely a performative and emotional practice that will eventually sediment in the collective imaginary (Bartra, 2014) and moreover, there is a shared desire that 'they [the young people] will come back, stronger, [better], more numerous' (Galeano, 2013). However, in their coordination, in their practice and understanding, there was a rationality that did not correspond to the members of

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[46] Allegedly, this was a common feature amongst movements using digital platforms, including Ocuppy Wall Street and the so-called Arab Spring demonstrations (Curtis, 2016).

#YoSoy132 as grounded in a collective existential affinity and a shared experience of living together. Instead, such rationality made possible the emergence of #YoSoy132 as a collective by conditioning their experience and practice. Emblematically, Roger Bartra (2014: 16) stated:

> I cannot find in the verbal discourse of the 132, memorable texts like those by the *Sup* [Subcomandante Galeano] for instance, but I do find assertive, lapidary phrases. Synthesis capacity attributable to the discipline of Twitter. In his Nobel Prize speech, the poet Joseph Brodsky said: "I believe… that for someone who has read a lot of Dickens to shoot his like in the name of an idea is harder than for someone who has read no Dickens." The anonymous demonstrator of #YoSoy132 wrote with a marker on a banner, drawing on the lyrics by Calle 13 [a band from Puerto Rico], "Someone who reads little shoots a lot". There is no doubt, a tweet is worth more than a speech (author's translation, Bartra, 2014: 16).

Digital literacy and discipline meant synthesis, effectiveness and efficiency, which blurred an account of the historicity of enunciation: the historicity of the Internet and the world it inhabits. If the Internet and digital platforms are to be used in specific contexts responding to politics, those new disciplines embedded in these technologies need to be acknowledged rather than embraced in a practice of effective communication whose referents are concealed relying on assumptions and generalisations that are neither present nor acknowledged as a political ontology. The design of the Internet has unfolded specific elements (instruments) with specific functions that do not know what the overarching design and task is about. Each part of the system has merely developed its own function (e.g. the Internet accommodating diversity without a shared known ideological referent), even if it could be redefined as a performative experience or self-fulfilled utopia (see Bartra, 2014).

6.5 Conclusion

This chapter has demonstrated how the Internet worked as an 'instrument of coordination without politics' – an instrument that made possible collective coordination and experience only when mediated by an external third party – when used by #YoSoy132 to bring together a diversity of groups and coordinate actions as a 'connected multitude'. #YoSoy132 reproduced the forms of coordination embedded in the Internet and endorsed instrumentallity, becoming instrumental within a broader strategic arrangement in which foreign actors define and decide at a distance the way in which the Internet and its subjects are shaped. Global connectivity and interoperability were reproduced while fostering the expansion of infrastructure and

universal access to the Internet as fundamental for the nation, democracy and humanity, and as a constitutional right; the free flow of information was reproduced in demanding freedom of expression and a free Internet according to US foreign policy interests; and the personalisation of identity and mediation of subjectification were reproduced in embracing social media platforms as fundamental for the constitution of a collective identity and action.

A specific discourse of human rights and Internet freedom saturated the meaning and practice of the Internet for #YoSoy132 and framed their actions within an international strategic arrangement. The Internet, understood through an image of freedom, neutrality, human dignity and information as fundamental for democracy, reproduced meanings and practices embedded in this technology's design and linked to hegemonic values and a US foreign policy practice that undermine other forms of self-determination. Accordingly, the technology was seen by #YoSoy132 as anathema to governments' interests and ultimately as supported rather than threatened by US corporations. The role of US social networking platforms undertook a crucial role in this production, as these organizations' links to the US state were noticed but nevertheless dismissed. The Internet's coordination capabilities and the lack of stable and shared referents favoured ignorance of its instrumental dynamics linked to foreign actors' agendas. Responding to the absence of shared political and ideological referents among the members of #YoSoy132, the assumptions regarding the benefits and democratic nature of the Internet occupied the vast gap between otherwise disparate groups and offered visibility to those who reiterated with utmost clarity the hegemonic meanings and embedded values of the Internet.

The underpinning element that supported all those meanings and practices was the form of coordination embedded in the Internet and digital platforms' design (Chapter 4), together with their mediation of collective communication, organisation and experience. The Internet and digital platforms made it possible to gather and call upon the multitude, constituting a 'connected multitude' and offering a frame for collective identity, lowering costs and reinforcing internal solidarity (Treré, 2015). Nonetheless and regardless of its far-reaching capabilities across time and space, these technologies did not bring about any certainty or knowledge of a shared existence. There was no political event that 'brings about the "existential affinity" of those "who just happen to live together", in which the *self* emerges through experience and reflection and which is constitutive of 'order and orientation' [Schmitt, 1993: 210]' (Ojakangas, 2007: 210-212). Instead, what using such technologies brought was coordination, efficiency, speed and reach across geographical and social

locations, diversity of actions, demands, ideologies and performances of liberation: fragmentation and flexibility in a reproduction of instrumental and expansive forms.

The Internet, despite its corporate and hegemonic arrangements (its meanings and use), persisted as a reference for liberation where no other ideology or referent enjoyed the trust of the group just like digitisation envisaged trust as embedded in digital technologies (Chapter 5). In mediating everyday life and becoming imperceptible as instrumental to someone else's interests, the Internet persisted as a taken for granted 'instrument of and for coordination' whose users/activists did not happen to live together (see also Chapter 7) but only to protest together through the most effective means. #YoSoy132 did not engage with the intricacies of living together and deciding together on the basis of politics. Therefore, the chapter is significant for the overall argument of the thesis as it explains how the forms of coordination embedded in the Internet were reproduced, expanding colonial forms rather than politics. As in the case of digitisation, these forms have been approached through philosophy of technology and critical approaches to the internet and oriented by the consideration of coloniality. However, the thesis as a whole argues that moving towards an alternative politics and a different praxis of the internet is necessary and possible in Mexico through advancing the inclusion of a decolonial element of analysis: the Zapatsita experience and the *tsosil* and *tojolabal* philosophy. The following chapter analyses the Zapatista experience in detail in order to advance the inclusion of such a decolonial element through a more fundamental inquiry into the meaning and practice of politics in relation to the Internet and instrumentality

Chapter 7

The Internet in the margins of instrumentality

The Zapatistas, territory and the political

The *Zapatista* support network has been celebrated as 'the first example of the use of new technologies in favour of a resistance movement that generated a global virtual community' (Rovira, 2003: 57). The rebellion has been deemed 'an information-age prototype of militant social netwar' (Arquilla et. al. 1996: 1) and the origin of a 'new logic of resistance' that has meant a 'fundamental transformation in the way social movement organizations function, which places communication technology and media practices at the center of resistance' (Wolfson, 2012: 149). However, instead of deeming the insurgency a case of 'coordination without politics' and instrumentality – collective coordination and experience made possible when mediated by an external third party without a shared political experience – the chapter further analyses the use of the Internet by the Zapatistas through the concept of *the political* (Agamben, 2009; Gelman, 1996; 21; Marder, 2010; Schmitt, 1993, 1996; Ojakangas, 2007), as an event of encounter/openness in which partners acknowledge/sense and define themselves as being together. It does so, in order to demonstrate how the instrumental/colonial character of the Internet – its form of coordination and the values, interests and aims embedded in this technology and analysed in Chapters 3 and 4 – are not consistently reproduced by the insurgency.

The chapter contends that the use of the Internet by the Zapatistas has not been instrumental as it has not allowed in a third party mediation or decision over its collective parameters and the orientation and order of their practice. Instead, a particular political formation and practice, with an *intersubjective* (Lenkersdorf, 1996) horizon, has encountered and responded to the use of the Internet redefining, at least temporarily, its instrumental/colonial character, both epistemically and organisationally. The Zapatista organisation effort as a self-governed, self-aware and self-defined community and its strategic orientation – the fundamental importance of attaining autonomy and territory – brings about 'the "existential affinity" of those "who just happen to live together" [Schmitt, 1993: 210]' (Ojakangas, 2007: 210-212), sharing an ethical horizon and a way of living together based on territory, with a shared political ontology. The overall argument is that *the political* as an experience of openness and encounter and the self-awareness that arises from it, informed by a

cosmological basis, affects the Internet by suspending its instrumental operation and its main rationalities of expansion according to the communities' concrete circumstances and to collectively defined parameters and practices of intersubjectivity whose foundation is the earth. The chapter contributes thus to the overall aim of the thesis of advancing a decolonial critique of the Internet as an 'instrument of coordination without politics' in Mexico by questioning the technological character of technology as set by Western metaphysics and by proposing a different concept of the political.

The chapter is organised through four sections. The first section underlines the strategic character of the Internet for the Zapatistas, which responds to a main political line of attaining 'tierra y libertad' [territory and liberty] instead of being the condition of possibility of collective practice as *tecnopolítica* on the instrumental basis of responding to another's end (see Chapters 5 and 6). The second section links the importance of the territory for the Zapatista insurgency to Mexico´s historical background of originary and agrarian rebellions and traditions throughout Mexican history. This section identifies territory as sign of a shared experience and orientation towards community life that has persisted in agrarian struggles and the Zapatista insurgency in the twenty first century. The third section further analyses, through the notion of *intersubjectivity* and the concept of the *political*, the importance of territory as the earth and 'Our Mother' and with it, its politico-ontological character for the Maya peoples that comprise the Zapatista rebellion. This section underscores territory and the earth, instead of technology, as sign and condition of possibility of community life and collective practice as it is the foundation and the index of interpersonal encounter (or the ongoing trustworthy symbolic mediation of social interactions) and cosmological and politico-ontological awareness and experience of community life. In addition, it shows how the equality of all things as assumed in Maya cosmology is in tension with an instrumental conception of beings.

The fourth section considers a more recent use and understanding of the Internet in the communities, in order to better understand how the political, and the multiplicity of elements it entails, redefine each of the rationalities described regarding digitisation in Mexico (Connectivity, Open Data and a Single Digital Identity) and those concerning the form of management embedded in the Internet´s design in the US (Global Connectivity, Free Internet and Personalisation of identity). The Zapatista distinctive practice was not that of relying or mediating collective existence and practice through the Internet. Rather, they encountered the Internet and located it within their own way of life and experience of the earth [la tierra] and according to an intersubjective understanding and practice of community that has ultimately underpinned their

struggle for territory and autonomy, destabilising the assumption of a technological being. Thinking of the political experience of the Zapatistas contributes to a questioning of the technological/colonial character of technology as instrumentality, as the ethical horizon of intersubjectivity recognises every being as a subject not to be instrumentalised as means to another's end or property but respected in itself and as in intimate coexistence with all beings and community life.

7.1 Territory and the strategic character of the Internet for the Zapatistas

The most important, consistent and emblematic political mobilisation in Mexico that has found in the Internet an asset for activism is the *Zapatista* organisation in Chiapas, well known as EZLN. This predominantly "indigenous"[47] guerrilla movement became visible after more than ten years of clandestinity in 1994 the day the North America Free Trade Agreement (NAFTA) came into effect supported by the amendments of Article 27 of the Mexican constitution, an article that previously promoted territorial distribution and had been used to protect originary peoples' communal land and *ejidos* from being sold as private property (Muñoz, 2003). This uprising brought attention to the inequities of capitalism and the persistence of colonization within modernity as a long-lasting (more than 500 year long) reality in Mexico. This reality was fostered by the Mexican state and transnational capitalism under the banners of progress, globalisation and free trade (Marcos, 2003). As the *Zapatista* spokesperson, Subcomandante Marcos, explained, the "free trade" agreement was for them an expression of transnational liberalism and the neoliberalisation process that was intensifying its effects over other models of production and political understanding; NAFTA was emblematic as a focus of confrontation between 'two winds', one from above –aiming towards the exploitation of land as a mere resource for consumption and the concentration of wealth– and one 'from below' claiming 'tierra y libertad' [territory and liberty]: a wind that 'born below the trees, will come down from the mountains; it whispers of a new world, so new that it is but an intuition in the collective heart' (Marcos, 1994: 297). Beyond any idealisations of the Zapatista struggle, it is the strategic significance and political use of digital technologies by EZLN that is addressed as indissociable from 'tierra y libertad' and that 'collective heart' to which Marcos and the third section of this chapter refer.

