Tweeting Towards Utopia: Technological Utopianism and Academic Discourse on
Political Movements in the Middle East and North Africa

By

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Abstract

This dissertation offers a critical reading of Western academic discussions of the role of new communication technology in the Arab and Iranian movements that started in 2009. It demonstrates that while academic efforts to interpret the role of new technology in the movements display discursive variety, technological utopianism is operative in many of these efforts, generating particular images of the movements in the Middle East and North Africa (MENA).

Critics, James Carey (1989) and Vincent Mosco (2005), understand technological utopianism as an extension of religious ideology (Carey) or ancient mythology (Mosco), concealing unequal economic relations (Mosco, 2005; Carey, 1989). This conceptualization of technological utopianism results in a lack of attention to technological utopianism's internal complexity and heterogeneity. This study attempts to acknowledge the discursive *reality* of technological utopianism by heeding its discursive, institutional, and historical nuances, while also tracing its effect on developing perceptions of the contemporary movements in MENA.

Acknowledging the multi-stranded nature of Western discourse of technology and its ramifications, this study employs a mixed-perspective approach. The first part of the dissertation (Chapters 2 and 3) is an historical and philosophical investigation that looks at Western discourse of technology, with special attention given to technological utopianism. Through this exploration, I put forward various models that have informed prevailing visions of technology. The second part (Chapters 5 and 6) relies on these models to critically and empirically assess their distribution in academic texts

investigating the MENA movements. It detects, through this assessment, ways technological utopianism affords particular images of MENA's politics and societies.

In order to carry out these two projects, the multi-stranded history and the empirical examination of academic discourse, this dissertation puts two discourse traditions in dialogue (Chapter 4): Foucault's sense of power and history (1971, 1977a, 1977b, 1988) and Fairclough's critical discourse analysis (2013). The empirical evidence for this study is provided via two different means of data sampling: systematic and case-based. This work carries out a systematic study of journal publications representing academic research discourse on technology in the MENA movements. It offers further evidence in three case studies chosen from three academic-related domains: public, pedagogic, and policy-setting. Informed by these analyses, this dissertation offers a critical, reflexive, and rigorous analysis of Western academic discussions of the MENA movements.

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As “discourse” is characterized by ubiquity and plurality, writing this dissertation about discourse, needless to say, has been a collective process, wherein I have acted as an element rather than the originator.

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Chapter 1: Introduction

Everywhere we remain unfree and chained to technology, whether we passionately affirm or deny it. (Heidegger, 1977, p. 3)

Background

Taken from Martin Heidegger's "The Question Concerning Technology", I find this introduction's epigraph to be one of the most delineative descriptions of a prominent type of relationship between the West and technology. Although it suggests Heidegger refers philosophically to a situation pertaining to all humans, Heidegger speaks, particularly, of the West. What follows in this dissertation is roughly aimed to extend this kind of discussion and further explore Western orientations towards technology. To be specific, it argues that technological utopianism is a way of seeing that has influentially animated Western discourse of technology, shaping recent academic discussions surrounding important Eastern political occurrences. Despite the newness of the examined discursive event, technological utopianism cannot be described as a new phenomenon, but is located within a long-standing historical construction, one that expresses certain attitudes towards new technology (Carey, 1989; Mosco, 2005; Segal, 1985; Sibley, 1973).

Development of modern technology is certainly not exclusive to the West, but while terms like *modernity* might seem to supersede geo-institutional boundaries, examination of socio-historical milieus of technology demonstrates that such blanket descriptions fail to highlight the variety of contemporary social interactions with technology. Inasmuch as there are reflections and interactions with technology in non-Western societies, these reflections are not identical to the West's. Charles Taylor (2004)

notes the importance of speaking in terms of “multiple modernities” and abandoning the usage of “modern society” as a description for the way all societies have presumably modernized. Tracing the rise of Western modernity, characterized by its own institutional changes (including science and technology), Taylor emphasizes: “how much greater are the differences among the major civilizations. The fact that these are in a sense growing close to each other . . . doesn’t do away with but only masks the differences” (Taylor, p. 196). That civilizations borrow from each other, Taylor elaborates, does not mean that they are converging on the same ideals because each society has its own way of borrowing, conditioned upon their complex institutions and systems of thought.

The West, arguably, has developed its own conceptions of technology. Lewis Mumford (1934) recognizes this point whilst pointing out that the place of technology in the West is different from other positions of technology developed in other cultures. He maintains that science and technology exists in other societies, but technology as a cultural system has not had such a significant impact there as it has in Western society: “They had machines; but they did not develop ‘the machine’” (Mumford, p. 4). In other words, technology as a form of discourse has occupied a significant place in Western ways of thinking, acting, writing, and living.

Western discourse of technology influences not only views of technology, but also taps into and steers orientations in other domains, something I demonstrate in this study. This dissertation examines ways Western academic institutions perceive and represent technology in relation to two recent major political events in the Middle East and North Africa: the Arab uprisings and the Iranian Green Movement.

The first years of my PhD coincided with a series of uprisings in the Middle East and North Africa – events now known as the Arab Spring. This series began with the Tunisian uprising – Mohammed Bouazizi set fire to himself in the town of Sidi Bouzid in December 2010 –and produced abundant discussions on the role new communication technology played in changing politics. Noticeable attention was also paid to the role of social media, especially Twitter, in the Iranian protests in 2009, which were described on one occasion as demonstrating “the power of 140 characters” (Solow-Niederman, 2010).

The Iranian Green Movement and the Arab uprisings are linked, not in terms of one having caused the other, but in that their representations in Western scholarly discourse have been governed by what I describe as *technological utopianism*. One thing that I find interesting about the political movements is the West’s ability to steer conversations about MENA through its discussions of interactions between technology and these two events into certain trajectories reflective of the West and its cultural forms, codes, and modes of knowledge rather than those of MENA. How and why this happens and what this implies are the main matters of exploration and inquiry in this research. Strictly speaking, this dissertation aims to address the following questions: In what ways do Western discursive *models* of technology shape academic discussions of technology in the MENA movements? What socio-historical constellations have provided grounds for these models? And what are the ramifications of these ways of speaking about technology in respect to the image of MENA’s politics produced in these discussions?

Western academic discourse surrounding the role of new technology in MENA’s movements was a phenomenon wherein resources were employed, aimed at developing a vision of new technology in the MENA region. And yet, it was also one of the most

important confluences of politics, culture, academic knowledge, and technology; it can be read as a repository of Western cultural and social attitudes towards technology, providing a critical context for the examination of how Western academic institutions identify, conceptualize, and represent politics relevant to MENA.

The Arab and Iranian movements have elicited different academic responses to the relationship between new media technology and the movements. Some perceive contestation in academic scholarship in response to the movements as a reflection of polarization between cyber-enthusiasts and cyber-pessimists (Fuchs, 2012). Others perceive academic arguments, in general, to feature more critical and positive diversity than other institutional discourses, such as public media (Mansell, 2012). However, I see what happened, in regards to academic responses to the Arab and Iranian movements, differently and feel an obligation go beyond such rudimentary arguments, studying rigorously diverse academic efforts aimed at understanding and interpreting the role of new technology within these movements. I argue that the examined academic discussions, focused on the role of technology in relation to the Arab and Iranian movements, are more than a matter of approach. Analyses that “overestimate the role of technology” (Fuchs, 2012, p. 387) in the MENA movements are more than explanations that have been (mis)guided by *technologically deterministic* methods (Aouragh & Alexander, 2011; Fuchs, 2011, 2012; Williams, 1974)¹. They rather represent a moment wherein we observe a disparity between what can possibly be said about the movements in MENA and actual representations of the role of technology in these events. This

¹ *Technological determinism* is a term that has gained common currency in critical communication studies. It is used to describe analyses of technology that create the impression of a one-sided causal relationship between technology and society/politics (Fuchs, 2011, 2012; Williams, 1974). The use of *technological utopianism* rather than *technological determinism* has implications for my study. These implications will be explained in Chapter 2.

moment is a reflection of Western long-standing undercurrents in technological discourse, in general, and technological utopianism, in specific, that shape conceptualizations of the movements in MENA and their political and social landscapes.

Technological utopianism is the point of departure from which my work has been launched. Multiple points of departure are typically taken when critically analyzing West-East relationships, including colonialism (Fanon, 2008), Orientalism (Said, 1978), racism (Chow, 2002), and imperialism (Chomsky, 2008). These are significant areas of critical research and they, needless to say, intertwine on multiple levels. However, taking one of these standpoints as the starting point of my research would have hindered an understanding and engagement with how Western academic discourse represented sites of struggle and resistance in MENA. I initially approached academic discussions, ones focused on the relationship between new communication technology and the protests, with a vague sense that a discursive problem existed in these discussions. I speculated, at first, that this problem was an outcome of a dominant Orientalist attitude in intellectual discussions of MENA. What I found, however, was that Orientalism, as a critical stance, was not enough to inspect the precise components composing academic discourse on the relationship of new communication technology and MENA politics. While there were some Orientalist patterns in this discourse, adopting Orientalism as a starting point to an analysis of this discourse was not enough to explain how *technology* garnered such attention in regards to the movements and why and how new technology was represented in certain ways with particular patterns. Some academic discussions were sympathetic to the movements and others even applauded them. How I could explain the existence of such outwardly positive trends, seemingly motivated by good intentions, in relation to

this academic discourse on technology in Eastern movements, was my main concern; this discourse, notably, created particular constructions of MENA's movements, which hugely sidelined possible or potential ways of talking about the movements.

I do not refute arguments of Orientalism or imperialism, as I believe these are projects that are still active and alive. Nevertheless, I do not consider Western academic discourse on the relationship of technology and the revolutionary movements as directly driven by political interests or imperialistic goals. I consider that this discourse was significantly shaped by technological utopianism, which had acted dynamically with political, military, institutional, cultural, and intellectual rationales. The two statements may seem indistinguishable, rather than contradictory, but for this research, the difference is significant. Drawing on imperialism or Orientalism as my main theoretical device would have confined the critique of this research to one dimension, missing the hybridity of the examined academic interpretations and sidelining some socio-historical trajectories that elucidate the centrality of technology in this discourse. On the other hand, speaking about technological utopianism allows for an understanding of complex forms of knowledge that the examined academic endeavours have drawn on. It is a critical stance, but one that aims to trace and pinpoint conditions that have made particular ways of speaking about new technology possible. I have settled upon technological utopianism as my interpretation tool, not haphazardly, but after studying published literature on the Arab uprisings and the Iranian movement and also after examining abundant critical work that deals with matters of Western technology and science. The act of observing similar patterns in both discourses, Western historical discourse of technology and contemporary

Western academic discourse on the MENA movements, has urged me to expand this research further and explore the semiotic effects of the latter.

In view of the consideration that technological utopianism has been produced and maintained in archaic exchanges with different sources of power, technological utopianism is assumed to have constitutive implications for the discursive production of the MENA movements. This dissertation, however, does not attempt to provide a description of the material unfolding of the Arab or Iranian movements. Nor is it aimed to precisely evaluate their political outcomes. Indebted to Foucault's theorization of discourse (1971, 1977a, 1977b, 2012), I believe representations and realities are conflative. I align this dissertation with work that analyzes discourse without identifying its internal signified(s), especially Edward Said (1978), who made a critique of Orientalism without offering an image of authentic Islam or a real Arab World. Foucault (1977b, 1988), similarly, condemned modern disciplinary tactics deployed to control sexuality and madness without defining the quintessential nature of sexuality or madness. On that account, I believe the efficacy of what is said about the role of technology in MENA is relevant to the use of particular epistemologies, reproducing recognizable codes, strategies, and patterns; it is about who and what is included/excluded and what questions are responded to and what are left out. These patterns and symbols are aspects that rely on Western traditions more than MENA or its course of events.

Whereas I am willing to address representational rather than factual aspects of interactions between technology and the MENA movements, I find myself inclined to establish the reality of these representations: the reality of Western historical discourse of technology. Historians and cultural communication scholars, such as James Carey (1989)

and Vincent Mosco (2005), note that technology evokes utopian aspirations. They provide cultural maps of this construction. However, Carey dismisses technological utopianism as a religious-capitalist “ideology” and Mosco disregards it as “myth” concealing the process of commodification and its application to digital technology. Carey and Mosco’s belief in the ideological or mythological nature of technological utopianism renders these scholars’ accounts to be inattentive to technological utopianism’s nuances, details, and components. As a result, their research offers a conclusive sense that technological utopianism is expressed and manifested in one way (ideological or mythical), while they also offer a vague definition of utopianism about technology, elaborating minimally on different ways this reverence of technology is envisaged.

My sense of the need for a heterogeneous account of technological utopianism comes from what I see missing in Carey and Mosco’s work. It also derives from my observation that Western academic discourse tackles new technology, in relation to the MENA movements, in ways that are problematic. Focus on new technology as the entrance to understanding the movements has hindered academics’ engagement with other facets of the movements: the cultural, social, and historical sides. This dissertation aims to do the opposite. I address gaps found in the works of Mosco and Carey, and epistemologically oppose what I am critiquing by exploring various models (rather than a single model), along which technological utopianism projects a reality in which dreams of democracy and positive political change can be fulfilled through the embrace of new technology. Examining technological utopianism with an awareness of its different dimensions assists us to become more observant and critical of its reality, its complexity,

and internal differentiation and allows for a rigorous and critical reading of this phenomenon. In other words, in order to better destabilize technological utopianism, we should not dismiss it as a fantasy, myth, or ideology. Unsettling technological utopianism becomes harder when that utopianism appears as an entity whose micro details are unknown. We should acknowledge its reality by taking it seriously, breaking it down, and observing its historical and internal variation.

In order to be more sensitive to the plurality of technological utopianism, I approach this object of research with a combined approach: a philosophical/historical enquiry and an empirical one. Readers who appreciate philosophical studies, similar to those found in Michel Foucault (1977a), Lewis Mumford (1934), and Friedrich Kittler (1990, 2010), might be surprised by the empirical component of this project. On the other hand, readers who look for positivist or realist accounts might not find the speculative and historical elements of the paper as fathomable or necessary. I, however, find blending these two approaches to be the best method for investigating the complex and multilayered construction of technological utopianism and its effect on conversations about the political movements in MENA.

I provide philosophical-historical research for two reasons. Firstly, understanding technological utopianism cannot happen without understanding its formation and stories. The philosophical and historical quarry is necessary to trace technological utopianism's contours, rationales, and confines. Reflexive interpretation is required to interpret or reinterpret different stories, philosophies, and sites in the making of Western discourse of technology and, particularly, its technological utopianism. Research, through this retrospective look, is not a search for ultimate truths, but is about how certain

(problematic) intellectual, institutional, and social forms, ranging from literary fiction to military regimentation, have become constitutive of a notable trend in Western discourse of technology.

Here, I draw on Michel Foucault (1971, 1977a, 1977b, 1988) to overcome some limitations in other philosophical and historical readings of technological utopianism. Reading the history of technological utopianism in the West from a Foucauldian perspective of discourse helps dismantle “monolithic” (Pennycook, 1994) conceptions in which power relations are understood as determined from the top according to laws of capital (Pennycook) or visions that prioritize consciousness and thought over material practices (Marx & Engels, 1998). Recasting technological utopianism in contingent terms as a historical process, conditioned by multiple “regimes of truth” (Foucault, 1977a), helps abolish deductive interpretations and expand the space for analysis that accommodates power in multiple forms.

Through this understanding of history I can explain the relationship between Western discourse of technology, marked by technological utopianism and produced in other historical moments in the past (Carey, 1989; Peters, 1999; Turner 2010; Winner, 2001, etc.), and discursive positions surrounding MENA politics produced in the present. Adopting Foucault’s complex vision of history, which is unconfined to one single line of development, has helped me understand that *multiple* sources of power continue to condition current intellectual understandings of technology. Along these lines, I understand that the rise of capitalism is not solely responsible for technological utopianism, as some studies suggest (Fisher, 2010). Instead, I identify it as the outcome of different symbolic and material processes.

Re-examining technological utopianism from a plural perspective helps us see that, within this construction, there are multiple models with each technologically utopian model holding different views of power, technology, society, space, time, and politics. The discernment of technological utopianism's heterogeneity highlights the important observation that there are technologically utopian ways of seeing that have gone unnoticed and escaped critical assessment by scholars such as Carey (1989), Turner (2010), and Mosco (2005) and that the image of technological utopianism provided by these scholars excludes many types of conversations that should be considered as extensions of the formation of technological utopianism.

This dissertation's philosophical-historical enquiry is accompanied by empirical textual work. Common approaches to technological utopianism hinge upon cultural, historical, and philosophical inquiries without engaging in rigorous work that looks at micro or textual practices. Dismissal of linguistic and textual inquiry, in relation to discourse of technology, may be a result of a lack of appreciation for the role of textuality in constituting meanings. There is, I believe, a persistent outmoded belief that language is just a mode of transportation, whose function is to deliver meanings or messages (Reddy, 1979). In this way, representations would seem mere descriptions. Evaluating these descriptions, then, would mean comparing them to facts, statistics, and real occurrences. Language, in this sense, appears as unimportant and examining *real* events comes across as the worthwhile job. However, texts do not merely describe; they mediate realities (Bengtsson, 2011; Fairclough, 1992). Therefore, their effectiveness should not just be measured in comparison to an assumed reality, but in relation to the questions of how categories – political, social, historical, cultural, and communicative – are embedded in

language, what representations are dominant, and what continues to be silenced and excluded within these representations.

Textual and intertextual analysis, for me, is a means to observe these categories and incongruities. I hope that introducing empirical and textual ways of analyses encourages new modes of inquiry unfamiliar in traditional approaches to technological utopianism or discourses of technology. Works of Carey (1989), Turner (2010), and Mosco (2005) may not find much need for this textual style of analysis, as their work is bound up in the exploration of Western technological utopianism's effects in the West. However, I believe that textual analysis can open up space for new ways of tracing how technological utopianism shapes the image, not only of technology in Western contexts, but also of things that are symbolically and geographically beyond. I intend the empirical textual analysis of this dissertation to bring awareness to how Western discourse of technology is not only ways of talking about technology. Discourse of technology, and more specifically technological utopianism, is, rather, instrumental in shaping international communication and institutional orientations. Whether ways of talking about new technology within the MENA movements have direct implications for foreign policies in the West is something that I cannot accurately predict, but what I see from this theoretical and empirical research is that particular forms of MENA have been created and circulated widely within the production of one of the most privileged Western establishments, academia, acquiring, in this way, a status of their own.

In building up the methodology appropriate for such discursive approach, I have relied on two different schools of thought. The first is Foucault's theory of discourse, which takes account of contingency and multiplicity in tackling history and power. My

understanding of power, in relation to Western discourse of technology, is informed by Foucault's (1971, 1977a, 1977b). Hence, I see this discourse as inscribed in a play of powers and entrenched in interplay with many knowledge components: literary production, engineering designs, scientific canons, religious ethos, philosophical propositions, and military arrangements. Influenced by Foucault too, I deviate from much critical discussion of technology (Carey, 1989; Fisher, 2010; Fuchs, 2011; Mosco, 2005; Turner, 2010) that relies on class and economic concerns. I rather see power as one that traverses multiple domains. Critical discourse analysis, on the other hand, has informed my work of how and which micro-details of texts reflect and reproduce power. Differentiating my work from CDA, however, I do not see power as a central force that shapes texts, but, as I have already stated, as a power seen through Foucauldian terms.

To recapitulate what has been said above, this dissertation aims to provide a critical philosophical account of different forms underpinning Western discourse of technology, and in particular, its technological utopianism. Paying much attention to the heterogeneity of technological utopianism is necessary to observe its influence and proliferation. Also, I find noticing regimes of truths, dilemmas, irrationalities, institutions, and contradictions that have become defining in technological development immensely useful to the disturbance of the imagined neutrality of technology. Through this historical account, I shed light on how technology has been a main element of both utopia and politics/revolution and how these two have been constitutive of Western technological development and history. Then, by using textual analysis, I locate and translate these broader meanings in relation to Western academic discourse on the MENA movements. I address how technological utopianism influences academic discussions of

the interaction between new communication technology and MENA, studying its impact in producing and manufacturing certain images of the Arab and Iranian movements.

Key Terms

I begin this exploration by defining the main parameters and terms set forth by the object of my study: *technology*, *utopia*, and *revolution*. As separate phenomena, technology and utopia occupy central places in scholarly discussion. Although there are works that have explicitly connected the two (Carey, 1989; Mosco, 2005; Segal, 1985; Sibley, 1973), there is not much scholarship that rigorously makes these connections. Rather than looking at utopia and technology as two separate historical constructions, I consider technological utopianism as one form: technology has been a main inspiration for utopian visions and, conversely, utopianism has historically escalated with the development of new technology. However, I clarify the terms *technology* and *utopia* separately and linguistically before proceeding with the work. This clarification further highlights the rationale behind my employment of technological utopianism as a critical perspective.

The *Oxford English Dictionary* defines *technology* as:

- 1) The branch of knowledge dealing with the mechanical arts and applied sciences.
- 2) The application of such knowledge for practical purposes, especially in industry.
- 3) Machinery, equipment, etc., developed from the practical application of scientific and technical knowledge. (Technology, 2005)

The word's connotation, nevertheless, is more ambiguous and complex than what appears to be the case in these senses. Examining the word from an etymological perspective

suggests that technology is more than hardware and knowledge that produces these tools. Darin Barney (2000) explains that the word *technology* combines the Greek words *techne* and *logos*. *Techne* means useful arts and activities and skills of craftsmen (Barney 2000; Heidegger, 1954). *Logos* derives from *Legin*, which means “to consider carefully” (Heidegger, 1954), to gather, and collect, as well as to utter and say (Barney, 2000). According to Barney, philosophers such as Plato and Aristotle did not combine these compounds into words because they conceived them to have different meanings, yet, these compounds were combined later. Their combination signals that technology represents more than gadgets or mechanized knowledge. The etymology of *technology* suggests that *technology* refers to more than an art that produces objects and includes ways of “speaking about or gathering what we consider to be more important to the human conditions”; therefore “technology is clearly more than the sum or operation of its parts” (Barney, 2000, p. 28).

Barney’s analysis of the word *technology* is closer to how I understand communication technology. Technology, in this sense, is not restricted to machines or technical knowledge, but reveals our views and relationships to other communicative structures, such as politics, society, space, time, the body, and others. It involves questions relevant to power, culture, and material and symbolic environments.

While I understand technology to be more than hardware (or software), I believe we should, nevertheless, retain the meaning of technology as material entities in order to understand questions that I pose regarding the relationship between technology and utopianism. According to David Billington, “Technology, in the minds of many people, consists of machines” (as cited in Segal, 1985). Regardless of its inaccuracy, this

understanding helps identify utopian meanings that have been associated with technology, such as in terms *technological development* or *technological revolution*. While all societies, regardless of their technological development, rely on technologies (Segal, 1985), the word *technology*, in the West, has become primarily associated with new and advanced instruments and knowledge, which fulfill what, at previous historical moments, were probably considered impossible designs. The purpose of my project is to probe deeply into the utopian interpretations and meanings assigned to new and innovative technology.

As historical and complex as the word *technology* is, *utopianism* also has a long history in Western literature. The word *utopianism* derives from the word *utopia*, with which the sixteenth century writer Thomas More named his imaginary island described in his book, *Utopia* (Segal, 1985). More coined the word *utopia* from the Greek *ou-topos*, meaning “no place” or “nowhere”, but also used *utopia* in his poem “Eutopia”, which means a good place (Sargent, 2010). Thus, the word has come to refer to a non-existent good place (Sargent), suggesting certain forms that have not yet existed historically can guarantee a perfected society.

Utopias had been described well before More’s *Utopia* (Sargent, 2010), something that will be elaborated on later in this dissertation. However, the linguistic structure of the word reveals a distinctive aspect of utopianism separate from other forms of knowledge. That utopia linguistically denotes dis-rootedness, dehistoricization, exclusion, or semi-exclusion of *history* from the present is an element that distinguishes utopia. Utopian thinking transcends, marginalizes, and ignores historical circumstances,

creating an image of a different world by presenting a contrasting concept of what the case actually is.

Inasmuch as technology has consistently formed a part of utopias, the role of technology in achieving utopian societies has differed from one vision to another. For example, Francis Bacon's *New Atlantis* expresses more confidence and enthusiasm for technology and science than the other seventeenth century utopia of Tommaso Campanella: *City of the Sun* (Sibley, 1973; Mumford, 1922). This variation recurs in modern utopian thought on technology (Sibley, 1973). An interrogation of current technological utopianism reveals that, in the same miscellaneous fashion, technologies are understood in a variety of ways, ranging from radical to softer versions of technological utopianism.

Current technological utopianism, however, is not merely an extension of older literary utopias. Using Foucault's perspective, I emphasize that technological utopianism is not just a mode of thought, ideology, or consciousness, but is associated with different cultural, social, and material factors. Different symbolic and material practices have nourished technological utopianism, resulting in even more diversity within this domain.

My examination of older utopian (and dystopian) thought, in conjunction with these historical formations, suggests that there are different models – although somewhat overlapping – into which technological utopianism can be divided. These categories can differ in their positions: in one model, technologies are accorded transcendental qualities, while in another they are instruments for achieving a communal society. In this dissertation, I argue that these, and other visions, while all restricted by their utopianism,

are based on different claims. They vary in their historical trajectories and in their implications for understanding the role of communication in mediating politics.

Also related to my research is the term *revolution*. The term is relevant to this study on two levels: the political and the technological. These two meanings have acted dynamically with each other. As a term, the word *revolution* appeared in seventeenth century England to denote “the restoration of a previous form of government” (Beniger, 1986, p. 7). The French Revolution, however, granted the word a meaning that suggests abrupt, new, and transformative change (Beniger). Change associated with revolutions has become distinct from other processes, such as reforms. While the latter implies change adherent to general values and rules, the former means dramatic change opposing current rules and bringing new principles and values (Williams, 1992).

A revolution often denotes socio-political transformations associated with democracy and people’s struggles to govern themselves, rather than being controlled (Williams, 1992). The most illuminatingly relevant are the Marxist notion of a revolution, as action directed against an establishment’s ownership of capital (Marx & Engels, 1998, 2011), and Hannah Arendt’s political notion of a revolution as democratic production of collective power and participatory spaces (Arendt, 1977). These two notions have enhanced the meaning of a revolution as “a drastic upheaval, one that people ought to welcome as good news” (Winner, 2001, p. 101). The word, as a result, conjures the image of altered conditions towards a better and a desirable future: a future that is democratic, egalitarian, rich, and diverse (Winner).

Revolution, however, has become a metaphor to signify dramatic change outside the political sphere, more often to describe leaps of technological development. Beniger

(1986), for example, speaks about the Control Revolution, in which a complex of rapid changes in technological and informational arrangements was made to bring economic control. The Printing Revolution (Eisenstein, 2005) and the Information Revolution (Slack, 1984) are, likewise, used to describe conspicuous technological changes. That being said, the word *revolution*, when applied to technology, not only connotes changes in technical and engineering configurations, but it also implies positive change occurring in economic, social, or political spheres as a result of these technological developments (Slack, 1984; Winner, 2001).

Revolution, in respect to academic discussions of MENA's events explored in the study, is used on these two different, yet intermingled, levels. One describes the political events as in "the Egyptian revolution" or "the Tunisian revolution". Setting aside the contestation of the applicability of the word to describe late political changes in the region, the evaluation of the events as revolutions is usually measured against criteria developed by the West. On another intertwined level, many researchers and commentators have attributed to the events the phrases "Facebook Revolution" and "Twitter Revolution". The use of "revolution" to denote these two meanings, in relation to the events, is not a coincidence. It is an extension of a longer thread of interchange between the two configurations of revolution, the socio-political and the technological, in Western intellectual traditions.

In explaining the terms *technology*, *utopianism*, and *revolution*, I hope not so much to provide Wikipedian descriptions of these words but rather to draw attention to important questions and issues that will be tackled extensively in the following chapters: (a) dehistoricization and heterogeneity as aspects of technological utopianism, (b) the

development of unique and utopian notions of *revolution* in the West, and (c) the strong discursive connection between politics/revolutions and technology in the Western context. In navigating more widely these meanings in the following chapters, I outline some orders of dynamism that connect strongly the three pivots of technology, utopia, and revolution.

Chapter Outline

The dissertation is basically divided into two parts, connected by a methodological chapter. The first two chapters are a theoretical/historical/philosophical inquiry into the development of technology and technological utopianism in the West. The methodology chapter does not only provide the methodology mostly appropriate for the empirical section, but it also reinforces important guiding principles that have set the direction of the overall research, such as how Foucault's theory guides my investigation of power and history. This is followed by the empirical section, divided in two chapters.

Chapter 2 provides insight into the development of Western utopianism of technology. In exploring this subject, I reject the "essentialist" (Hennessy, 1993) view of history that renders history as an objectively evaluated narrative. Rather, I realize the embeddedness of cultural and social institutions and the complexity of the involved processes. This complexity is reflected in the structure of the chapter itself; the chapter is not built around a sequence of events, but around different forms of knowledge and practices. The chapter explores the interplay of different sources: utopia as literary genre, utopia as political philosophy, irrationality and religion, militarism, politics, and the intellectual doctrine of neutrality. By providing different contexts, the chapter points out

different discursive trajectories and demystifies technological utopianism by revealing its dynamic powers and regimes of truths.