Following ancient inequalities in territorial distribution, access to natural goods and respect for cultural difference, the displacement of indigenous peoples from their

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[47] As it comprises Tsotsil, Tzeltal, Tojolabal, Chol, Mame, Zoque and mestizo communities.

territory has been a constant practice enacted throughout more than 500 years in Mexico. Territories have been seized from peasants and indigenous peoples, either illegally or exploiting the gaps in agrarian and land tenure laws, always spearheaded by racism and the inequalities it fosters. Pushed deeper and deeper into lowland rainforest, Maya communities in Chiapas were increasingly excluded from political and economic life, and the territories they inhabited further exploited and depleted (Marcos, 1994, 2003; Estrada Saavedra, 2007). In this context, the Zapatistas – mainly Mayan indigenous communities and urban Marxist and middle-class revolutionaries [Tsotsil, Tzeltal, Tojolabal, Chol, Mame, Zoque and mestizo] –gained national visibility on the 1st of January 1994, occupying prominent towns and municipalities in the state of Chiapas, the poorest state in Mexico. The guerrillas initially relied on military skills and the Maoist-inspired programme of action developed by the military command of the rebellion (González Esponda and Pólito Barrios, 1995). Once the EZLN was forced back into the mountains by the military strength of the Mexican state, threatening to eradicate the uprising, the movement and allied activists resorted to information technologies as a main strategic component. The EZLN developed an international information campaign that was retransmitted through the Internet[48] thanks to a network of activists and NGOs from within Mexico, the US and Canada (*redes de solidaridad* [solidarity networks]) (see Rovira, 2009). The campaign and the network established 'gave constant visibility' (Rovira, 2014: 388) to events regarding the Zapatista indigenous communities and achieved international pressure against the Mexican government offensive.

The EZLN later on consolidated itself as an anti-systemic heritage retrieved by new movements standing against neoliberalism, and more concretely against corporate media. Its innovative operation on the Internet inspired new efforts based in the US and Canada (such as the *Indymedia* project: a network of independent media, which developed along the lines of the battle of Seattle in 1999 [Wolfson, 2009, 2012]) and other contemporary social movements (see Castells, 1996; Cleaver, 1998; Dyer-Witheford, 1999; Juris, 2008; Wolfson, 2009, 2012). The Zapatistas example gave activists interested in new media and the Internet an extraordinary case: a 'framework and a language that catalyzed the development of a new type of social movement that had media and communications at the core' (Wolfson, 2012: 152).

As the report *The Zapatista Social Netwar* in *Mexico* commissioned by the Pentagon to the Rand Corporation, a US think tank, stated, the innovation of the Zapatistas in

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[48] Soon after the Zapatista uprising, one of the first solidarity networks that supported the diffusion of information regarding the rebellion was a website created by Justin Paulson, a student at Pennsylvania's Swarthmore College (Rovira, 2009).

using the Internet consisted of being 'an information-age prototype of militant social netwar', more precisely 'an emerging mode of conflict (and crime) at societal levels, involving measures short of traditional war, in which the protagonists used networked forms of organisation, and related doctrines, strategies, and technologies attuned to the information age' (Arquilla et. al. 1996: 9). It was thus a case in which 'a violent insurgency in an isolated region mutated into a nonviolent though no less disruptive "social netwar" that engaged activists from far and wide and had both national and foreign repercussions for Mexico' (Ibid: xi). Others argue that the Zapatistas 'engaged in a war of words, fought primarily with communiqués rather than bullets, giving voice to the victims of neoliberalism' (Routledge, 1998: 253), without emphasising the use of the Internet. While another account claims that the Zapatista use of the Internet is one of those 'radical initiatives that cannot be inscribed in the mainstream public sphere […] driven by discursive struggle as opposed to a search for consensus' (Bakardjeva, 2009: 91). However, the persistence and use of the Internet by the insurgency have much more to do with their own experience of the political than with information networks, communiqués or bullets. In the same way the 'EZLN was not a "wired" indigenous army' (Arquilla et al., 1998: 23), the insurgency neither had information technologies as fundamental feature or mediation of their political unity nor expressed static guidelines and principles of organization for technological endorsement.

Despite having a 'superb media spokesman', the insurgency 'did not have their own laptop computers, Internet connections, fax machines, and cellular telephones' (Ibid). Such devices 'were in the hands of most transnational and some Mexican NGOs— and they used them to great effect for conveying the EZLN's and their own views, for communicating and coordinating with each other, and for creating an extraordinary mobilization of support… (Arquilla et. al., 1998: 23). As Todd Wolfson (2012) has explained in a particularly clear way, 'it was the use of new media tools principally taken up by activists and NGO leaders outside the EZLN that marked the movement' (Wolfson, 2012: 160-163) in the eyes of an international audience. If the movement is understood as constituted by 'three layers': the *indígenas* or indigenous peoples: *Tzeltales*, *Tsotsiles*, *Tojolabales*, *Choles*, *Zoques* and *Mames*; EZLN´s members 'from educated middle-class *Ladino*[49] backgrounds'; and the 'most networked layer' constituted by local and transnational NGOs, it was the 'top layer' (Arquilla et. al. 1996) of NGOs and technological devices that brought about the possibility of having huge visibility.

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[49] A mixture of native American and European ascendancy, more generally Spaniard.

The establishment of a support network and the visible permanence of the movement, mobilising supporters in order to dissuade the Mexican government from taking more violent action, was possible in the encounter between such top layer of the mobilisation, the Internet and the other two layers of indigenous and ladino members. Then, technological mediation allowed both NGOs and the EZLN to take advantage of already existing relations of solidarity and to create new ones receiving increasing support from beyond Chiapas. Nevertheless, the use of the Internet was always politically grounded in 'a process that comes from a clear political line, based first and foremost in the interests of the peasants of southern Mexico, and consequently allows for an adaptable strategy of confrontation' (Wolfson, 2012: 160-163). This clear political line is expressed in the claim for 'Tierra y libertad' [land and liberty]. In other words, NGOs and civil society's support was included within an already and to a large extent consistent process of political understanding that had territory[50], and autonomous self-government [liberty] at the core of its efforts.

It is in relation to territory and liberty that the historic and spatial development of Zapatismo in Chiapas comprehends a complex set of events and multiple encounters. First, the organization of Mayan communities in the jungle, the on-going relationship with the Catholic church and liberation theologians (Estrada Saavedra, 2007), through the arrival in indigenous communities of urban Marxist and middle-class revolutionaries coming from Northern Mexico. Then, the translation and mixture between western revolutionary traditions and originary Maya roots (Bartra, 1998): a sort of 'Marxist/Mayan synthesis' in conflict and armed confrontation with the Mexican military. And finally, the encounter and change of strategy in the conflict against the Mexican government and the use of information networks (Wolfson, 2012: 160). By the 90's the Zapatistas were listening to and *talking with* variegated expressions of a common concern against neo-liberalism and a common understanding of humanity expressed in eleven demands: work, land, housing, food, health, education, independence, liberty, democracy, justice and peace (*trabajo, tierra, techo, alimentación, salud, educación, independencia, libertad, democracia, justicia y paz*)(Comandancia EZLN, 1993; see Ceceña, 2004).

In this context, the Internet was more of a dialogue, coordination and organization opportunity between the community in rebellion and the support coming from outside organizations and activists. The shared experience of being together as a community

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[50] The use of the word *territory* instead of *land* in this chapter stands for the difference between the valorisation of space as embedded and intertwined, co-produced, with multiple forms of life and experience. This means that cultural forms and practices as well as multiple embodiments are seen as correspondent to territory as a co-production between human and non-human subjects and its multiple expressions of interaction.

as such did not rely on technological support but on a form of living together grounded on and translated into territory. Paying more attention to the latter, contrary to Peña's digitisation and #YoSoy132 (Chapters 5 and 6), the constitution of the Zapatistas as a political process and collective subject was not due to its digital networked character, which was only acquired after the uprising and the advent of the Mexican government´s response. The collective practice was constantly formed and transformed through decades of everyday interactions and organization that goes back to the years of land distribution, *ejidos* formation from jungle settlements, extra communitarian solidarity networks (Estrada Saavedra, 2007, Renard, 1997) and the intersubjective translation – respect and dialogue – that started in the 70´s (Bartra, 1998; García de León, 1995; Renard, 1997). All that was finally expressed to world audiences as a visible collective voice on the 1st of January when 'it was spearheaded by the triggering of their arms' (author´s translation Bartra, 1998: 9, in Marcos, 2002).

Looking at the *campesino* (peasant) and *indígena* (indigenous) or native American roots obliges us to consider the multiplicity of interactions and meanings embedded in territory and thus the use of the Internet as dependent on the social and political context of the Zapatista political base. In this light, the importance of *territory* is not as an economic factor but as the 'physical basis for community–for having a sense of community and for being able to endure as a community' (Arquilla et. al. 1998: 25-27). As we will see in the next section, territory has been a constant political endeavour amongst the agrarian and native peoples of Mexican society, still present as an imperative in twenty first century struggles and persistently linked to the Mexican Revolution and the process of land distribution as preservation of agrarian communities and the recognition of their right to the usufruct of land, officialised and embodied in the post-revolutionary Mexican state. Territory has been the main driver of indigenous and peasant political communities throughout centuries in Mexico as it signals the interpersonal character of communitarian life (with a long history among Mesoamerican peoples) and the possibility of autonomous self-government and not exclusively private appropriation or individually based usufruct of land. As the following two sections will show, through the aim of attaining territory, the Zapatistas reiterate not only a shared representation of the earth and territory among Maya communities and other native American peoples but also the concrete awareness and presence of the earth as foundation and index of interpersonal encounter (or personal mediation of social interactions) and cosmological and politico-ontological awareness and experience of community life.

7.2 The political importance of territory in Mexico: Heritage and foundation of originary and agrarian communities and their colonial, pre-revolutionary, revolutionary and post-revolutionary struggles for community basis

The *Zapatista* movement in Chiapas has been but one of many rebellions in the last decades across Mexico and many countries of Latin America that fight against the private appropriation of communal territory. In this context, as Carlos Rodriguez Wallenius (2016) explains, originary accumulation and 'accumulation by dispossession' (Gregory, 2006; Harvey, 2003) have converged in the will to obtain extraordinary profits and comparative advantages of rent over land. Under common agreement between national and transnational corporations and local and national governments, such private appropriation has generated great confrontation between two ways of cultural and socio-economic construction of everyday spaces or ways of territoriality and 'directionality for specific forms of local development' (author´s translation, Rodríguez Wallenius, 2016: 19). On the one side, stands a neoliberalisation process and, on the other, the awareness of territory as fundamental for constructing community – as a living together in which all its parts and members are fundamental within a shared everyday experience and intimacy that in this case includes the territory and looks to respect and use the goods provided by the earth as part and members of the collectivity instead of appropriating and exploiting them as mere resources.

In Mexico these confrontations and rebellions involve a colonial past, the exploitation of natural goods as resources for the reproduction of capital in foreign metropolis and markets, a 20th century marked by the *hacienda*[51] system and plantations, other peoples uprisings and of course, the Mexican revolution (Bartra, 2015). Thus, by the beginning of the present century in Mexico, regional and local movements underpinned the 'communitarian defence of the territory' and at least 60 cases of confrontations in this respect had been fully documented. As mentioned, these confrontations have meant the opposition between a form of territorial appropriation bonded to corporations, governments, profit, dispossession and rural territories destruction and another one, that defends self-determined forms of life 'bonded to the earth, agricultural and livestock production, nature, culture and communitarian organization' (author´s translation, Rodríguez Wallenius, 2016: 25).

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[51] Huge areas of land owned by one family or landlord who employed peasants under extremely poor conditions and holding intrusive prerogatives generally under a scheme of perpetual debt as the wage was never enough to pay for the employee's debt contracted with the owner due to food and basics for living or even tools for working.

All these processes are part of a broad range of social struggle expressions that transformed, little by little, the axis of peasant struggles in our country, which went from agrarian vindications and access to land in the 1970´s decade, through the appropriation of the productive process by peasant economic organizations in the 1980´s and through the emergence of the indigenous agenda and demands for autonomy strengthened by the Zapatista insurrection in the decade of 1990, in order to arrive at the beginnings of the 21st Century, when the concurrence of various peasant and agriculture and livestock producer organizations (gathered in the movement 'El campo no aguanta más' [Land cannot stand any more]), tried to influence agrarian policies (Ibid).

The contraposition of two ways of enacting space and constructing territory has a meaningful and outstanding contrast which is crucial for understanding the non-technological mediation of the Zapatista communities: land is crucial not as a resource but as a fundamental bond and basis for communitarian existence. Within this understanding multiple forms of life seeking autonomy and organized contestation against capitalism have taken place. From among these forms, the *Zapatista* movement in Mexico is the most visible one as it occupied territories, reinvigorated its indigenous roots, called for autonomous self-government and was supported by a dense and multiple set of local and international NGOs, activists and civil society members world-wide. In such conditions, the Zapatistas were able to push forth demands in accordance to the language of 'contemporary demands in modern societies: democracy, liberty and justice' and in a context of 'democratization processes of the end of the century' (e.g. the end of socialism in Eastern Europe) (author's translation, González Esponda and Pólito Barrios, 1995:102). Nonetheless, before visibility and innovation regarding a Western public sphere and informatics, the earth was fundamentally important not only for the Zapatistas in Chiapas but also in the history of Mexico as a country and the popular expression that brought about the Mexican Revolution and the institutionalisation of certain territorial vindications.

As James C. Scott (1994: ix) has asserted, 'the Mexican revolution… was a constellation of local revolutions that had taken root well before the new state was created'. Despite not having a modern national overarching sense as a state community, these local revolutions also expressed how before, during and after the Spanish colonial period territory has been fundamental as heritage to originary communities, 'the sign (prenda) of their sacred relationship with nature, their gods, their ancestors and their descendants' (author's translation, Rhoux, 2011: 14). This is a relationship that has 'persisted in the imaginary of [those] communities even throughout the colonial viceroyship, surviving in the Indian laws and the myths, rituals, celebrations and the safeguarding of primordial titles over land' (Ibid).

During the revolution, despite the fact that villagers supported different revolutionary factions[52] and adopted their proposals of territorial reform 'interchangeably in their continued struggle over land' (Baitenmann, 2011:3), that sense of the importance of the territory was still present and embedded in local struggles, as it would become clear in the institution of the Mexican *ejido* – collective territory, indivisible and without possibility of being sold or individually inherited and distinct from the Spanish *ejido* and the English *commons* (see Esteva, 2013: 174) – and dominium over the natural goods within the national territory as heritage of the Mexican people. Crucially, during the revolutions and 'despite important philosophical, regional, ethnic and class differences, agrarian reform programmes were remarkably similar' as they 'all retained key elements of the colonial criteria for the *pueblos de indios*, and they were based on nineteenth century procedures for the disentailment of communal land' (Ibid). Such colonial criteria and nineteenth century procedures in turn responded to the legacy of indigenous and agrarian communities' struggles for territory as symbol and foundation of communitarian socialities.

Despite the communitarian character of territory being represented in the Republic of Indians (the juridical form of the Spanish monarchy that recognised rights over land to originary communities), the Borbonic Reforms in the XVIII Century retrieved delegated administrative control into a more centralised form of government and accumulation by dispossession (Vásquez, 1999; Florescano and Gil Sánchez 2003). In the nineteenth century, territory as heritage of these communities was further neglected by liberal constitutions, thus always encountering peasant and indigenous resistance but to nevertheless be continued throughout the governments of Benito Juarez[53] and Porfirio Diaz.[54] As Rhina Roux (2017: 43) has emphasised:

> Before the liberal project of creating an atomised society of individuals united by
> the impersonal bond of the market and the abstract rules of law, agrarian

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[52] Amongst the most representative factions were the Constitutionalist faction of Venustiano Carranza and Alvaro Obregón, Francisco Villa in the North of the country with his División del Norte [Northern Division] army, and Emiliano Zapata in the South of the country. Each faction had a different emphasis around agrarian reform and state government.

[53] President of Mexico from 1858 to 1872. He was a lawyer and identified himself as a liberal politician. Implemented liberal reforms based on individual rights and the rule of law, nationalised the wealth of the Clergy, waged the War of the Reform (1858-1860) against Conservatives and defended the country against the Second French Intervention in Mexico (1862-1867). He implemented the disentailment and disamortisation of eclesiastical and communal lands and properties.

[54] General and politician, was president from 1876 to 1880 and from 1880 to 1911 when overthrown by the Mexican Revolution. He imposed modernisation and favoured foreign investment according to European, particularly French, standards, expanding train lines and promoting the concentration of land ownership in the form of privately-owned *haciendas* (plantations, mines and/or factories) property of estate-owning *hacendados* (for a general overview see Coatsworth, 1981). During his government the general conditions of the peasantry decreased under an accelerated and generalised scheme of accumulation by dispossession.

rebellions put forth once and again the redeeming myth of a community whose symbolic representation was the earth. In that symbolic order the earth did not only mean a natural good as guarantee of material self-sufficiency or a mode of production. In the conservation of the earth and the commons that the agrarian rebellions impelled was comprised the resistance of a world of life that rejected to be dissolved: with its mesh of traditions and uses [costumbres] and moral rules, its sacred relationship to nature, its ludic experience of work alien to a puritan *ethos* and a notion of time linked more to the rhythms of harvesting than to a lineal time of "progress". But it as well comprised the agrarian communities struggle for rights and jurisdictions' (author´s translation, emphasis in the original, Roux, 2017: 43).

Therefore, despite the opposition between two forms of life, communities did not reject state forms of government *in toto*. Moreover, a practical arrangement resorting to official and revolutionary regimes was evinced as looking to guarantee local territorialities (Baitenmann, 2011) and thus the existence of communities. As these communities tried to keep territorial political jurisdictions, the struggle for territory often resorted to whatever land tenure rights, revolutionary regimes support or official centralised mediation that promised an opportunity to maintain their territories, manage their goods and deliver justice. So, while demands and struggles were generally accompanied by demands for political autonomy, they could also make use of liberal institutions. For instance, once the Republic of Indians disappeared, 'the retrieval of the *ayuntamiento* [town hall] of liberal provenance was an early example of the resources used by agrarian communities to preserve their identities, territorial rights and forms of government' (Roux, 2017: 44). In a similar way, Spanish colonial institutions would be used for the same purpose during and after the Mexican Revolution.

Overall and most emblematically, the persistence and insistence of communitarian socialities nurtured the inclusion within the Mexican Constitution of 1917 and the Mexican State order of 'three principles that stemmed from the Spanish monarchical tradition of public law' (author´s translation, Roux, 2017: 47). First, the agrarian communities' right to usufruct the territory and its natural goods under the form of *ejido*. Second, all lands and natural goods within the Mexican territory belong to the state. And third, 'the "direct dominium" of the nation "inalienable and imprescriptible" (which is to say an absolute, exclusive and perpetual right) over minerals, salts and oil' (author´s translation, Roux, 2017: 47). From this perspective, 'the originality of the Mexican Constitution of 1917 was that it took land and commons out of the circuits of market exchange' (Roux, 2017: 37) through Article 27, combining a shared sense of

communitarian socialities with useful institutions from the Spanish monarchical tradition of public law.

As villagers supported a national administration that mediated and formalised their territorial claims, and employed agrarian laws and procedures in a practical manner, they 'actively sustained the construction of a national agrarian bureaucracy' (Baitenmann, 2011: 22-29). This ended up weakening the ideal upheld by revolutionaries like Emiliano Zapata, after whom the EZLN took its name, and its famous claim for 'Tierra y Libertad', which supported a more autonomous form of national organisation based on municipalities, a decentralised governmental system, and equity in territorial distribution rather than restitutions (see Brunk, 1995). On the contrary to the latter, while 'regulating villagers' participation in land reform, federal administration 'claimed legislative authority, invaded the sphere of the judiciary and greatly restricted the role of municipal and state governments, all elements that would characterise Mexico's agrarian reform for the next 70 years' (Baitenmann, 2011: 19).

Defining whether and to what extent the role of such manoeuvre, the allocation of a centralised management of this rich sense of territoriality and communitarian life under a state form, has in the end been beneficial to peasant and indigenous communities or not is something that cannot be discussed in detail here. However, it is not only a matter of the extent to which the agrarian reform either brought about contention to capitalist exploitation or co-optation of popular claims and demands into a state apparatus that centralised the administration of agricultural production, eventually consolidating its presence as a capitalist actor in disfavour of peasantry (see Nugent and Alonso, 1994: 211-212). It is more about the concrete political experience and claims for territory that found themselves eventually mediated by an ensemble of technical positions (constitutionalism, liberalism and agrarianism), which intended to bring stability to the country but never achieved this on the basis of an organisation of autonomous municipalities and communitarian socialities.

Autonomy was progressively limited under a Federal government that centralised agrarian law and its executive and judiciary scope. In the decades following the Mexican Revolution and as the Federal government consolidated as a centralised government, dissent would be co-opted, excluded or annihilated in a very specific manner (see Pansters, 2012). However, the advent of the Mexican Revolution signalled the presence of an, although dispersed, shared sense of communitarian life grounded on territory. The revolution hindered the destruction of a form of life oriented towards preserving territory, autonomy and its set of sacred relations; a form that would be crucial in the recognition of territorial distribution contained in Article 27 of

the Constitution of 1917 – foundation of the legitimacy and sovereign authority of the Mexican state and post-revolutionary elites' legitimacy (Roux, 2017) – and that is here proposed as crucial for politics in a context of expanding technological mediation.

Territory in its communitarian importance for the Zapatistas is correlative to the history of Mexico as a nation. Although national and official rituals and symbols regarding the revolution were put in place and reiterated along with an increased centralisation of government and the consolidation of a hegemonic party, these could only mean that self-awareness, decision and self-government were never achieved as a nation beyond or before official mediation. Territory in turn, points directly at the concrete experience of communitarian efforts in Mexican history. On this basis, the following section analyses territory as a historical, existential and communitarian bond and concrete experience of the political and as it is displayed by the Zapatistas. This, in order to understand how territory, autonomous self-government and self-awareness through philosophy have constituted the political for the Zapatistas and have limited the instrumental character of the Internet.

7.3 *Maya* roots of Zapatismo in Chiapas: Intersubjectivity, territory and the political

While land reform and territorial claims (tierra) had persisted throughout the centuries finding legal recognition in the Mexican Constitution of 1917, autonomy was severely limited and postponed under a centralised government and international political and economic pressures. More recently, with the reform to Article 27 of the Mexican Constitution, which preceded the signing of NAFTA in 1992, territory as basis of communitarian existence and its legal form as *ejido* have come increasingly under threat. Since then, the Zapatistas have called upon the Mexican and world population to rise up against capitalism and the depletion of the earth, working towards 'a world in which many worlds fit' (see Klein, 2001). This section analyses, through the notion of 'intersubjectivity' (Lenkersdorf, 1996, 2006) and towards an understanding of 'the political' in relation to instrumentality, the importance of territory as the earth and 'Our Mother' and with it, its politico-ontological character for the Maya peoples that comprise the Zapatista rebellion. This section underscores territory and the earth, instead of technology, as sign and condition of possibility of community life and collective practice as it is the foundation and index of interpersonal encounter (or the ongoing symbolic mediation of social interactions) and cosmological and politico-ontological awareness and experience of community life. In so doing, the section shows how the equality of all things as assumed in Maya cosmology offers an

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alternative view to the instrumental conception of beings and a different understanding of the political in relation to the Western category of technology.

Autonomy for the Zapatista rebellion in Chiapas has appeared as correlative to an on-going effort of intersubjective self-awareness informed by Maya cosmology and philosophy and rooted in the practice and language of communities based on territory: a political ontology (Ceceña, 2004; Lenkersdorf, 2002). Such self-awareness means life and decision as a community are defined not by a third party but by a practice of intersubjectivity (Lenkersdorf, 1996, 2006), a living-together, not to be confused either with any kind of isolationist effort or identified straightforward with a Western ideal of democratic non-hierarchical or horizontally perfect decision-making process constituted by rationally aware and critical subjects. The Zapatista communities and the Maya peoples are not here offered as an example of a utopia or a reservoir of hope. The Zapatistas are interpreted (and in many ways speak) here as an invitation to listen and try to understand what keeps coming back as political, which in this case is developed and valued as bonded to territory and the concrete constitution of community experience.

Concerning territory and philosophy for the Zapatistas, in an effort of translation from a Maya sense, from a *Tojolabal* way of life, the condition of possibility for liberty is 'the existence of the free community in which we are integrated' (author´s translation, Lenkersdorf, 1996: 85).

> We enjoy thus liberty thanks to communitarian conditions that make us free. Community, on its behalf, needs space in a specific place that bonds us to the soil that is Our Mother and where our ancestors passed away and keep visiting us. There is no liberty thus, if there is no place to extend roots that give us life, community and support' (Ibid).