Chapter 3 focuses on the role of Western modern scholarly discourse in (a) nourishing technological utopianism and (b) providing particular intellectual templates for understanding revolutions and politics that enhance, or at best, do not interrupt, technological utopianism. Although Chapter 2 critiques the role of scholarly discussions in forming technological utopianism in some instances, the overall discussion in Chapter 2 focuses on technological utopianism as a multi-institutional discourse. Chapter 3, differently, discusses modern intellectual bodies of thought that have significantly contributed to technological utopianism, typified by Marshal McLuhan (McLuhan 1994, 2011; Carey, 1989), Stewart Brand (Turner, 2010), and Francis Fukuyama (Fukuyama, 1989; Mosco, 2005). The discussion of these works is preceded by a critique of seminal discussions that have built particular concepts of revolutions and democracy, manifested in Hannah Arendt (1977), Karl Marx (1998, 2011), and Jürgen Habermas (1991). In analyzing these intellectual influences, I am guided by the critiques of James Carey (1989, 1998), Vincent Mosco (2005), Fred Turner (2010), Diana Saco (2002), and a few others. Discussing these works, I further highlight some important themes relevant to the object of the study and the relation between technological utopianism and politics. The chapter also elucidates clearly the main rationale behind the study and answers why I think that intellectual discourse is effective in extending technological utopianism. It shows the role of intellectual and academic expertise in reproducing, maintaining, and adapting technological utopianism. Inasmuch as academic discourses are shaped by technological utopianism, academic knowledge has had a role in invigorating

technological utopianism. The role of academic and intellectual discourses, therefore, should not be taken lightly.

At the end of Chapter 3, I put forward a summary of models that, I argue, guide intellectual discussions about technology, especially in relation to political change. Importantly, although these understandings of technology are various, they are not without mutual influence and overlap. Some of these models may not recognize the influence of new technology to be as exuberant as traditional literary utopias do, yet, they are all engaged with utopian promises.

This dissertation gives much attention to theoretical and historical arguments, and it does so mainly to place recent academic discourse on the Arab and Iranian movements within this history and to provide necessary theoretical devices to interpret this discourse. In Chapter 4, I expound upon my mixed-methods approach to register the different nuances of the examined academic discussions, and trace ties between the academic texts I interrogate and Western historical discursive forms of technology and politics. In this chapter, I critique some of the logics in Michel Foucault's postmodernist approach and Norman Fairclough's critical discourse analysis. Each has important concepts to offer in the examination of technological utopianism, and, yet, each has its gap in relation to the questions this dissertation poses. This chapter analyzes these approaches in order to constitute one that serves the purpose of this dissertation. The chapter also interrogates how the essential notions of *academic* and *Western* are determined in assembling the data. Taken together with the previous chapters, this chapter provides the basis for an analytical framework for assessing the different ways of seeing new technology in light of the Arab and Iranian movements and the implications of these ways of seeing and their

textual and intertextual patterns in drawing a specific picture of MENA political and social lives.

The next two chapters, 5 and 6, focus on analyzing Western academic discussions of the Iranian and Arab movements. In Chapter 5, I provide systematic analysis of published journal articles. The chapter calculates the distribution of the communication models in the data and provides other quantitative results. The chapter, however, goes beyond descriptive results and provides deep critical and textual analysis of the data. The analysis is divided according to the models, with a focus on ones found to be influential in the sampled data. The purpose here is to map out discursive patterns and strategies found within these models and to record the semiotic impact of these strategies in producing certain language and modes of knowledge about MENA.

Some of the linguistic and intertextual strategies explored in Chapter 5 are further illustrated in Chapter 6, which is devoted to selectively analyzing a number of academic cases and observing academic arguments and debates in different places: the public, the pedagogic, and the political. The aim of this chapter is to provide a broader and more generalized sense of these models. While the previous chapter is oriented towards systematicity and is restricted to journal articles, this chapter is characterized by selectivity and generality and it also broadens the scope of analysis to other academic-related domains. The final chapter interprets the results of the analysis and provides a summary of the most significant findings of my analysis.

By providing both systematic (Chapter 5) and case-based (Chapter 6) data analyses and a historical-philosophical inquiry (Chapters 2 and 3), my project offers a reading that is evidence-based but also nuanced and multi-dimensional in order to reveal

stocks of knowledge and ideas that the examined discursive event draws on and to show how the reproduction of this knowledge affords certain representations of MENA.

Chapter 2: Mapping Western Discourse of Technology

This chapter is divided by the chief institutions, polities, and doctrines I understand as historically influential in shaping technologies or ways of speaking about technology, especially in relation to technological utopianism. After clarifying some interrelated vocabulary and concepts, this chapter focuses on:

- The domain of utopia
- Religion and rationality
- Capitalism and myth/ideology
- Militarism
- The doctrine of neutrality
- Technology and politics
- Network technology between utopia and power

This chapter traces chaotic historical trajectories of discourse of technology and problematizes technological utopianism by revealing interplay of multiple regimes of truth in the formation of this construction. Building upon this chapter and the next one, the final section of the following chapter provides a summary of various discursive models that have shaped attitudes, visions, and language surrounding technology.

Further Vocabulary

I explained in Chapter 1 the rationale behind my use of technological utopianism as a critical standpoint in relation to other points of departure such as imperialism, capitalism, and Orientalism. Scholars employ other names as well to describe how technology is talked about and how it becomes a material for admiration. The *technological sublime* (Carey, 1989), *digital sublime* (Mosco, 2005), *technological optimism* (Krier & Gillette,

1985), *technological determinism* (Fuchs, 2011; Williams, 1974), and *cyber utopianism* (Turner, 2010) are several terms used to describe new technology's emergence and development. I have chosen, however, to adhere to *technological utopianism*.

Technological utopianism underscores three important qualities I want to highlight in my exploration of this construct: the contingency, historicity, and heterogeneity of technological utopianism.

Sublime. Some critics describe enthusiastic views of technology as *sublime* (Carey, 1989; Mosco, 2005), from the Latin *sublimis*, meaning elevated or lofty. *Sub* means “up to” and *limis* refers to the boundary or limit (Morley, 2010). The word began acquiring its contemporary meaning in the 18th century when it was applied in relation to arts to describe natural wonders instilling astonishment and awe, including mountains, waterfalls, and infinite skies (Morley, 2010).

Edmund Burke, a well-known 18th century thinker, describes the sublime as a mixture of feeling – fear, delight, amazement, and thrill – provoked by nature. Unlike beauty, which triggers only pleasure, the sublime is “the strongest emotion which the mind is capable of feeling” (Burke, 1909, p. 35) and is tinged with some degree of horror caused by the obscurity and magnitude of some natural elements (Morley, 2010).

Friedrich Hegel, a 19th century philosopher, also helped form the concept of the sublime, recognizing the sublime as a point of meeting with ‘the Absolute’. In other words, sublimity happens when the divine manifests itself in nature (Morley, 2010). Hegel extended the concept by addressing its relation to self-transcendence. Inasmuch as Burke focuses on the psychological aspect of the sublime, Hegel distinguishes the sublime from related concepts by incorporating a divinity-human relation.

This is not the place to detail major philosophical contributions and debates concerning the sublime. I refer to Hegel and Burke's theories in order to highlight a few dominant assumptions and qualities characterizing the conception of the sublime. First, the sublime is an emotional phenomenon (Burke, 1909; Morley, 2010). Second, it is associated with a belief in the existence of powerful entities that transcend the banality of human existence (Mosco, 2005). Third, and lastly, it is characterized by the duality of its effect – a combination of extreme pleasure and excessive fear (Morley, 2010).

Both Mosco (2005) and Morley (2010) propose that technology has substituted nature in spawning the experience of the sublime. Transcendental qualities, they argue, which were connected with nature, have become characteristic of technology. New technology is conceived, correspondingly, as an entity higher than the human form of being. In the same manner that nature elicits a dual response, technology, Mosco and Morley tell us, triggers a synthetic reaction – admiration and fear – because of its conceived ability to thrust people into different realities, either heavenly or terrifying.

While I agree with Mosco and Morley that sublimity is important to the study of technology, I importantly stress a difference between their outlooks of the phenomenon and how I consider the sublime in regards to broader discourse of technology. Mosco considers the sublime the main influence in shaping the language of technology. I, on the other hand, propose that the technological sublime intersects with one way of speaking about technology. This discursive constituent, I contend, is the highest rank of technological utopianism – the most intense and extreme version. This way of talking is what I refer to as the *transcendental* model and is coupled with the *dystopian* model. The two models, the transcendental and the dystopian, result in a singular approach to

understanding technology. I have elected to use the term *technological utopianism* as the umbrella term for the multiple ways of speaking I examine in this paper, while also associating the technological sublime with the transcendental and dystopian models that exist within discourse of technology. Inasmuch as the sublime makes a singular approach to technology, it is not an all-encompassing view of technology. A unitary perspective, like Mosco's, disregards other knowledge-forms emerging from different experiences and mystifies discourse of technology by describing one discursive structure as the dominant. There are different models, which certainly differ in the degree they champion technology. The re-inscription of this differentiation in describing and analyzing technological utopianism and the treatment of technological utopianism as an interdependent system, which cannot be reduced to one mode of thinking, are necessary to better understand technological utopianism.

Cyber. If I consider my task to elucidate effects of technological utopianism on academic reflections on the use of technology in propelling or facilitating the MENA movements, then, logically, I should also consider other terms frequently used to describe the Internet – claimed as one of the most commonly used forms of technology in the MENA movements and, especially, referred to by the term *cyber*.

The word *technology*, rather than *cyber*, has implications for the nature of my research as it emphasizes the historical rootedness and heterogeneity of technological discourse. I will explain further my rationale for choosing the word *technology*. Before doing so, however, I must necessarily discuss the term *cyber* and the formation of its concept. *Cyber* is usually used as a prefix, as in, for example, *cyberspace* (Saco, 2002), *cyberculture* (Bell, 2007), and *cybertheology* (Spadaro, 2013), and it continues to be used

to create other neologisms. This morpheme was borrowed from *cybernetics*, a word derived from the Greek word *Kubernites*, meaning skilled in governing, steering, or piloting (Bell, 2007). The modern use of cybernetics began around World War II (Bell). Historians point out that World War II brought about changes in the disciplinary nature of science, especially in the United States of America, where universities found themselves working closely with military and government researchers (Turner, 2010). That fields can borrow from others has become more legitimate in the light of the collapse between engineering and science, and also between military and civilian research (Turner). Cooperative work between the military and the civilian gave rise to cybernetics, which Norbert Wiener proffered as a universal model for interdisciplinary collaboration (Turner), one that could be used for biology, physiology, engineering, and social science. Wiener used *cybernetics* to describe his interdisciplinary theory and to draw attention to an analogous relationship between human and mechanical systems. The pilot and governor, who regulate steam engines and aircraft, are imagined in the cybernetic metaphor as mechanical devices able to regulate themselves through error and feedback (Turner). This mechanical theorization of living organisms translates the material world into computational terms and conceptualizes society as a compound of machines “seeking self-regulation through the processing of messages” (Turner, p. 22).

Wiener’s discussion of the intersection between the machine and human behavior also contributed to other important and well-known philosophies of cyberspace. William Gibson introduced the term *cyberspace* in the 1980s with his “cyberpunk” novel *Neuromancer*, wherein the term was used to describe a computerized world in which the novel’s characters connect their consciousness to a computer network (Bell, 2007).

Gibson depicts this data world as a “consensual hallucination . . . a graphic representation of data abstracted from the banks of every computer in the human system” (as cited in Saco, 2002, p. 102). According to Diana Saco (2002), Gibson’s political goal of drawing a dystopian image of computer-mediated space is to invite readers to reevaluate their increasingly technologically mediated life and the escalating conflation between technology, people’s own sensory experiences, and capitalist interests and monopoly.

The term *cyberspace* came after a technological transformation in computer technology – beginning with the development of electronic computing in the 1940s, through to the extension of electronic computation and distributed networks in the 1960s, and then to the invention of the personal computer in the 1970s – increasing computer access from their previously restricted use by institutions and institutional users (Saco, 2002). This transitional development in computation and electronic technology has urged people, like William Gibson, to imagine, conceptualize, and fill the intangible space between computer screens and their influence on people. In contrast to Gibson’s intended meaning, the word *cyberspace* has become connotative of democratic empowerment (Saco, 2002), generating rosy visions of the computer. Although considered by some to be slightly outdated – new words, such as *digital*, have been proposed as replacements (Bell, 2007) – the term persists in literature surrounding new forms of technology.

I am aware that *cyber* may apply to my analysis of academic discussions surrounding the use of new technology in the MENA movements. However, its use risks hiding a much longer social and cultural course of technological innovations recounted by thinkers like Lewis Mumford (1934), thereby ignoring the possibility that recent developments respond to older utopian desires for transcendence or communal life. We

cannot understand the position of new technology in Western life, embodied lately by cybertechnology, without going beyond and taking into account the wider range of developments in Western institutions, thought, “technics” (Mumford, 1934), and other social and cultural domains. I opt to use the word technology in the philosophical section of this dissertation to emphasize technological utopianism’s historicity. I may refer to different forms of technology – industrial, electronic, or digital – in this section in order to make more apparent how technological utopianism has accompanied the development of different technological forms. Terms such as the Internet, social media, and digital media will, also, be used in the analysis section, not because technological utopianism is unique to these new forms of technology, but because of the nature of the examined academic discussions, which tend to utopianize new formations of technology when older technologies lose their appeal.

One of the most important philosophical-historical writings proposing that new technological projects can only be explained through examination of pre-modern history is Lewis Mumford’s *Technics and Civilization* (1934). Mumford argues that most historians date great transformations in modern technology from Watt’s invention of the steam engine, recognizing that “the machine” had been in development for centuries prior to the industrial period. Recently, attention has shifted to developments in digital innovation rather than industrial technology, conjuring up a vision of the development of digital media as a decisive moment in history. Mumford wrote his book in the early 1900s and, therefore, could not have been aware of our contemporary emphasis on digital/cyber technology. Yet, his vision of technology is still needed to debunk the modern misconception of digital technology as a historical breakthrough. If, as Mumford

informs us, the industrial mechanical revolution is an extension of older social and cultural forms, then it follows that digitalization is a response to mechanization.

Mumford (1934), after all, refers to three waves that have swept the Western civilization: the *eotechnic* phase, starting around the tenth century; the *paleotechnic*, characterized by the use of resources and materials such as coal and iron; and the *neotechnic*, marked by developments of electricity and alloys. His argument about these waves reveals that more recent technological developments are not points of departure from earlier innovations and social forms, but rather that each phase embodies things from the past. Each stage is interplay of knowledge, skills, materials, and spiritual and intellectual elements cemented on older sets of “internal and external” resources (Mumford, 1934).

But Mumford (1934) defies the idea of historical progress and social evolution in his historical account. He refrains from sketching the paleotechnic phase, distinguished by its enlightenment project, as a developmental advance over traditional life in the eotechnic period. Mumford’s story of technology is not one of evolution towards modernity but rather one that depicts a history of contradictions and tensions. He, in fact, devotes one section in his book to disparage what he calls the “doctrine of progress”, which gained popularity during the 18th century because of rapid improvements in technology. The idea of a steady persistent improvement, Mumford tells us, was considered a reality during that period of time. The 18th century, “which was in fact a low one measured by almost any standard except scientific thought and raw energy [was perceived] ... as the natural peak of humanity’s ascent to date” (Mumford, p. 182). The naturalization of the philosophy of progress resulted in assuming that:

If the cities of the nineteenth century were dirty, the cities of the thirteenth century must have been six centuries dirtier: for had not the world become constantly cleaner? If the hospitals of the early nineteenth century were overcrowded pest- houses, then those of the fiftieth century must have been even more deadly... The fact that the cities of the nineteenth century were far brighter and cleaner and better ordered than the new Victorian towns: the fact that medieval hospitals were more spacious and more sanitary than their Victorian successors. (p. 183)

Mumford's perception of history, which accommodates tensions rather than evolution, sums up the idea of technology that I defend in my dissertation and counters the conception of technology I am critiquing. Establishing a critical history of technology is important in order to disturb the utopianism of technology. In contrast to utopian approaches to technology, which forget technology's history in favor of a short-spanned and information-centered story, a historical look is productive in investigating past and present discursive formations – military, scientific, academic, spiritual, religious, literary, and economic – and, thus, in understanding how these are imported and reconstituted in present discourses surrounding technology. This retrospective investigation does not require smoothing out limitations, antagonisms, and disruptions to produce a positivist and totalizing history. Rather, observing the past is to diagnose and observe these incongruities. Encapsulating the history of technological utopianism into the recent development of cyber theories – the concept of cyberspace is understood by academics, such as David Bell (2007), as the most legitimate metaphor to describe innovations in information technology and the language revolving around it – means, on the other hand,

sidelining the manifold state of communication and technology and de-rooting and decontextualizing modern societies.

Technological optimism/pessimism/determinism. Other terms affiliated with my project are *technological optimism/pessimism* and *technological determinism*. According to Christian Fuchs (2011), a study of technology is considered techno-optimistic or techno-pessimistic when it is interested in one aspect of technology, creating an impression that technology has a one-sided relationship, either positive or negative, to society. He describes this epistemological approach as *technological determinism* for its obliviousness to dialectics of technology and society (Fuchs, 2011). When the specific effect that is presumably created by technology is conceived as positive, the approach is described as techno-optimistic; when the effect is negative, the assessment is described as techno-pessimistic (Fuchs).

Technological determinism, to Fuchs, is “a kind of explanation . . . that assumes that a certain media or technology has exactly one specific effect on society and social systems” (Fuchs, 2011, p. 112). In his study of television, Raymond Williams (1974) condemns technological determinism, rejecting the view of television, an important form of modern technology, as an autonomous technology that “altered all preceding media of news and entertainment” (Williams, 1974, p. 3). He advocates the notion of technology as a social phenomenon, in both origin and effect.

While technological determinism is an important entry to critique of reductive arguments about the role of technology, it is a term that gets a critic absorbed in the method realm, so to speak. It is a term that does not pose contextual, historical, and philosophical questions about the problematic pattern itself. With *technological*

determinism, we do not feel obliged to ask what kind of historical contexts that have led to the building of this discursive formation itself.

By settling upon utopianism, rather than determinism or pessimism/optimism, I can go further than critiquing a deterministic attitude of technology. In my view, technological utopianism is more than an erroneous approach to technology. It is not a universal epistemological problem and to say otherwise is to call for an immensely ahistorical Eurocentric critique. Instead, I argue that technological utopianism speaks to texts, signs, ideas, opinions, and ways of speaking, organizing, and behaving, which significantly developed within Western milieus. The objective of my work is to shake up such characteristically utopian ways of speaking about technology by invoking and critiquing Western institutional and historical formations.

Another nuance of the term utopianism, in contrast to determinism, is the polyphonic status of the former. Technological utopianism accommodates a wider range of attitudes, opinions, and positions in engagement with technology: from transcendence to utilization, from occupation with the body to politics, and from dystopia to communion. The words determinism and optimism/pessimism suggest some qualities of technological utopianism's discursive models but they are not adequate to label the coalescence of different Western ways of speaking about technology. This coalescence of discursive formations is much more varied and contingent than a simply polarized quality of an approach.

Although it is true that some utopian stances of technology are deterministic, there are ones that evade the exact sense of determinism. As an example, the Marxist view of technology is under scrutiny in this dissertation for amplifying technological

utopianism. However, the Marxist view is not technologically deterministic in the strict sense of the word since it is “more sensitive to the liberating as well as enslaving potential of modern technology” (Segal, 1985, p. 69). The Marxist view does not present one kind of relationship between technology and society. Nevertheless, it is this interpretation which deems technology as “neutral”, “pure”, and capable of operating in accordance with people’s projects and demands (Feenberg, 1991, p. 5) that renders the Marxist view a utopian stance. It is a view that characterizes technology as being allied with people’s purposes, whether good or bad, honorable or evil.

Technological determinism, as critical stance, I believe, is a concept based, not on heterogeneity, but on bi-dimensionality. It is ordered in two pairs: hard-soft determinism and optimism-pessimism. To compare technological determinism and technological utopianism in more visual terms, while the former is reductive in the sense that it places views of technology along straight paths, the latter positions discourses of technology at different points over a sphere. Certainly, the two concepts (technological determinism and technological utopianism) are symbiotic. However, determinism does not accommodate views that disturb its binary categorization. On the other hand, utopianism has more philosophical, textual, and literary associations. It can accommodate determinism, but adds complexity to it while lessening its binary rationality.

Emancipatory/liberating media. The words *emancipation* and *liberation* are also recurrent in discourses of technology and are examined in the following sections. The utopian ideal of liberation/emancipation is closely associated with Marxist and neo-Marxist studies. Some Marxist scholars (Benjamin, 1969; Dyer-Witheford, 1999; Enzensberger, 2000; Marcuse, 1972) assume that technologies have enslaving and

liberating potentials.² Their vision involves a superior society, capable of taking control of capitalist media and liberating the proletariat (who will eventually replace today's existing society – built on unequal relations). Those who advance the “emancipation hypothesis”, according to Fuchs (2011), perceive media as tools of class struggle. While the sublime crisscrosses with the first technological utopian approach I investigate (“transcendence” and “dystopianism”), the philosophy of liberation/emancipation contributes to the second model, which will be named the “tool/network” model in this dissertation.

The Domain of Utopia

Literary utopias. Here, I explore the social and cultural history in which technological utopianism can be located. In doing so, I pay particular attention to the utopian. The relationship between *utopia* and *technology* is not something primitive and binary. Therefore, in order to understand a concept as complex as technological utopianism, we must unravel emblematic Western utopias, their constructions of technology, and their associated meanings, such as technique and knowledge. Such analysis helps reveal the main features of utopian thought variants in regards to technology.

Many of these literary utopias pay attention to technology and technical knowledge and their ramifications in political, social, or individual lives (Segal, 1985; Sibley, 1973). In fact, Thomas More, who coined *utopia*, made technology an important, albeit implicit, theme in his 16th century book of the same title:

He, like the inventors of curious engines amongst mankind, has exposed this great machine of the universe to the view of the only creatures capable of

² "The doctrine of neutrality" section within this chapter expounds upon this Marxist view of technology.

contemplating it, so an exact and curious observer, who admires His workmanship, is much more acceptable to Him than one of the herd, who, like a beast incapable of reason, looks on this glorious scene with the eyes of a dull and unconcerned spectator. (More, 2007, p. 122)

Here, as entities, nature and its “author” are aligned with “machine”, “engines”, invention, glory, and reason. Those who reason and observe are classified harmonious with nature, morally superior, and more lovable to God than those “incapable of reason”.

More’s *Utopia* has a theological tone, but, according to Howard Segal (1985), More “expects man, not God, to establish utopia” (p. 57). Like many other utopias, More displays a hunger for science and knowledge, even if the purpose of implementing his proposed new arrangements is serving God. More’s philosophical reliance on people, rather than God, to establish Utopia required him to locate his utopia not in paradise but in a “contemporary semifeudal society” (Segal, 1985, p. 57) where people work to perfect their society. This semi-realistic aspect of More’s *Utopia* distills a common misunderstanding about utopian literature: the myth that utopia is always an unachievable dream to which people mentally escape.

Lyman Tower Sargent (2010) contends that there are, in fact, two versions of utopia: one that focuses on pleasure and affluence of food and riches and another that reflects systematic organization and planning. The first category includes utopias from Biblical, Greek, and Roman stories and myths of paradise (Sargent, 2010). More’s utopia is, clearly, exemplary of the second. More provides “a detailed description of utopia, not merely a set of abstract principles” (Segal, 1985, p. 57) or a state of reverie. The meticulousness and semi-realism of his scheme is reflective of an “instrumental”

(Feenberg, 1991; Winner, 2001) view of technology – technological progress is conceived of as a means to a better life rather than a reflection of abundance of divine blessings. In actuality, More's utopia is characterized "by a drastic decline in desire for more material goods" (Sibley, 1973, p. 261) and luxury items. Happiness, accordingly, is associated with communal life, which simple technologies help regulate and organize.

The connection between utopia and technology is heightened in other sixteenth and seventeenth century utopias, including Francis Bacon's *New Atlantis* and Tommaso Campanella's *City of the Sun* (Segal, 1985; Sibley, 1973). Investigating these two works also reveals that utopias should not be unified into a single conception. Utopias demonstrate different degrees of technological exaltation, reflecting their intellectual and social milieus. The Christian orientation unites the utopias of Campanella and Bacon, as well as that of More (Segal, 1985), but each utopia has its own method of incorporating a conceptualized ideal society and the role of technology in building that civilization. More's *Utopia*, in spite of breathing admiration of science and knowledge, portrays a simple communitarian society. Bacon, on the other hand, imagines an ideal city based on science and advanced technology (Mattelart, 1996). His fiction takes place on the island of Bensalem. In this utopian society, the most significant progressive element is technology (Mattelart, 1996). In Bacon's island, "technique is king" (Sibley, 1973, p. 262). Among the most impressive achievements in the city are the production of artificial metals, navigation under the sea (Segal, 1985), and imitation of birds' flight (Mattelart, 1996). In the city we find also a scientific community, composed of scholars and engineers, devoted to doing research and enhancing science and technology (Mattelart, 1996).

Campanella's *City of the Sun*, differently, is slightly more cautious of technology (Sibley, 1973) and demonstrates less "childish" (Mumford, 1922) enthusiasm for endless technological development (Sibley). The City of the Sun prides itself on technological triumphs, such as labour-saving agricultural machines and an advanced water and sewage system (Segal, 1985). This acceptance of technology, however, is accompanied by a stress on education and an attention to class divisions (Sibley, 1973). Invention is instrumental in achieving the ideal commonwealth of the City of the Sun (Mumford, 1922). With mechanical development, labour becomes dignified, slave-holding becomes an outdated custom, and working hours are minimized (Mumford). There is fascination with technology, not necessarily because technology can be a direct source of happiness, but because it can be a means among other organizational contrivances to bring about ideal life.

To make the connection between older utopias and contemporary utopianism more apparent, I elaborate on variation in utopias' orientations to technology and in systems of thought utopias draw on. Utopia is not of a bygone era. It is part of Western cultural production that manifests in contemporary discussions of technology. In order to establish this connection, between utopia and current utopianism, I revisit the concept of *utopia*. Utopias should not be considered allusions or dreams of unrealizable projects. Rather, they should be understood as complex systems, encompassing different schemes, blueprints, and various realizations of technology. If utopian thought lost its appeal at some historical points, this does not mean that it dried up as a resource for realizing technology. Contemporary discussions of technology still project it in many ways, and

many use it to grasp the role of new technology in achieving (or dissipating) idealistic dreams.

Another aspect that unites utopias from the sixteenth to eighteenth centuries – think, as well, of Daniel Defoe’s *Robinson Crusoe* (1998) and Jonathan Swift’s *Gulliver’s Travels* (2013) – and that may also have been rehashed in contemporary technological utopianism, is the fetishism of exploring different countries. Adventuring and going beyond the sea to explore *unknown* places takes a hold upon the writings of many utopian visionaries (Mumford, 1922). Such desire reads as an inclination for conquest over other countries – attested to by the history of European colonialism. The utopias of More, Bacon, and Campanella “recount the adventures of travelers who have discovered civilizations unknown to Europeans and have returned home to announce their finds” (Segal, 1985, p. 58). Essential to these visionaries is that dreaming of a better life means thinking of other (different) places with other individuals.

The above-discussed utopias, which have a reputation as the greatest utopias in Western history, tend to forge their ideal cities as closed-off communities. In More’s *Utopia*, travel requires permission. In Bacon’s island, only a number of scholars are allowed to travel and inform themselves of scientific discoveries beyond their borders (Mattelart, 1996). The refusal of the foreign, the limitation of travel, and the extreme secrecy are among the most outstanding characteristics of the depicted cities. This duality, I believe, of the desire to build utopian projects in faraway places and, at the same, the idealization of communication restriction as a style of living, still governs how the West engages with others. This duality is contradictory in that it demonstrates a curiosity about other societies and how they engage with technology as a mode of

communication but there is also an idealization and encouragement of isolation, closure, and disengagement from the foreign.

Dystopia. A synthesized desire for communication and connection, with disinterest and apathy, towards the Other is symptomatic of the intrinsic dialectic between utopia and dystopia. Scholars investigating utopian thought usually classify utopia into two categories: utopias, which are positive projections of what a desirable society would look like, and dystopias, which are constructs of what dark, evil societies would look like (Sibley, 1973). However, the line between positive and negative constructions is a fine one.

Lyman Tower Sargent (2010) notes that while the word *dystopia* was first used by John Stuart Mill in his speech to Parliament in 1868, it did not become common and descriptive of a literary form until the twentieth century when many disasters – World War I and II, Hiroshima, the Holocaust, and the Depression – eroded the prospect of pursuing idealistic constructions of society. These tragic events, Sargent tells us, were an impetus for a dystopian orientation in literature. The new pessimistic literary genre was founded, according to Sibley (1973), by Mary Shelley's 19th century dystopia *Frankenstein*, in which an experimental scientist creates life from dead bodies and ends up creating a monster who eventually kills the scientist and his family (Sibley). The novel is about losing control over a technology that in the long run turns on its engineers. Such a tragic sensibility of technology and science is also found in other works, including George Orwell's *Nineteen Eighty-Four* (2009), which critiques the subjugation of humans to the power of psychology, science, and technology (Sargent, 2010). Orwell highlights the fear of knowledge, together with that of technology, as useful to the

powerful elite in controlling and conditioning the ruled classes. Particularly notable in the novel is the way the ruling party uses telescreens as tools to keep the subjects of *Oceania* under constant surveillance (Orwell, 2009).

While the despair in utopian writing over people's ability to control technology is more obvious in dystopian works, such as Orwell's *Nineteen Eighty-Four*, utopias and dystopias, while different, are not substantially distinct categories. Technological utopias and dystopias are convergent in that one is based on the existence of the other. Hope about technology is a projection of despair over a current situation, while dark constructions of technology are a mirror of the realization that technological innovation should be the central element of a narrative. Dystopian representations of technology govern some narratives about technology in the same way that transcendental and other utopian models inflect current discourses surrounding new technology. In both transcendental and dystopian projections, technological utopianism establishes conventions for how technology should be talked about. They both display unwavering faith in negatively or positively transformative possibilities of technology in respect to a specific *utopian* set of meanings such as democracy, peace, harmony, and prosperity. Both technological utopias and dystopias place technology at the centre of an ailing society or a flourishing community.