As above, in this experience Our Mother is the soil, not only a specific location but also the multiplicity of interactions it entails, which linked to collective memory, tradition, practice and flesh is a bond that makes possible community itself. Liberty means to live in community and thus bonded to Our Mother. Territory, experienced from a Maya cosmological and philosophical perspective as Our Mother means life, community and support. Territory, lands, waters and the multiplicity of beings and interactions are comprised in Our Mother who is 'flesh of our flesh' and offers the possibility itself of existing; it nurtures us (Ibid). The earth provides food, which cosmologically and traditionally is associated with maize, of which our body has been made of (see Florescano, 2000). Therefore, Our Mother offers food and food is

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present as our supplier, our flesh and our blood. In the same way, the earth provides a place to extend roots and form a community, literally living together with other members while being formed with maize or the food offered by Our Mother. As a consequence, when Tojolabales 'see the milpa[55] [their agricultural practice], they do not think of exchange values or use values, but in a vital relationship as the one between brothers, partners or families' (Lenkersdorf, 1996: 110). La Milpa and family are a vital relationship not limited to an economic production or exchange in terms of resources. Instead, joy comes from co-existence and responsibility, from a particular form of use. Family has no exchange value or use value, family is used not in utilitarian terms but as joy (Ibid). This is why '*la tierra* [the earth, territory and soil] is indeed our mother. This is why it is never a commodity you can sell or property you can accumulate' (Ibid: 112).

Such an understanding from *Tojolabal* philosophy is a common one among Maya peoples, informed by its cosmogonic tradition (see Florescano, 2000). Although in many aspects similar to other Mesoamerican cultures, Maya philosophies and practices vary depending on each group and of course have not been immune to urban and Catholic practices and ideas (see Estrada, 2008; Florescano, 2000; D'Alessandro and González, 2017; Pitarch, 1996). However and overall, philosophy, myths, rituals and agricultural practices conciliate Maya groups with the earth and nature. For instance and in a similar way to the Tojolabal peoples, Tzeltal territories are experienced and constructed in accordance to their agricultural practice that is la Milpa, entailing human and non-human beings (D'Alessandro and González, 2017: 271). As an important cosmogonic element for many originary peoples in Mexico, this agricultural practice of la Milpa, in the case of the Maya peoples, is complementary with oral tradition as a way of relationship with nature (Ibid, see Estrada, 2008) and entails a very particular linguistic structure. For the Maya peoples, and more emphatically for some Zapatistas, the close relationship to la Milpa is philosophically meaningful as it is related to that which is sacred and to the equality in the sacred that remains in their language. Despite some gaps in practice this sense of equality or sacredness keeps coming back and pushing forth in their vindications of everyday life, as we will see in the following lines.

What Carlos Lenkersdorf (1996: 106-110) calls 'intersubjectivity' helps understand the idea that 'the milpa has much more value than its use', that 'its heart turns sad as our heart does when we are far away from our beloved ones', that 'it has thus, feelings that make it transcend commercial value, just as our family has no utilitarian value

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[55] Mesoamerican agro-ecosystem mainly comprising and combining maize, beans, courgettes, chile and others altogether in the same area.

[…] without rejecting the fact that they [our beloved ones] are useful because we help each other' (author's translation). Here, intersubjectivity is 'the starting point' for Tojolabales, which means, in linguistic and social terms, the absence of objects and the plurality of subjects (as 'agential subject' and 'experiencing subject') in a dialogical structure of meaning and enunciation in which two or more acting subjects always recognize themselves as actors (Ibid: 110-117). In linguistic terms, for instance, the proposition 'I told you' would be enunciated in Maya Tojolabal as 'I told you and you listened', accounting for two agential subjects instead of one; while to say 'I saw the mountain' would mean something like 'I saw the mountain and the mountain had the experience of being seen' (see Lenkersdorf, 1996). Everything is a subject expressed in their linguistic structure as the absence of objects and the presence of agential and experiencing subjects. Those inanimate things from a Western perspective are recognised by the Tojolabales as having a relationship to themselves – as experiencing – and to others – as being agents. In social terms, from this philosophical stand 'human beings are not the only possible society, because there is nothing that does not have a *yaltzil* [a heart]' (author's translation, Lenkersdorf, 1996: 106).

Such an intersubjective understanding, linguistically and socially explicit, is common amongst Maya peoples (see Mentinis, 2006: 176, Paoli, 1999) and has been reiterated by the Zapatistas. For instance, as Xuno López (2015: 267) explained in a Zapatista forum, also recalling to other Maya peoples present, among the *Tsotsil* peoples, 'everything that exists has its *O'tan*-heart and all O'tan has W'otan, its guardian', and

> this notion of *O'tan* is one of the forms of our *sna'el k'inal* in our pueblos [towns]. S*na'el k'inal* is something like knowing the world [saber el mundo], meeting/getting to know the world, to comprehend it, understand it, recognise it, to long for it, to miss it, to apprehend it, knowing to be-exist in it, knowing to direct the word, knowing to live in the *ich'el ta muk'*-recognition-respect, knowing to listen, knowing to feel, being awake, being vigilant, being as guardians [estar de guardianes], knowing to correspond (author´s translation, López, 2015: 267).

From the *O'tan*-heart the *sna'el k'inal* unfolds, at the same time that the *O'tan*-heart unfolds as a form of *sna'el k'inal*. *Ich'el ta muk* appears as a mode of knowing and living in recognition and respect for everything as everything has *O'tan.* This is the seed-word [semilla-palabra] that is taught by current *Tsotsil* youngest elders [mayores-menores actuales] (Ibid). As López (2015: 269) continued explaining, 'our grandmothers and grandfathers also comment that, just as everything has *O'tan* and

Wo'tan, as well everything has *Ch'ulel*, which 'is like the spirit, the soul, conscience and language, it is being, that which on its own [de por si/naturally] exists' (author's translation). Different from an instrumental understading in which things are objects designed or meant to follow another being's specific programme and achieve specific functions as their own end, each and every thing in the universe has its Ch'ulel. On the contrary to the rush of digitisation to relocate trust from human mediation to machine mediation (Chapter 5), recognition and respect for every single and whatever being speak of a fundamental and immediate interaction and trust among a multiplicity of beings and worlds. 'With the existence of many *Ch'ulel*', Tsotsil people 'consider that a pluriverse *Ch'ulel* exists' (Ibid). 'From this notion our world was ordered', asserted López as he emphasised how 'the sacred is co-substantial to our humanity', as it is about 'matter and spirit amalgamated' and about all that exists being sacred (Ibid: 271).

Despite being sometimes idealised by observers such equality of subjects in spoken language and philosophy has a correlate in collective decision-making and the capacity to listen and dialogue with non-Maya practices. Such a sense of belonging and existence bonded to the territory and the specific set of interactions maintained with nature and other members of society, from a Maya perspective, emphasises *in practice* the importance of community and principles like patience, listening, direct participation and decision through a 'culture of intersubjectivity' and 'otherness' (Ceceña, 2004; Lenkersdorf, 2002). This practice has guaranteed cohesion among the originary peoples and the EZLN, and is usually one of the main focuses of attention and sympathy from outside observers and supporters (Ceceña, 1997). However, support and sympathy even in the far-reaching and close relationship with local and transnational NGOs is not the same as living within the cultural understanding and practices of these indigenous and autonomous communities, where horizontal structures of participation generally accounted by observers are combined with vertical hierarchical ones and the 'essential elements' of the rebellion are not limited to 'democracy, autonomy, communications, or networks' (Wolfson, 2012: 163, also see Estrada Saavedra, 2007; Mentinis, 2006) but consistently linked as well to the inhabitance of a territory as a community, with all the complexities it entails (e.g. conflict and imposition of foreign forms).

Regarding such complexities and calling attention on the expansion of capitalism, López has described how 'this mode of *sna'el k'inal* [the notion of *O'tan*] is increasingly less common' as '[capitalism] has taken away *Ch'ulel* from all that exists and has turned it into an object, a thing, a commodity' (Ibid: 269). However, he underlines, 're-cognising [re-conocer] again the sacred in everything that exists

means to take back our sacrality, our humanity, to hearten-us [*corazonarnos*] and unite-us[56] [*hermanarnos*]' (Ibid: 271). To hearten [*corazonar*] in this sense can be understood here as 'original con-senting' and 'becoming other of the self' (Agamben, 2009: 36) as feeling/sensing together and being together. This is the vision that has been shared by the Tsotsil and Maya ascendency, that has been present in the Zapatismo in Chiapas and that is now part of a decolonial critique of the Internet through the idea of the political. In this light, the contrast is clear between instrumentality or the technological character of technology and Maya cosmological tradition: the former objectifies, hides interactions and fragments knowledge while the latter recognises and makes visible the interactions between – human and non-human – subjects drawing together and sharing knowledges. Even in the case of the creation of for instance, cooking utensils and ceramics or fabrics, Maya cosmology recalls the notion of *corazonar* or to hearten with something (Ibid: 274-6), displacing the understanding of technology and the colonial form of 'thingification' of beings (Chapter 2) through an idea of *parejitud* (equality/evenness). As with other "human" members of the community, it is possible to *corazonar* with non-human beings one has given form to and shaped and this has to do with politics and territory, metaphysics and philosophy.

As a Zapatista member asserted: '(…) the future of the EZLN is not defined in military terms but in political terms. We are not worried about the enemy, we are worried about how we are going to define a new relationship among partners' (author's translation, Ceceña, 2004: 21). Along with this emphasis on partnership over enmity, in the case of the Zapatistas there is a basic experience of the equality of all things and of collectivity that must be considered as underlying their political experience. If the political, inspired in a Schmittian definition, is an event constitutive of 'meaning and order' in which the self emerges through experience and reflection from the encounter with the 'other', '[bringing] about the "existential affinity" of those "who just happen to live together" [Schmitt, 1993: 210]' (Ojakangas, 2007: 210-212), the Maya *sna'el kinal* (stating that everything is alive and has a heart) and its mode of living in *ich'el ta muk*-recognition-respect refer precisely to the decision and experience of living together that is constantly present in linguistic and social terms.

However, instead of a Schmittian emphasis on otherness as brought about by enmity, the political here has to do with the experience of encounter and how a collective

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[56] Here an english translation feels inadequate but tries to express something Spanish language can still express in the reflexive sufix –nos which means to act on oneself. Again, Giorgio Agamben has written on how this desubjectification and subjectification is related to a different understanding of the notion of use, as it used to be expressed in the idea of *Chresis* (see Agamben, 2015).

decides and defines itself (in evenness with all that exists) as being together, open and in respect towards every 'other'. Then, this 'other' that appears and is recognised can be seen as the friend: who 'constitutes the political' and shares no positive or predicative identity but the pure fact of existing and the 'original con-senting' that the friend exists (Agamben, 2009: 36). From the latter perspective politics appears as a 'becoming other of the self' (Ibid: 34-35) and not exactly a becoming a self from the experience of the other. This flexibility in the interpretation of the political, in terms of enmity or friendship, does not exclude one another but speaks of the political as encounter/openness at the level of facticity and the emergence of a collective self from that experience and reflection. As Xuno López (2015) reminds us again:

> As everything has O'tan, so that [sic] exists a great O'tan that can transform into *Ko'tantik* or *Ko'ontontik* [in Tsotsil language] – something like "our heart of all of us [todas y todos nosotros]" (our heart). The other way of making-us [hacer-nos, as consituting a *we* as being together] and enunciating-us in a *kol-lek-tive*[57] heart [corazón *kol-lek-tivo*] is *ko'tanjo 'tik/ko 'tantikon* or *ko'ontonkutik* (Tsotsil), [which is] as well one type of "our heart-us [nuestro corazón nosotros]", but in this way of enunciating-us [enunciar-nos, enunciating a *we*] we exclude because we are excluded. We do not place everybody [todos y todas] because they do not hearten [corazonan, be in a collective heart] with us [nosotras y nosotros]; if they do not hearten with us, then they do not feel what we feel, do not endure what we endure, do not see what we see, do not listen what we listen to, do not fight for the same we [nosotras y nosotros] from below fight for (author's translation, López, 2015: 267-268).

As above, the way of interpreting and building upon equality in facticity is differential depending on the mode of living and 'corazonar' (heartening), it can be inclusive or exclusive. In this way, political ontology as the 'interpretation of […] collective existence' (Marder, 2010: 4) is a present matter among the Zapatistas, although it takes a different form and nuance in its explicit enunciation, be it cosmological and philosophical propositions and practices, or be it language and social traditions like agriculture. Based on this form of being together that comes from the persistent intuition that everything is alive and deserves respect and recognition, in contrast to instrumentality, a specific heart formation can follow, depending on the way we want to live together with everything that exists and more precisely with those who reject

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[57] As Xuno López (2017: 276) explains, *kol* in *Tseltal* and *Tsotsil*, from *kolel* and *kolelal* have a wide array of meanings and senses, referring to what in Spanish [castellano] would mean 'liberation, to free oneself, to unleash, to free off chains, to let go, untie, etc'. *Lek* refers in turn to what is 'dignifying, good, just, honest, simple, what is correct, goodness, virtue, gratitude, compassion, solidarity, kindness, what is useful, appropriate and convenient, adequate, healthy, nice and enjoyable, fun and pleasant, serviceable, the tasty and magnifique in quality' (Ibid).

the dignity and existence of all other beings, or even those 'who simulate to hearten' (author's translation, López, 2015: 268).

The latter case refers to all those who want originary peoples to delegate responsibilities, who want to take their place, to manage their affairs, to 'act as their guardians in all aspects of life as peoples' (Ibid), preserving coloniality as analysed in Chapter 2 and in close resemblance to the instrumental management and mediation of subjectification identified in Chapters 3, 4, 5 and 6. This is what has been interpreted by these same peoples as *domestication*, every time those who want to speak and act on their behalf 'plant their *stalel kuxlexal* (mode of life) in our heart, they place modes of feeling-thinking, of acting, of being-existing in our hearts and so we reproduce what they are and how they are' (Ibid: 268). A simulation that ends up deciding on and forming, through domestication as instrumentality, the indigenous subject according to another's end and interpretation of the world.

Such a clear differentiation and awareness of the way of being-together is an inquiry into the collective experience accompanied by the reiteration of equality in facticity and from which meaning and order arise in a specific form. As López (2015: 268-269) confirms,

> constituting us into a *kol-lek-tive Wo'tan* is as well to become a *kol-lek-tive Ch'ulel* and to become a cosmic-*kolektive Xch 'ulel wo 'tan*, so to speak, in guardian spirit-consciousnesses of all that exists. In this all that exists is included our own existence. To be vigilant, sentinels… each one in the place that corresponds to her but with feet, heart and eyes [from/on] the earth. It is a come-and-go… We enunciate ourselves from an exclusive-excluded *ko 'tanjo 'tik* in order to reconstruct, reincarnate a *ko 'tantik*, a new heart, an our-we-humanity [una nosotras humanidad nuestra, in which we walk *pajal-pajal* [as equals], in evenness as those women in our towns demand, in which there is *ich'el ta muk'*-respect and recognition to each one of its grandeur, its value, its importance, its being, its doing, its thinking and its existence (Ibid).

In the preceding lines, the experience of collective existence pushes towards becoming ethics, not as prescriptive points or specific norms of conduct but as a call for and embodiment in territory and community of a concrete and grounded encounter first, within an exclusive community and within and between each one of its members through awareness of what *is* (facticity) and the way in which tradition has preserved knowledge. But also, through the awareness of community's collective form and its distance from other modes of life, based on the awareness of a fundamental living together that is possible thanks to the equality of all things. Such is the correlate and

ground to the enormous effort and process of translation carried on for more than 30 years in the Zapatista organisation.

As Subcomandante Galeano (2017) explained at the critical reflection seminar entitled 'Los Muros del Capital, Las Grietas de la Izquierda' or 'The Walls of Capital, The Cracks from the Left' celebrated in April 2017 in Chiapas, 'as far as the Zapatista indigenous communities are concerned, collective work was not organized by the EZLN, nor by Christianity; neither Christ nor Marx had anything to do with the fact that, in moments of danger, faced with external threats, and for parties, music, and dance, the community in territories of the originary peoples becomes a single collective'. More than a contestation effort, the Maya roots of the Zapatistas play an important role in harnessing the negotiations and translations among discourses and practices across cultural and political boundaries, always embodied as communities. Zapatismo appears as a translation and mixture between western revolutionary traditions and indigenous Mayan roots (Bartra, 1998): a sort of 'Marxist/Mayan synthesis' (Wolfson, 2012: 160) and an intersubjective relation between Enlightenment, Christianism and Mayan cosmovision (Lenkersdorf, 1996). Nevertheless, such translation has had a strong political certainty from which to inquire into all that exists and the way in which it exists and that offers a valuable advice in order to better understand Western cosmology and epistemology from an outside.

In this light, three Zapatista well-known motifs, which question the instrumentality and objectification of a subject-object relation and the colonial/modern ideas of superiority of the dominant, become clearer: *A world in which many worlds fit*, as many political ontologies are always possible and ought to be respected as equal; *Commanding while obeying*, as a collective heart and the equality of all things translate into evenness in decision-making; and *All for all, nothing for us,* as there is no real object of appropriation and every thing corresponds to every other thing and in the end and in principle we are all equally sacred, we all come from Our Mother, enjoy each other and are potentially one heart, one soul and one community. In addition, the Zapatistas and their notion of 'walking while asking questions', inspired in an 'Other' cosmology presents an important diversion to what Ramón Grosfoguel (2012: 99-100) calls the "walking while preaching" of the Judeo-Christian, Western cosmology reproduced in equal measure by Marxists, conservatives, and liberals'. Instead of claiming to have a specific programme of action and established norms of conduct, Zapatismo 'moves forward "asking questions and listening" and thus their 'programme of struggle is a concrete universal constructed as a *result'* of a dialogue in recognition of pluriversality (Ibid). This means that the Zapatistas 'do not set out from an abstract

universal (socialism, communism, democracy, the nation, as floating or empty signifier) in order to then preach and convince all Mexicans of the correctness of this view' (Ibid).

Walking and living together, the Zapatistas have been fighting for territory and liberty in order to achieve community. Self-government and self-awareness are condition and tendency of their own existence as a community, while territory is experience and sign of the multiple interactions that arise from equality and the aim of living in recognition and respect. Thus it seems like a collective interpersonal certainty arises in their awareness of their commonality and persists in their bond to territory and the meaningful order that takes place and reiterates, although with varying intensities, this same certainty. The call for modernity and economic development has remained in the margins of the Zapatista communities despite being imposed in several ways and embraced to varying degrees. This, to a large extent, due to historical, social and economic circumstances beyond the control of these communities; but also, thanks to the cohesion and certainty that tradition and grounded existence and experience as a community have to offer. Accordingly, as already mentioned, instrumentality/coloniality involves tension with the Zapatista and Maya experience and political ontology. First, in terms of conceiving a technological object that is instrument without a heart, personality or dignity, which exists only in order to fulfil another being's end. And second, in terms of a systematic practice of delegating self-government to those who do not hearten with them or relying on external supports in order to constitute community, letting some other political group to decide over their coming to terms with (or managing) the multiplicity of interpersonal interactions, as the design of the Internet and its most recent use by government and activists in Mexico suppose, has still remained in the outskirts of the Zapatista communities.

Although increasingly pushing towards its penetration into Zapatista communities, delegation of self-government has been generally subdued by an experience of the political in which instrumentality and technology do not have a stable presence and, in contrast, can be profoundly put into question. Politics in relation to technology, inspired in the Zapatista experience and political ontology, can be understood as the pre-eminence of the political as a collective experience, not as a given or a constituted sphere of action or affairs, and the conditioning, redefinition or suspension of a technological character of beings, which corresponds to a specific different geography, political ontology and experience of the political. In contrast to technopolitical approaches, an 'other' idea of politics and technology does not assume two separate spheres of interaction: politics and technology. A critique of the instrumentality and colonial forms of the Internet rather calls into question technology,

in its being technological, according to the concrete experience of the political and its political ontology. In the following section, the way in which the Zapatistas have more recently used and thought of the Internet is analysed in order to show how from their own experience of the political have redefined each of the rationalities described regarding digitisation in Mexico (Connectivity, Open Data and a Single Digital Identity) and those embedded in the Internet´s design in the US (Global Connectivity, Free Internet and Personalisation of identity).

7.4 Redefining forms of coordination: A collective use of the Internet

Whereas the strategic imperative of autonomy and territory has demonstrated that the Zapatistas are not an example of 'coordination without politics' as they did not mediate their collective existence as a community with the Internet, the recognition of territory as interpersonal mediation (or its interpersonal immediacy and familiarity) and means and end of struggle has also contributed to a politico-ontological and decolonial approach to the instrumentality/coloniality of beings through the understanding of intersubjectivity and the consideration of the equality of all things. This section will detail how in addition to the contributions to a decolonial critique of the Internet, the Zapatista practice and more recent use of the Internet entails a redefinition of the rationalities described regarding digitisation in Mexico (Connectivity, Open Data and a Single Digital Identity) and those embedded in the Internet´s design in the US (Global Connectivity, Free Internet and Personalisation of identity).

As mentioned before, the rebellion has been paradigmatic for their use of information technologies, mainly the Internet, in gathering support, coordinating actions and diffusing information against capitalism and the neoliberal agenda. Strategic skills and savvy use of the media have proved fundamental for the Zapatista organisation in their most visible facet that started in 1994. More recently, as many Zapatista members have asserted, a crucial motivation for using the Internet within the communities has been to be informed within and between *municipios autónomos* [autonomous municipalities] about what happens beyond Zapatista territory and mainly about the grievances committed against other peoples across the world in the name of capital, in addition to establishing solidarity with those peoples (personal communications).

In 2014, once the organisation noticed that commercial media copyrighted information on the organisation and offered these media's interpretation of the events but not the Zapatista voice, they decided to organise their own media: *Los Tercios Compas*. Instead of media, which in Spanish is *medios* and in terms of portions means "halves"

(as in one half or half an hour, each of two equal parts), they used *tercios*, which would mean "thirds" (as in one third of an apple or each of three equal parts) in addition to *compas*, short for *compañeros* or partners (Galeano, 2015). Los Tercios Compas stand for the use the organisation does of their own information and diffusion appliances, describing them as those thirds that are partners (Ibid). Tercios Compas is an alternative to mass media and an option for information to become legible and partner, not a worker under the sign of commodification. The communities required journalism that performed investigation and analysis, so scarce in mass and commercial media, as well as avoiding third parties mediation of their voice to the world, so the Tercios Compas were the option. They wanted to speak for and by themselves to other communities and groups within and beyond the Zapatista territory. They recorded events and information to diffuse and share with those who sympathise with the movement and the general public and to allow Zapatista members to take a focused glance at the many events that take place between them and other sectors of national and international society. With Tercios Compas the Zapatista organisation took over the administration and publication of the website *Enlace Zapatista,* [58] where they publish communiqués, events and calls for participation in events. More recently they have produced and presented films at their own film festival *Puy ta cuxlejaltic* in Chiapas (see Comisión Sexta, October 2018).

The collective use of the Internet has maintained thus a shared political meaning and orientation within the framework of the organisation. In a similar way, the understanding of and reflection on the Internet corresponds in many ways to such political orientation. Paradigmatically, Subcomandante Galeano (2014) (former Subcomandante Marcos) when talking to alternative and free media has described the Internet as a battlefield. A notion that has been alluded as well in more recent events like CompArte Cybernetic Edition in 2017. Moreover, informatics are the means of globalisation to expand, to conquer the world as a vast territory and administrate it; all languages are to be translated to that of informatics [think of Open Data] (Marcos, 1999). In addition, contrary to understandings of the Internet as a new public sphere or taking for granted its characterisation as essentially open and free or potentially democratic, Galeano and the Zapatista call have emphasised its conflicting traits and the necessity to spread art, resistance and rebellion through this space. The Internet and social media platforms are part of an overall critique of capitalism and developmentalism with a particular consideration of technology. As Subcomandante Insurgente Moisés and Subcomandate Galeano (2018a) have emphasised in a Zapatista forum:

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[58] enlacezapatista.ezln.org.mx

The possibility to purchase labor power is provided for by private ownership of the means of production, circulation, and consumption. Private ownership of the means of production forms the nucleus of the system. Built upon this class division (the owner of private property and the dispossessed), and hiding it as such, are a whole range of juridical and media simulations, as well as other dominant evidentiary forms: citizenship and juridical equality; the penal and police system; electoral democracy and entertainment (increasingly difficult to differentiate); neo-religions and the supposed neutrality of technology; social sciences and the arts; free access to the market and to consumption; and a whole spectrum of nonsense (with some versions more developed than others) of things like "change begins within oneself", "you are the architect of your own destiny", "when life gives you lemons, make lemonade", "don't give fish to the hungry, teach them to fish" ("and sell them fishing poles"), and, highly fashionable today, efforts to "humanize" capitalism by making it good, rational, and objective, that is, "capitalism light."