Utopia and political philosophy. While utopian works of the sixteenth to eighteenth centuries gained wide attention, Lyman Tower Sargent suggests (2010) utopian works had been written well before that era. Critics associate the aforementioned utopias of More, Campanella, and Bacon with Plato's *The Law* and *The Republic* (Mumford, 1922; Sibley, 1973). As in More's *Utopia*, Plato's ideal cities rely on an array

of ingredients, chief among them rational design, knowledge, reason, and justice. Notably, when Plato wrote *The Republic*, his region, Attica, had been defeated and burned (Mumford, 1922). His awareness of the dire conditions of his society urged him to sketch a design that went beyond reform, aiming to reshape societal and political “fundamentals” (Mumford, 1922, p. 31). Here, we see again the dialectic between utopia and dystopia – between dire conditions and an ideal imaginary.

“Commonwealth” in Plato’s *Kallipolis*, Mumford explains, is associated with the city. Simple rural life does not produce a happy life in Plato’s society. Rather, “complexity” is a requirement for the ideal society (Mumford, 1922). The city of Kallipolis, as Plato imagines, consists of three classes: philosopher kings (rulers), auxiliaries (warriors), and artisans (workers) (Sargent, 2010). Conspicuously, at the forefront of this engineered class system is rationality and wisdom. As such, politics are not governed by emotion or left to amateurs but are perceived as “a field of practice that has its own distinctive knowledge, its own special skills” (Winner, 2001, p. 40). The logic behind this system is that if conditions were engineered and rationalized, the “legislation of accident” (Sibley, 1973), which produces events such as war and poverty, would be curbed. As noted by Sibley, “Plato’s purpose [from this construction] is to reduce the impact of legislation by accident and to substitute for it legislation by deliberation and design” (p. 259).

Plato’s framework understands politics as craft, with particular knowledge and skill sets. That Plato designed a template to guide how people run their society is representative of his attempt to regulate politics. On the other hand, he depoliticizes technical life and material crafts. Winner (2001) observes that inasmuch as technology

and politics are analogous in Plato's framework, such is a one-sided dynamic of a relationship: *techne* serves as a model of politics but not vice-versa. The fact that that Kallipolis is imagined as a city, rather than a rural space, illustrates Plato's conception of mechanization as an essential ingredient of a society (Mumford, 1922). However, as his *The Laws*, Plato also forbids the citizens of his ideal cities – people who have the right to engage in deliberative or judicial office – from engaging in crafts (Winner, 2001).

According to Winner (2001), as a result of the lack of historical political evaluations of technology in classical political philosophy such as Plato's *The Laws* and *The Republic*, knowledge of technology has not developed alongside the application of a critical assessment. Rather, technology has grown gradually "invention by invention, industry by industry, engineering project by engineering project" (Winner, p. 47) without an established understanding of how politics and power relations intermingle with technological development.

Plato's writings, together with More's, Bacon's, and Campanella's, show a range of attitudes towards technology. Some utopians associate technology with abundance and pleasure without setting a clear blueprint for how their utopian living can be achieved, a description that defies questions of time and space and displays "naive enthusiasm for endless development" (Sibley, 1973). This is most obvious in Bacon's city:

The material resources of this foundation are manifold. It has laboratories dug into the sides of hills and observations with towers half a mile high; it has great lakes of salt and fresh water which seem to anticipate the marine laboratories we know today; and it has engines for setting things in motion. (Mumford, 1922, p. 107)

A consequence of this preoccupation with technology is that “we in the Western world live in an inventor’s paradise” (Mumford, 1922, p. 108). On the other hand, utopian writers such as More and Plato, perceive technology as a means [among others] to achieve rational projects. They grant more space for questions about social or political arrangements. However, such constructions lack deliberative political and critical evaluations of technology. Instead, they perceive technology as pure instruments, distinct from politics.

These examined utopias combine a multitude of cultural and intellectual elements: a tradition based on egalitarianism in More, a philosophy centered on politics in Plato, and a grain of religion in Campanella and More. Each utopia has its own set of values, institutions, and forms of behaviour, and in building these utopias, authors borrow from their material and symbolic worlds, from their own values, and from their cultural and social environments.

Religion and Rationality

Utopia and technology are constructions with Christian ties, but this relationship is not a sort of interdependence explained in simple terms. Consider, for example, More’s *Utopia* (2007), which is ambiguous in the sense that it is both religious and secular. *Utopia* includes a religious spirit, but it also holds secular principles, placing emphasis on knowledge and human organization. War in More’s *Utopia*, as an example, is permitted, but prohibited if motivated by religion (Mumford, 1922).

Here, I suggest revisiting divisions between the religious and the secular, the intellectual and the spiritual, and the rational and the irrational. As John Durham Peters (1999) explains, there is considerable continuity between the reasoned notion of

communication, expressed by philosophers such as Socrates and Plato, and aspects of Christian “mystical” tradition:

The quest for mystic experience and the romantic yearning for fusion with one’s other half, ranging from Aristophanes’ hilarious speech in Plato’s *Symposium* through mystical visions of Christ as the bridegroom of the soul to recent hopes for full couplings across the distance of cyberspace, express precious longings . . . [and embody] the notion that two souls could blend. (Peters, 1999, p. 65)

This continuity between the two variants, the philosophical and the religious, makes clear the ubiquity of the historical developments of communication and technology.

Technology is neither the outcome of enlightened secular thought, nor is its discourse simply an extension of older religious or mythological motifs (Mosco, 2005; Carey, 1989). Discourse of technology actually derives from both prominent Western constructions and is closely allied to dynamic possibilities unleashed by the two.

Another historical instance of the marriage between religion and reason is the “very old tradition reflected in the Bible [that] suggests that man was placed on earth to ‘subdue it’” (Sibley, 1973, p. 256), not by his bodily might but by his ability to learn and invent (Sibley). In synthesis with this transcendental notion of technology – as elements capable of transcending biological matters – technology and knowledge are also perceived as menacing. The fall of Man is the story of man’s knowledge destroying man (Sibley); Cain, who represents agriculture, is, simultaneously, the first murderer (Sibley). The unavoidable dialectic between the transcendental and the dystopian is an inherent aspect, not only of literary genres, but of religious texts as well.

The assumption that technology is only an outcome of secular scientific thought or brought into effect merely by the power of capitalism is wrong. Actually, Mumford (1934) contends that the concept of mechanization took form not in modes of living and ideas that developed during the capitalist civilization, but in a religious context, in Benedictine monasteries of medieval Europe. He explains that the mechanical conceptualization of time emerged as part of monastic routine, “which reflects the presence of order in the institutions of the Church itself” (Mumford, 1934, p. 12). The first mechanical clock was invented by a monk and motivated by a desire within monasteries of the West for order and power: to regulate spiritual life and “synchronizing the actions of men” (Mumford, p. 14). The clock, not the steam machine, according to Mumford, regulated urban life and “dissociated time from human events” (Mumford, p. 15). The development of the clock introduced the concept that the natural world could be independently and “mathematically” measured (Mumford, p. 15). Mumford’s account of this historical legend illustrates the conflation between religious devotion and engineering pursuit and between a desire for worldly power and an inclination for spiritual subservience in the development of technology.

Mumford (1934) argues that technological improvements beginning to crystallize in the seventeenth and eighteenth century rested upon a “dissociation” of the body and the machine, dissociating actions from the human body to create and operate engines. For Mumford, nothing has prepared the West for this rejection and “contempt of the body” (p. 35) more than the spread of monastery systems. Elimination of bodily pleasures, “sterilization of the self”, and denial of one’s interests were the main principles the Church emphasized (Mumford, p. 34). This endeavor to exclude the body led to the

development of a machine that could work independently and away from “human bias and preference” (Mumford, p. 34).

James Carey (1989) makes the interrelationship between religion and technology and the development of these two concepts alongside utopianism even more transparent in his account of the development of the telegraph. Protestant Christianity, as Carey points out, presented a model for understanding the role of the telegraph. Disappointed with the negative outcome of industrialization, people in the West were prone to religiously-inspired yearnings for the recreation of human community and a resurrection of a “naturalistic bliss” (Carey, 1989, p. 88). Europeans fantasized about America as a pristine utopian space where technologies could be used for creating “ecological balance and social harmony” (Carey, p. 88).

The invention of the telegraph, Carey (1989) illustrates, was seen not simply as useful but “as divinely inspired for the purpose of spreading the Christian message further, and eclipsing time and transcending messages further and faster” (p. 14). Innovations in transportation were similarly imagined in religious metaphors, as increasing man’s potential to “extend God’s kingdom on earth” (p. 13) and to connect the European Christian community to America. The telegraph, by its design, was different from previous modes of distant communication, such as railways, fulfilling the fantasy of having communication detached from body-bound movements (Peters, 1999), a development which appealed to spiritual imagination, marked by a longing for transcendental interaction. The “invisibility” (Carey, 1989) of electrical current constituted the perfect analogy of the ability of the human soul to exist beyond the body (Carey, 1989; Peters, 1999).

Vincent Mosco (2005) asserts that “transcendental tales”, inspired by the telegraph, also accompanied electronic inventions that appeared later. In the same way that the telegraph was hailed as “the nerve of international life, transmitting knowledge of events, removing causes of misunderstanding, and promoting peace and harmony throughout the world” (Mosco, 2005, p. 119), the telephone was proffered as a “new social order” (p. 126). But the telephone was eclipsed later by the radio, which was announced as “the medium of God’s work” (p. 128). In due course, the emergence of the television inspired discussions about the “pre-television” era versus the era of television. Television was the “product of a rational inquisitive mind, or the spirit of conjurer’s art, the white light from the dark ritual” (Mosco, p. 135). Easily recognizable in this chain of electric developments is an “historical amnesia” (Mosco, p. 117). The rise of new technologies had been systematically accompanied by promises of radical change, while older technological apparatuses entered the sphere of the common (Mosco).

Mosco (2005) attempts to refute these utopian prospects of new technological inventions, culminating in cybertechnology, by employing a cultural-historical approach that focuses on the quality of the “myth”. He defines myths as stories that vitalize individuals and societies “by providing paths to transcendence” (Mosco, p. 3), characterized by unfeasible promises. The mythical search for the sublime, Mosco tells us, shifted from natural locations to new man-made creations. Today, according to Mosco, latest technological developments, manifested by computers and cybertechnology, embody important cultural myths of our time. This embodiment underlies the notion that human society is experiencing an “epochal transformation in human experience” (Mosco, 2005, pp. 2-3) and the “promise [of] a world in which people

will communicate across borders without the filters and censors set up by watchful governments and profit-conscious businesses” (p. 25).

What I find slightly problematic in Mosco’s approach (2005) is his reduction of communication about new technology to one cultural source – the myth. In particular, I wonder about other ways of speaking about technology and their relations to this one dimension of the cultural landscape. Do different ways of seeing technology carry the same qualities or views of power, society, and politics? Are these different formations used by the same group? Is there inter- or intra-variation in this mythological way of knowing or presenting knowledge about technology? Mosco doesn’t address such questions and, as a result, technological utopianism in Mosco’s analysis appears clouded and elusive. This closed description prohibits an understanding of technological utopianism or its mechanisms and, thus, limits the possibility of observing its influential capacity to constitute and change discourses.

Both Carey and Mosco’s cultural discussions are important in unpacking the symbolic production of technological utopianism. The narratives, provided by Mosco (2005) and Carey (1989), link expressions and themes relevant to technology to particular discursive traditions, whether that tradition is “myth”, in the case of Mosco (2005), or religious “ideology”, as elucidated by Carey (1989). I have learned much from their scholarship on technological utopianism – they refer to the term *utopia* in their accounts – and on the historical introduction of older forms of technology in the American society, but both scholars ignore technological utopianism’s other facets. Can we talk about religion without renaissance or myth without intellectual knowledge? Mosco and Carey make reference to different types of genres – academic, economic, and governmental –

and gather and analyze snippets of these conversations. Examining these various types of discourses on technology, they, however, deliver their arguments in a philosophically generalizing manner, highlighting, in each reference, the essence of the tradition they explore. Their accounts are too general to provide specific qualities of discourses they examine. Therefore, Carey and Mosco fall short of explaining systematically different themes, expressions, motifs, languages, and structures appearing in the specific contexts they choose.

Capitalism and Myth/Ideology

Mosco and Carey's impatience to analyze technological utopianism in more elaborate and meticulous terms is, I believe, because of their understanding of this construction as one that cloaks and legitimizes capitalist production. After examining the mythological nature of technological utopianism, Vincent Mosco (2005) uses political economy to situate computer technology in the constitutive relationship between digitalization and commodification. He proposes that myths conceal a great deal of the relationship between these two processes. They hide the proposition that digitalization expands processes of commodification. Myths about new technology, buttressed by advertisers, public relations firms, and mass media, work within neo-liberal philosophies embodied in attempts to regulate labour and markets and privatize global communications. In this paradigm, welfare states become neo-liberal corporate states. Mosco posits that digitalization, one of the latest trends in technological development, has enhanced commodification and extended the transformation of communication forms into commodities and market values. As a consequence, communication arenas in Europe, the United States, and Canada are being led by an increasingly small number of corporations.

Mosco notes as an example that the corporations of CanWest, Rogers, BCE, and Quebecor dominate the current Canadian communication industry.

Carey (1989), quite similarly, notes that there is a strong relationship between technology and “monopoly capitalism” (Carey, 1989, p. 158). The telegraph, for Carey, was a new force of production that required naturalization of new relations in law, politics, science, and economy. Such changes in other domains were developed to guarantee and maintain corporate monopoly. The ideology of capitalism, according to Carey, resided alongside religious language, whose role was to conceal capitalist and middle class interests in the development of the telegraph. Religion and capitalism were, together, “unifying ideologies . . . consciously planned and directed”. The ideological nature of the ways the telegraph was talked about, Carey argues, elicited “uniformity of reaction” (Carey, p. 159): a rhetoric that combined utopian ideals of peace and harmony and capitalism’s power, force, and productivity. On that account, a religious view of technology was an element that mediated middle class interests and capitalist development (Carey).

Both Carey and Mosco refer to this conjunction of capitalism and religion/myth as an attempt to counter the assumed potential of technology to advance democracy and to dispense the erroneous conviction of new technology’s capacity to create diversity and positive contestation. I, nevertheless, find such types of analysis insufficient, especially considering the distinctiveness between true and false consciousness that notions such as “myth” and “ideology” suggest. Carey and Mosco’s arguments suggest that once democracy corrects capitalist relations and transforms power relations, technological utopianism can wither away: a notion that appears utopian itself. If technological

utopianism is, as they suggest, nothing but a myth or an ideology whose function is to camouflage the capitalist system, then, a critic's task seems to shed this cloak as soon as possible in order to reveal the reality behind it. For this exact reason, examining technological utopianism's variants and nuances appears a waste of time; explorations of something with no inherent value is worthless while value resides in what is beneath this rhetoric. What technological utopianism requires, along Carey and Mosco's lines of thought, is not a venture to *explore* it but efforts to *condemn* it.

Ironically, the less attention we pay to technological utopianism, beneath which capitalism is assumed to work, and the more efforts we put to disregard and falsify this construction, the more it lingers because we are not well-informed about it. To explore technological utopianism is to adopt a differentiated notion of it and to penetrate the hearts of different domains and developmental paths upon which this construction is built. More fruitfully and helpfully, technological utopianism encompasses more than one ideological or mythical dimension. There is also more than one institution that must be recognized – political, literary, intellectual, and military. If we wish to understand technological utopianism, we have to accept that this construction comprises multiple levels of meaning, structures, and contexts that are both visible and not visible.

Capitalism, in spite of being one important dimension of discourse of technology, should be studied alongside other cultural and institutional dynamics: e.g., the West's discomfort with losing control of and blundering in communication, symbolic forces of literature, religion and language, and the history of Western military and warfare.

Militarism

The critical discussion in the previous section is not to suggest that technology and science are separate from capitalism. Methods of science and technology certainly rested, in part, upon capital and money. However, technological utopianism is not the direct result of the emergence of or a change in capitalism.³ Likewise, “the machine” (Mumford) is not a recent phenomenon, and to say otherwise is to slight other critical elements. One of the influential elements in the development of technology, as Lewis Mumford (1934), Friedrich Kittler (2010), and Diana Saco (2002) suggest, is warfare and military organization. The three investigators delegate innovations in technology – industrial (Mumford), electronic (Kittler), and digital (Saco) – to the exigencies of war and military arrangements.

Mumford (1934), in *Technics and Civilization*, sheds light on the alliance of mechanization and militarization, highlighting ways “the machine” embodies military philosophy and action. In lieu of the pre-modern “hunter”, whose work involved transcending and abolishing life, the soldier inherited his will-to-power (Mumford). The new hunter’s mode of life did not die with the success of agriculture. On the contrary, it was systemized with the “regimentation” and organization of the army. Drills, training, and the “indoctrination of soldierly habits of thought” (Mumford, p. 84) that accompanied the development of the army were a great boost to the spread of machine industrialism. Regimentation, humiliation of the enemy, and obedience within the army paved the way for these traits to be embraced in the industrial arena (Mumford, 1934).

³ As Mumford points out, capitalism has grown in other civilizations (than the West) with relatively low technological development (Mumford, 1934). So, there is less of a consistent relationship between capitalism and technological development.

In spite of its organizational concern and regimental style, the military created a space for innovation, preceding the easing of restrictions on technological development in the industrial era. This combination of innovation and organization gave rise to technologies such as the cannon, which, as Mumford (1934) illustrates, came as an instrument for annihilating space by which people were able to express themselves at a distance before the invention of the telegraph. The use of military topographic surveys and maps heralded business organization and marketing charts (Mumford). The large-scale need for iron to make guns, cannon balls, and other military equipment hastened the mass production of iron, a material exploited widely during the ensuing industrialization (Mumford).

Likewise, Friedrich Kittler (2010) argues that optical media, a later development of technology, have been produced within times and places controlled by warfare: the material of gunpowder was used for war before being used for cinematic purposes. The seriality of the Colt also introduced the notion of sequentiality to film. The military need for information between fronts and control centres led to a change in entertainment technology and media acoustics. Such examples and others are raised by Kittler to maintain that warfare was the horizon within whose limits optical media, such as television and cinema, were designed and manufactured.

Putting forward warfare as a context for technology grounds technological inventions in their specific and material experiences, denying them transcendental or neutral configurations that some insist on linking to these technologies. Diana Saco (2002) reveals more of this picture in *Cybering Democracy*. The origin of the Internet, she tells us, reflects a set of institutional and national security concerns amid fears

triggered by the Cold War. Saco notes that the Internet has been a spin-off of an older computer network developed by the U.S. Department of Defense (DoD) in the late 1960s. The purpose of the project launched by the Defense Advanced Research Projects Agency (DARPA), a DoD research agency, was to build an effective and resilient communication forum for military personnel that could withstand any attack carried out by the USSR. This technological venture, as Saco informs us, was a side effect of a competitive stance towards the Soviets after their development of *Sputnik*. The American reaction to the Soviet Union's development of the satellite was "not the warm glow of wonder at human ingenuity, but a Cold War shock that the USSR had become technologically advanced enough to put a satellite into orbit" (Saco, 2002, p. 87).

The story Saco (2002) tells is important for its ramifications that underscore the oddity of the view that new technologies are neutral instruments, a stance that I will elaborate upon further. It reveals the glaring contradiction of saying that technology, such as the Internet, is an egalitarian platform for democracy while realizing that this technology actually developed in syndication with security-funded initiatives. Failing to adequately challenge the normalized legitimacy of new technology's neutrality engenders the alleviation of dependence on a system supported by the military establishment.

The argument that the military contexts of technological developments have implications for how technologies change conditions is distinct from naïve technological determinism. The path I am taking here leads to a multi-layered, institution-based perception of the relationship between technology and political change. I believe that the assumption that technologies are "tools" (Feenberg, 1991) that can be employed by society in any direction they intend is overly malleable. Taking into account how

technologies are produced, conceived, built, and communicated is an impetus to observing what actions, structures, and behaviours are inhibited or supported with the use of these technologies.

Observing how technology developed at different historical periods in conjunction with the military is not only to counter technological utopianism by revealing its regimes of truth and powers. It also helps reveal how important discursive constituents of technology have been shaped by war and militarism along with other institutions, and, thus, the *contingency* of discourse of technology and the *multiplicity* of its knowledge forms become more apparent. Transcendence and the desire to abolish space and human capability have developed, not only in the lap of religion and literary productions of utopia, but also alongside military imperatives. Emphasis on organization and instrumentality in contemporary discussions of technology has been pushed, not only by corporate culture or particular utopian philosophies, but, also by military styles of organization and regimentation. This view emphasizes technological utopianism's discursive heterogeneity; it also shows technological utopianism's rootedness in multiple domains and, hence, its resilience and the limit of possibilities to re-interpret technology outside discursive models imposed by these institutions. If the principles of transcendence and organization permeate military, industrial, literary, spiritual, and scholarly domains, then no wonder developing a perspective outside these powerful institutions is difficult.

The Doctrine of Neutrality

I want to highlight, through this multi-faceted analysis, a critical view of technology that revolves around actions and processes in multiple arenas associated with technology.

This notion of technology stands in opposition to the notion of technology as neutral and pure instruments, a view often adopted by some Marxist scholars – the toughest critics of capitalism – including Walter Benjamin (1969) and Hans Magnus Enzensberger (2000).

Ironically these thinkers have not thought to see the case of technological economic reproduction a suspicious one. Rather, they have opted for the view of new technologies as tools for the oppressed, to be used against socially and economically exploitative relationships.

The Marxist tradition conceives technology as double-sided: manipulated by capitalist systems, but also with the potential to be both liberated and liberating. The father of the Marxist tradition, Karl Marx, inaugurated this vision of technology although, as we have seen, the conceived purity of technology was latent in some older literary utopia. I will focus, here, not much on Marx himself, since I will go back to his philosophies on the revolution and technology in the next chapter. These later discussions of Marx will set him side-by-side with Hannah Arendt and Jürgen Habermas, two other leading intellectuals on the subject of political change. Instead, I will focus now on scholars who propagated Marx's philosophical canon.

Nick Dyer-Witheford, a distinguished neo-Marxist, (1999) affirms that new technology, represented by cybermedia, can be used for liberating functions, along with oppressive ones; the task of social movements and coalitions consists in finding possibilities through which they can mobilize technologies for their goals. Such a double-

sided view of technology comes from Marx himself, who realized that the expansion and development of communication circuits in his lifetime, such as railways, telegraphs, and steamships, emerged parallel to a desire to expand the market and facilitate conditions of exchange (Dyer-Witheford); on the other hand, Marx also perceived these technologies as potentially empowering and solidifying apparatuses for proletarians in their struggle against exploitative classes and conditions (Dyer-Witheford).

The simultaneously exploitative and emancipatory characteristics Marx attributes to industrial technology are acknowledged by Dyer-Witheford's treatment of new communication technology. Dyer-Witheford (1999) discusses cybertechnology in connection to the "circulation of money, commodities and power" (p. 289), as well as to the proletarian struggle to recognize the potential of these technologies to open and facilitate communication among and within transnational movements and worker unions. He cautions against the destructive power of capitalism:

Capitalist globalization means war – not only the immediate violence of military attack whether in the form of imperial invasion or low-intensity conflicts, but also the sustained social and environmental violence of starvation, social disintegration, and deprivation that in turn sets the scene for ethnic rivalries and internal conflict. (p. 335)

But capitalist globalization, Dyer-Witheford explains, allows for counter-battles and struggles to be carried out by workers, feminists, and ecologists in the sites of technological production and consumption, just as communication media commodities are facilitated and expanded. This emancipatory power of cybertechnology, according to Dyer-Witheford, can be seen in successful counter-attacks. For example, communication

via computers and videos opened up the possibility for workers in Japan, Switzerland, and South Africa to take action in solidarity; the Indonesian genocide stopped in 1990 because of the disseminated news and videos of the government's secret actions. Electronic boycotting campaigns, alternative radio stations, and other disseminative media all facilitated the flow of news, debates, and controversies among movements, and thus allowed these movements to form alliances that could stand against atrocities of corporations and other exploitative institutions and conditions. According to Dyer-Witheford, political-economic practices are an essential basis for democratic struggles directed against economic and political inequalities.

Walter Benjamin, another scholar who perceives technologies as enabling positive change in interclass relationships, argues essentially for a Marxist understanding of technological inventions. In "The Work of Art in the Age of Mechanical Reproduction" (1969), Benjamin elaborates that mechanical reproduction of art destroys what he calls the aura of artistic works and "detaches the reproduced object from the domain of tradition" (p. 221). Artistic reproduction, made available by technologies such as the camera, increases the potential for a work to reach a mass audience, and for this reason, shatters the authenticity of the work as well as its traditional and religious essence (Benjamin). This type of process is connected to the "contemporary crisis and renewal of mankind . . . [and] intimately connected with the contemporary mass movements" (Benjamin, p. 221).

This perception of technology characterizes new technology as capable of making a forceful impact on social, cultural, as well as political lives. According to Hans Magnus Enzensberger (2000), Benjamin was able to recognize the liberating and emancipatory

potential of technology in its underdeveloped stage and to subject media to a “dialectic-materialist analysis” (p. 30). Benjamin aimed to create a framework in which film and photography could potentially achieve the revolutionary goals of the proletariat against the corruptive power of dominant classes (Benjamin, 1969). Benjamin’s thesis, however, is arguably based on “a diegetic scaffold that remains essentially Hegalian” (Wellbery, 1990, p. 32): a view, in which technological innovations function in opposition to the interests of dominant classes, who, in the first place, have developed these formations to enhance their interests.

Benjamin’s stance towards technology is echoed by Enzensberger (2000), who applauds Benjamin’s analysis of technological replicability. Enzensberger’s project in his “Constituents” essay is “releasing the emancipatory potential which is inherent in the new productive forces” (p. 14). He proposes a framework for organizing new media technology, different from the way media technology is manipulated in capitalist societies. For Enzensberger – as for some other Marxist theoreticians – new technologies belong to two different social schemas: those that are repressive and centrally controlled by corporations and bureaucracy, and those that are emancipatory, decentralized, and socially controlled. The manipulative use of technology, according to Enzensberger (2000), is epitomized by the ways in which technologies, such as films and television, enhance capitalism and the “consciousness industry” through the blocking of reciprocation between “receivers and transmitters” (Enzensberger). The separation between transmitters and receivers, Enzensberger insists, is not inherent in technology, but, rather, the alienation between the two, transmitters and receivers, reflects the social divide between producers and consumers, with economic and administrative measures

reinforcing the gap between the dominant and dominated classes. Once the ruled class, Enzensberger points out, takes over the production component of the communication “circuits”, electronic technology will be able to instigate higher levels of learning, freedom, and engagement, demolishing class hierarchy. Technology, at that time, will be returned to its “egalitarian” (Enzensberger, 2000, p. 20) nature, forming the necessary infrastructure for a democratic participatory order.

Technology and Politics

The belief that technologies can be neutral has not escaped criticism from Jean Baudrillard (1981), who, in response to Enzensberger’s call to liberate media from capitalism, argues that the notion of “liberating media” is a “regurgitate[ion] of the old Marxist delusion that underneath the capitalist veneer of exchange value resides a more natural use value waiting to be uncovered” (Winthrop-Young & Wutz, 1999, p. 15). Baudrillard explains that envisioning media technology as pure instruments and advocating their liberation from capitalism is erroneous. Dominance of power, he asserts, functions not only at the level of the usage of technology, but at the level of its form as well. New media technologies allow for messages to be reduced to codes and signs and, in this way, they are “anti-mediatory and intransitive. They fabricate non-communication” (Baudrillard, 1981, p. 280). While McLuhan finds in the form and operation of media technologies a revolutionary power, his dialectic of “the medium is the message” (McLuhan, 1994) is employed by Baudrillard (1981) to critically study how politics exists neither in the content nor in the capitalist mode of production but in the very architecture and structure of technologies themselves. While both McLuhan and Baudrillard interpret media technologies as apparatuses whose content is irrelevant in

terms of impact, these two scholars differ drastically in their perspectives on what new technology's impact entails. McLuhan envisions a "global village" made possible through the dissemination of media technology. For Baudrillard, on the other hand, media technology's codification is reductive and, thus, hinders people from ambivalent and plural reciprocity.

Baudrillard (1981) objects to Enzensberger's proposed "reversibility of circuits", which involves the shifting of production from the hands of the elite to the hands of the people. He argues that this action is futile because it continues to operate within the dominant scientifically-oriented communication model, which both understands and constructs communication in terms of the transmitter, the message, and the receiver. Such a universalizing, instrumental, and technical model, according to Baudrillard, reduces communication to two entities, excluding the context, plurality, and ambivalence of a communicative phenomenon. Therefore, to Baudrillard, "it is necessary to understand...that in effect it is quite correctly not a technical problem" (p. 280). Rather, technology's effect "functions at the level of form, at the level of separation it establishes, which is a social division" (Baudrillard, 1981, p. 280). The reversal of the transmitter-receiver relationship using media technology, as Baudrillard tells us, is not sufficient to achieve reciprocity because it is still a reductive model of communication that hinders our ability to examine a technological system thoroughly and deeply. "This 'scientific' construction excludes, from its inception, the reciprocity and antagonism of intercourse and ambivalence of exchange" (Baudrillard, p. 285). Effective communication, for Baudrillard, involves more than this unilateral form of communication, which dominates most science-based mass media structures; the chance of achieving reciprocal

revolutionary change in media technologies is also minimal because it “presupposes an upheaval in the entire existing structure of media” (Baudrillard, p. 281).

Langdon Winner (2001), similarly, calls for technology to be examined meaningfully at the level of their designs and arrangements. At the centre of Winner’s argument is the notion that “machines, structures and systems of modern material culture cannot be accurately judged by their contribution to efficacy and productivity and their positive and negative environmental side effects but also for ways in which they can embody specific forms of power and authority” (Winner, p. 9). In other words, from Winner’s perspective, technological objects have political qualities.

Winner uses various examples to demonstrate the intended strategic designs of various technologies as well as the unintended political and social effects of these designs. He examines the case of Robert Moses’ design of the low bridges on Long Island parkways in New York, which were intended to prevent buses (used at that time by poor and black people) from reaching areas such as Jones Beach, thereby restricting access to such areas to white members of the middle class. In a similar way, Baron Haussmann was hired by the French emperor in 1852 to renovate Paris and turn the city from a political to a social space; streets were restructured to be too wide for rebels to build barricades across – it was a common strategy during the French Revolution. Paris, then, was transformed into a space primarily set for luxury and middle class consumption.

Network Technology between Utopia and Power

Robert Moses’ New York bridges and Paris’ streets were originally used for the purpose of transportation. Both, however, enabled functions far beyond their immediate use and

these functions were reflected in their designs and structures. They were not neutral means of transportation. Hence, using only the criteria of “efficacy” and “productivity” (Winner, 2001) to assess the value of technology is to turn a blind eye to such political meanings of technology’s designs.

With this in mind, I focus here on the critique of one key design of technology – the network design – and elucidate its political meanings. The vision of technology as *neutral* instruments, prevailing in Marxist thought, has not been distinct from the conception of communication as a network. Marxist thought has refrained from attaching good or evil to technology, evaluating technology by its use rather than its historical or socio-economic context. The vision of technological instrumentality constitutes the basis of many Marxists’ blueprints for networked social movements and coalitions. This instrumental vision has become even more potent in more recent discussions surrounding network technology, as will be evident in the analysis sections of this dissertation.

The link between socialist thought, utopia, and the network vision is not new. The image of the network served as a template for the vision advanced by the 19th century socialist Henri de Saint-Simon. In his utopian egalitarian society, Saint-Simon provides a theory of administration through a networked conception (Mattelart, 1996): the society of Saint-Simon flourishes through the organization and production of “material” (transport) and “spiritual” (finance) networks. It is described as a “‘veritable organized machine’ in which the lives of individuals constitute the ‘cogs’ and whose harmony depends on that of all the ‘springs’ that compose it, each of them having to furnish ‘its necessary contingent of action and reaction’” (Mattelart, p. 86). Notably, the metaphor of “cogs”

resembles the late notion of the “node” put forward by Manuel Castells (2000, 2004), the present pioneer of network theory.

The dream of *network* is a fantasy that has preoccupied Western thinkers and propelled them to build their visions on this pattern. It also underpins the material infrastructure of many communication systems, including the development of ships, harbours, and canals. The major European cities of Venice and Amsterdam were “built upon piles, both of them served by a network of canals” (Mumford, 1934, p. 122). Ships navigating European canals served international trade and transportation, and boats served local and regional transportation (Mumford). “An interlacing system of canals and dirt roads” (Mumford, p. 123) was also the system upon which American states were established. The network arrangement was indispensable neither from the West’s intellectual enterprises (Saint-Simon) nor from the West’s material communication structures (canal and road networks).

Western visionaries, engineers, and cities find the network appealing as a system because of the advantages they assume this design can afford. Proponents of the network hypothesize that this design can create a “universal bond” (Mattelart, 1996) – or, more accurately, to achieve an imperial goal – by its extension and decentralization. Advocates of the network also assume the network can work “organically” (Mattelart), a conjecture developed from the continuity between biological and social orders (Mattelart). In this manner, there is no need for the hard work of leadership. Lastly, because of its assumed organic nature, Western visionaries and planners render this design as a means to achieve the communitarian dream of society and democratic aspirations since each part of the

network system is dependent upon the rest, and therefore, isolation from the interconnected system means failure.

These aspects of a networked system are the ones Foucault refers to when he describes the characteristics of the “discipline” system: “it is cellular (by the play of spatial distribution); it is organic (by the coding of activities); it is genetic (by the accumulation of time); and it is combinatory (by the composition of forces)” (Foucault, 1977a, p. 167). Foucault’s major contribution, here, lies in the notion of decentralized power. The dream of networking, in which components work organically and cooperatively, is the way, as Foucault shows, modern governmental and military institutions work. The European modern disciplinary model is a system “organized as a multiple, automatic and anonymous power; for although surveillance rests on individuals, its functioning is that of a network of relations from top to bottom, but also to a certain extent from bottom to top” (Foucault, 1977a, p. 177). While individuals in such a network view themselves as liberated, they are actually trapped in a surveillance system. There are components that work dynamically but this does not mean there is more freedom for individuals. There is actual supervision: embedded, hidden, and discreet. The network, according to Foucault, is a hierarchal power system that, paradoxically, works un-hierarchically, “like a piece of machine” (Foucault, 1977a, p. 177).

Foucault’s discussion shows how the networking mechanism, which consists of the distribution of nodes over an entire surface, facilitates supervision and discipline. Technology that was developed to see without being seen, such as the telescope and the light beam, worked side-by-side with this disciplinary set-up, which enhanced the production of certain forms of knowledge (Foucault, 1977a). By espousing the

instrumental definition of technology – that technology is merely a means to an end – we fail to see these political meanings; rather, “we are duped into the utterly false assumption that it [technology] is something which we can control, which we can master and bring under our sway as it facilitates our efforts to secure certain ends (O’Brien, 2011, p. 95).

Conclusion

The *network* design in its broadest understanding has been profusely employed as a means for understanding and construing *realities* in diverse social milieus, including social movement theory (Benjamin, 1969; Dyer-Witheford, 1999; Enzensberger, 2000). *Neutrality* is integral to this design, and, thus, the design is seen as a model that can render – rather than hinder – utopian dreams into reality. But what proponents of the network design fail to recognize is the degree to which this design is tied to a net of power. They overlook cultural, social, and political fabrics from which networks are developed.

This chapter has explored this utopian trend in talking about technology alongside other tendencies. The *transcendental* construction of technology entails an understanding of technologies as entities capable of evading regular, “banal” (Mosco, 2005), and human mechanisms inherently critical to social and political structures. The *dystopian* view of technology, which borrows from the transcendental vision, builds an exaggerated sensibility about technology’s capability to harm social and political orders. The chapter has also explored how controlling and, sometimes, dissipating the human *body* (the military, the monastery...etc.) has accompanied many utopian projections of technology. This chapter has also pointed out the proliferation of these different utopian projections in

different establishments, which have had their own impact in sustaining and modifying technological utopianism. The instrumental and transcendental visions of technology are inextricably intertwined with military, religious, scientific, and literary discourses. As has been shown, the prominence of these models in different Western institutions makes difficult the task to disturb, challenge, and interrupt these utopian ways of seeing technology. Building upon the plural sense of technological utopianism constructed in this chapter, Chapter 3 focuses, more particularly, on technological utopianism in Western *scholarly* traditions and academic canons.

Chapter 3: Western Modern Intellectuality on Politics and Technology

Decades before Foucault critiqued causality and connection, Karl Marx, together with Frederick Engels, published their short but important *The Communist Manifesto* (1998), offering an analytical approach to class struggle and capitalism. This pamphlet does not take technology as its central theme, however, its arguments have been operative instruments for many subsequent authors in setting out their research agendas examining technology and politics and the interaction between these two. In other words, Marx's theory of class is important for its immense influence in shaping scholarly perceptions of power, technology, and social and political processes. It has had the impact of shifting attention to *class* as "the decisive setting for the next round of class struggle...or as Marx and Engels put it in the famous opening passage of the *Communist Manifesto*...'The history of all hitherto existing society is the history of class struggle'" (Abrams, 1982). In this section, I will discuss the impact of a set of important intellectual and academic arguments, including those of Marx, in understanding the concepts of democracy, revolution, and technology, as well as the interaction between these elements. I have already discussed the capacity of intellectuals to sway Western perceptions of technology but my focus has thus far been directed at the impact of a variety of institutions: literary, religious, military, economic, and political forces. This section considers more specifically the role of Western intellectual arguments in shaping the concepts of democracy, technology, and communication, and also, more importantly, in enabling and nourishing, and, sometimes, altering the shape of technological utopianism.

In terms of theorizing political revolutions and democracy, the West is familiar with the Marxist definition of revolution: action directed against the establishment's

ownership of capital and the rule of elite classes (Marx & Engels, 2011). Like Marx, Hannah Arendt's (1977) notion of democracy, as people's capacity to produce politically collective power and deliberative spaces, has substantially influenced questions of politics and democracy and shaped subsequent intellectual discussions of these notions. These two models, along with Jürgen Habermas', have become definitive of some discussions of new technology's impact on political landscape (Saco, 2002). But are these cardinal theories, of Marx, Arendt, and Habermas, really helpful in trying to understand the role of technology in shaping politics and democracy, especially considering (geographically speaking) non-Western actors? In other words, do these scholars offer models of democracy that align with or destabilize technological utopianism? Do they consider non-Western experiences in their own conceptualizations of democracy and political change? In the first part of this chapter, I explore the arguments of Marx, Arendt, and Habermas with these questions in mind.

The second part of this chapter, under the sub-heading "Modern academic expertise and technology", aims to articulate the role of Western academic expertise, including that of Marshall McLuhan (Carey, 1989; McLuhan, 1994), Stewart Brand (Turner, 2010), and Francis Fukuyama (Fukuyama, 1989; Mosco, 2005), in reviving and maintaining technological utopianism. Fred Turner (2010), James Carey (1989), and Vincent Mosco (2005) have explicitly indicated the role of the aforementioned thinkers in shaping and nourishing technological utopianism. My work extends these critiques, addressing the complicity of Western academic expertise in sustaining and reviving technological utopianism, and, also, attending to what is missing in Mosco, Carey and Turner's critiques of technological utopianism.

Revisiting Marx, Arendt and Habermas

Marx, Arendt, and Habermas, having substantially contributed to Western modern thinking on democracy, political change, and revolution, and despite their differences, all address the public's relation to the private, addressing political implications of interactions in and between these two spheres (the public and the private). I shall look in some detail at answers offered by Marx, Habermas, and Arendt, to the question of political transition, and explore the impact of these philosophers' discussions on contemporary understandings of democracy and technology.

Karl Marx: Progress and technology. Class is central to Marx's analysis of democracy and revolution. Simply, according to Marx, working classes must obtain their interests from the bourgeois (Abrams, 1982), as the division between classes manifests itself inherently in material economic activity. In *The German Ideology* (1998), which he wrote with Friedrich Engels in 1845, Marx critiques modern German philosophy and idealism for ascribing religion and theology to the problems of power and oppression. Religion and consciousness, Marx tells us, are offshoots of material activity rather than being the originator. Thoughts and ideals, articulated in the spheres of language, art, politics, and religion, are all constituted and shaped by economic modes of production. Conceivably, Marx's philosophy is distinct from his contemporary German philosophies because of his conceptualized relationship between "consciousness" and "life":

It is not consciousness that determines life, but life that determines consciousness.

For the first manner of approach the starting point is consciousness taken as the living individual; for the second manner of approach, it is the real individuals

themselves, and consciousness is considered solely as their *consciousness*. (Marx & Engels, 1998, pp. 42-43)

Marx makes the recognition that the capitalist mode of production is accompanied by what he calls a “mode of co-operation” (Marx & Engels, 1998, p. 49). Co-operation, in Marx’s point of view, is involuntary in the capitalist system and is mainly adopted to boost capital accumulation (Abrams, 1982). Therefore, it appears as an “alien” force whose objectives and goals are unknown to workers (Abrams). The worker experiences labour not as a means of achieving common and shared social interests but as an alien activity in which the worker is compelled to enter (Abrams).

As stated by John Durham Peters (1999), Marx offers a more “robust” vision of communication than former utopian “spiritualist” traditions, though communication is not a matter Marx addresses directly. Peters argues that Marx’s analysis is “much more attuned to pathology, power, and distortion in intersubjective relations than are the spiritualists” (p. 109) and locates possibilities of communication in relations previously sidelined. “Marx does not conceive of communication as the touching of souls... [Rather he] is the analyst of unhappy relations between subject and object” (Peters, 1999, p. 119). For Marx, market is “the *agora*”, the element mediating communication, and also the “source of irrationality and abuse” (Peters, p. 126).

Marx’s communication model is advantageous in accommodating and acknowledging failures in communication. However, Marx also anticipates a cure for these failures. Europeans, in the Enlightenment era, believed in their superiority over other ancient and contemporary races (Huber, 1985). The emergence of natural science abetted the belief in progress, entailing a conviction in autonomous development (Huber).

Marx, according to Eduard Huber (1985), could not escape the influence of this prevailing conviction. Like many of his contemporaries, Marx was deeply influenced by the doctrine of progress, and, accordingly, he adopted a view of history as a process in which humanity developed from primitive to higher forms of society (Huber, 1985). This understanding influenced Marx immensely, leading him to conclude, “In broad outline, the Asiatic, ancient, feudal and modern bourgeois modes of production may be designated as epochs marking progress in the economic development of society” (as cited in Huber, 1985, pp. 368-369). In this account, Marx sketches economic development as having started from “ancient”, developed into “feudal”, transformed into “modern bourgeois”, and then arriving at optimal communism. The inclusion of the “Asiatic” group seems odd, defying the temporal norm of the described economic history. It probably signals Marx’s attempt to endow his account with universal legitimacy. However, in attempting to universalize his model, Marx does not grant Asian modes of production their due attention. He never offers a deep examination of non-European developments in the same way that he analyzes the European industrial transition.

Marx’s Euro-centric analysis (Huber, 1985) leaves little space for culture, tradition, politics, religion, and other entities that mobilize society. It alternatively correlates change with economic transitions, ignoring other domains of communication. It suppresses sensitivity to other activities, meanings, stories, and struggles in other cultural contexts. Colonialism and colonial subjects’ struggles are almost absent in his narrative of history and progress. I am not aware of all of Marx’s wide scholarship, but from *The Communist Manifesto* (Marx & Engels, 2011) and *German Ideology* (Marx & Engels, 1998), and from works commenting on his theory, such as Darin Barney (2000),

Philip Abrams (1982), Christian Fuchs (2011), Andrew Feenberg (1991), and many others, I cannot find a single reference to non-Western colonial experiences, strivings, and struggles. This invites a re-consideration of the application of Marx's theory as a global framework capable of interpreting both Western and non-Western experiences of communication, democracy, and revolutions, and urges the development of alternative considerations.

Modern "technology is numbered by Marx as one of an array of productive forces...[and] among the indispensable material conditions required for progress towards the good society" (Barney, 2000, p. 40). In Marx's assessment, technology has both emancipatory and enslaving potentials (Barney, 2000; Fuchs, 2011; Segal, 1985). In respect to the enslaving potential of technology, Marx proposes that technology facilitates the accomplishment of capitalist accumulation and alienation (Barney, 2000). He understands this process as one in which elite classes employ technology to enhance their profit by decreasing the number of workers. This expanded means of production, with fewer workers, causes an increase in labour assigned to these workers (Barney, 2000), and thus enhances workers' alienation.

Marx, nevertheless, foresees a more equitable society that "would utilize, especially automated, technology as a principal means of freeing the proletariat" (Segal, 1985, p. 69) from alienating labour. Modern technology, in Marx's argument, can be used to lessen the burden of an individual's work and, simultaneously, generate goods and services that satisfy society's needs (Segal, 1985). To Marx, "Slavery cannot be abolished without the steam-engine and the mule jenny, serfdom cannot be abolished without improved agriculture" (Marx & Engels, 1998, p. 44). While technology, for

Marx, produces enslavement, he also considers it necessary for liberation, not intrinsically, but through its employment, by the elite and the disadvantaged.

Hannah Arendt: Revolutions, politics and space. Contrapuntal to Marx's view of revolution and democracy, Hannah Arendt (1977) critiques *needs* as the fuel for revolution, distinguishing between political and social activities. For Arendt, a revolution's success is contingent not upon intense necessity, but upon people's capacity to produce politically collective power constitutive of democratic public spaces. The American Revolution, Arendt argues, moved towards freedom because of the Founding Fathers' commitment to act in the political realm, providing people the means to participate in democratic government, rather than to abolish human miseries and satisfy society's needs (Arendt). The Founding Fathers, according to Arendt, acting together, produced lasting political institutions. The people of the French Revolution, on the other hand, inundated with the "the poverty question" (Arendt, p. 50), swayed away from politics and were paralyzed by the "automatic, uncritical belief that power and law spring from the selfsame source" (Arendt, p. 156). The French Revolution's focus on needs hampered the capacity of the French to organize politically and constitute self-organizing bodies (Arendt).

Democracy, to Arendt (1977), comes from working within collective bodies, rather than from violent actions. She suggests that the modern framework of democracy is erroneously predicated on the French Revolution that produced Marx's social notion of the revolution. Comparing the American and French revolutions through the examination of people's experiences in advance of the two revolutions, Arendt concludes that the American labourers were not overwhelmed with misery, and, therefore, the problem they

posed was political rather than social. Asymmetrically, with respect to the French Revolution, the conflation of the social and political questions was destructive in that it did “throw them [revolutionaries] into a state of nature” (Arendt, p. 156), and fettered them from forming legislative councils. Arendt posits that the French revolutionaries incorrectly understood their task to be the liberation of people from an oppressive force, thereby overlooking the expansion of freedom and spaces of public political participation.

Utopically, Arendt envisages “deliberation”, a Western ancient political tradition, as the means to attain happiness and democracy. This becomes clearer in her magnum opus *The Human Condition* (Saco, 2002) in which she “defines politics in terms of an ethos of speech and action in a space of appearance” (Saco, 2002, p. 47). She holds the Athenian public space – the *agora* – as the ideal standard wherein citizens debated public matters away from “bodily necessity” (Saco, p. 47). Arendt laments the West’s loss of this political public space because of “the predominantly apolitical realm of the social, whose ethos is the administration and regulation of the formerly private issues of necessity” (Saco, p. 46).

Describing Arendt’s notion of politics as democratic is, to some critics, erroneous (Saco, 2002). The older Athenian model of politics was not democratic, after all. It was an elitist system built on slavery and “the exclusion of women and propertyless males” (Saco, p. 47). Add to this, Arendt’s failure to acknowledge the colonial background of the American experience. In a rebuttal of the Marxist predictive utopia of democracy, much of what Arendt suggests is a “retrospective utopia...offering less [of] an emancipatory theory of politics” than a celebration of Athenian democracy (Saco, p. 48).

In addition to being elitist, Arendt's model of democracy is "bodiless" (Saco, 2002). If Marx's framework should be critiqued for narrowing human action to pecuniary activity, Arendt's thinking of revolutionary action is restrictive for its exclusion of the material from the political sphere. For Marx, slavery is the result of class, but for Hannah Arendt, people are slaves because of "the bodily needs of survival" (Saco, p. 84) – although colonial slavery is absent in both discussions of revolution⁴. Furthermore, while Arendt requires the bodily presence in political spaces, she asks for the elimination of the body, and its necessities, in the democratic process (Saco, 2002). Arendt's revival of Athenian thought, corresponding with bodily erasure, has made easier the envisioning of new technologies, such as the Internet, as the new *virtual* sphere, the new democratic space, and the new *agora*, as Saco (2002) suggests.

Both Arendt and Marx's thinking of revolution crystallizes around different events, from the French to the American Revolutions. These historical events impacted the modes of knowledge adopted by these thinkers in their discussions of revolutionary changes. Their examinations of revolution, nevertheless, are bound by Western modernity, facilitating utopian visions of democracy and technology (progressive in the case of Marx and bodiless in that of Arendt), on one level, and sidestepping Western colonization, on another. The non-critique of colonization and nourishment of utopian senses of technology in their discussions of revolution deems colonization and technology necessary, or at least unthreatening to their democracy utopias. Technology

⁴ It has to be noted that colonialism is an important theme in Arendt's *The Origins of Totalitarianism*. She argues in this work that the European colonial experience provided the foundation for the 20th century totalitarianism. Colonialism and non-Western experiences, however, do not constitute any part of her discussion of revolution. This lack of engagement with non-Western revolutions hinders a successful application of Arendt's theory of revolution to non-Western contexts and movements.

and colonization, therefore, are benign by nature in the political visions found in these intellectuals' ruminations of revolution.

Habermas: Public sphere. If the political is missing from Marx and the social from Arendt, then Jürgen Habermas (1991) seems to sketch a map that combines the two, political and bodily needs. Habermas' theory of the public sphere combines the private and the public (Saco, 2002), with a critique of technology embedded in this theory. However, Habermas' philosophy has not actually destabilized the ground for technological utopianism.

Habermas' conceptualization of the public sphere (1991) resembles Arendt's emphasis on participation and deliberation (1977). Both theorists inherently posit an elitist participatory model of democracy. However, unlike Arendt's Athenian public space in which political councils debate only public matters, Habermas' public sphere is a space for the bourgeois class to discuss both public and private matters (Saco, 2002). Insomuch as Arendt (1977) salutes the American Revolution for its founders' commitment to political rather than social and economic interests, Habermas constructs the ideal public sphere as a space that merges the public with the private. Habermas defines this space as "the sphere of private people come together as public: they soon claimed the public sphere, regulated from above against the public authorities themselves, to engage them in a debate over the general rules" (Habermas, 1991, p. 27).

The public sphere, Habermas (1991) alleges, appeared in iconic form during the eighteenth century along with the growing commodity exchange and the emergence of spaces, such as salons and coffee houses, where the bourgeois engaged in rational critical debate of issues important to civil society. The public sphere became a place for civil

society to deliberate and express their interests and needs, and, subsequently, to increase their political power over state policies and decisions. The people of the bourgeois stratum, according to Habermas, were able to break despotic authority while forming a political milieu for democracy and public power through public debate of their private interests.

Habermas is pessimistic about the public sphere. For him, the public sphere grew in a different direction than its previous democratic promise – a structural change Habermas, himself, describes as “refeudalization” (Habermas, 1991, p. 142). Rational and critical debates, he observes, were replaced by a consumption culture, and the critical formative power of the family was substituted by conversations shaped by new media and public relations institutions. The new democratic system, Habermas explains, provides an illusion of democracy while lacking the integrity and accessibility that once characterized the older public sphere, a change accompanied by an increase in state machinery and interference by law and legislative bodies (e.g., welfare) to resolve economic predicaments posed by corporate expansion (Habermas).

Habermas, finding no attainable resolution to this situation, does not proffer strategies to dissolve the elite power of the state and mega-corporations but insinuates that the revival of the ideal modern public sphere is hard to achieve. His sketch of the public sphere appears as a semi-dream, a retrospective dream, without due attention to the steps and arrangements needed to achieve the dream. The construction of the public sphere, therefore, is predicated on its divergence from *reality*. One may even cast shadow on the historical referent of Habermas’ discussion. Clubs and salons, where the enlightened met during the 18th century, were not based on plurality. Nancy Fraser (1990)

suggests that they were actually predicated on a chain of exclusions, paramount among them the exclusion of women from the public sphere. When counter-publics challenged the bourgeois group, Fraser says, the latter attempted to hinder the former's broader participation. Evidently, a "revisionist historiography suggests a much darker view of the bourgeois public sphere than the one that emerges from Habermas's" (Fraser, 1990, pp. 61-62).

Paradoxically, Habermas attempts to counter utopianism in his sketch of the public sphere's evolution, wherein he holds the technology of mass media partially accountable for the dissolution of the democratic public sphere. "Technological development", he argues, "in the means of transmission of news (after the telegraph and the telephone came the wireless telegraph and telephone and shortwave and radio)" has supported the general tendency of the public sphere towards concentration and centralization as it has enabled corporate homogenization of services (Habermas, 1991, p.186). In his article, "Technology and Science as 'ideology'", Habermas also condemns the role of technological utopianism in reducing politics to a pursuit of technological means for the achievement of goals (Feenberg, 1996; Winner, 2001). He "denounces the 'secret hopes' of a whole generation of thinkers – Marcuse, Benjamin and Adorno – whose implicit ideal is the restoration of the harmony of man and nature" through the development of new technology (Feenberg, 1996, p. 48). This hopeful stance of technology, Habermas suggests, is dangerous because the reductive rationality of technical language has come to dominate the political sphere; correspondingly, political tensions and contradictions have come to be seen as merely technical problems (Feenberg, 1996).

Insomuch as Habermas is critical of communication technology, he incorporates technology into his account of democratic transitions. While he attributes the gloomy transformation of the public sphere to new electronic technology, he celebrates the technology of print as the basis on which the deliberative communication of the public sphere was built (Saco, 2002). He provides an account in which books, pamphlets, and newspapers circulated among the educated public and were widely used and often discussed in gatherings taking place in eighteenth century salons and coffee houses (Taylor, 2004). Habermas affirms that the public sphere was predicated on print capitalism, claiming that there is a common mind that can form amidst the multiplicity of spaces through circulation via technology (Taylor, 2004). This representation of the public sphere as the embodiment of public power with the capacity to counter state has facilitated the transference of Habermas' imagined construction of the public space to the space of the late developments of technology. Charles Taylor (2004) distinguishes the public sphere from what he calls as the "common space" in how the former "transcends such topical [common spaces]. We might say that it knits together a plurality of such spaces [an opera, a stadium.... etc.] into one larger space of non-assembly" (Taylor, p. 86). The drawing of the "public sphere" as one big place where people can participate even when they are geographically distant – whether a realistic or unrealistic vision – conforms with the formulation of the technology of the Internet as a space accessible to different actors and groups regardless of their regional, territorial, or terrestrial locations.

Affinity of democracy and technology. The theories of Habermas, Arendt, and Marx diverge upon their conceptualizations of the private and the public and the impact of these on democracy. What brings them together is their concern for democracy and an

endeavor to formulate a model in which democracy can be achieved. These scholars' utopian constructions of democracy/revolution have migrated to discourse of technology. If we understand that current Western academic talk about new technology is not reflective of natural results of ethnographic research that tackles how technological developments affect political life, but rather is a part of a discourse that has supplanted and re-modulated long-standing utopian projections of democracy, then we see the continuum between the intellectual projects of Marx, Arendt, and Habermas and contemporary ways of observing technology and its impact on the political. Habermas and Arendt focus on the public space as what invigorates democracy. Advocates of new technologies, such as the Internet and social media, see in these tools the capacity to enhance the public participatory space, widen it, or accommodate its counter-publics. Analogously, influenced by the rationalism of Enlightenment, the doctrine of progress, and the tendency to neutralize science and technology, Marx's strand of technological utopianism associates technology with revolutionary movements and sets forth its role as tools that can be appropriated for the benefit of the resistor, in the same way they advance the power of the dominator.

Through the above discussion, I hope to have made clear how the philosophies of the three important modern Western intellectual figures, Marx, Arendt, and Habermas, have paved the way for a theoretical affinity between democracy/revolution and communication technology. I have also attempted to show how these three intellectual projects share a utopian sense of democracy and a marginalization of non-Western experiences, endeavors, and strivings in their accounts of democratic change.

Modern Academic Expertise and Technology

Here, I elaborate on the role of modern academic knowledge in invigorating technological utopianism and focus on three examples that explicitly demonstrate academic and scientific knowledge's role in feeding (and adapting) modern technological utopianism. These examples concern Marshall McLuhan (1994), Stewart Brand (Turner, 2010), and Francis Fukuyama (1989), respectively critiqued by James Carey (1989), Fred Turner (2010), and Vincent Mosco (2005) for their impact on extending and re-inflecting technological utopianism.

Each – McLuhan, Brand, and Fukuyama – is a legend; we can speak of their legacies and schools of thoughts. However, we can also observe the precursors of their intellectual enterprises: Catholicism is a staple of Marshall McLuhan's communication philosophy (Carey, 1989); a scientific strand of biology can be observed in Stewart Brand's contribution (Turner, 2010); and an evolutionary vision of time merged with a longing for transcendence can be seen in Francis Fukuyama's political science (Mosco, 2005). These three cases illustrate, on one side, the important role of academic knowledge(s) (represented in this discussion by communication [McLuhan], biology [Brand] and political science [Fukuyama]) in extending, recalibrating, and heightening technological utopianism. Hence, they support my justification for focusing on the production of academic expertise in regards to the movements in MENA. They, on the other side, provide evidence of how academic and intellectual discourses, characterized by technological utopianism, can embody different but tangled layers of knowledge.

McLuhan and transcendental thought. James Carey (1989) points out that “futurist ethos”, which “convey an impression that electrical technology is the great

benefactor of human kind...[and] hail electrical technique as the motive force of desired social change” is highly associated with the communication scholar Marshall McLuhan (Carey, p. 88). What also distinguishes this utopian trend set by McLuhan, according to Carey, is “the belief that electricity will overcome historical forces and political obstacles that prevented previous utopias” (p. 88). McLuhanian thought, Carey notes, has “been articulated and reiterated over many decades and has many spokespersons in our time” (p. 88). Despite abundant critique (Baudrillard, 1981; Enzensberger, 2000), McLuhan’s utopian outlook of technology is still widely recapitulated inside “intellectual circles” and “repeated and embraced by coterie of advertisers, engineers, corporate and foundation executives and government personnel” (Carey, 1989, p. 88).

In his celebration of electronic technology, McLuhan distinguishes himself by a “penchant for religious metaphors”; such inclination “leads to a characterization of electricity as Divine Force” (Carey, 1989, p. 89). Metaphors in McLuhan’s works draw from religious language (Carey, 1989): e.g., the primacy of orality in his approach is inspired by the influence of chants and memory found in Christianity, which stands in opposition to debate and deliberation identified with politics (Carey, 1998).

McLuhan’s appreciation of orality, stemming from his Catholic beliefs (Carey, 1998), is the baseline for the well-known comparison he makes between printing and electronic technology, concluding in that discussion that the invention of printing led people to work in isolated fictions, while electronic technology restored mankind to the pre-mechanical age (McLuhan, 1994). From this perspective, electronic technology has the potential to transform the world into a “global village” (McLuhan, 1994, 2011). The difference in these technologies’ impact is attributed to their different effects on human

perceptions. While the mechanical effects of printing encouraged people to shape their perceptions linearly and uniformly, in a way compliant with the visual order of print, “eliminating the ear man and the tactile man” (McLuhan, 1994, p. 17), the new applications of electricity have helped people to rearrange their perceptions in an “integral” way similar to nomadic and pre-literate societies (McLuhan, 1994, p. 8). By connecting to computers, people are not only able to “extend” their “nervous systems” to interface with technology (McLuhan, 1994, p. 90), but also to use this type of mediation to connect with the “consciousness” of other human beings (pp. 3-4). This type of extension ushers humanity into, what McLuhan calls, the “global village” (McLuhan, 2011).