The neutrality of technology as a form of simulation is understood in relation to private ownership as possibility of capitalism. This form of simulation can be seen as part of the effort of 'those who simulate to hearten' (López, 2015: 268) to make other political communities embrace a capitalist way of life in a concealed manner, taking advantage of simulation to convince and expand but directly threatening territory and with it, community life. Thus, Moisés and Galeano (2018a) explain that

[w]hen a mining company invades the territory of originary peoples—often with the alibi of offering "work opportunities" to the "autochthonous population" (yes, that's what they call us), they aren't just offering people wages to buy a new high-end cell phone: they are also discarding a part of this population and annihilating (in all senses of the word) the territory in which that population functions. The "development" and "progress" offered by the system in reality disguises what is truly its **own** development and progress and, more importantly, hides the fact that that progress and development are obtained via the death and destruction of populations and territories (emphasis in the original).

The neutrality of technology, as a promise with no cost, helps conceal the core practice of capitalism regarding originary territories: depletion and dispossession. Capitalism expands through concealment embedded in the implicit, although for the Zapatistas explicit, agreement to be governed. In this same line, discussions through social media platforms have been described as 'autoerotic exercise' (Moisés and Galeano, 2018b), thus calling into question the idea of a new public sphere from its capitalist foundations. Besides waging war through the Internet through spreading

their word (or word-seed, in Spanish *palabra-semilla*), it is clear that in terms of information, communication and most importantly organisation, is a priority to surpass concealment and the mediation of third parties and establish interpersonal communication and autonomy. In this regard, even the use of social media platforms like Facebook and YouTube has been notably limited to diffusion of information under a collective account.

As above, Galeano (2014) has emphasised that 'the best information is that which comes from the actor and not from that who is covering the news' (author's translation). The idea is to have those who are living in the place you want information about 'to tell us what is going on, not through someone else' (Ibid). In addition, it is clear that the Internet offers huge amounts of information and 'you can find whatever you want, if you are in favour of something you will find arguments in favour, if you are against something in there you will find arguments against' (Ibid). What is needed, furthers Subcomandante Galeano (Ibid) is 'for that information to have a space to accommodate within, to be legible'. This is where free, autonomous and alternative media have an opportunity to investigate and inform and maybe even communicate as direct interlocutors. This is why Galeano (Ibid) asserts that 'those who have disrupted the world of information are collectives where the individual is completely diluted'. And he finishes off by saying that 'what they have seen is that the anonymity of the collective is what is starting to replace and put in crisis [that] media eagerness of those above for finding individualities and personalities' (Ibid).

Regarding digitisation in Mexico and its rationalities of Connectivity, Open Data and a Single Digital Identity, the Zapatista use of the Internet has limited this technology's instrumentality as it has maintained territory as the interpersonal matrix of community life. First, regarding connectivity as infrastructure expansion connected to international networks (see Chapter 3), the Zapatista connection to the Internet is conditioned by its geography and weather, being more difficult and expensive to reach the rural areas in which they have established. In addition, autonomous municipalities intend to establish autonomous infrastructure or at least try not to compromise autonomy as a community through third party commitments. Second, regarding Open Data, while the Zapatistas have supported art, resistance and rebellion, and of course the copyleft idea as opposed to the copyright (Galeano, 2015), tending towards the de-commodification of information, information on everyday life of the communities (as anyone who walks in a Zapatista community can notice) has not been digitised in order to be traded and shared so that technologically and technically equipped corporations and organisations can exploit such data. In developing their own services they have dismissed digitisation as intended by the

Mexican government and as expanded through health, education, revenues and taxes and banking services. Not being a wired organisation and limiting their use of the Internet mainly to their communication with the outside, in addition to socioeconomic individual and family limitations in mobile phones with Internet connection and the geographic limitations to infrastructure, drastically reduces the amount of data available and most importantly, their decision-making process would assess collectively instead of imposing at great scale according to foreign parameters. Third, and traversing the first two, in terms of not being profitable for the government or private corporations to invest in infrastructure and services without local population having the right consumption habits (see Chapter 3) and not producing enough data, is the rationality of a single digital identity.

As emphasised by Galeano (2014) the idea of the Zapatistas is to establish direct communication, upholding anonymity and collectivity instead of personalisation and individuality. Without dismissing individuality, intersubjectivity tends to locate and ground such individuality on community life and so-to-speak face-to-face interaction. Despite individuals exploring and using platforms that are based on the production of profiles, there is something 'not quite well about it' (personal communications, March 2018) that limits its scope of use. This limitation as well comes from engagement in everyday collective activities. Not everyone has money to pay individual services. Members of the communities use mobile phones mainly for contact with the outside. Neither community organisation nor internal communications rely on the Internet. Territory emphasises direct affection between subjects, pushing towards making the members of the community aware of this affection as intersubjective through variegated forms like cosmology, philosophy, tradition and agriculture. Even though individuals might not be rationally and logically aware (according to Western expectations) of the orientation established by the community and the territory, their mode of living, even in its tensions with so-called modern forms, gives them an experiential awareness and not only rational or logical understanding. The organisation looks towards awareness and constant reiteration of the importance of recognising and respecting equality (which does not necessarily mean a *de facto* condition) rather than individualising fashions.

Concerning the form of coordination embedded in the Internet´s design in the US and the rationalities of Global Connectivity, Free Internet and Personalisation of identity, the above points apply in a similar way. What must be emphasised is that the individualisation of identity, its profiling and data mining of behaviour, desires and attitudes turns contradictory in terms with all that means the non-mediation of an intersubjective and territorially grounded community. If the principle of non-

commodification of information, communication and organisation, along with the fundamental knowledge of the equality of all things and thus of the inappropriable-as-an-object character of all that lives, withstands, appropriating individual identities that seek to distinguish from the commonality of the collectivity is out of terrain. Where members of a community live together and walk together, there is less space for foreign mediation of community practices. This does not mean taking for granted that Internet expansion and the use of profiling platforms is merely impossible within the Zapatista municipios. Instead, it means that the political experience of the Zapatistas,takes its grounding on concrete communities, on concrete territory and on a concrete mode of life. To expand the individualisation of identity would most probably mean to displace autonomous self-government and the principles and practices that have nurtured the endurance of these peoples.

7.5 Conclusion

As analysed in this chapter, in the Zapatista experience, the formation of their political community has not been shaped by the Internet. Disposition and openness towards listening, patience and action were not the product of mediation by technological devices or an effect of information. Moreover, the strategic use of the Internet and email servers was possible by its being grounded on an intersubjective awareness and community experience with territory. This is in contrast to the many consequences the transformation of the Internet and Web 1.0 into Web 2.0 has had for the way in which more recent cases of activism (e.g. #YoSoy132) are collectively constituted through social media platforms and profiling practices. Communities of digital activists are nowadays formed through and within digital platforms, usually moving 'beyond' these and to the streets (Rovira, 2014) but nevertheless being conformed and organized in a disperse space connected through "nodes" whose physical support is generally unacknowledged. Such mobilisations aim at mobilising from individually inhabiting privately owned digital platforms into the public space. Instead, the Zapatistas have mobilised from inhabiting collective public spaces into digital platforms and the Internet as a battlefield, where, recalling Naomi Klein (2001), their best weapon is not the Internet but their own word.

Communities' bond to the earth and territory, together with their disposition towards autonomous self-government and self-awareness, as a living together reiterated in Maya cosmology and philosophy, have limited the extent to which the Internet has reproduced its instrumentality in economic terms and as coordinating elements on behalf of others. Instead of endorsing government at a distance as the Internet does at the level of conditioning nations' agendas and orientation and shaping

individualised subjects and its collective arrangements (instrumentality), territory stands for the concrete interpersonal (not exclusively human) experience and decision of a community with a shared awareness and orientation. Territory means then the self-embodied interaction with the multiplicity of beings (human and non´human) that inhabit and happen to live together, which is not delegated to a foreign agent but is experienced and decided by the community itself. Different from the Mexican State´s digitisation policy and from #YoSoy132 instrumental and instrumentalised use of the Internet and its reiteration of foreign parameters and interests, the Zapatistas have a multiplicity of elements that limit the instrumental character of the Internet, mainly arising from the political as living together – with and as territory, land and Mother Earth – and acknowledging their own collective experience and metaphysics (not exclusively in logical terms but through symbolic and meaning production practices).

A critique of the Internet and of the 'relation' between 'technology' and 'politics' must consider the political always in relation to territory as the symbol and index to all the human and no-´human beings that inhabit together and interact – affect each other – as a political community, and as the awareness of the interactions entailed by that community and territory – contrary to the mediation of interactions by third unknown actors. Therefore, the chapter is crucial for the overall argument of the thesis as it has moved towards the inclusion of a decolonial element in understanding technology and the political. On the basis of the Zapatista experience and *tojolabal* and *tsotsil* philosophy, such understanding includes not only human beings but also the multiplicity of beings that constitute a political community as intertwined with and as territory. By recognising that all beings have a heart and are part of a collective one as partners, instrumentality is not the defining characteristic of some beings. Ultimately, the chapter argued, the internet as experienced by the Zapatsitas appears as something other than a technology – an instrument that is only valued as it serves another being – and becomes a being that is to be listened, considered and located in relation to community life, philosophy and collective awareness. Only through the inclusion and consideration of *tojolabal* and *tsotsil* philosophy and the experience of the Zapatistas, together with philosophy of technology, critical approaches to the Internet and an inquiry into the concept of the political, has this thesis accounted for the political implications of using the Internet in Mexico without defining such implications within assumed concepts of technology and politics.

Chapter 8
General Conclusion

Academia, government and activism in Mexico have assumed technology and politics as two constituted although generally unquestioned spheres, thus being unable to describe the multicultural reality of Mexico in relation to so-called technology. While such understanding assumes an inevitable technological reality and digital futures to be democratised, neither the category of technology nor the one of politics have a clear referent, meaning and presence among culturally diverse groups in Mexico. In assuming a technological reality together with a democratic drive, the Internet in Mexico has performed as an instrument of coordination without politics, where politics has been replaced by public administration through colonial forms of developmentalism and democratisation. These forms and practices have concealed their own subject of enunciation and the situatedness and non-universal character of these foreign parameters of doing and thinking.

In a coloniality context, a critique of the Internet as an 'instrument of coordination without politics' has been initially developed in this thesis as a questioning of the cultural and metaphysical matrix of the construction of technological objects. Therefore, together with a decolonial understanding of the link between modernity, capitalism and coloniality as inextricable, instrumentality as the technological character of technology has been included in the equation as a fundamental way in which beings are constructed and objectified. More specifically, through the intended universality of technology and politics, and the alleged desirability of liberal democracy, the expansion of the Internet has instrumentally – that is, relying on its constitutive metaphysical assumption of the need to govern over unaware instruments – concealed the specificities of its design and its forms of coordinating its components (both so to speak human and non-human) within a specific disposition of things and a specific task, meaning and orientation of managing what is produced as a complex technical and social environment on behalf of its users. Such a form of management conceals and fragments shared collective meaning, knowledge and orientation, accommodating its fragments as instruments within a hidden overarching economy.

In other words, the Internet has been designed to manage its components in a distributed manner although maintaining points of authority and control which are

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concealed through the fragmentation of knowledge of the overall economy of the system. A process of concealment and fragmentation that is crucial to its right operation. This way, the Internet has developed into a pervasive mediation, first fragmenting information into data packets and adapting heterogeneous systems to transmit such information in a most efficient manner according to security imperatives, and later establishing the frameworks of subjectification under which access and the exploitation of data are granted. In exchange, the Internet and the prolific production of platforms and applications have managed a multiplicity of interactions on behalf of its users, expanding, through simplification and adaption, to different contexts, cultures and ideas but preserving its specific control foundations in capitalist values and colonial practices; the same foundations and form of management that condition the possibility of alternative collective practices of self-government.