Carey (1998) argues that in analyzing interactions between the body and technology, McLuhan studies the body from a mechanical perspective. McLuhan assigns a mechanical characteristic to each bodily sense (Carrey, 1998): participation to the ear, discrimination to the tongue, and concentration to the eye (Carey). To electronic technology, he assigns the ability to balance human sensibilities (Carey). Such metaphors liken human senses to parts of a machine, each of which has a particular function. However, this formulation also contains theological undertones. McLuhan celebrates the spread of electronic technology, such as television, radio, and computers, as an opportunity that permits people to remain connected in consciousness. The perception of these technologies as entities that give life to collective intelligence is correspondent with the recognition of collective intellect in the Church – the conjunction between God and human beings (Spadaro, 2013, p. 95). As a consequence, “the angelic and celestial world

becomes the region of the virtual worlds, through which human beings are in *intellectual collectivity*” (Spadaro, pp. 95-96).

The way that McLuhan talks about electronic technology does not render technologies as mere instruments for the storage and dissemination of information, nor does it highlight technologies’ potential use. It is not a way of talking that represents technology as spaces of participation; it is a way of presenting new technology as an eruptive force, transforming life, overcoming obstacles, and uniting the globe.

McLuhan’s communication model, in such a sense, is emotive and it is characterized by the notion that technology can *transcend* into a global scale of union, and by vocabulary that is parallel to the pre-modern language of transcendence and sublime.

Stewart Brand: Technology, utopia, and biology. The unfolding of technological utopianism in the late twentieth century North America is also documented by Fred Turner, in *From Counterculture to Cyberculture* (2010), but through a narrative with Stewart Brand at its core. The story of Stewart Brand, which Turner narrates, demonstrates an affinity between academic and scientific knowledge and technological utopianism. Turner’s (2010) story begins in the late 1950s, when many Americans feared the conjunction of industrial, academic, and military institutions that had brought atomic bombs into existence. Under the pressure of a nuclear threat from the Soviet Union, there emerged a dystopian vision of society, dominated by hierarchy and pyramidal organization, and “run by buttoned-down psychologically fragmented people” (Turner, 2010, p. 26).

Turner (2010) proposes that Stewart Brand, viewed as a prominent technology visionary, saw the scientific theory of cybernetics as an alternative to Cold War tensions.

Turner further refines Brand's ideals, arguing that if hierarchal structures worked in a top-down manner, eliminating the element of individuality, then biological systems, in the cybernetic model, appeared to be maintained by "evolutionary forces" (Turner, p. 44) working at the level of individuality. While, ironically, the counterculture movement, which Brand had joined, had been opposed to the university's rigid and bureaucratic systems, this *academic* scientific organic model of cybernetics became an intellectual framework for Stewart Brand's work; Brand saw in this theory a social design that could solve problems of hierarchy and bureaucracy while also maintaining "holistic individuality" (Turner, p. 43). Through this theory, a society would become whole and its parts could function as constitutional organisms (Turner).

As mentioned in Chapter 2, the whole-individual framework of cybernetics, developed by Norbert Wiener, provided an image of the material world as a system seeking self-regulation through the processing and controlling of messages and information (Turner, 2010). As such, correct information guaranteed an efficient system. Technologies were seen in this vision as tools used to correct the actions of public leaders by offering accurate information about society's constituent parts (Turner). Such a model underscored a benevolent view of information technology. Emerging technologies were perceived to be influential in the social order and organizing individual activities. If accurate information is important for society and for the functioning of its individuals, then information systems and technology should be vehicles for moral goodness:

Embedded in Wiener's theory of society as an information system was a deep longing for and even a model of an egalitarian, democratic social order. To the readers of *Cybernetics*, computers may have threatened automation from above,

but they also offered metaphors for the democratic creation of order from below.

(Turner, p. 24)

Brand's *Whole Earth Catalog* was initially launched to help "back-to-the-landers" live communally (Turner, 2010). It featured contributions from the government, industry-based communities, New York and San Francisco art groups, and various communes spread across the United States in the late 1960s. Turner argues that the *Catalog* served as a textual forum wherein the communes could interact with technologists and academics, and exchange information. When the *Catalog* was transformed into a digital version, practices of advanced technology were added to this mix.

The *Whole Earth Lectronic Link* (WELL) brought the *Catalog*'s ideal of an interconnected community into virtual *community* – in fact the term "virtual community" was deployed for the first time by Howard Rheingold in an article for the *Whole Earth Review*. "If the *Catalog* represented community in print" says Turner, "the WELL's digital technology allowed it to *become* an interactive collectivity in real time" (p. 151). The WELL project owed much to the legacy of the *Whole Earth Catalog* and its cybernetic ideals. Shared interests and interconnection fostered by both projects helped idealize virtual community and restored the dream of a united community.

Corporeality vs. cybernetics. The cybernetic view of information, adopted by Brand, is based on a model of a world in which information flows through its constituents (Turner, 2010) and translates human physiological systems into technologically inspired metaphors. However, the presumption that theories focusing on the interaction between the human body and digital technologies should conjure utopian communal visions of technologies is erroneous. Other scholars concern themselves with the materiality of

media technologies, focusing on the interface between these technologies and the human body, but “refuse to invest this [technological] transformation with the historical-philosophical meaning of emancipation” (Wellbery, 1990, p. 33). Friedrich Kittler considers the emergence of new technological inventions as decisive historical moments but declines to endow them with the utopian values of freedom and liberation (Wellbery, 1990). Kittler (2010) provides an analysis of new technology that can be described as ambivalent rather than celebratory. He acknowledges that optical media technologies have overcome illusions and fantasies by dissociating the “real” from the human hand and eye; nevertheless, to Kittler, these technologies, paradoxically, have produced “simulations” (p. 37). The film is not anything but a frame and television is nothing but electronic signals. Being invisible to us, Kittler suggests, optical media technologies have blurred the distinction between reality and representation, producing a simulacrum world:

The thesis would thus be that traditional arts, which were crafts according to the Greek concept, only produced illusions or fictions, but not simulations like technical media. European culture up to early modern times was under the control of what Hans Blumenberg called ‘the postulate of visibility’... Technical media and only technical media - according to the thesis of these lectures - destroyed the postulate of visibility. (Kittler, 2010, p. 39)

Unlike the formalist theory of cybernetics, the “post-structural” “presupposition of corporeality” (Wellbery, 1990, p. 14) helps reveal the problems of power entangled with technology. The cybernetic vision looks at the body from a mechanical perspective, while the corporeality hypothesis is centered on effects and accommodates ruptures in relations (Wellbery, 1990).

To make this comparison clearer, we may look at Foucault's analysis as an example of the importance of using a corporeal-centered approach to technology studies. Mechanical, electronic, and digital technologies do not take a central space in Foucault's writings. His analysis of "technologies of power" (Foucault, 1977a), however, makes clear the effectiveness of examining the body's interaction with objects in revealing relations of power that might not be observable at first glance. In *Discipline and Punish*, Foucault starts with the grotesque details of the 1757 public execution of Damien the regicide, whose body was quartered, torn, and burned in France. While the details may shock the reader and elicit condemnation of the conditions of executions in earlier times, Foucault's analysis aims not to allow the reader to tower over traditional techniques of power while celebrating (presumably) modern liberating and kinder approaches to punishment; rather, Foucault's analysis posits that the modern gentle approach of discipline "produces subjected and practiced bodies, 'docile' bodies" (Foucault, 1977a, p.138). It renders the shift from public violence to hidden punishment not as a sign of liberatory progress. For Foucault, the modern techniques of discipline, typified by the use of timetables, the distribution of bodies, and the arrangement of spatial communication in hospitals, prisons, and factories, serve to produce "docile" bodies that can work within a set of normalized, internalized, and hierarchized grids and rules (Foucault, 1997a). This is not progress but another form of discipline. Power, through technique innovations, becomes more pervasive, subtle, and controlling of bodies.

The described effects of modern techniques on human bodies, by Foucault, and the suggested effects of new technologies on the "postulate of visibility," as described by Kittler, separate these two scholars from other utopian visionaries like Brand. For Brand,

the cybernetic theory of information was not merely a point of investigation but a healthy formula for treating prevalent fears in his era (Turner, 2010). Brand, Turner elaborates, migrated between technical, scientific, academic, and communal societies in search of solutions to tensions and questions of self, humanity, and consciousness perpetuated by Cold War and nuclear threat. Kittler and Foucault, on the other hand, examine the mutual dynamics between the human body and objects in order to excavate “pathos” (Wellbery, 1990) in the interaction between technologies on the human body.

Fukuyama and the “end of time”. The last case that conflates technology, modern academia, and utopia is that of the political scientist Francis Fukuyama. Vincent Mosco (2005) correlates Fukuyama’s work with the transcendental “end of time” notion. He argues that time, as a motif, figures prominently in work on cyberspace. Centrally, this analysis notes a fundamental difference between ancient and contemporary styles of thinking and ways of living caused by fast and enormous developments in technology. The rise of computers, according to proponents of “the end of time”, marks an important shift, a “new age...that ends history as we have known it” (Mosco, p. 56).

Francis Fukuyama, in “The End of History?”, announces the triumph of liberal democracy and the end of an ideological world characterized by irrationalities and dictatorial governments. Fukuyama’s essay, which was published in 1989, in an intellectual public quarterly, advocates for the global acceptance of a free market and of technological and scientific development:

the worldwide ideological struggle that called forth daring, courage, imagination, and idealism, will be replaced by economic calculation, the endless solving of technical problems, environmental concerns, and the satisfaction of sophisticated

consumer demands. In the post-historical period there will be neither art nor philosophy, just the perpetual caretaking of the museum of human history. I can feel in myself, and see in others around me, a powerful nostalgia for the time when history existed. (Fukuyama, 1989, para. 58)

Fukuyama's prediction, Mosco states, provides an "umbrella that shelters visions of cyberspace and the end of history" (Mosco, 2005, p. 59) in spite of the significant problem of marginalizing the growing control of neoliberalism. Fukuyama suggests that "understanding the underlying processes of history requires understanding developments in the realm of consciousness or ideas" (Fukuyama, 1989, para. 19). History, for Fukuyama, is the animating idea that gives meanings to events. This history, he argues, has ended. With the collapse of fascism and communism, people, supported by science and technology, will be able to achieve liberal democracy that fulfills their desires for freedom (Fukuyama, 1989; Mosco, 2005).

This unbridled optimism about the role of technology and science, according to Mosco (2005), has been taken up by leading authors, intellectuals, scientists, and engineers. Nicholas Negroponte, for example, promises "wonderful new worlds to come" (Mosco, p. 73) from digital technologies. Ray Kurzweil, likewise, envisions a world profoundly altered by computer-induced changes but points more specifically to ways computational technology have changed the conception of mortality and to the possibility of the physical body defying death through hardware and software files (Mosco, 2005). Another ramification of Fukuyama's end-of-history thesis is the belief that "the young will lead us" into ideal futures (Mosco, 2005, p. 79) – a theme that has been repeated by computer enthusiasts, including Douglas Rushkoff, whose works declare that "the older

generation doesn't get it but young people do" (Mosco, p. 81). The young's enthusiasm, according to technological utopianists, coheres with technology's vibrancy and challenging nature. This belief renders the *young* as the leaders of the new age.

Certainly, the end of time, as declared by Fukuyama, has inspired much work "willing to entertain the prospect of a fundamental turning point in society and culture" (Mosco, 2005, pp. 55-56). The utopian desire to control destiny and overcome history – and its concurrence with ideology, tradition, and catastrophes is not, however, something uniquely modern. More's sixteenth century utopia (2007) is about the determination to control destiny and time through techniques of order. Bacon's utopia (Mumford, 1922; Sibley, 1973; Segal, 1985) is, similarly, a manifestation of the dream to create a future, relieved from social and natural ills. With Fukuyama, the end of history has become explicitly associated with modern scientific knowledge and new advanced technology. Long-standing endeavors to dissociate time from the past, and freeze it, have become more intellectually associated with complex technological developments and scientific knowledge expansions.

Mapping Models

Finally, I conclude this chapter by summarizing discursive formations (Foucault, 2012) that have guided Western relations with objects of technology. These formations do not occur in fixed squares, but frequently have traversed the boundaries between them. For example, while the cybernetic organic model fits mostly the nodal tool/network mode, it has also surfaced in McLuhan's work, recognized for its transcendental conceptualization of technology. What makes the job of recognizing different trajectories of technological utopianism even more challenging is the array of syntheses intertwined with them:

secularity versus religion, utopianism versus dystopianism, longing for control versus a desire for obedience, and search for harmony with nature versus a quest for engineering it (to name a few).

This, however, does not mean we should not search for historical trajectories because of these paradoxes and complex levels. Sidelining discourse of technology's history entails the claim that the West is not different from other social groups in their engagements with technology, a proposition that Lewis Mumford (1934), Friedrich Kittler (2010), James Carey (1989), Michel Foucault (1977a), and other prominent thinkers, I believe, would absolutely refute. Importantly, we must recognize interlocking relations between different discursive models and realize different paths – albeit uneven and interlacing – through which technological utopianism has manifested itself. Actually discerning the contingency of technological utopianism, by tracing the rise of modernity to the tradition of religion, connecting utopia to dystopia, and detecting the dogma of progress in the notion of resistance, aids the process of breaking down, anatomizing, and, thus, demystifying technological utopianism.

The shape of technological utopianism that I propose is a perception built upon the literature I have examined. Needless to say, it is provisional. But I would like, below, to provide a rough sketch of how I understand technological utopianism. The purpose of this rudimentary sketch is not to provide a settled map of technological utopianism, but to invite the reader to visualize my mental topography of it.

If we can imagine the construction of technological utopianism as a domain – appearing as a circle – then the models I propose are scattered within this circle. Closest to the centre are the models of *transcendence* and *dystopianism*. These two siblings

represent the highest – or, unreasonably, the lowest – levels of acceptance of technology. Inspired by many elements, including religion, the sublime, and some literary utopia, these two models relay technological developments beyond the parameters of efficiency and enhancement. They represent technology as entities capable of transcending limitations of time, space, politics, and life.

The second dimension of technological utopianism relates to the supposed capacity of technological innovations to facilitate and network. The first function, facilitation/assistance, comes from the view of technology as neutral *tools*. This conception, as discussed above, is self-evident and dominant in Marxist studies. The function of networking cannot be traced to a certain source, but *network* has been a dominant design and form of thinking in Western material and immaterial structures such as pre-modern European roads and canals (Mattelart, 1996; Mumford, 1934), the socialist utopia of Saint-Simon (Mattelart, 1996), and biological analogies (Mattelart, 1996; Turner, 2010). Meanings that are associated with this paradigm revolve around efficacy, planning, and rationality.

The third model is the *public sphere*, whose proponents perceive new technology as the new participatory sphere or as another sphere that accommodates counter-publics. Although the public space is featured as the place for utopian democracy and participation in Western intellectual traditions (Arendt, 1977; Habermas, 1991), it theoretically lacks attention to material analysis. Because of this lack of materiality, advocates of this model find in the virtual space of the Internet a new, advanced, or reinvented space to revive participatory democracy.

The model of *corporeality*, on the other hand, emphasizes interaction with human body parts. It displays an ambivalent relationship towards technology. Post-structuralist thinkers, such as Foucault and Kittler, are among those have established the model in Western modern intellectual traditions.

Finally, the *critical* method is one that examines technology in respect to the question of power and dictates critical readings of technological development. Foucault's theory is one guide for implementing a critical reading of technology but works of others who concern themselves, explicitly or implicitly, with questions of control and power, including James Carey, Vincent Mosco, Armand Mattelart, and Lewis Mumford, have also provided critical readings of technology.

Ultimately, these different constructions, tied by utopian questions, will be the focus of the next analysis chapters. They will be explored in relation to recent academic discussions of the role of new media technologies in the Arab and Iranian movements.

Chapter 4: Methodology

We know that discourse has the power to arrest the flight of an arrow in a recess of time, in the space proper to it. It is quite likely, as Homer has said, that the gods send disasters to men so that they can tell of them, and that in this possibility speech finds its infinite resourcefulness. (Foucault, 1977b, p. 53)

The first theoretical chapter of the thesis, Chapter 2, focused on the socio-historical recurrence of technological utopianism – not to trace the evolution of technological utopianism, but rather to describe different contexts wherein technological utopianism emerged and shaped different ways of speaking. Chapter 3 dealt more specifically with the role of academic expertise in developing and adapting technological utopianism. This chapter aims to set out the methodology of my research and suggests a discursive entry into Western academic engagement with the Arab and Iranian movements and the role of new media technologies in these events. I prefer to use the term *methodology* rather than *methods* to describe this section as the goal of this chapter is not only to design methods or checklists that allow for the application of pre-established criteria but to also, because of the work's critical nature, involve discussion of theory and embrace reflexivity.

This chapter opens with a discussion of Michel Foucault (1977a, 1977b) and Anthony Giddens (1991), who elaborate on the scope and ways in which “expert” knowledge systems dominate other domains and practices. This discussion provides further support for the choice of academic discourse as the object of my study. I then argue for an approach that capitalizes on a diversity of conceptions and methods in order to ensure that the research means are most suited to my proposed research topic. I take my cues from communication studies, Foucault, and critical discourse analysis with the

intention of bridging the gap between these different approaches. The goal of this review of literature is to provide an approach in which textual and post-structuralist perspectives are brought into dialogue. By combining textually-based investigation and Foucault's post-structuralist perspective, I propose a critical engagement with technological utopianism that traces relations between macro structures and micro events, provides a procedure for problematizing texts, and develops a heightened critical perception of these same texts. This critical engagement serves a contingent conceptualization of academic discourse on technology more so than "transcendentally" controlled notions of social relations (Curtis, 2014). Although this dissertation's textual analysis is inspired by critical discourse analysis (CDA), and particularly by Fairclough, I propose a synthetic approach that combines linguistic analysis with categories and perspectives drawn from communication theory (Carey 1989; Mosco, 2005 ...etc.) and Foucault's theory of power. This conjunction leads to a consideration of how various historical and cultural structures are articulated in texts – something none of these perspectives allows for if not combined with the other perspectives.

I then move to define what I mean by *Western* academic discourse. In discussing this category, I rely on Foucault's notion of the author and the theory of "discourse community" (Hyland, 2009) to emphasize closeness between language and institution rather than adopt a view that overemphasizes agency and geographical distance. The discourse community theory shifts attention to what people practice rather than who they are. In the remainder of the chapter, I set out my research design and highlight changes made to the design as the study progressed. This section will include a discussion of data

collection and analysis procedures, which consist of two processes: systematic and case-based.

Why Academic Discourse?

My interest in academic discourse comes from perceiving that discourse as a form of expert knowledge. Academic discourse, according to Ken Hyland (2009), has come to be a privileged form of argument in the Western world. The issue of discourse and power in the academy is part of a more general social problematic of language and power.

Academic institutions, much like other institutions, such as mass media, are highly engaged in the production and reproduction of discourse in relation to power. Firstly, academic institutions constitute a core domain of discursive power in the West; accomplishment in academic institutions depends heavily on discursive and linguistic engineering (Hyland, 2009). Secondly, academic discourse is involved and intertwined with other domains and institutions, as shown in the previous chapters and which will become more transparent in Chapter 6. Academic discourse, then, is not only important to study because of the production of language in its domain, but also because, beyond universities and academic institutions, academic discourse disseminates and is informed by other areas of Western life, including media, policy, and politics (Hyland, 2009).

The broader subject of expert knowledge, its development and its usage, has not escaped criticism. Michel Foucault points out the contiguity between power and western discourse in one of his most influential texts in discourse studies, *Discipline and Punish* (1977a). In the book, Foucault investigates the shift in the nature and function of power from pre-modern to modern societies, proposing certain features characterizing discourse and language in modern times. He argues that in studying modernism, “instead of treating

the history of penal law and the history of the human sciences as two separate series... [one should make] the technology of power the very principle both of the humanization of the penal system and the knowledge of man” (p. 32). According to Foucault, scientific and expert knowledge (such as criminology, psychology etc.) have had a huge influence on the administration of punishment in the penal system. This intermingling of the two systems, scientific and penal, also manifests in the way observatories were built in both the scientific and other social domains. Along with the telescope and other gaze-shaped models of technology developed in scientific fields, panopticism was carried out in urban development: in the construction of hospitals, asylums, schools, and prisons. Foucault’s discussion of the change in punishment and discipline can be described as a call for the abandonment of “the whole tradition that allows us to imagine that knowledge can exist only where the power relations are suspended and that knowledge can develop only outside its injunctions, its demands and its interests” (Foucault, 1977a, p. 3).

In a manner reminiscent of Foucault, Anthony Giddens (1991) elaborates on ways in which systems of expertise represent important sources of authority in post-traditional societies. The certitude of tradition, according to Giddens, is replaced by rational knowledge. This means that people’s self-identity, rather than being automatically based upon authority and tradition, is built through a process of reflexivity, characterized by doubt and contestation. Although Giddens differs from Foucault in his more elaborated exploration of self-reflexivity as a pervasive feature of modern rationality, Giddens shares Foucault’s focus on the societal influence of expert knowledge; Giddens perceives expert knowledge to play a fundamental role in, what he calls, “the sequestration of experience” (1991, p. 8). A result of reflexive modern identity is a predominant

susceptibility to constant revision in light of new information and knowledge. These changing forms of knowledge and information are ordered into expert systems. In discussing expert systems, Giddens focuses on how expert knowledge guides people's social relationships and everyday social activity and how these systems penetrate all aspects of social life: food consumption, medication, marriage, personal relationships, etc. To Giddens, "the doctor, counselor and therapist are central to the expert systems as the scientists, technician or engineer" (p. 18).

While Giddens concentrates on the role of experts in shaping modern personal identity, his discussion highlights academics' role, as experts, in interpreting what Giddens himself describes as the "*intrusion of distant events into everyday consciousness*" (1991, p. 27). Giddens argues that events happening in remote places can, in modern times, enter people's experience and affect their everyday experiences. A parallel exists between his argument and mine but I focus on the interplay between "distant" events and the socio-cultural phenomenon of technological utopianism rather than on the effects of this mediated experience on consciousness and psychology. I aim to explore how communication of the MENA movements, in which academics assert themselves as objective interpreters, feeds into, or in some cases restructures, technological utopianism and provides particular perceptions of the MENA movements.

An historical inspection of technological utopianism reveals the plausibility of the idea that Western academic institutions are closely bound up with technological utopianism. This state does not apply only to technocratic traditions of academic knowledge, but also to the humanities and social sciences. In the theoretical chapters of this dissertation, I asserted this claim by presenting the critique of James Carey (1989),

Fred Turner (2010), and Vincent Mosco (2005) regarding the production and dissemination of utopian discourses of technology. I highlighted how their discussions reveal that academic and scientific expertise had responsibility in reviving and adapting technological utopianism. I also discussed the ramifications of the intellectual production of Karl Marx, Hannah Arendt, and Jürgen Habermas in forging assorted views of democracy, politics, and revolutions that position technology as compatible with democracy and better socio-political conditions.

Nonetheless, as I indicated, there are gaps in the existing literature, including the works by Carey (1989), Mosco (2005), and Turner (2010), surrounding the shape of technological utopianism and the role of academic institutions in shaping this construction. Besides lacking a critical understanding of technological utopianism's impact in relation to other regions or territories than the West, these critiques provide only unitary analyses of technological utopianism; in most cases, they refer to technological utopianism as an ideology (Carey, 1989; Turner, 2010) or myths (Mosco, 2005) that “actively obscure” (Turner, 2010, p. 260) capitalist unequal structures (Carey, 1989; Mosco, 2005; Turner, 2010). Technological utopianism is not studied with attention to its different paths and models, or to how these various models, which have been in touch with different realities and institutions, are re-inscribed in contemporary discussions of technology. This dissertation relies on a plural framework to develop an understanding of technological utopianism. A plural framework does not mean a weak framework; it means elevating technological utopianism to a serious level and elucidating its reality in constituting conversations – and not only its role in hiding realities.

Which Approach(es)?

To address these gaps in the existing literature, I combine the Foucauldian concept of discourse with communication theories and supplement these forms of knowledge with knowledge of linguistics and of intertextual, textual, grammatical, and semantic properties. Instead of advancing one best method, I opt to borrow approaches, methods, and views that answer the question of how much context, whether historical, social, linguistic, etc., is needed to gain insight into the object of my study. More specifically, I follow the question: how do I map possible ways of intellectual thinking, speaking, and writing in regards to technological utopianism? Certainly, each approach is entangled with certain theories of language and discourse; however, these approaches, I argue, can be combined if systematic similarities are found among them, and if the assumed contradictions between them are drawn upon to address gaps and cracks in the approaches.

I argue that combining CDA's attention to linguistic and intertextual properties – an approach primarily associated with Norman Fairclough (1992, 2001, 2013), the most influential thinker in critical discourse analysis – together with Foucault's sensibility to the multiplicity of power (1977a, 1977b), provides an account of technological utopianism that acknowledges the complexity of this discourse without one's becoming lost in its intricacies. Textual analysis, combined with Foucault's vision of power, helps provide a dynamic view of how texts re-accentuate and adapt historical discourses and of how history guides these texts. In my study, the idea that new technologies, such as social media, were the agents, means, or spheres for the Arab and Iranian movements is a naturalization that needs to be denaturalized, first, because of its interpretations of the

past, and second, for its effects on future predictions and practices. This is, of course, not to suggest that there is a direct relationship between the two, the interpretations and implications. However, if academic institutions adopt this type of naturalization then their discourse needs to be considered for its historical background, probable effects on visions of past, and also for its potential implications of determining people's relationship with technology and of providing particular templates for understanding movements in non-Western spheres.

Before presenting a definition of discourse that fits into this project, I would like to give an overview of the term *discourse analysis* and explore some of its distinct uses. Discourse analysis, as entered into the vocabulary of linguistics, is a way of studying chunks of language in use: through text linguistics, conversation analysis, etc. (Pennycook, 1994). It was informed by and associated with pragmatics and a developing perspective of "language in use" aimed at discovering grammatical and structural features of language operating at levels higher than the sentence (Hyland, 2009). Issues that occupied analysts included how conversations worked in terms of turn-taking and sequencing, how texts were put together, and how patterns of language uses varied across cultures (Pennycook, 1994). At this stage, discourse analysis was associated with a growing attention to empiricism, highlighting a need for more data of interactions in settings associated with language acquisition and language learning (Pennycook, 1994).

An important development relevant to linguistic analysis was the growth of critical discourse analysis. CDA emerged in the late 1980s and was closely associated with Ruth Wodak, Teun A. van Dijk, and, more prominently, Norman Fairclough. Since then, according to Jan Blommaert and Chris Bulcaen (2000), CDA has become one of the

most visible and influential strands of discourse analysis. This type of discourse analysis has its roots in a known Western tradition of critical social theory that extends from Marx to the critical theory of the Frankfurt school (O'Regan, 2006). The other known critical tradition that developed in parallel to the former is one that extends from Nietzsche to the post-structuralism of Foucault (O'Regan).

CDA is distinguished from the traditional linguistic strand of discourse analysis by its commitment to going beyond linguistic description to explain how language creates and reflects power relations (Pennycook, 1994). CDA understands discourse as a social phenomenon and consequently seeks to situate discourse in society. It views discourse as both socially constitutive and socially constituted. This constitutive theory of language is at odds with the referential view of language (Bengtsson, 2011) adopted in traditional linguistics. While the referential theory perceives language to be “a neutral bridge between thought and object or thought and action” (p. 91), the constitutive theory of language posits that meaning is actively created through discursive practices. Discourses, according to the constitutive theory, are not transparent or impartial means of describing natural worlds, but they work to regulate, adapt, change, construct, and control knowledge, societal systems, and institutions. Language, as a result, is not dead, meaning that it is not merely a neutral container to contain any meaning, depending on cognitive schemes. It is rather a producer and a byproduct of relations.

This constitutive view of discourse is partially inspired by Foucault. Fairclough, in his article “Discourse, change and hegemony” (2013), explains that his view of discourse evokes Foucault’s identification of discourse “as constitutive of power in modern society” (p. 126). Fairclough even uses terms such as “orders of discourse”

(2013), which derive ultimately from Foucault's analysis. He adapts this term to refer to "a particular relatively durable articulation of discourses, genres and styles" (p. 382). Despite these and other similarities between Foucault and Fairclough, regarding discourse's constitutive effects, there are important distinctions between the Foucauldian approach and CDA, as shown below, in respect to questions of ideology and power and to the critical theories that these two approaches are based upon.

In further examining CDA – its goals, its theoretical and methodological frameworks, and its divergence from Foucault's post-structuralism – I rely mostly on Fairclough, as many describe his work as "the most elaborate and ambitious attempt toward theorizing the CDA program" (Blommaert & Bulcaen, 2000, p. 448).

Fairclough's work, however, is distinguished from Foucault's by how the former defines the purpose of his work:

My original formulation of the broad objective of my work in CDA still holds: to develop ways of analyzing language which address its involvement in the workings of contemporary capitalist societies. The focus on capitalist societies is not only because capitalism is the dominant economic system internationally as well in Britain (where I have spent most of my life), but also because the character of the economic system affects all aspects of social life. (Fairclough, 2013, p. 1)

Fairclough perceives relations between micro instances (language) and macro structures (the capitalist system) to be dialectical. That is, macrostructures affect language and language, in turn, shapes and constitutes these structures. Fairclough's view of this dialectical relationship is conditioned by a Marxist perspective that locates power in

economic processes. Unlike Foucault, whose work problematizes “transcendental” critiques of power (Curtis, 2014), Fairclough makes material and socio-economic relations primary, studying less other sites of power.