In designing and exporting the Internet, coloniality – the control of economy, authority, knowledge and subjectivity exerted under foreign parameters and by foreign actors – has been embedded and expressed in this technology's form of coordinating its components as product of an imperative of expansion, efficient administration, entrepreneurial, scientific and military opportunity and national superiority. The Internet has been designed according to this imperative in terms of accommodating diversity and adapting this diversity to pre-established parameters of discrimination (first of information and then of people and cultures). In this light, global interoperability and connectivity, one of the forms of coordination of the Internet, in the instances of the US and Mexican governments, orient expansiveness toward the achievement of a capitalist market expansion and benefit privileged actors. Something similar happens with the other three forms of coordinating resources of the Internet.

The free flow of information reiterates the need of data to circulate while concealing the cultural values and economy that underpin this necessity and its hidden forms of controlling circulations. As just a formal right, the free flow of information hides the fact that information on the Internet is always under scrutiny and control (infrastructure and protocols design, third parties' terms and conditions, cultural parameters and law enforcement). But also, that this form of coordinating information as it was free while disseminating culturally specific values like freedom of expression, individualism, post-nationalism, digital humanities and electoral democracy undermines self-determined ways of using the Internet and controlling the flow of information according to local and situated forms of social organisation and political experience.

Personalisation of identity and the mediation of subjectification have been core elements in the expansion of the Internet and the economic benefits it provides to well-established actors in technological development and data exploitation. Grafted into the commercial drive of the Internet and the globalising expansion of the Web 2.0, the exploitation of user-generated data not only objectifies behaviors and exploits users' unawareness of their own labour, but also functionalises users as instruments that produce data, objectifying them as a manageable resource under hidden parameters. Individualised and shaped according to market parameters of data mining and big data analysis techniques decided by third parties in order to produce profit, users are made identifiable, manageable and predictable, offering certainty to financial markets (and the circulation and control of resources) and simplicity in everyday life interactions to users, managing interactions on behalf of others who cannot understand the economy of such interactions, thus undermining the capacity of recreating and revisiting collective existence through shared referents.

The administration of information and data embedded in the Internet is also a production and management of individuals that conceals its own intricate processes. By hiding and simplifying processes for users, producing an appearance and appreciation of reality as a seamless and culturally neutral experience, users delegate a series of decisions, awareness and knowledge to an impersonal structure whose mediation is intended to be imperceptible on a regular basis. Correspondingly, the globally expansive interconnected circulation of data and the alleged free flow of information, whose ethnocentric parameters of discrimination are intended and constructed to appear as universal and neutral (thus neglecting communities self-determination regarding information and knowledge), have as their main resource data, which are increasingly coordinated and packed according to digital identities and in terms only accessible to those privileged and literate members of an exclusive group, being bought and sold under unclear parameters. The Internet is thus embedded with coloniality also as 'thingification' – turning 'man into an instrument of production' (Césaire, 2000: 42) – in its need to expand through fragmentation, accommodation (commodification and alienation) and concealment.

The Internet fragments, individualises and then accommodates such fragments and diversity by hiding its own parameters of decision and overall economy aiming to achieve a "seamless" mediated reality. This way, users delegate the management of technical and social interactions to third parties that have designed and keep designing the Internet, which operate servers, applications, platforms and infrastructure, and that also define policies and the horizons of digital futures without

users being able to grasp the broad interactions required, embedded in and produced in a hardly perceptible manner by and through such technologies, let alone the metaphysical assumptions that underpin their operation and the effects they generate.

The analysed understandings and practices of digitisation and #YoSoy132's activism in Mexico have epistemically and empirically expanded coloniality in the form of coordination without politics. As an instrument of coordination, the Internet and its mediation of interpersonal engagement, indefinitely postpone truth and trust as collectively shared and territorially based knowledge, order and orientation; that is, the Internet postpones a shared experience and awareness of existential affinity and the definition of a relationship among partners as it increasingly mediates the interactions of those who would happen to live together. As the Internet expands, it determines and accommodates the diverse nature of its components as instruments, the latter which do what they have been designed and expected to do although indifferent [or ignorant] of the broader economy and the principal cause that they ultimately respond to. As a flexible mediation of truth, trust and meaning construction as habit, the Internet has entailed and diffused coordination without politics in Mexico in the cases of #YoSoy132 and Peña's digitisation. The case of the Zapatistas is however different as the Internet has been so far, present and located, used or neglected, with respect to the community´s own shared existential experience, *stalel kuxlejal* – mode of life – and sna'el k'inal – meeting/getting to know the world –, walking towards knowing to live in the *ich'el ta muk'* – recognition-respect – and constituting an inclusive collective heart – *ko 'tantik* and cosmic-*kolektive Xch 'ulel wo 'tan* – where, the thesis proposes, the political includes decoloniality as the (human and non-human) beings that constitute a community in and as territory.

The thesis has argued that the internet in Mexico has reproduced coloniality rather than politics and that the Zapatista use of the internet as a decolonial element, together with philosophy of technology and STS, can offer respite to the problematics of alienation, discrimination, and fragmentation in digitalising contemporary Mexico. Therefore, the dissertation has sought to act as a mediator, moving towards the epistemological inclusion of a decolonial element that also considers the metaphysics and historicity – orientation, values and interests –of technological design within the broader discussion on politics and technology. Ultimately, the Zapatista way of life offers not only an alternative use of the internet but also an alternative experience and understanding of the political, which is identified here as decolonial politics as it debases instrumentality, thingification and domestication. Only through the inclusion and consideration of *tojolabal* and *tsotsil* philosophy and the experience of the

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Zapatistas, together with philosophy of technology, critical approaches to the Internet and an inquiry into the concept of the political, has this thesis accounted for the political implications of using the Internet in Mexico without defining such implications within assumed concepts and expectations of technology and politics.

The use of the Internet in Mexico, as intended to achieve development and democracy, has diffused forms of coloniality to the extent it has reiterated instrumentality through coordination without politics. That is, in assuming the inevitability, need and desirability of technological mediation of interpersonal social interaction in everyday life and between government and governed and assuming the presence of a liberal democratic subject capable of participating in technological design, the use of the Internet consolidates third parties' control at a distance through this technology's hidden layers and fragmentation of shared knowledge and consenting. Coloniality in this instance consists in the reiteration of an economy that manages a vast array of interactions and decides on behalf of other unaware subjects, instrumentalising and exerting control in a concealed manner.

In the instance of digitisation by Peña's administration, coordination without politics followed the discriminating ideal of being part of a group of selected countries under the distinction between developed and less developed countries according to parameters of economic growth and technological modernisation determined in countries other than Mexico. Within that endeavour, three transversal practices converged on stabilising and giving certainty to the opening and expansion of financial and telecommunications markets: Connectivity, Open Data and Single Digital Identity. These practices, defined under foreign parameters of development and modernisation, underpinned digitisation as market-oriented in a liberalising fashion, mainly in terms of private property, infrastructure and resource management. Significantly, the Open Data agenda of the Mexican Government not only has guaranteed and concealed the privilege of foreign access to huge amounts of data but also the entrepreneurial use of these data according to the construction of a civil society and government that assume technological mediation as constitutive of politics and promote technology as the agent that engenders the trust governments are no longer capable of producing.

Through digitisation the Mexican state tends to lose its own place as third party and mediation – its administrative position – by delegating decision and the construction of trust to a foreign sense of orientation, a capitalist impulse that combines the expansion of the Internet's rationality and its forms of coordination with the mediation of subject formation and the continuous exploitation of the earth. The latter, as it is

commodified and offered to extractivism, in combination with the promotion of the Internet's rationality by the Mexican government, entails the expansion of a disposition over the members of a national society as active resources and instruments.

On the other hand, #YoSoy132 used the Internet as an 'instrument of coordination without politics' – an instrument that made possible collective coordination and experience only when mediated by an external third party – when used to bring together a diversity of groups and coordinate actions as a 'connected multitude'. #YoSoy132 reproduced the forms of coordination embedded in the Internet and endorsed instrumentallity, becoming instrumental within a broader strategic arrangement in which foreign actors define and decide at a distance the way in which the Internet and its subjects are shaped. This organisation reproduced epistemic forms of coloniality by reiterating US values of free Internet and freedom of information over self-determination and national and local prerogative in the circulation of resources. But also, this collective was coadjutant in the process of integrating the Internet as fundamental for the country and democracy as a constitutional right and necessary mediation of subjectification (having a voice and participating). #YoSoy132 ignored and further concealed the forms of control embedded in this technological mediation, which have responded in the last instance to foreign actors and interests.

Everyday use of the Internet among #YoSoy132 members and through popular applications and services demonstrated to have sedimented into habit, fragmenting collective knowledge and conditioning their scope of action but remaining useful for coordinating its members and actions. Aware of censorship and control by US and Mexican governments and corporations, activists still used US commercial services and popular websites under the imperative of wide, efficient and cheap communications. The Internet as an 'instrument of coordination without politics' offered simplicity and accommodated heterogeneity while hiding the overarching end and economy of the system, fragmenting knowledge and awareness (Chapter 3 and 4) of the mediation that made possible their collective actions, allegedly, as a 'connected multitude'. The Internet persisted as a taken for granted 'instrument of and for coordination' whose users/activists did not happen to live together – did not share a *stalel kuxlejal* – mode of life – or were aware of their *sna'el ki'nal* – meeting/getting to knoe the world – and their existential relationship as partners – (see also Chapter 7) but they only happened to protest together through the most effective means. #YoSoy132 did not engage with knowing their living together and deciding together

on the basis of politics and territory while the Internet did not bring about any certainty or knowledge of a shared existence

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Overall, Peña's digitisation policy and #YoSoy132's epistemic and meaning production was correlate to a form of coordination without politics. In the absence of shared referents, universalism has remained hidden among fragments, a universalist logic and practice have been imposed and the system components have been impeded from uniting into a shared effort and political experience. Thus, in using the Internet to transform Mexico as a nation, forms of coloniality, rather than politics, have been widely diffused by Peña's administration and #YoSoy132.

As embedded in the Internet and reiterated by public administration efforts in Mexico, capitalism, modernity and coloniality have transformed into a more flexible form,, which discriminates in a subtle manner, promising inclusion only within a capitalist way of life, where commodification and objectification are the rule for accommodating diversity into a global design. This way, both instrumentality and coloniality have transformed, in a US context of expansive capitalism, into a form that is being exported globally. Such a form has unfolded into an embedded form of coordination, management and concealment that is hardly noticeable and is increasingly becoming rooted in everyday life and its common imperatives of being efficient in terms of reach, time and costs.

An instrument of coordination without politics emerges in the intersection between an instrument of coordination that increasingly and inadvertently mediates every aspect of social life and its use in a situation that reproduces someone else's embedded values and interests ignoring their economy and final end. This situation exposes how this instrument of coordination becomes an instrument of coordination without politics in other geographies. In using the Internet as an instrument of coordination designed by someone else, one is inadvertently reproducing a third parties decision and government over oneself, postponing self-determination and politics. Therefore, it is ignorance that forestalls politics, but as shown in Chapter 7, it is not exclusively ignorance of the particular structure and design of this technology; it is ignorance of the multiplicity of beings and interactions that constitute a shared world and reality.

Only when used within a shared stalel kuxlejal, existential experience and *sna'el ki'nal*, including a cosmological and metaphysical understanding, that bring about the affinity of those who live together and define a relationship among partners, can the Internet as reproducing instrumentality, thingification and domestication be to some extent turned inoperative (de-linked) in its main forms of coordination (global

interoperability and connectivity, free flow of information, personalisation of identity and the mediation of subjectification). Through collective use, global connectivity – either in a developmentalist fashion or an economic imperative – has been conditioned by the Zapatistas according to local traits grounded in territory. The Zapatistas adjusted the free flow of information as information is never culturally and politically neutral and collective decision and self-determination is a process that emerges from within a community and not as sanctioned by foreign actors and agendas (either of economic growth, democratisation or human development). Open data agendas and the personalisation of identity or a single digital identity across such communities have been largely limited by the obstacles to the previous forms of coordinating resources: there is no individual subject with a single digital identity and its preconditions have not been settled yet as mobile phones and Internet access are not pervasive enough to mediate everyday interactions and obtain more significant pecuniary benefits from it, let alone financial services and their data mining practices.