Fairclough’s work (Fairclough, 2013)⁵ displays a tension in the way he positions his work in relation to Foucault. While, in many pieces of his work, he acknowledges the influence of Foucault, he also makes a clear distinction between his analysis and other versions of discourse theory that collapse the distinction between reality and discourse. Fairclough asserts that “CDA is a ‘moderate’ or ‘contingent’ form of social constructivism” (p. 5). That is, CDA, according to Fairclough, is a realist approach that claims there is a real world, independent of ways this world is perceived, represented, or spoken about. The adoption of a realist approach explains the way he views power as being reduced to pathological effects of market and capitalism and to the impact of changes in economic systems on discursive practices in contemporary society. Many of Fairclough’s writings include a partially deterministic account of the workings of power. CDA’s role, according to Fairclough, consists of its attempt to “understand how contemporary capitalism in some respects enables but in other respects prevents or limits human well-being and flourishing” (2013, p. 11).

Fairclough positions his model of discourse analysis within theories of ideological processes in society (Blommaert & Bulcaen, 2000) that are built from Marxism’s and Althusser’s contributions to the theory of ideology (Fairclough, 2013). Ideologies, according to Fairclough, arise in “class society”, characterized by relations of

⁵ Fairclough compiled the important pieces he wrote between 1983 and 2008 in one book, published in 2013. I relied on this book to study his work and theory.

dominations. For Fairclough, if people are capable of transcending class societies, they are, then, able to transcend ideology (Fairclough, 2013, p. 5).

Arguably, on a theoretical level, Fairclough provides a closed conception of power by paying much more attention to capitalism and market than to other sources of power. His vision of power obliterates the intricacies of history and other societal, cultural, and institutional pressures. A Foucauldian view, on the other hand, exposes problems in discourses that may otherwise go unnoticed by CDA analysts. Foucault's perspective of power allows a more sensitive view of distortions, exclusions, and pathologies found in discourses without the totalizing tendency of Marx-inspired visions of power (Pennycook, 1994). In his definition of genealogical writing, for example, Foucault wishes to unsettle such historical essentialisms, arguing for what he calls "effective history":

An entire historical tradition (theological or rationalist) aims at dissolving the singular event into an ideal continuity – as a teleological movement or a natural process. 'Effective' history, however, deals with events in terms of their most unique characteristics, their most acute manifestations. (Foucault, 1977b, p. 154)

In Foucault's genealogical writings, we can see how this style of critique affects his conception, for example, of the development of modern prisons (1977a). The development of the prison is conceived by Foucault as neither an upside-down process exercised solely by the oppressive state nor as a result of a growing respect for human rights in the West which condemn traditional corporeal punishments. Rather, Foucault's account emphasizes ambivalence and contingency of ways these relations are decided.

Foucault's conceptualization of power and systems is important to my study. While I find Fairclough's framework helpful in regards to this dissertation's analytical tools, Fairclough's vision of power would, I assume, reduce and restrict my exploration of the structural and historical conditions of academically located technological utopianism. To illustrate this more, I discuss briefly a case in which Fairclough critiques the discourse of British universities: Fairclough argues that discursive changes affecting higher education in Britain are a typical example of the effect of the processes of marketization and commodification on the public sector. The changes in academic discourse, according to Fairclough (2013), "have very much been 'top-down' changes imposed upon academic staff and students" (p. 101). For Fairclough, these changes can be detected by CDA analysis of texts, which can make contemporary practices in the British academic discourse more concrete and visible.

Exploring various historical readings of communication, I see academic articulations of technological utopianism not as mere manifestations of capitalism-related changes but as a chain of contingent norms, the product of a set of social, cultural, theological, political, scientific (and economic) institutions. Rather than offering a transcendental account of power and agency, my study aims to evoke a sense of the contingency of these embedded norms and open up other possibilities of tracing power dynamics.

Foucault's post-structuralism and Fairclough's CDA are seen by many as representative of two different streams of critical research (O'Regan, 2006). Implicit in Foucault's work is the heterogeneity, and sometimes "irrationality", of allegedly rational discourses (Stahl, McBride, & Elbeltagi, 2005). Fairclough's project, on the other hand,

“addresses possible ways of righting social wrongs” (Fairclough, 2013, p. 11) and aims at “supporting actions for a better world” (p. 14). Foucault emphasizes the illegitimacy of discourses, whereas Fairclough is intent on identifying “possible and feasible changes in social forms which can overcome or mitigate those limits” (Fairclough, pp. 20-21).

Fairclough’s association with this type of critical realism has had the effect of associating strategies used in CDA that are based on textual and semiotic modes of investigation with critical realism and distancing them, on the other hand, from Foucauldian contingent forms of analysis. Foucault’s narratives of sexuality, madness, and discipline are understood by many sociologists and discourse analysts to be incongruent with linguistically systematic methods of inquiry offered by CDA.

However, I believe that despite the differences between these two approaches in the notions of power and ideology and in their styles of critique, they are not contradictory. Rather, they can be combined to address each other’s weaknesses in regards to the object of my study. As indicated above, Foucault was influential in the development of Fairclough’s understanding of language as being constitutive. Fairclough also borrowed Foucault’s “orders of discourse” to develop his framework. Both Foucault and Fairclough share the critical intention of delegitimizing dominant structures and practices.

Also, while Foucault’s studies of discourse largely bypass texts and text analyses, I do not see that Foucault objected to the idea of textual analysis or of reference to language instances in order to disturb the status quo of dominant practices. In his article, “A preface to Transgression” (1977b), Foucault posits that what characterizes discourses surrounding “modern sexuality” is “the violence done by *such languages* [emphasis

added], its having been ‘denatured’ - cast into an empty zone where it achieves whatever meager form is bestowed upon it by the establishments of its limits” (p. 29). The fact that Foucault does not carry out extended linguistic analysis of the phenomenon he studies does not mean that his conception of power is incompatible with textual analysis.

The dialectic view of structures (which can be explored through critical history) and discourse events/objects (represented by texts, according to critical discourse analysts) is not foreign to Foucault’s writings. However, the textual object in critical discourse analysis is usually substituted, in Foucault’s historical mappings, by another object or event – rather than text, the object can be the body, the building design, etc. I contend, therefore, that dialectic thinking, occurring in Fairclough’s thought, between macro structures and micro objects/texts, is not a deterministic or totalizing type of thought by itself. It is a vision that underlies Foucault’s work as well, even if Foucault distances himself from dialectical thinking (1977b). If a dialectical view dismisses the ideal of full understanding of an “object” and renounces reduction of social structures to capitalist systems, critical analyses of texts could take a more complex perspective and could, then, free inquiries from generalizations and essentialisms of *the real*.

Despite this drawback of CDA in emphasizing the gap between the *real* and the *ideological*, what distinguishes critical discourse analysis and renders it a fruitful and useful discursive entry for analysis is that it has legitimized a linguistically-oriented discourse analysis firmly anchored in social theory (Bengtsson, 2011) with a deep interest in problems and forms of power in society. Some approaches fail to capture a system’s internal workings and understand how lexical, semantic, and other textual relations shape

knowledge. They also fail to capture how historical orders shape texts. CDA, on the other hand, sets out to make sense of the relationship between texts and macro events.

Some social scientists and discourse analysis approaches see CDA textual analysis as distracting or irrelevant (Fairclough, 1992), especially in understanding ways discourse functions to create social and cultural developments. In other words, CDA is seen, not as a form of life-analysis but as a “formalistic” (Fairclough, 1992) philosophy marked by attention to linguistic arrangements and style with corresponding de-emphasis of content. Fairclough posits, notwithstanding, that there are benefits of close textual analysis neglected and questioned by social scientists and he suggests a few reasons why textual analysis ought to be more widely recognized within discourse analysis and social science inquiries (Fairclough, 1992, 2013).

On the theoretical level, Fairclough argues that language is widely and mistakenly perceived as transparent; it is understood to be a neutral bridge between thoughts and activities whereby the constitutive property of language and the “work that language does in producing, reproducing or transforming social structures, relations and identities is routinely overlooked” (Fairclough, 1992, p. 211). As a consequence, social analysis does not recognize that texts constitute actions as texts are also constituted by actions. It, similarly, does not recognize that analysis of language entails going beyond a neutral attitude to language in order to recognize political, historical, cultural, and social mechanisms.

Another theoretical problem relevant to the marginalization of text and language analysis in some discourse and social science strands is the prevalent opposition of content and structure (Fairclough, 2013). A common claim amidst social scientists is that

meanings and broader philosophically (and institutionally) focused inquiries are more effective in revealing and identifying power structures than textually-based analyses. Political-economic analysis or research procedures that focus on broader socio-cultural analysis are deemed to be more operative in deconstructing power relations. The main problem with these arguments is the distinction they make between meaning and form (Fairclough, 2013). Contrary to what this distinction implies, all historical, political, or economic processes have to be semiotically mediated in order to be normalized. Language, whether spoken or written, is one form of mediation through which practice can enter into a domain. Meanings are important, but so too are style, grammar, semantics, coherence, and patterns (Fairclough, 2013).

On the methodological scale, Fairclough recognizes texts as a major source of evidence for tracing relationships between patterns in texts and wider social processes and structures (1992). Textual analysis can sensitively measure social processes and actions and provide evidence of ongoing processes and mechanisms (Fairclough, 1992). If done systematically, textual analysis can also become a means of detecting contradictions and disjunctures in texts, thus allowing conceptions under critical examination to be problematized. This is not to claim that linguistic analysis is the only way to unearth power mechanisms and processes. Rather, the claim here is that if textual analysis informs critical enquiries, results can be more firmly grounded than in philosophical enquiries (Fairclough, 2013). This is especially so if there is an enhanced role of language in the exercise of power, as in the case of the generally acclaimed role of mass media or the case of institutions characterized by their expertise or authority in society: including political, governmental, and academic institutions.

Fairclough regards the absence of textual analysis in Foucault's work as the reason for Foucault's failure to detail mechanisms of power (Fairclough, 1992). One cannot simply apply Foucault's discourse ideas. The fact that Foucault's work focuses on analysis of the abstract, according to Fairclough, renders Foucault's work inadequate and not fully grounded in addressing problems of discourse.

Another advantage of Fairclough's discourse analysis is that he provides a methodological blueprint for critical discourse analysis in practice (Blommaert & Bulcaen, 2000). While I do not rigidly follow Fairclough's three-layered framework (2013), elements of his framework have proven useful in organizing my own methodological framework for this dissertation. Fairclough perceives discourse as a complex of three elements: social practice, discourse practice, and text. His hypothesis is that there are important connections between properties of texts, ways in which texts are put together (discourse practice), and the nature of their socio-cultural structures and practices (social practice) (Fairclough, 2013).

The first dimension of Fairclough's model is that of *text*: analysis of texts, according to Fairclough (2013), is form-and-meaning analysis, and comes down to investigation of texts' forms, choices, and patterns in vocabulary, grammar, and other concrete textual features. This attention to textual features is what mainly distinguishes CDA from Foucault's method of analysis. The second dimension is that of *discourse practice*. At this level, Fairclough refers to Foucault and Bakhtin's bodies of literature on the relationship of discursive events (texts) to their orders of discourse. To Fairclough, approaching discourse as discursive practice means that in analyzing linguistic features, attention should be given to *intertextuality* that links a micro event to macro social

structures (Fairclough, 1992). Intertextual analysis, for Fairclough, is concerned with how texts draw upon other orders of discourse – particular configurations of conventionalized practices – and other discourses, texts, genres, narratives, etc. This kind of “analysis draws attention to the dependence of texts on society and history in terms of resources made available within the order of discourse” (Fairclough, 1992, p. 196). Analysis of discourse practices is mainly concerned with how texts are articulated in relation to other texts, and also highlights the “heterogeneity” of texts in being constituted by a combination of diverse genres. Finally, analysis of discourse as *social practice* refers to exploration of questions of power in a socio-historical context. This dimension of analysis is framed in theories of ideological processes (those of Althusser, Gramsci, and Marx), and focuses upon large-scale ideological structures. I have discussed previously Foucault’s perspective of power to problematize this dimension in Fairclough’s model and to emphasize the dispersion rather than the ideological and impositional property of power.

The comparison that I have made above between Fairclough’s CDA and Foucault’s post-structuralism may seem arbitrary (for it is certainly not comprehensive of each scholar’s rich contributions). However, my objective, in comparing the two discourse strands, is to show how many principles of CDA overlap with Foucault’s critical work and, thereby, demonstrate that they are not as incompatible as imagined by the wider discourse analysis community. More importantly, my comparison aims to highlight the gains of each approach while also destabilizing some aspects of both. Such reflective inspection of the two approaches justifies the combination of the *perspective* of Foucault with the *framework* of CDA.

What is *Western Academic Discourse*?

Referring to Foucault and Fairclough, and considering the context and milieu of my work, I consider discourse as ways of speaking (or writing) associated with historical processes and with a particular field of practice. In my work, the examined discourse is Western ways of speaking about technology and its role in the MENA movements manifested in academic discursive events and associated with wider socio-historical formations of technological utopianism.

More than a few issues need to be resolved before detailing the specific methods used in this study. These issues include: What defines *academic*? What defines *Western*? What are the perspectives that shape these two categories within my research? In addition to Foucault's understanding of power, I employ his (1977b) conception of "the author" in order to understand who the *Western academic* is. Following Foucault's argument, in "What is an Author" (1977b), I aim not to describe the academics (the producers of the sampled data in my dissertation), nor to "reproduce their statements" (Foucault, 1977b, p. 114), but rather to discern ways of speaking that guide their discussions and concepts and theoretical relationships that form their works. Rather than dealing with the author in the traditional sense (i.e. the creator of meanings who is bound by his/her intentions), Foucault employs the notion of *the author as a function of discourse*. Attention, according to Foucault, should be directed towards the characteristics of a discourse and its differences from other types of discourses. The "author function", for Foucault, "is not defined by the spontaneous attribution of a text to its creator" (p. 130) (that is, to its writer as an actual individual) but by institutionally governing conditions and structures. This view of the author is helpful in shaping my view of the *Western academic*. The

Western academic traditionally connotes an image of the physiologically *white* scholar associated with Western geographical territories who is in control of his/her production. However, I perceive the Western scholar as part of an institutional discourse with its own rules, regulations, and functions. This notion of the author function, as being bound to “institutional systems that circumscribe, determine and articulate the real of discourses” (Foucault, p. 130), facilitates the understanding of how a *Western* Scholar can be said to have written an academic article, even if the author has not been born and raised in what is geographically designated as Western. I do not tend to delve into interactional regulations unique to Western production of academic discourse, such as how scholars publish in academic journals, or how, for example, publications are circulated – the same kind of inquiries that Foucault probably would pay attention to in the case I am investigating. These are questions and issues that I do not want to underestimate; yet, I hope to discern some discursive rules through a set of procedures that include historical, linguistic, intertextual, systematic, and selective inquiries, revealing rules governing the sampled academic discourse.

To further illustrate and support this notion of the Western academic, I wish to draw upon the notion of “discourse community” (Hyland, 2009). The best attempt to elucidate the concept of discourse community is that of John Swales, “who emphasizes its heterogeneous, socio-historical nature, focusing on collectivities which share occupational or recreational goals and interests and which employ particular genres to do so” (Hyland, 2009, p. 49). Working from a sociolinguistic perspective, Swales makes important distinctions between “speech communities” and “discourse communities”. The first distinction is germane to geography and distance, as the concept of discourse

community gives less emphasis to geographical closeness (Hyland). Another difference is that while in speech communities membership is a given (conferred by being born into a specific community), people in discourse communities *choose* to become members of these communities and thus they adapt their language according to conventions and practices within these communities.

Hyland points out that groupings such as social class, gender, and race, are important in defining social identities and cultural behaviors. Nonetheless, institutional experiences, such as those in the academy, also help to shape values and ideas. In the academy, authority is exercised by editors, reviewers, and other figures who influence which arguments are accepted, which are persuasive and which are not, and which create and contribute to disciplinary consensus (Hyland, 2009). There is, of course, agency and some space for different norms to be integrated. But the heterogeneity found in a domain does not necessarily mean accommodation of external, complex, and unfamiliar practices since community conventions restrict what is said and what ought not to be said.

The narrow heterogeneity of the Western academic community is also enhanced by the wider socio-historical context, i.e., the status of Western institutions in the post-colonial world and the residue left by colonization on geopolitical relations. Talking about the conditions of geopolitical and racial relations in the post-colonial context, Frantz Fanon (2008) says:

When blacks make contact with the white world, a certain sensitizing action takes place. If the psychic structure is fragile, we observe a collapse of the ego. The black man stops behaving as an *actional* person. His actions are destined for ‘the Other’

(in the guise of the white man), since only ‘the Other’ can enhance his status and give him self-esteem at the ethical level. (p.132)

My intention in quoting and referring to Fanon is not to utilize his forthright and, to some degree, provocative argument to describe the “psychology” of non-white academics who have been trained or educated, or who are publishing, in Western-bound institutions. My aim of drawing on Fanon is, rather, to de-emphasize the ethnicity of an author in favor of an interpretation based on their institutional and discursive backgrounds. The institutional and the wider socio-historical background of relations in the Western academy reduces the role of non-white scholars in shifting the nature of Western scholarly discourses.

Taking into consideration the above notions of the *author function* and *discourse community* and Fanon’s idea that the white and non-white are both participators (whether by authority or by the wish to belong) in the limitation of opposing voices, I suggest four criteria for the data selection of what I identify as part of *Western* academic discourse:

- Linguistic: the language of the texts is Western (English).
- Institutional background of the writer/speaker: scholars have been educated or trained in Western educational institutions, e.g. in North American, European, or Australian universities.
- Institutional background of the text itself: materials have been published in or by Western institutions, e.g. European journals, American organizations, etc.

In respect to the criterion of language, the reason for focusing on English, rather than other Western languages, is the difficulty of using translated texts in textual analysis as translation subjugates linguistic intricacies, which are essential for linguistic analysis (Fairclough, 1992). My non-proficiency in other Western languages and inability to

analyze texts in other languages without translation hinders my choice to include texts published in Western languages other than English.

Boundaries of Academic Discourse

Discipline. The boundaries of the academic discourse I am studying also must be addressed. I choose to approach, delimit, and define academic texts, whether spoken or written, from two wide and important angles: *discipline* and *genre*. The concept of discipline is central to the study of scholarly discourse. In studying internal mechanisms of discourse, Foucault (1971) considers the academic discipline an important internal regulator. Families of disciplines, according to Foucault, determine what can be true and factual. Each discipline determines the objects, methods, and propositions considered to be true. When speaking about paradigm shifts in scientific communities, Thomas Kuhn (1962) similarly elaborates on ways and mechanisms in which new disciplines emerge and split from older parent disciplines. Bearing in mind the importance of disciplines as a regulator of academic discourse, I choose *discipline* as one criterion for the processes of assembling and delimiting data.

In their influential study on the nature of academic disciplines, Becher and Trowler (Giannoni, 2010) propose a typology of academic knowledge that consists of four disciplines: (a) hard pure sciences concerned with universals and value-free results in discovery and explanation; (b) soft and pure humanities and social sciences; (c) hard/pure technologies; (d) applied social sciences aimed to support professional practices. For the purposes of my dissertation, I focus on the discipline of humanities and social sciences and, from within this discipline, I have selected academic texts that address the relationship between media technologies and political and social change. This

choice has been justified by my literature review to date, as I have found considerable discussion of the relationship between social/political change and technology in the discipline of humanities and social sciences. This choice has also been validated by the data of my work as most of the work that I have found has been published by people writing within this discipline.

Based on the objective of my investigation, I have chosen three domains from the discipline of humanities and social sciences for the study: political science, sociology, and media and communication studies are the best candidates for exploring research on political movements in relation to communication technology. Political science and sociology are traditional sciences that tackle social and political processes, while the newer field of media and communication has established the ground for discussion about communication and its role in affecting socio-political change. Significantly, however, each of these fields covers an array of interests and approaches. Communication and media studies, as an example, seek to understand communication and media through different approaches and within different types of contexts, including journalism, mass communication, organizational studies, ICTs, etc. Not distinguishing these types within each domain is a limitation of this study. However, I have found through my work that to restrict myself to a small number of fields within each domain, I would have ended up with limited data, from which I would have had difficulty incurring any results. Thereupon, I have included data from journals (Chapter 5), and academics (Chapter 6) which/who are described as coming from the three aforementioned domains. For the same reason, I have included journals of area studies as long as they are defining themselves as working within the specified fields. Despite this limitation of not

identifying the fields within each domain, these three domains offer a good basis for exploring how scholars, in the discipline of humanities and social science, construct their knowledge of the political movements in question.

Genre. The concept of discipline provides a broad vision of academic texts and their educational contexts. However, within the context of academic communication, there is a continuum of settings and genres. The examination of *genres* is important in making sense of how texts provide meaning-making resources across different discursive fields (Fairclough, 1992). They help in understanding the bridge between the broad /historical and the narrow/textual. Hyland's discussion of academic genres recognizes three major settings across the academic domain: 1) research discourses, 2) instructional discourses, and 3) popular discourses.

Research discourses have evolved for functional reasons and gained considerable status as a result (Hyland, 2009). Negotiations and arrangements of published research, which manifest in prolonged processes of writing, editing, and reviewing, are important in mediating academic texts (Hyland). These processes function as an apparatus of control on arguments, propositions, and methods circulated within academic settings (Hyland). *Instructional discourses* are also important, as they are concerned with disseminating knowledge (Hyland) and function to establish the content of a discipline for students and newcomers in the field (Kuhn, 1962). They provide a window into the legitimate paradigm(s) of a certain era (Kuhn, 1962) although they are not the place to find how innovation and construction of new knowledge happens. Finally, *popular discourses* provide an insight into how academic knowledge is popularized, mediated, and interpreted in other social domains. Studying academic discourse in popular arenas

helps extend our understanding of the academy beyond canonical discourses (Hyland, 2009).

Methods Parallel to Settings/Genres

This project introduces different genres alongside two types of analysis: systematic and case-based (*figure 1*). The first part of the analysis introduces a programmed method of looking at academic discourse on communication in the Arab and Iranian movements. In this part, I have chosen to delimit my study to journal articles, an important genre of *research discourse*, for the sake of systematic analysis. Reviewing and editing processes, usually required in the production of journal articles, mean that journal articles represent a clear and well-demarcated genre of the academy. For the reason of systemacity, other research-related genres, such as conference proceedings, book reviews, editorials, theses, and dissertations, are excluded from my research.

The systematic section of analysis includes journal articles published from 2009, when the Iranian movement broke out, to the end of 2014. In gathering the data, I used the following databases: *Humanities, Communication and Mass Media Complete, Google Scholar, Scholars Portal, International Political Science Abstract, ProQuest, ProQuest Sociology, ProQuest Political Science, Sage Journals, Social Sciences, Taylor and Francis Journals Online, Wiley, and Academia.edu*. These databases are widely known for academic leadership. They have been used to accumulate a body of literature published in English and in Western journals on the role of communication in relation to the Iranian and Arab protests. I have used different keywords to gather the data: “Arab Spring”, “Arab Spring and communication”, “Arab revolutions”, “Iran”, “Green Movement”, “Arab protests and social media”, “Egypt”, “Yemen”, “Syria”, “Arab

uprisings”, “Arab uprisings and technology”, “Arab and digital media”...etc. The bibliographical references of articles I have looked at have also supported me in gathering more articles published on the topic of the MENA protests and new media technologies.

In the initial phase of my dissertation work, I thought to merely analyze, systematically, a sample of research articles in order to understand the object of my study. Doing so, however, would have meant omitting other academic genres that are in conversation with academic research discourse. I was also urged by my supervisor and doctoral committee to look for ways through which I could include other platforms to observe the dissemination of academic views, and thus, increase the significance of my work. I was not willing to abandon the systematic task; at the same time, given the temporal and spatial framework of my dissertation, a systematic and exhaustive analysis of all academic genres would have been near impossible. For this reason, I opted to maintain the systematic analysis of research articles, as representative of research discourse, using a selective/case-based method alongside other types of academic discourses.

While I have used a systematic method of choice for Chapter 5, I have drawn selectively, in Chapter 6, upon more diverse academic scholarship so as to trace some features of academic scholarship in *popular*, *pedagogic* and *policy-related* settings. In this section of the dissertation (Chapter 6), I analyze three academic cases/arguments that explore the impact of digital media technologies on political participation in the movements of Iran and the Arab Spring. The first of these belongs to the polarized Clay Shirky and Evgeny Morozov. Their arguments are among the most well-known academic

discussions, in the popular sphere, on communication and political movements. They have published a number of books, oriented towards the public. Chief among these works are *The Net Delusion* (Morozov, 2011), *To Save Everything, Click Here* (Morozov, 2013) and *Here Comes Everybody* (Shirky, 2008). Unfortunately, there is no reference to the Arab and Iranian movements in Shirky's book as it was written prior to them. On the other hand, there is some mention of the events in Morozov's. I allude to their books in order to make clear their general arguments, but I focus my analysis on their discussions of the Arab and Iranian movements in audio interviews, TED speeches, and other media platforms.

Secondly, I examine theorist Manuel Castells, who is less engaged with popular media than Morozov and Shirky. However, David Bell notes "many critics agree that Castells has written one of 'the most illuminating, imaginative and intellectually rigorous account[s] of the major features and dynamics of the world today'" (p. 52). That he has studied the Arab uprisings provides an excellent opportunity to examine the work of one of the most respected theorists in the field of communication and media. His background as a sociologist shows the effect of sociology on communicative perspectives of the examined movements. Beside his status as a scholar, his sociological background has encouraged me to include his arguments in my analysis so as to provide a variety of scholarly background.

Finding a specific textbook that addressed the MENA movements was difficult, but in searching through online curriculums and talking (unofficially) to my colleagues and professors about their course materials, I have also found that Castells' *Networks of Outrage and Hope* (2012), especially his chapter on the Arab Spring, is commonly used

to teach about communication within the movements of MENA. Before discussing this specific chapter, however, I refer to his earlier work, *The Rise of the Network Society* (2000), which has also received great attention. There is no discussion of the MENA movements in the book, but I refer to the book in order to illustrate his main insights about “network society” to prepare for the critical examination of his writings on the Arab uprisings.

Figure 1. Data analysis types along different settings/genres

Finally, the third case I explore is the work of Mark Lynch, a professor of political science at George Washington University. Lynch wrote for *Foreign Policy* and participated in writing reports for the United States Institute of Peace, an institution funded by the American Congress. His publications have been selected in this study to represent academic scholarship on the MENA movements in politically oriented settings. What makes Marc Lynch significant is that he comes from political science and writes in

political and policy-related settings. It has to be noted that my selection of scholars is not meant to demonstrate a hierarchy of importance but rather to make visible a variety of academic backgrounds, genres, and settings, providing a deeper understanding of how academics engage with and understand the relationship between communication and the Arab and Iranian protests. I am optimistic that this case-based analysis chapter offers glimpses and instances of academics' engagement with technology in different public fields and genres, supplanting the narrower focus in Chapter 5.

Academics Shirky, Morozov, Castells, and Lynch are also commonly cited and discussed in many of the sampled research articles in Chapter 5. Marc Lynch is referred to in many journal publications, including Naomi Sakr (2012), Zeynep Tufekci and Christopher Wilson (2012), Kevin Wagner (2013), and William Youmans and Jillian York (2012). Morozov is referred to in Hart Cohen (2012), Kari Andén-Papadopoulos (2013), and Aziz Douai (2013). Clay Shirky is cited in such articles as Saeid Golkar (2011), Melissa Wall and Sahar El Zahed (2011), Theodor Tudoroiu (2014), Albrecht Hofheinz, (2011), and Anita Breuer and Jacob Groshek (2014). Manuel Castells inspires even more works, among which are Lorenzo Trombetta (2012), Tim Markham (2014), and Ilhem Allagui (2014). On some occasions, they, likewise, cite each other and cite the authors of some of the sampled research articles. As an example, Morozov and Shirky refer to each other on multiple occasions. Shirky is also cited by Castells (2012), whose study of the Arab movements relies, in part, on research done by Muzammil Hussain and Phil Howard (2012); Hussain and Howard are among those addressed in Chapter 5 of this dissertation (Howard, Agarwal, & Hussain, 2011; Howard & Hussain, 2011). Such intertextuality validates the construction of the sampled texts in this dissertation's two

analysis projects (the systematic and cased-based chapters) as a distinctive unit. This hardly means that the examined discourse is self-contained. Rather, this intertextuality helps construct boundaries in order to achieve the objectives of the study.

The function of Chapter 6, which inspects Shirky, Morozov, Castells, and Lynch, is, in addition to what has been already said regarding the introduction of a variety of backgrounds and genres, aimed to highlight the three discursive models that are most effective in the sampled research discourse. These are the *transcendence* and *dystopianism* (highlighted by Shirky and Morozov's contributions), the *tool/network* (represented by Castells'), and finally the *public sphere* (illustrated by Lynch's). The chapter aims to better and further familiarize the reader with repertoires, patterns, and themes associated with each epistemological model.

Codes

I conduct manual investigation and analysis of the data according to six categories: (a) transcendence, (b) tool/network, (c) public sphere, (d) corporeality, (e) criticalness, and (f) dystopianism. The literature review, shown in the second and third chapters of the dissertation, has revealed *ways of speaking* that have historically guided conceptualizations of technology and its role of creating, boosting, or hindering social and political change. The six ways of speaking of technology that I propose are historically and institutionally connected. Some must be dominant and others are marginal. Studying them together is useful in understanding the dominance of particular models and the general structuring of the examined discourse. Through this manner of examination, my research acknowledges the heterogeneous nature of the examined discourse and helps provide a general outline of knowledge-forms nourishing the

sampled academic discourse on the role of new technologies, particularly social and digital media, in the Arab uprisings and the Iranian movement.

I discussed the *a priori* codes I had developed from my previous literature review on technology with my doctoral committee in my second comprehensive project. When the codes became clearer to me, I discussed them with my committee in the dissertation proposal meeting and with my colleagues to ensure they were clear and relevant to understanding relations between political change and new technology. As the project progressed and I reviewed the data more deeply and spoke further with the committee, I continued to make discoveries related to categories, themes, and patterns of which I took notes as I proceeded. This manner of coding can be described as a reflexive and recursive process. It was both a deductive and inductive process. For example, one of the models I named in the beginning of the project was the *old and new* model, concerned with intellectual perceptions of dynamics between new and old media technologies in relation to political action. I deleted this category as I found it often entangled with the other models: the *transcendence* model, for example, tends to emphasize the role of new technologies and present old ones as futile in bringing democracy while the *tool/network* model tends to see old and new media technologies as more connected. I found that this category was more relevant to understand *time* presupposed by the models. I also added the category of *dystopianism* in the later stages of my project as I realized that academic discourses, especially in public and media platforms, may display a dystopian kind of logic in analyzing the relationship of media technologies and socio-political developments. Reading further about utopia, as a historical and literary construct, has supported the view of utopianism as a conjunction of utopian and dystopian attitudes. In

other words, in order to talk about technological utopianism, we need to include technological dystopianism as an essential part of this discussion.