Limitations in Internet access and individualisation of use are not explained by geographical or intellectual and entrepreneurial limitations in the case of the Zapatistas. Instead, the spatial order and the orientation of the communities respond to their *sna'el ki'nal* and *stalel kuxlejal*, to specific social and political orders, their traditions and modes of production, their cosmologies, their metaphysics and ontologies, which as this thesis proposes, speak of a, although contested by capitalism, different conception of beings – as equals and not as instruments – and therefore, of a different concept of the political as decolonial politics in relation to technology. Collective interaction for the Zapatistas is still grounded on territory as immediate social and interpersonal interaction; as Zapatistas, collective use and even collective accounts on social media platforms (collective efforts to inform and be informed through the Internet) have had preeminence over individual use. And most significantly, the Zapatistas express an ongoing effort of revisiting the order and orientation of this organisation´s collective existence, taking their time and deciding over the terms of engagement and politicisation of science and technology as ethnocentric categories, caring to live in the *ich'el ta muk'* and in interaction (openness and encounter) with the fundamental location of the earth and territory as sign of community life and *ko 'tantik* – inclusive collective heart of all that exists.

The Zapatista organisation effort as a self-governed, self-aware and self-defined community and its strategic orientation – the fundamental importance of attaining autonomy and land – have meant, in this thesis, the politicisation of the Internet not as a technology and not because of a merely strategic instrumental character directed towards an end but primarily thanks to their political experience and *sna'el ki'nal*,

seeking to become *a* cosmic-*kolektive Xch 'ulel wo 'tan* and include beings as partners and not as instruments, constituting territory and its experience of co-existence as concrete foundation of community life. In the instance of the Zapatistas, their sna'el k'inal – meeting/getting to know the world –, as walking towards knowing to live in the *ich'el ta muk'* – recognition-respect – and as their own shared existential experience and *stalel kuxlejal* – mode of life – that can include the (human and non-human) beings that constitute a ko 'tantik – inclusive collective heart of all that exists–, has been understood to affect the use of the Internet by conditioning its instrumental operation and its main rationalities of expansion according to the communities' concrete circumstances and to collectively defined parameters and practices whose ethical basis and horizon are founded in the earth and in awareness of the multiplicity of unmediated interactions taking place as a community.

As above, the thesis has demonstrated how the Internet has been politicised not as a technology but as a battlefield – inhabited or neglected with respect to a community´s own embodied mode of being and politics, which necessarily traverse its intertwinement with territory. Decolonially and critically thinking of politics and technology is not about re-territorialising it according to local endeavors; but about considering that something like a technological object restricts the ethical horizon of communities to an instrumental ratio and disguises the overarching economy that expands by depleting territory and thus by destroying inclusive and territory-based community life. In this same line, what this thesis proposes as decolonial politics, in relation to technology, comes from the Zapatista use of the internet as a decolonial element, which together with philosophy of technology and STS, points towards the understanding that whatever being matters and shares its existence with any other beings as part of the earth and members of a territory and a political community. This means that something like a technological object, the concept itself of technology as instrumental – being and doing for someone else's purposes – is already biased according to a specific cosmology and metaphysics. In the last instance, to politicise technology in this light means to politicise beings beyond their being and doing as shaped by and for someone else, beyond their being instrumental; that is, to experience politics by dissolving technology. Again, it is not only about a strategic attempt. It is not only about a redefinition of the forms of coordination embedded in the Internet. It is about decolonial politics as opening up the possibility for a "technological" object of being in itself and not for someone else: being non-technological and just an 'other' whatever being, which is not disposable and functional but always potentiallly a member of a political community, who speaks for that community and does not – by design – hide or ignore its doings and the economy in which it is used.

Lastly, politics is not an embedded or intertwined element of technology when used in distant locations different from that of its designers. Not acknowledging this could endorse the comfortable implementation of technological fixes within the logic of reforming the existing technology. In other words, not emphasising the coloniality of the internet could unfold into the ongoing use and promotion of the internet and digital solutions for the digitally illiterate (and the non-digitally literate) and non-Western subject, reproducing its colonial bias. Accordingly and in turn, technology is not necessary for decolonial politics. Technology might be necessary for public administration in a globalising effort to accelerate the rhythm of resource extraction and circulation but technology does not entail the political. Therefore, if we take seriously the argument that the internet increasingly expands as an instrument of coordination without politics, decolonial efforts would need to engage in self-limiting the use of the internet. Firstly, by not assuming and promoting an everyday technical experience, let alone one in which the internet or digital technologies mediate collective interaction. This means that that being which is considered a technological artefact or system should not be used in a coloniality context to perpetuate and consolidate an everyday technical experience (and its status as an instrument or technology) but instead to turn inoperative its own overarching economy (using the internet to eventually stop using the internet for instance). And secondly, by drawing this "technology" as a non-instrumental and a non-technological being closer to collective awareness. Complex technological artefacts and systems need to be politically – sensibly, symbolically and philosophically – situated; this means, accounting and saving the distance (ignorance) of its multiple embedded elements and processes through collective awareness and experience. The latter by recognising first, that technology is not a datum that needs to be "politicised" complying with someone else's economy and that the experience of the political can always reject the use of a technological object if decided by whatever group; and second, by acknowledging that the political can thus destabilise the existence of something like a technological object by living in *ich'el ta muk'* and recognising its equality as a being.

The main problem with reproducing the coloniality embedded in the Internet is the forclosure of the political as a shared experience of encounter, con-senting and definition of a relationship among partners, and moreover, of the political as that experience which, oriented and being a collective heart (*kolektivo*) in the *ich'el ta muk'*, entails ethics and territory as con-senting and awareness of the world in its multiplicity of beings, acknowledging them as members of a political community.

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Appendices

Appendix A
Daniel McCarthy's (2015: 162-163) Discourse Analysis Guide

Step one – Location and context
- 1.1 What type of document is this? (policy statement, interview, comments to reports, congressional testimony, position paper, etc.)
- 1.2 Who is the author of the document? Does it represent the view of the United States government? Is it representative of personal opinion only? (If it has no personal author, does this make it seem more official/formal/authoritative?)
- 1.3 To whom is the author speaking? Is this document for a particular audience?

- 1.4 In relation to the other documents studied, does this document seem consistent with the others, or has the author specifically tailored their message to meet the approval of a given audience? (Consistency of message)

.

Step two – Representation of the Internet
- 2.1 What does the document say in a straightforward macro-reading? That is, who is doing what to whom in the article? What is it about?
- 2.2 Binary oppositions – what are people/actions/events/places defined in opposition to?
- 2.3 What are the verbs/adjectives attached to the Internet? (E.g. revolutionary, democratic, progressive, neutral?) What are the predicates and relations to other things and people? How, if at all, is the Internet related to other aspects of international society?
- 2.4 Is the Internet accorded a positive, negative, or neutral value overall? What are the metaphors employed? What other texts are referred to in the document?
- 2.5 Is the Internet deterministic, a neutral tool, a biased but ambivalent technology? Is any kind of causation implied?
- 2.6 Is the Internet described as an actor/agent? A state of being?
- 2.7 Are there any clear unquestioned assumptions about the Internet?

Step three – Representations of markets, innovation and property rights
- 3.1 What are the verbs/adjectives attached to intellectual property rights? (Predicates/Relations)
- 3.2 Are property rights accorded a specific value? Are metaphors employed?
- 3.3 Relationship between intellectual property rights and the Internet?
- 3.4 What verbs/adjectives, if any, are attached to actors who violate intellectual property rights?

. 3.5 What role is accorded to markets in the article, if any? What predicates attach to markets? What values does this suggest adhere to markets, if any? What is the general relation to markets, intellectual property rights, innovation?

. 3.6 Does the narrative disclose any particular view or understanding of how innovation occurs?

.

Step four – United States foreign policy culture/practices

. 4.1 Does the document fit within a particular stain of American foreign policy culture? Is it Universalist/Exemplarist/Crusading/Isolationist/ Realist? Does it suggest universal values or culturally specifically values?

. 4.2 Does the document refer to particular political values that resonate within American political culture? (E.g. freedom of speech/press)

.

Step five – Disjunctures

. 5.1 Are there any elements of the discourse that do not fit together, or do not fit with the wider discourse? What are the inconsistencies or contradictions?

. 5.2 Does the discourse significantly shift over time, e.g. with the change in administration from Bush to Obama?

.

Appendix B
Additions to the Discourse Analysis Guide
(Step three of McCarthy's Guide was omitted)

Representations of the global/digital identity
1. What are the verbs/adjectives attached to the global and/or global connectivity/digital identity?
2. Is the global accorded a specific value? Are metaphors employed?
3. Relationships between the global and the Internet?
4. What verbs/adjectives are attached to subjects who are in contact with the global/connectivity or reject it?
5. What role is accorded to the global?
6. What role is accorded to the free flow of information? What values does this suggest adhere to free flow of information, Internet freedom or freedom of expression? Adverbs/adjectives used to describe it? What is the general relation to the free flow of information?

Representation of democracy/development
1. What are the verbs/adjectives attached to democracy/development?
2. Is democracy/development a specific value? Are metaphors employed?
3. Relationships between democracy/development and the Internet?
4. What verbs/adjectives are attached to subjects who violate democracy?
5. What role is accorded to democracy/development?
6. Does the doument fit within any meta-discourse of resistance, development, democratisation?
7. Does the document refer to particular political values that resonate with US political culture?

Disjunctures
1. Elements not fitting together or not fitting within a wider discourse. What are the consistencies or contradictions?
2. Are there any minidiscourses or interpretative repertoire to make it easy for the audience to understand?
3. Does the discourse significantly change over time? With the change in the concrete situation or opposition to a speciic policy?

Discourse as productive
1. How is the text producing a specific knowledge? What is the location of truth and what are its effects? How is social difference constructed?
2. What meanings and things are being produced?
3. How are bodies, things and places located in the text? Is there a regular order? Key themes?
4. Interpretive repertoire or minidiscourses?

5. How does the text deal with complexity and contradiction

6. Visibilities and invisibilities, what is not seen or said in the text?

7. What is being detailed in the text and what is not?

8. Is there any label or caption for images? What images are left with no caption? What does this suppose?

9. Who produced the image? How is the reader constructed in order to understand the message?

10. What are the popular icons in the image? Has it been modified in some way? What is its relation to other images?

11. What verbs/adjectives are attached to the images?

12. How is the subject constructed as able to read the message? What verbs/adjectives are attached to the subject producing the message?

Discourse and *dispositif*

1. How does the text play as part of a *dispositif?* Ordering/disposition of things and space? What constitutes the *dispositif* (architecture, regulations, scientific treatises, philosophical statements, laws, morals, etc.)?

2. Are there any technologies as matrices of practical reason producing and being poduced by the text? How are technological objects and subjects displayed and ordered, what is the materiality of this order's supports, what is its spatial organization? How are images and videos framed? What is the genre of the material?

Appendix C
Table: Mobilisations on Twitter – Mexico (2009-2016)

Year	Hashtag	Year	Hashtag
2009	#VotoNulo #GuarderíaABC #JusticiaABC #MatrimonioDF #YaBajenle #InternetNecesario	2013	#EstelaDePaz #LadyProfeco #FueraPeñaNieto1Smx #CNTEsequeda #PosMeSalto #LiberenaYakiri
2010	#15x15 #VigiliaABC #ReynosaFollow #MTYfollow	2014	#TodosSomosGoyo #PrensaNoDisparen #HastaQueRenuncieDuarte #TodosSomosAutodefensas #LeyBala #EPNvsInternet #NoMasPoderAlPoder #EPNstop #CadenaHumana #LeyTelevisa2 #LeyPeñaTelevisa #TodosSomosPolitecnico #EPNBringThemBack #AyotzinapaSomosTodos #YaMeCansé
2011	#LeyDuarte #CazaUnBot #MarchaNacional #MarchaPorLaPaz #VerFollow #OpCartel #SoyProle	2015	#CarmenSeQueda #EnDefensadeAristegui #Korenfeld #Justicia5Narvarte #DuarteAsesino #LeyFayad #NoShopultepec
2012	#QuitaUnAnuncio #QueremosDebateNoFutbol #NoMasTelevisa #YoSoy132 #MarchaYoSoy132 #DebateYoSoy132 #MarchaAntiEPN #CopeteLeaks #FotoxCasilla #OpPRI #SorianaGate #MonexGate #EPNPresidenteImpuesto #CercoAlCongreso #1Dmx #TodosSomosPresos	2016	#NosFaltan5 #AlertaXochicuautla #VivasNosQueremos #MiPrimerAcoso #ElPitodeMancera #NiUnVotoMásAlPRI #Ley3de3

Source: Rodriguez Cano, 2016: 44