I have analyzed the data to identify and better understand the main ways of seeing that embody current Western academic knowledge of the interaction between communication technologies and the political movements in MENA and the implications of these ways of seeing technology for conceptualizing MENA. Performing manual investigation, rather than corpus analysis, corresponds with the complexity of these models and the need to delve into the examined articles to classify them. The systematic analysis of these coded models is accompanied by the analysis of selected texts in answering the proposed questions and in demonstrating the role of culture, power, media, and communication in the construction of the discourse analyzed.⁶

Analytical Tools and Strategies

In studying the different models suggested above, I strategically focus on what texts say about the relationship of communication technologies to other important communicative categories. These categories are informed by my theoretical and philosophical inquiry of Western discourse on technology and Western intellectual propositions about democracy and revolution. They are:

- Protests/movements
- People of the region
- Regimes and governments
- Culture
- Space and time (history, material designs etc.)

⁶ The “references” section includes data sources that are cited in the body of this dissertation. For the full list of data sources examined for the dissertation, check “appendix”.

- Power (empowering/disempowering, revolutionary/counter-revolutionary, etc.)
- Global community
- The human body

These categories are helpful in identifying the model(s) underpinning a text. For example, ascribing agency to technology (rather than to people), as well as a capability to transcend time and to conquer regimes, helps reveal the transcendental model underlying an article. Some of the categories, such as “culture”, “people”, and “government”, are also helpful in directly identifying images of MENA’s politics, culture, and society. I have also looked at resources, references, scholars, and schools of thought the authors use in their literature reviews and theoretical discussions in order to identify the theoretical underpinnings of their work. The use of Castells’ networking theory, for example, in an article makes it more visible that the theoretical argument of this article derives from the *tool/network* model.

I have also developed a set of criteria and questions, borrowed from and inspired by Foucault (1977b), Fairclough (1992, 2001, 2013), Waitt (2010), and O’Regan (2006), to help me scrutinize the examined discourse.⁷ These questions include:

1. Identifying the organization of the text:
 - a. What is the general framework of the text? Argumentative, narrative, conversational, etc.?
 - b. What is the title of a text? What is foregrounded in the title?
 - c. What is the main idea presented in the abstract?
 - d. What information is advanced in the text? What is the general theme?

What are the implications of this way of thematization?

⁷ Waitt has drawn on Foucault, and O’Regan on CDA to develop their methodologies

2. Looking at arguments of truth and strategies of conviction used in texts:
 - a. What arguments are found in the text?
 - b. What is assumed and implied? What is naturalized and normalized?
 - c. What is excluded? E.g. what is not said about technology? What is not said about the movement? Which social events are included/excluded etc.?
 - d. What contradictions are in the text? Which aspect of the text contradicts the general theme or argument? What inconsistencies exist within texts or among them?
 - e. What is said about actors and actions? Who or what is given agency, and how are they represented?
 - f. What evidence is provided? Is there reliance upon scientific evidence, trustworthy methods (statistics), etc.?
 - g. What are types of statements used? Facts, predictions, evaluations, etc.
3. Examining inter-discursivity:
 - a. What styles, narratives and genres are drawn upon? How are they articulated together?
 - b. What does the text say in comparison to other texts?
 - c. What metaphors are used? What are their effects? What meanings/genres/discourses/narrative do they evoke?
 - d. What are the resources for meaning making? Statistics, surveys, etc.?
4. Recognizing grammatical choices:
 - a. How are transitivity and voice employed (Fairclough, 2001)? Who is doing what to whom? When are active and passive structures used? What

or who is usually highlighted through the use of these structures? What kinds of processes are used? Material, actional, etc.?

- b. Modality: What is the degree of commitment to argument? (Fairclough, 2001)? Are sentences assertive, declarative, or evaluative?
- c. Lexical choices: What kind of vocabulary is used? Emotional, rational, formal, or informal? Which lexical constructions seem to be important? Which are excluded? What vocabulary is repeated in a text or among texts? What kinds of meanings and discourses does this vocabulary promote?
- d. Tense: What is the tense used? Past, present, future? What does the tense tell about the orientation towards the phenomenon examined? What does it tell about the temporal construction of the event? Does it indicate any meaning of authority?

In the dissertation, I intend to provide a way of moving from the broader analysis of historical practices and interactions that have constituted utopian attitudes towards technology to close analysis of concrete language instances. Links between the broad, the historical, the narrow, and the textual are elucidated by studying inter-discursive features characterizing the examined discourse: how meanings, found out through the historical and philosophical inspection, are reflected, recoded, and replayed in texts describing the movements of MENA. This broad-narrow kind of approach is helpful in identifying particular forms of knowledge figuring in statements and utterances, with institutional force, about the MENA movements. More importantly, this approach helps clarify how these Western forms of knowledge afford particular images of MENA's politics, history,

culture, and social systems. The following chapters are intended to make contributions in these regards.

Chapter 5: Analysis of Journal Articles

Data analysis and the writing of research are not discrete processes. They are intertwined, each relying upon and nourishing the other. Chapters 2 and 3 of this dissertation consist of literature reviews intended to reveal macro practices that have given rise to the discursive and textual patterns discussed and analyzed in this section. They focus on the historical and philosophical enquiry of technological utopianism. This chapter (Chapter 5) presents systematic analysis of journal articles to discern the distribution of the six models – transcendence, tool/network, public sphere, criticalness, corporeality and dystopianism – incurred from the previous theoretical discussion. In doing so, the chapter also pays particular attention to the image of MENA constructed in these texts. It is empirical and textual work, informed by the philosophical propositions discussed in the previous chapters. The next chapter (Chapter 6) involves textual analysis, but it will look different than this one (Chapter 5), presenting selected cases of academics in other academic genres in order to expand the narrower focus of this chapter and to better familiarize the reader with variations intrinsic to academic discourses.

Despite the interrelatedness of all of the chapters, Chapters 5 and 6 are distinct from the previous chapters, which have presented more freely essayistic and philosophical discussions. Chapters 5 and 6 are meant to provide critical but attentive and rigorous analysis of a wider range of data and are intended to retain some of the long-established criteria of academic writing such as clarity and brevity. This has required a painstaking process of gathering, reading, interpreting, mapping, and reviewing the data, usage of multiple spreadsheets, and years of engagement with literature on MENA.

It is fair to say, however, that Chapters 5 and 6 exhibit a more technical orientation than the previous chapters. This shift from more philosophical and elaborate writing (Chapters 2 and 3) to more coded analysis is probably in itself evidence of the impact of technical reasoning on academic analysis. While coded analysis helps in breaking down information and grasping patterns that would have not been, otherwise, observable, it has the impact of reducing other ways of engaging with social phenomena. The different types of writing involved in making this dissertation may sensitize the reader, I believe, to one of the macro arguments of this project: studying what authors say about an issue should be complemented by a study of how pre-existent practices operate on these authors. Admitting this oscillation between expansive (philosophical) and contractive (coded) analyses, I hope, though, that applying multi-methods to study technological utopianism helps enrich my critique of this subject.

Data and Geography

After eliminating articles published outside the three disciplines of political science, sociology, and communication and media, as well as conference proceedings, theses and dissertations, reports, and book reviews, I have ended up with 79 journal articles. Given the specificity of the topic, I was initially surprised by the large number of articles in which scholars, in a number of disciplines, examined, with renewed vigor, the assumed role of technology in galvanizing or facilitating the Arab and Iranian movements. This significant proliferation was an initial indicator of the degree to which academics paid attention to the role of technology in political change.

Table 1 illustrates that the uprising in Egypt is the most described event in the collected data, followed by Tunisia. The articles that discuss protests in general (e.g. the

Arab Spring) or one or more protests apart from those in Egypt or Tunisia (e.g. Libya, Syria, Bahrain, etc.) constitute, altogether, less than a half of the published articles (even less than the separate cases of Egypt and Tunisia.). Further, when these other Arab protests are discussed, they are usually studied briefly and in the context of other similar events. This shows a common intellectual interest in events where protests succeeded or at least partially succeeded in shaking regimes.

Table 1

Countries of movements examined in the articles

	N	%
Iran	13	16
Tunisia	40	50
Egypt	59	74
All other Arab protests (Libya, Bahrain, Syria, Morocco, etc.)	35	44

The focus on Egypt and Tunisia, where the protests succeeded (initially) in overthrowing their regimes and the marginalization of the other movements indicate the following intellectual tendencies:

A utopian notion of *revolution*. The focus on Egypt and Tunisia may indicate a reduced definition of *revolution* as a change that overthrows a regime. In this view, the events in Egypt and Tunisia are representative of revolutions, while other political movements fall short of true revolutions. As such, Egypt and Tunisia seem much more

important as political events. This trend is not surprising since the dominant forms of revolutions in Western intellectual traditions, put forward by Karl Marx (1998, 2011) and Hannah Arendt (1977), highlight utopian notions of revolutions. A revolution is recognized by Arendt and Marx as “the revolution” if it achieves a transition to near-perfect political conditions. This progressive, rather than ambivalent, attitude towards revolution is compatible with the extensive attention to the Tunisian and Egyptian movements, as they seem to ideally achieve positive political change in a short span of time.

Dehistoricization of MENA. Unexpectedly, the Egyptian and Tunisian uprisings *succeeded* in getting rid of their regimes and a need has developed among their Western observers to attribute this success to an outside factor. Along these lines, new media technologies are seen as an explanation to the mystery and complexity of the two uprisings’ success. This tendency is a manifestation of a scholarly inclination to suppress a narrative of history in favour of a technologically-centred one, necessary to manufacture a utopian image. That is, history is disregarded for the sake of technological utopianism.

A progressive notion of technology. Finally, the domination of Egypt and Tunisia also indicates an academic tendency to study what media technologies *can* do rather than what they *cannot* do. Such a progressive notion of technology is part of technological utopianism. Technology is studied when it is assumed to produce positive results, but is less subject to academic inquiry in the case of events producing negative or no significant consequences. The success of technology, therefore, is a narrative that can fit the paradigm of technological utopianism.

Distribution of Models

Table 2 presents the percentage of models used in the articles and shows that the most dominant model in the sampled articles is the “tool/network” model.

Table 2

Distribution of models in the sampled articles

Model	N	%
Tool/network	44	56
Transcendence	16	20
Public sphere	7	9
Corporeality	2	3
Criticalness	9	11
Dystopianism	1	1

The second most frequent model is “transcendence”. The “public sphere” and “criticalness” follow these two and are followed by the models “corporeality” and “dystopianism”. Notably, the models that place more hope on new media technologies (“transcendence”, “tool/network”, and “public sphere”) in achieving successful political results dominate this sampled discourse. On the other hand, models that take a more ambivalent, critical, or pessimistic stance are less prevalent; they altogether make 15% of the sampled data. Although these numbers are not intended to indicate an objective evaluation of the distributions of these intellectual models in academic discourse on technology in the MENA movements, since the sample is focused on two specific events,

they do offer a glimpse into the influential ways Western academics in the discipline of humanities and social sciences consider the role of technology in the MENA movements.

In the following sections, these models will be described in further detail to reveal their patterns and identify textual and linguistic properties that distinguish/connect each model from others. Two models will not be discussed in this chapter: “dystopianism” and “criticalness”. An elaborate discussion of the “dystopian” model will be left to the next chapter, which will examine dystopian arguments through a discussion of Evgeny Morozov. The “critical” strand, in which critical approaches are adopted, and in

Figure 2. Distribution of models in the sampled articles

which critical ways of speaking are relied on, has been referred to in previous sections. I have chosen to leave out the analysis of the critical perspective for two reasons. First, analyzing this perspective would entail a tedious repetition of what has been discussed so far, in Chapters 2 and 3. For example, Christian Fuchs (2012) refutes in an article the

“myth of Twitter revolutions” (p. 385) reproduced in discussions of the Arab Spring and calls for an approach that considers capitalism’s injustices. The intersection between technology, myths, revolutions, and capitalism has been discussed and critiqued to a great extent in the previous chapters. Repeating this critique, I believe, would not add much to the project. The second reason for leaving out the model in this chapter is that analyzing the critical model does not help much in answering the proposed questions for the dissertation. The main goal is to detangle technological utopianism, exposing its paradigms and linguistic and discursive patterns. It is to demonstrate how technological utopianism recreates a variety of templates for a portion of contemporary intellectual ruminations of technology.

Transcendence

To discuss the transcendence articles, I begin by briefly giving examples of the main journals in which these articles were published, as well as some of the authors’ institutional background to remind the reader of the influence of Western academic institutions in shaping the examined discourse. While some authors have non-western names, the dissertation, as indicated in the methodology section, does not focus on biographies of specific people or on entities, but on internal mechanisms of the described communicative event (academic conversations surrounding the Arab and Iranian movements) and on technologically-utopian strands produced within it. The journals and the institutional background of these authors are European or North American. For example, Anita Breuer, Todd Landman, and Dorothea Farquhar are from universities in Germany and the UK, and their article (2014) is published in the journal of *Democratization*. Kevin Wagner and Jason Gainous are professors at American

universities and their examined article (2013) is published in the *Journal of Information Technology and Politics*, an official journal of the American Political Science Association. Joe Khalil is a professor at Northwestern University, and his article (2013) is published in *Television and New Media*, a journal published by Sage Publications.

Autonomy and power. To analyze texts produced by these authors, I begin with an examination of the titles of their articles. Analyzing the titles of the articles is important in revealing the main problems occupying the scholars, and also in accounting for how the authors generally apprehend the relationship of new technology to the protests. Some of the titles of the “transcendence” articles are:

“On the mobilizing role of social media revolutions” (Kiss & Rosa-Garcia, 2013)

“Digital uprising: the Internet revolution in the Middle East” (Wagner & Gainous, 2013)

“The media and the making of the 2011 Egyptian Revolution” (Osman & Abdel Samei, 2012)

“Explaining the role and impact of the social media in the Arab Spring”
(Frangonikolopoulos & Chapsos, 2012)

“Social Media and its effectiveness in the political reform movement in Egypt”
(Bhuiyan, 2011)

The main actor in these titles is social media. I consider social media an actor because the titles do so. Social media is foregrounded, while the role of other communicative categories, including history, people, culture, etc., is de-emphasized and backgrounded. Social media is represented as having an *agency*, a role, in shaping the events in question.

According to these titles, social media is the prime definer of the represented reality of the Arab and Iranian movements.

In the articles' depictions of social media as agents, a few aspects are worth noting. The first is consistent with the autonomy element implied in the titles. That is, the emphasis is placed on the power of social media as an actor in shaping the events. The abstract of one article states that the goal of the research is to analyze "the *power* [emphasis added] of the Internet and social networks in the Arab uprisings" (Soengas, 2013, p. 147). The article uses the word "power" to explain a consequence of social media: Xosé Soengas states that the international declarations of solidarity with the protests are "a consequence of the *summoning power* [emphasis added] of the Internet" (p. 154). This statement associates the noun phrase "summoning power" with the Internet, representing the Internet as a miracle-making power. Mohammed Aman and Tina Jayroe (2013), from the University of Wisconsin, similarly argue "most MENA governments have recently discovered that the might of the new ICT is *much stronger and more threatening to them than any military force* [emphasis added]" (p. 340). They compare this image of power with "military force" and weapons, different from the idea of a "summoning power," with its metaphysical connotations. However, both metaphors reinforce the same conception of social media as a supreme omnipotent being.

Power and its derivations, such as "powerful" and "empowering", are not infrequently used in the sampled articles. Christos Frangonikolopoulos, from Aristotle University, and Ioannis Chapsos, from Coventry University, (2012) state that "powerful" social media are "*empowering* 'social non-movements' . . . *igniting* public mobilization, *enabling* civic engagement [emphasis added]" (p. 10). "Igniting", "enabling", and

“empowering” are all material processes that suggest similar meanings of power, agency, control, and capability.

Emphasizing the power and agency of technology in this way leads to a highly deterministic interpretation of the protests. Soengas (2013), for example, hypothesizes that “technology has come to play a *determining* [emphasis added] role” (p. 153) in the political and social changes which have occurred in Arab world. Melissa Wall and Sahar El Zahed (2011) support this deterministic vision of the role of social media through an article titled “a YouTube call to action in the Egyptian revolution”. The human actor who made these calls in the revolution is not mentioned in the title. Rather, the revolutionary call is modified as a YouTube action. This title implies that technology has replaced the human. YouTube, not the human, is active and autonomous. YouTube is the motive force of desired social and political change. This type of determinism becomes more blatant in an article, published in the *International Journal of Communication*, which affirms “that the revolutions were, indeed, tweeted” (Lotan et al., 2011, p. 1401). Aman and Jayroe (2013), describing the Arab protests, also ascertain that “the revolution was blogged and tweeted”. Stripped of their historical roots and political baggage, the Arab movements have been reduced to tweets. Here lies the danger of technological utopianism. The utopian orientation impacts not only an academic’s ability to understand technology, but also their capacity to fully understand social and political events in MENA.

Old and new. The deterministic nature of this type of technological utopianism creates the condition for possible obliviousness about old politics and historical culture. A dichotomous image of the Middle East appears in many of the articles. The past is black, controlled by dictatorships, wherein people (and women) are oppressed. There are

no outlets through which people can express themselves and engage in any political activity. New technology, however, has been “paving the way for transformation” (Radsch & Khamis, 2013, p. 883) and for a new future for the region (Maamari & El Zein, 2013). This image of the future predicts a separation from history. In one article, the “downfall of . . . the most stable dictatorship in the Middle East and . . . the success of revolutions that may change the Middle East for a decade to come” are attributed to social media (Osman & Abdel Samei, 2012, p. 17). Another article, concerned with the role and status of Arab women in the Arab movements, predicts that “there is no turning back when it comes to young women wanting to be heard and to participate” (Radsch & Khamis, 2013, p. 887) thanks to social media that “enabled them to express themselves freely and their voices to be heard” (p. 881). Similarly, Wall and El Zahed (2011) identify new media with “a *new* political language for Egypt” and “a *new* form of citizenship [emphasis added]” (p. 1333). Referring to Clay Shirky’s arguments about social media, they postulate that new media are based on the idea that one can share information with many and, thus, that these media reshape the structure of communication, replacing political hierarchal actions with participatory ones. New media then are perceived to be the fertile ground upon which new democracy can take root.

These ways of talking about technology raise the structure of technology to a level that warrants a number of claims: new language, new politics, more freedom, radical democracy . . . etc. This idealization of new technology masks historical continuities that have given rise to the movements as we observe them. Individual communication towards collective action is viewed as “a possibility [for Arab citizens] which, until then, had been *rarely* used [emphasis added]” (Soengas, 2013, p. 154).

Hubert János Kiss and Alfonso Rosa-García (2013) define the objective of their research as an attempt to analyze “how these new technologies may help that successful massive protests are organized in countries where this kind of demonstrations were *rare* [emphasis added] before” (p. 1). By highlighting the “rarity” of the protests in the history of the region, the article gives the impression of a past disconnected from the present. Social change is a prolonged process, but it is depicted in the articles of the transcendence model as a quick and sudden action associated with the development of technology. That is, social change is believed to happen concurrently with speedy technological development. In this utopian academic discourse about technology, movements are actually discussed in the temporal norms of technology.

The “revolutionary” impact of the Internet applies, however, according to Kevin Wagner and Jason Gainous (2013), only to the region of the Middle East. They argue that the impact of the Internet is limited in Western politically-open nations, but becomes significant within the “socially and politically repressive” Middle East. In the region, according to Wagner and Gainous, “the Internet may allow for an organized opposition and opposition outreach that would never have otherwise been previously possible in any meaningful scope . . . creating a new universe of political actors that are hard to anticipate and identify” (pp. 264-265). The article insists not only on the creation of a dualistic image of past and future – a history disconnected from the present and future, unpredictable, and unrelated to historical roots – but on constructing a bipartisan image of the East and West. Whereas the Internet has the potential to shift and reshape politics in Middle Eastern countries, the West is constructed as an entity that already enjoys the privilege of being open and free.

The contradictions of the argument are also supported by the subtle irony of the research conclusions. Wagner and Gainous' project, which utilizes data provided by the US-based OpenNet Initiative, suggests that the effect of the Internet becomes more significant in the Middle Eastern countries that have lower Internet filtering and weaker in countries with higher filtering practices. If there is really an inverse relationship between Internet filtering and democratic impact, then the Internet should have a stronger impact on Europe and North America where Internet filtering is assumed to be at minimum. These dualisms between the Eastern regimes and Western democracies, and between past and future, help construct an image of MENA as a collection of repressed societies whose savior is the Internet, paving the way for a better future resembling the present West. Such interpretation of the role of the Internet is a consequence of the pinning of utopian hopes on new technology and results in reductive ways of imagining MENA. The utopian spirit mounts at the end of the article, where the authors use the maxim that "the age of the Internet has come, and nothing will be quite the same" (p. 273).

The technologically transcendental spirit prevailing in the articles impedes some academics as they look into the legacy of the local culture and attempt to make right judgments about the interaction between technology and the people of the region. One striking example is the argument that Arab women were unable to evade the confines of their walls because "extended family ties make it difficult to escape prying eyes and ears, especially in conservative, traditional societies" (Radsch & Khamis, 2013, p. 884). Things have changed, according to Courtney Radsch and Sahar Khamis, with the advent of "emancipatory and expressive social media" (p. 884). The assumption underlying this

argument is that “cyberactivism enabled them [Arab women] to participate . . . without engaging in behaviors they themselves might find uncomfortable, such as mixing with strange men” (Radsch & Khamis. P. 884). To Radsch and Khamis, a woman exemplifying this change is Tawakkol Karman, who, ironically, was known to be active in the street and to have no social media account before or during the time of the Yemini protests. In fact, during the protests, there were huge crowds of Yemini women on the street demanding the ousting of Yemen’s former president Ali Abdullah Saleh. Yet, the authors have chosen to marginalize the physical presence of women (“Arab Spring Nations”, 2013) and to focus on their virtual participation. Such ways of speaking about women and new technology indicate the continuing existence of utopianism about technology in depictions of protests, reinforcing stereotypical apprehensions of Arab women and their dynamics in the region. Such an outlook weakens serious attention to the historical roots of the uprisings and the role of women within these movements.

Another ramification of the discursive dehistoricization of the movements is the focus on youth as the main human actor. The majority of the articles, not only those that rely on the transcendence mode of speaking, but also other models (especially the “tool/network” and the “public sphere”), tend to paint an image of the movements as primarily youth-driven; these articles represent “youth” as the collective subject capable of leading their nations to better social and political conditions. The fascination with youth becomes, however, more prevalent and stronger in the transcendental articles. The transcendental texts portray youth as leading the movements. The argument’s first premise is that youth are not tainted with the ideologies of old regimes. The young are fresh and pure, with dreams and aspirations distinguishing them from old fossilized and

rigid institutions and systems. The second premise is that the young are tech-savvy and wired (Mosco, 2005), with an instinctual ability to use new technology to the benefit of themselves and their people; they grew up surrounded by technology, and thus, they are not only masters of these gadgets, but are also deeply influenced by the smart nature of new technology.

In one article, betraying such assumptions, Rasha Owais (2011) notes that “despite efforts by most Arab regimes to censor and control the internet, tech-savvy youth . . . are able to outwit their elderly rulers whose average age is over 40” (p.12). According to this statement, age is decisive. The regime is controlling and dominating, and the governing powers lack the youthful intelligence required to operate the new technology; therefore, they fail to crush the youth. On the other hand, the young are smart, dynamic, and tech-savvy. For this reason, they are able to stand up against their old rulers.

Out of curiosity, I selected one article randomly (Aman & Jayroe, 2013) and counted the times the word “young” was mentioned. It was repeated in that article 19 times. The following are some of the statements in which “young” was used in the article:

“Mubarak’s security forces in Alexandria tortured and killed Khaled Sa’id, a *young* [emphasis added] Egyptian blogger and businessman.” (p. 326)

“The tweeted picture worldwide of the *young* [emphasis added] girl, Neda Agha-Soltan, shot in the head by Basji forces became the iconic symbol of how corrupt and morally bankrupt the Iranian government has become.” (p. 340)

“*Young* [emphasis added] Arabs in particular now use the blogosphere, not mainstream media, to reengage and express their own political views that the established Arab media do not allow or provide.” (p. 341)

These texts demonstrate a remarkable tendency to overemphasize the generational division and align morality along the same divide. The state is aged and morally corrupt, and the young are either an intentional driving force of change, empowered by the blogosphere, or symbols of innocence and victimhood that have galvanized the movements (such as Khaled Sa‘id and Neda Agha-Soltan) through the dissemination of their images on the Internet.

The sustained depiction of the Iranian and Arab protests as “young” revolutions inhibits other ways of considering complex events. Further, it frames new media technologies as benevolent by nature. In other words, it makes these technologies appear helpful only for those with good intentions, but difficult and too complex for authoritarian regimes. The presumed beneficiary of the new technologies, in these articles, is the young activist, whereas governments are presumably unable to use these technologies for their benefit. For example, Wagner and Gainous (2013) argue that “the use of the web has created a communication protocol that is difficult to contain . . . more directly, the Internet allows individuals to organize outside the state” (p. 263).

Frangonikolopoulos and Chapsos (2012) make the same claim that the virtual space of social media exists beyond the state’s control: “social media created unprecedented opportunities for the exchange of information outside the control of the dominant and supervised mainstream media” (p. 13). Similarly, Aman and Jayroe (2013) perceive the Internet to be unreachable to the dictator, affirming that “Arab authoritarian regimes have

discovered that they cannot simply flip a big red switch to stop the flow of information” (p. 317).

Such arguments construct the virtual space outside the physical space, the former inhabited by the young and the latter by a state unable to engage with the smart virtual people. Therefore, the relationship of new technology to these governments is that of threat:

“By providing a space for increased free speech, the Internet poses *an existential threat* [emphasis added] to the ability of authoritarian governments to control the national narrative.” (Breuer. et al., 2014, p. 5)

“Social media . . . create *a serious threat* [emphasis added] to the legitimacy of political regimes.” (Frangonikolopoulos, 2012, p. 17)

Notably, the above statements position technology as the source of this threat. Social media is depicted as autonomous machines with an inherent ability to distinguish between people and the state. It is supportive of the young, but threatening to the old.

The antagonism between oldness and newness is obvious in representations of the user of media and also in the discussion of the type of media itself. Whereas new media is depicted as the young’s technology, old media is presented as the state’s technology; old media is for propaganda, control, and domination and gives no space for the people to express themselves. Unlike traditional media, social media is represented as epochal and transformative in allowing unrestricted and unsupervised flow of information. The following excerpts presume this distinction between the two types of media:

“The Internet and social networks served as . . . counter-balance to official censorship and to government-supportive media.” (Soengas, 2013 p. 147)

“The state’s monopoly of mass media was challenged, and new media provided alternative sources of news to the public, diminishing thereby the power of commanding states to manipulate public opinion.” (Osman & Abdel Samei, 2012, p. 2)

“Many . . . turned to social networking sites as the only consistent arena for free political expression open to them [which] . . . potentially disrupt existing media.” (Wall & El Zahed, 2011, pp. 1333-1334)

“Social media enhance the likelihood that a revolution triumphs more than traditional mass media.” (Kiss & Rosa-García, 2013, p. 1)

“Access to this newer media has circumvented the established and government-controlled media such as printed press, radio, and television.” (Aman and Jayroe, 2013, p. 317)

“The unprecedented freedom of information available in cyberspace has helped fuel and channel resentment and rage of people.” (Owais, 2011, p. 13)

“Signs of next media revolution are obvious. There is a new drive and hunger for truth and freedom.” (Owais, p. 12)

The underlying premise of these statements is that when technology changes, the world changes with it. The utopian logic assumes that when media technology is developed, rules are rewritten for better lives, for democracy, for the free flow of information, and for liberation. Thereby, the history of technology and that of humanity are constructed as epochal changes, as if these technological inventions or human actions emerge from a vacuum, separate from their larger sociopolitical contexts.

Transcendental potentialities. The transcendental articles also demonstrate a range of transcendent possibilities attached to technology, transcending time, space, and sociopolitical limitations. These possibilities have already been salient in some parts of the analysis. But they become even clearer with the use of words that strongly convey transcendent meaning:

“The Internet and social media contributed to *transcend* [emphasis added] geographical and socio-economic disparities.” (Breuer et al., 2014, p. 19)

“Digital elites . . . used technology to *bypass* [emphasis added] state authorities.” (Breuer et al., 2014, p. 19)

“Their nature [of social media], which allow for connection to be made in *a very fast and widely distributed manner* [emphasis added].” (Frangonikolopoulos & Chapsos, 2012, p. 10)

“The new communication technologies operated a form of politics that is based on the participation and direct engagement of all citizens *rather than the hierarchical* [emphasis added] model of institutionalized bureaucratic authoritarian politics.” (Frangonikolopoulos & Chapsos, 2012, p. 14)

“[Youth generated media] have allowed for translocal and transmedia circulation of youth cultural politics.” (Khalil, 2012, p. 339)

“The existence of social media has basically *rewritten the rules of politics* [emphasis added].” (Maamari & El Zein, 2013, p. 497)

Such statements allege that new technology substitutes human traditional “hierarchal” politics, space, and time with technologically transcendental qualities. New communication technology is imagined as fast and as an entity that extends beyond local

reach, demolishing the bureaucratic and hierarchal type of politics that has dominated and restrained human interactions.

Transitivity and metaphors. Looking at localized properties of language used in the articles, there is, to some degree, a macro-consistency in the use of transitive verbs with new communication technology being the subject of these verbs:

“Internet *allows* [emphasis added] individuals” (Wagner & Gainous, 2013, p. 263)

“Social media *enhanced* and *ignited* [emphasis added] people’s desire for democracy.” (Bhuiyan, 2011, p. 14)

“Internet based media that is *transforming* [emphasis added] the region” (Owais, 2011, p. 13)

“Social media *created* [emphasis added] unprecedented opportunities.” (Frangonikolopoulos, 2012, p. 13)

“Social media . . . created meaning.” (Frangonikolopoulos, 2012, p. 17)

“Networked social media *gave* [emphasis added] Arab women new tools to articulate their identities” (Radsch & Khamis, 2013, p. 884)

“Participatory media are . . . changing activism.” (Wall & El Zahed, 2011, p. 1334)

“Newer media has circumvented the established and government-controlled media.” (Aman & Jayroe, 2013, p. 317)

“The Internet allowed . . . provided” (Breuer et al., 2014 p. 1)

“These media platforms made it possible for anyone to find out what was happening in the world.” (Soengas, 2013, p. 148)

This is, of course, not to suggest that transitivity is the only grammatical structure used in the articles. However, the use of transitive verbs is more prominent in transcendence articles than those of other models. This is not illogical, as transitivity complies with a meaning underlying their arguments: that new communication technology has played a key role in propelling and fueling the events.

To emphasize the legacy of technology in the story of the Arab and Iranian movements, authors of the examined texts provide a particular metaphor: “fanning the flames of revolution” (Maamari & El Zein, 2013, p. 498), “igniting” and “ignited” (Frangonikolopoulos, 2012; Bhuiyan, 2011) “fuel” (Owais. 2011; Wagner & Gainous, 2013), “blogging...as the new flame of hope in the Arab world” (Hofheinz, 2011, p. 1418), and “galvanized” (Brier et al., 2014). These words, associated with the meanings of fire and power, suggest a particular kind of agency connected with technology. This vocabulary also helps depict the *revolution* in the Middle Eastern region as a momentary event. The scale of the whole process of change is reduced to a fire – a discrete political process, separate from the slow and long development of other institutions.

Techno visuals. The articles of the transcendence model commonly use statistics about the usage of the Internet and social media to support the validity of their arguments. More than other ways of speaking about technology, articles with transcendental epistemology draw on the technicality of charts and graphs as a discursive strategy to deliver their meanings. A reductive outlook of the events explains this fascination with systematic and visual ways of speaking about the Arab and Iranian movements. The Arab and Iranian movements are comprehended more as technical phenomena rather than human types of activities. For example, Breuer et al. (2014) employ tables and bar graphs

to show that there is a positive relationship between online and offline activities: more Internet-use leads to more protest activity. Aman and Jayroe's (2013) article also relies on tables showing numbers of tweets through the years. Wagner and Gainous (2013) use tables and charts that describe Internet use and filtering in Middle Eastern countries. Charts about Facebook usage in Egypt are also used in Serajul Bhuiyan's (2011) article to support the validity of the argument. The use of such materials reinforces the technocentric vision of the movements. It implies that in order to learn about the examined movements, one needs to use *technical* ways of knowing about these phenomena. This way of drawing a connection between the Internet and the range of the political influence of an uprising in a country normalizes a technologically utopian and deterministic vision of the political influence of the Internet.

Tool/Network

Functionality. With transcendent logic, the space and time of new technology replace the human space and time. New technology, according to this perspective, demolishes human physical, spatial, and temporal boundaries, and opens up new opportunities to achieve noble political goals in norms that were not convenient in older eras. This prompts the use of expressions and linguistic structures that emphasize the power and agency of technology. It also elicits a tendency to project utopian commitments onto new communication technologies, intertwined with utopian images of youth and revolutions. Differently than the transcendence discursive constituent, the network conception of technology renders links between new technology and social and political lives as parallel rather than transcendental. Such a view emphasizes how technology can "scale up" revolutions rather than "galvanize" them. One of the striking

features of the network model is the emphasis on the functionality of technology. The model nourishes the idea that technology is “tools” predisposed to serve their users’ goals and objectives. Some excerpts that highlight the functional view of technology are:

“Social media . . . provided *the means* [emphasis added] for disseminating important safety information during the revolution.” (Eltantawy & Wiest, 2011, p. 1214)

“The Arab uprisings of 2011-2012 are a case in point, highlighting how tech-savvy activists today routinely employ their smartphones as a key tool of insurgency and opposition to state power.” (Andén-Papadopoulos, 2013, p. 763)

“Social media . . . can be . . . a *tool* [emphasis added] of coordination.” (Barrons, 2012, p. 55)

“Social media . . . certainly *accelerated* [emphasis added] the speed of those events.” (Barrons, 2012, p. 64)

“Social media introduced speed and interactivity that were lacking in the traditional mobilization techniques.” (Eltantawy & Wiest, 2011, p. 1213)

“Twitter played an important *functional* [emphasis added] role [in the case of the political protests in Iran].” (Ems, 2014, p. 729)

“Social media are tools for co-ordinating networked publics.” (Lindgren, 2013, p. 217)

“Since the Arab uprisings in 2011, social media has proven to be a useful mobilization tool.” (Chaudhry, 2014, p. 943)

“These tools were often appropriated by activists.” (Aouragh & Alexander, 2011, p. 1345)

“During the Iranian election crisis of 2009, Twitter was used extensively as a communication tool for disseminating information.” (Potts & Jones, 2011, p. 346)

“Youth have used the Internet as . . . a tool to mobilize people for change.” (Harb, 2011, para. 10)

“Social media then became an effective and essential tool of communication and organization.” (Dahdal, 2012, p. 8)

“Social media . . . did play an important facilitation role in terms of inter and intra group communication as well as information dissemination.” (Rane & Salem, 2012, p. 97)

These types of claims about social media are slightly different in the network model than those in the transcendence model. The “tool/network” way of speaking about social media is oriented towards utility, speed, and effectiveness, with a focus on the movement-related purposes of coordination and mobilization. Words such as “tool”, “means”, and “facilitating” are commonly used to describe the interaction between social media and political movements.

The seeming rationality of the tool model is one aspect that attracts scholars to this discourse. The model seems to offer a balanced, objective, and neutral view of the role of new communication technologies in political and social lives. Many scholars who adopt it argue that this way of speaking about technology, which focuses on the utility and serviceability of technology as *tools*, transcends the extensive debate between cyber-enthusiasts and cyber-skeptics on the role of new media technologies. (Tudoroiu, 2014; Solo-Niederman 2010; Aouragh & Alexander, 2011). The Internet in this discussion, according to its proponents, neither makes revolutions nor hinders political change. Thus,

the Internet “may be compared to Janus, the Roman god with two faces” (Golkar, 2011, p. 53), or a “double-edge sword” (Golkar, p. 63). Within the tool/network model, technology is seen as neutral tools that can be used according to the intentions of their users. However, this type of discourse is not free of utopian entanglements. Through a discussion of thematic elements that cut through these articles, I try to elucidate how the model does not actually transcend the utopian domain. Rather, it emanates from a culturally rooted view that utopianizes technology.

Community. Technology in the “tool/network” discourse articulates a long-standing dream for building a community, or network, in which people cooperate to achieve their goals. Philip Howard, a professor at the University of Washington, and Muzammil Hussain, an assistant professor at The University of Michigan's Department of Communication Studies, describe demonstrators at Tahrir Square as a “community of like-minded individuals, educated but unemployed . . . They found solidarity through digital media” (Howard & Hussain, 2011, p. 38). Similarly, Julia Skinner, from Florida State University (2011), attributes part of the success of the Arab Spring to the fact that “social media also created a community in which people could share news, sympathy, and support” (pp. 3-4). Nahed Eltantawy and Julie Wiest, affiliated with High Point University, describe the role of media technologies as “organizing and implementing collective activities, promoting a sense of community and collective identity among marginalized group members” (2011, p. 1207). Sometimes this community even goes beyond the community of protestors to include the global community. Christopher Wilson and Alexander Dunn (2011) claim that Twitter was “perpetuating the feeling that the world was watching, which was an important factor for morale and coordination on

the ground” (p. 1252). Clearly, these examples suggest there is scholarly emotional investment in the role of digital media technology, serving in this discourse as tools that fulfill the dream for a community who can support each other.

This imagined community has a number of characteristics. A primary aspect of the digital community is that it is made up mainly of young people. Youth serve as emblems of a healthy and vibrant community. Philip Howard, Sheetal Agarwal, and Muzammil Hussain (2011) point out that the young are those who have Internet access and are the ones capable of making change in their home-regimes. In another article, Howard and Hussain (2011) describe the young population as “eager for change but committed neither to religious fervor nor political ideology” (p. 38). These academics delineate the young as pure and thus open to change. Mohan Dutta (2013), affiliated with Purdue University, describes the Arab Spring as “youth resistance” circulated in social media (p. 139). Asef Bayat (2013), a professor of sociology at University of Illinois, reiterates the same argument, explaining that the ones who ignited the Arab uprisings are the “young, educated, post ideological and variously marginalized who utilized expanding electronic communication” (p. 591). The Internet in the network articles epitomize a neutral arena where the young are capable of expressing themselves and, through this expression, liberation can happen and a community can be built up. Saeid Golkar, a scholar at Stanford University (2011), emphasizes this connection between the young and the Internet, as an unblemished space, when he puts forward that, “The Internet has already helped young people liberate themselves from constant societal pressure and the social control of the ruling regime” (p. 53). This association, between the imagined virtuosity of the youth and the purity of technology, gives rise to a

deterministic conclusion in which urban, middle-class, and technology-savvy young people represent the engine of protest movements. Infatuation with youth permeates the articles in this model; the actors in the protests are reduced to the urban young, while the role of other social groups is marginalized. Whereas this functional model projects some differences from the transcendence model, it clearly expresses the same preoccupation with youth as the ultimate agent of change.

Another aspect of this community is decentralization wherein the Internet community is perceived as decentralized, invoking the cybernetic vision of nature in which organisms work spontaneously and cooperatively without centralization. This discourse recapitulates biological convictions, but shapes them in a digital language. In other words, actors in this paradigm are presented as being able to work in a decentralized cooperative way with the help of social media whose structure is assumed to be compatible with the requirement for a fragmented but flowing kind of dynamic. Seen in this light, by academics such as Stefano Passini (2012), a professor at University of Bologna in Italy, social media stands for “a common organizing tool that do not require a rigid hierarchy with a unified party line and allow disparate groups to work together and build up ties with each other” (p. 305). Simon Lindgren’s (2013) description of the development of the Libyan uprising conjures the image of a natural way of development: “The architecture [of social media] is decentralized, network connections are distributed, and mobilization and *self-organization* [emphasis added] is going on” (Lindgren p. 207).⁸ The “decentralized and non-hierarchical nature of social media” is also applauded by Halim Rane and Sumra Salem (2012, p. 108), academics at University

⁸ As a reminder, Norbert Wiener took up the idea of self-organization in his book *Cybernetics*, applying the theory to both biological and mechanical systems. A discussion of the theory can be found in Chapters 2 and 3.

of Griffith in Australia. Habibul Khondker, who earned his master at Carleton University and PhD at Pittsburgh University, describes the Arab uprisings as “an interesting case of horizontal connectivity in social mobilization” (p. 675). Genevieve Barrons (2012), from the University of British Columbia, describes the event as an example of a “leaderless revolution” (p. 64).

The typification of social media as facilitating fragmented but connected communication represents social media compatibly with ecological laws. Sometimes, explicit biological references are used to describe the operation of social media. Lisa Potts and Dave Jones (2011), affiliated with Old Dominion University, for example, label interactions with social media as an “ecosystem” in which the “components of the ecosystem (i.e., people, groups, and tools) construct linkages across these pathways” (p. 339). Using the biotic reference of “ecosystem”, the authors establish compatibility between nature and social media.

However, the material shift from the action of “components” of the community to the large-scale political action is not explained. How can these components “construct linkage”? Or, in the more familiar terms of the “tool/network” discourse, how can these “nodes” network? The network, unfortunately, is de-spiritualized and emptied of deep engagement with the dynamics of the community in question. In most of the articles, authors use “network” to refer to what has already been connected, without paying particular and critical attention to the nature of how and what has been assembled.

Christopher Wilson and Alexander Dunn (2011) find explaining the effectiveness of a network by the degree of the expansion of this network to be sufficient. Speaking of the Egyptian uprising, they maintain that the value of the network increases with each

additional member node: “As more individuals are connected to the same communication network through tools and platforms, the potential impact of the network increases exponentially” (Wilson & Dunn, 2011, p. 1270). Approaching the concept differently, Ilhem Allagui (2014) focuses on the strength of the connection between nodes. She elaborates that the linkage was very strong at the dawn of the Arab protests, and thus the network system has had more significant influence. However, the links between the nodes have since been disrupted:

The bond that linked actors for collective action has weakened. The reciprocity and mutuality principles have been relaxed. The singular claim of the revolution has been transformed, and actors have become divided based on their cultural capital, while the network’s ‘modes of coordination’ have also been disrupted, leading to a breakdown of the social capital. (p. 1000)

This is counterintuitive, as the reasons for this transition from connected to disrupted links are not clear. The network is perceived to be something unimagined, uncontrollable, and unpredictable. The flow of this network is depicted as out of reach and our task is to only observe this change, not to interfere or try to control it.

Simon Lindgren (2013), who is a professor of Sociology at Umeå University in Sweden, also talks about the uprising in Libya in terms of nodes, analyzing who these nodes are (Twitter users), what they are communicating (tweeting), and to whom. Lindgren’s analysis projects, to some degree, more depth than other analyses as he looks at some of the dynamics between these nodes. However, his analysis implies that this network is technological rather than human, as he turns activists and their interactions into nodes and tweets. This suggests we can follow the dynamics of activists by

observing their tweets and online interactions, as if the virtual space was separate from the physical. If action is linked *a priori* to a repertoire of tweets, seeing how this network acts would be difficult.

Partial history, partial context. The transcendence model makes difficult to understand the politics and histories behind the movements in question. Its rendition of the movements is directed mainly towards pointing out the agency of technology in propelling the events. On the other hand, the exploration of the movements' past extensions is wider in the tool model, which displays more acknowledgment of historical and political roots. Yet, the model renders the mobilization of new technologies as decisive in turning this historical and political preparation into reality. Sohail Dahdal (2012), for example, alludes to the weakening of the Ottoman Empire as part of the historical context that should be considered when looking at the Arab uprisings. He also directs attention to the role of the Turkish Empire in depriving Arabs of education. Nevertheless, in this context, he considers that social media helped nurture the uprisings by creating an "effective and immediate means of communication" (p. 6). Notably, he attributes effectiveness and immediateness to social media and argues that, because of the ability of social media to facilitate effective communication, these media caused what he describes as "*cultural awakening* [emphasis added]" (p. 8), an intellectual awareness, and a more receptive attitude. He explains that the history of the Arab region is brimming with protests, such as the Bread Riots in Jordan in 1989. However, these attempts to throw-off regimes were all unsuccessful because of the failure to connect and of the lack of effective tools of communication before the age of the Internet. Clearly, Dahdal has explored the past of the current Arab uprisings. However, within his argument, the dream

of overthrowing regimes is realized only with the advent of online communication, despite previous attempts to carry out the same objective.

As an Arab, I find the term “awakening” a familiar one. The theme of awakening has always been found in arguments made by Arab intellectuals who have called for cultural “awakening” as necessary for social substantive change. However, calling for change in the Arab region projects Western ideals of historical development. Therefore, while I see the employed theme of awakening, on one hand, as a sign of hybridity in Western discourses and practices, and, probably, an effect of some authors’ non-western background on the examined discourse, this hybridity, on the other hand, does not create an effective counter effort. Rather, what is at issue is that this kind of multiplicity is but a manifestation of how sources for meaning-making, which were established in the Western context, were “re-contextualized” (Fairclough, 2013) into the Arab intellectual language as a result of colonization, to be later re-highlighted in the currently studied Western academic discourse.

To highlight this more, I refer again to the doctrine of progress (Mumford, 1934) that ruled the modern West and envisioned the Middle Ages as “dark” in relation to modern history. This vision has migrated to the language of Arab intellectuals and has become a replacement of “Arab exceptionalism”, entailing that Arabs, for cultural and social reasons, were immune to democracy (El-Mahdi, 2011). After “Arab exceptionalism” was highly critiqued for its Orientalist tendency, Arab “awakening” came to dominate many Arab historical movements through the propagation of this notion in the region (including the movements of Arab nationalism) whether these

movements were secular or not (El-Mahdi).⁹ While this particular construct of awakening has become a characteristic of Arab ways of speaking about political and social movements, it actually emanated from a utopian Western way of speaking about its own knowledge and history.¹⁰

Arguably, then, while Dahdal, differently from the transcendental articles, discusses a historical dimension of the contextual conditions of the movements, this historical exploration is not at odds with the Western forms of knowledge about technology, dominating the examined discourse. Others, in the network model, draw attention to economic and capitalist structures. Rane and Salem (2012), for example, refer to economic conditions as a factor that mobilized people on the street. However, their project does not look at social media as products of capitalist systems. Rane and Salem actually attribute to social media a “decentralized and non-hierarchal nature”. Interestingly, the tool/network discourse, popularized with the rise of socialist and anti-capitalist movements and theories (Castells, 2000, 2004; Dyer-Witheford, 1999; Enzensberger, 2000), lacks a critique of capitalist structures existent in the manufacturing and production of new media, revealing a gap between movement theories (focused on resistance to elites) and their formulation of digital technology (rendering them as neural tools). Part of the explanation lies in the dominance of technological utopianism as a sort of knowledge hindering mature and developed understanding of these gadgets.

Technical limitations. The “tool/network” form of speaking also differs from the “transcendence” model in that it allows for further acknowledgement of the limits and problems facing activist users of digital media. However, these problems are usually

⁹ Interestingly, even the Salafi (religious) movement in Saudi Arabia, during the 90s, named itself “*Alsahwah*”, denoting “the awakening”.

¹⁰ See Mumford (1934)

framed as technical problems that can be overcome by technical solutions. In one article, Alicia Solow Niderman (2010), from Stanford University, draws attention to the efforts of the Iranian government to censor the Internet. However, she argues that there are limitations to such censorship because Twitter poises itself to “circumvent government censors, as its architecture allows messages to spread despite government blocks” (p. 33). Interestingly, government censorship is depicted as a hindrance treated by “technical” means. The Internet, to Golkar (2011) is “liberatory” for mobilizing people in and out of Iran and for delegitimizing the Iranian regime by documenting its violent suppression of protestors. Nevertheless, Golkar also interprets the Internet as having a suppressive role, especially in terms of surveillance and censorship. After discussing the suppressive and liberating potentials of the Internet, Golkar proposes some strategies on “how to expand the liberating potential of ICTs while limiting the misuses of these technologies by authoritarians” (p. 64). These strategies include educating people about technology and making the Internet more available. He also recommends that “the democratic world” should stand for a free Internet for all humanity. Golkar’s proposals seem to be driven by utility and a pragmatic approach to the Internet. However, this seemingly rational and common sense approach is actually engaged with utopian yearnings for a better world benefitted from new technical innovations. It suggests that teaching of technical skills is the way to move forward. According to Golkar’s argument, what people need is a better understanding of how technology works; only then can they progress and overcome the problems preventing the establishment of democracy. Such vision directly participates in the popular conversation that technological education is the best means to move societies forward. More importantly, it neglects the complexity of political and social systems (or,

actually, the sociopolitical systems, as there is interplay between these groups that ultimately determines the well-being of a people) and also marginalizes the role of other types of cultural education.

The second utopian-driven proposition proposed in Golkar's article is that of the global citizen. Golkar discusses the concept of the global citizen through the use of broadly used utopian terms, like "the humanity", which we know to be wider, more varied, and divided than the way many try to frame it. The kind of conversation that Golkar reproduces shares many concerns with the old McLuhanian talk about the interaction between technology and humanity. While the author seems to make observations of the Internet that are oriented to this technology's practical ends, he actually reinforces the normalized techno-centered conversation within which the mastery of new technology is considered the path to a better world – not only for local communities but for "humanity" at large.

Synthesis of old and new technologies. New technologies, such as social media, in the transcendence model, are characterized as replacing the traditional media of print, television, and radio. I have found a few articles with the tool/network model, which, likewise, delineate the relationship between the new and old media technology as oppositional. That is, social media is discursively constituted as a substitute to older media. Lindgren (2013) identifies the relationship between social media and the older media of broadcasting as one of a contrast rather than a complement. He identifies social media as a disruptor of the official flow from traditional media. Sahar Khamis and Katherine Vaughn (2011), from the University of Maryland in USA, similarly, portray a splitting image of old and new media. In this image, the Egyptian and Tunisian

governments supervise the traditional mass media while cyber media defies and resists these autocratic regimes.

The differences between old and new media technology in the previous examples are exaggerated in order to highlight the empowering effects of new media. Social media, within the transcendence discourse, and a portion of the tool discourse, are represented as making a break from outdated technologies and with the ability to solve issues hindering democracy. However, in the broad sampled network discourse, this antagonistic relationship between the two modes of communication – broadcasting and digital – is substituted by a unifying vision in which new media is formulated as units that work harmoniously, and in some cases correctively, with old media. One network article suggests that “social media played in tandem with the mainstream media outlets” (Dahdal, 2012, p. 3), such as Aljazeera, and pronounces that what makes social media effective is that it is “changing our habits of media consumption and creating back channels of communication that blur the boundaries between the storyteller and their audience” (p. 5).

This synthetic vision of old and new media is also registered by other projects, including that of Solow-Niederman (2010), which argues that social media worked with traditional media in the Iranian movement. However, this piece does not specify what type of “traditional” media she refers to. Rather, the article focuses on Twitter’s role in the mobilization of people to protest the Iranian election. Miryam Aouragh, from Oxford University, and Anne Alexander, from the University of Cambridge (2011) delineate this process of interaction between old and new media as a process in which traditional media is reliant on new social media as a source of information. Howard and Hussain (2011)

reiterate this argument, announcing that the success of Aljazeera in mobilizing Arab people was dependent on the use of social media to collect information and images. In a similar fashion, Lorenzo Trombetta, (2012), who finished his thesis in Paris, blurs the distinction between traditional and new media, but attributes the success of Syrian activists in reaching mass pan-Arab satellite television stations to social media, such as Facebook, where activists initially posted their videos and documented the suffering and torturing of Syrian people afflicted by the regime.

Since the academics mentioned above tend, even when engaged with older media, to favor the new modes in their discussion, the difference between the “tool/network” and the “transcendence” strands is not radical in terms of the view of the interaction between old and new media. However, the “tool/network” discussions seem to be more balanced and more well-informed. This difference between the two approaches, transcendence and tool/network, is due to their different underlying assumptions: in the transcendence paradigm, new technology replaces older modes of communication, while in the “tool/network model”, it has functional attributes that help make the world achieve democratic results in a faster way. This does not mean that new media gets less attention. In fact, most of the “tool/network” articles, including Al-Rawi (2014), Aouragh and Alexander (2011), Lindgren (2013), Bruns, Highfield, and Burgess (2013), Moussa (2011), Harlow (2013), and Khamis and Vaughn (2013), study the Arab and Iranian movements using methodology centred on either the content of new media or on Arab and Iranian actors engaged with these communication technologies. Such attention represents a huge bias in the way that the events are perceived: through the lens of technology the events are seen.

Grammatical components. This less deterministic vision of the role of technology also surfaces in grammatical structures of network articles. The transcendence model displays a macro-consistency in the use of transitive verbs, with the Internet and social media being the subjects of these verbs. The network model shows variation in the use of transitive and intransitive verbs, with people or social media alternatively used as the subject of these processes. Some verbs are intransitive and are preceded by social media and the Internet as the subjects. Some examples are:

“Social media were instrumental in setting up this environment.” (Dahdal, 2012, p. 3)

“Social media played an instrumental role in the success of the anti-government protests.” (Eltantawt & Wiest, 2011, p. 1207)

“The Internet has been an effective platform for social and political activism.” (Al-Rawi, 2014, p. 920)

“Facebook pages have become the sites of networking and spaces for exchanging and for disseminating news about the protests.” (Harb, 2011, para. 8)

“Social media has proven to be a useful mobilization tool.” (Chaudhry, 2014, p. 943)

“Social media served as a tactical tool.” (Tudoroiu, 2014, p. 346)

“Facebook was important for coordination.” (Wilson & Dunn, 2011, p. 1251)

In other cases, digital media become the objects of transitive verbs, of which activists and people are positioned as subjects of these processes:

“Social movement leaders from around the world use online applications and digital content systems to organize collective action.” (Howard, Agarwal, & Hussain, 2011, p. 218)

“These tools were often appropriated by activists.” (Aouragh & Alexander, 2011, p. 1345)

“Twitter was used extensively as a communication tool.” (Potts & Jones, 2011 p. 346)

“People used social media.” (Howard & Hussain, 2011, p. 36)

In the same fashion of the transcendence grammar rule, social media and the Internet become the subjects of transitive verbs, as in the following:

“Social media . . . is changing our habits of media consumption and creating...”
(Dahdal, 2012, p. 5)

“The Internet has altered the dynamics of political communication systems.”
(Howard, Agarwal, & Hussain, 2011, p. 223)

“The Internet allows protestors to collaborate.” (Solo-Niederman, 2010, p. 31)

“Twitter helps you create and share ideas” (Chaudhry, 2014, p. 943)

“Facebook . . . was perpetuating the feeling that the world was watching.”
(Wilson & Dunn, 2011, p. 1251)

“Digital media spread the details of successful mobilization.” (Howard & Hussain, 2011, p. 39)

This variation indicates a less deterministic conceptualization of social media. The network texts show differences from the transcendence template in conceptions of society, media, and types of interaction between technology and politics. However, the

network, as shown in the discussion, is still bound by utopian longings, paved by a long history that has idealized technology's role in ameliorating political conditions.

Public Sphere

Before going further with this model, I would like to draw attention to how some of the sampled articles sometimes combine more than one model in their perception of technology's role in the course of the Arab and Iranian protests, especially in the "public sphere" discourse, which is sometimes combined with a "network" vision. Articles, though, are coded for the model that is most prominent in that article. As an example, Sahar Khamis and Katherine Vaughn (2013) rely on a network way of speaking to approach the role of social media in the Tunisian and Egyptian uprisings. In another article (2011), focusing on the Egyptian protests, they employ a public sphere way of speaking, combined, to some degree, with a network angle, to analyze the role of the "We Are All Khaled Said" page in engaging citizens and changing politics. The focus of their discussion in this article (2011) is slightly different than the other one (2013). The other article (2013), coded as a network article, focuses on how social media is "supporting the capability of the protestors to plan, organize and execute peaceful protests" (p. 69). In the article that focuses on the page of "We Are All Khaled Said", Khamis and Vaughn include some of the network tenets, including the role of Facebook as a source of information and as a mobilizing tool. In this article, however, they are more preoccupied with the role of the Facebook page in shaping the public sphere. They suggest that "one of the most important venues through which public opinion trends and public spheres are both shaped, as well as reflected, in modern Arab societies is the Internet" (p. 147). The page "We Are All Khaled Said", they argue, "created a virtual public sphere" (p. 157)

which they describe as “a virtual, cosmopolitan forum online, where the issues of human rights, equality, democracy and freedom could be freely discussed outside narrow national identities” (p. 157).

New communication technology and public sphere. The Internet, according to Khamis and Vaughn (2011), is an important “forum” that has given rise to the public sphere. Their attribution to social media a role shaping the public sphere is what characterizes the “public sphere” strand. Within the “public sphere” articles, the pre-Internet public sphere is described as either non-existent or not diversified enough. The Internet, according to the proponents of this model, evolved to be the public space in which the people coalesce, or at least made the public sphere more accessible to marginalized segments of society. Academics, such as Aziz Douai (2013), accept the pre-social media existence of a public sphere in Egypt, but social media, according to Douai, who is from University of Ontario Institute of Technology, “have offered Arab ‘counter publics’ platforms that ‘transformed’ how these ‘counter-publics’ mobilize for social and political change, as well as offer a mode of expression in a contentious public sphere” (p. 27). Social media epitomize, in this argument, platforms that animate diversification in the public sphere and allow an entry for previously marginalized groups.

The writers of the “public sphere” articles conceive social media in Arab countries as a space where different voices – secular, Islamist, etc. – were allowed to emerge (Douai, 2013; Tufekci & Wilson, 2012; Nanabhaya & Farmanfarmaian, 2011). Yet, this diversity is harmonious with cosmopolitan nature and is characterized by uniformity despite differences. The reason that social media can achieve both diversity and uniformity – these two imaginaries representing two clashing utopian dreams – is the

benevolent and genuine nature of social media and the “responsiveness” of these media to people’s needs and aspirations:

The social media were able to occupy the narrative space of a large section of Egyptian society on account of its own responsiveness to the people’s needs, with which the traditional media’s unresponsiveness was in stark contrast, and the success of the secular-leftist and Islamist wings of the opposition to forge a certain degree of unity. These factors helped an oppositional narrative to emerge and overwhelm the official narrative. The point to be noted here is that this narrative arose from ‘the street’, from the people’s lived experience, and hence there was no need to look outside it for its meaning. (Ray, 2011, p. 194)

The harmony between people and social media is also lauded by Douai (2013), who titles his article “Seeds of Change”. He explains that the seeds of change in the Arab region are the “unprecedented convergence” of the technological and the human (p. 24). The naming of what he perceives as transformations in the region as “seeds of change” is interesting since some Arab mass media also commonly use “wind of change” in reference to turbulent but positive local change. The fact that the writer has chosen to employ the phrase “seeds of change” indicates the reductive image of the region’s history. Using terms such as “seeds”, instead of “winds” or “waves”, helps convey the Arab protests as manageable and possible to grasp historically – they can be traced to seeds.

Celebration of the Internet’s ability to create a cosmopolitan space is also endorsed by Zeynep Tufekci, University of North Carolina, and Christopher Wilson, (2012) who maintain that the Internet allowed different groups, like liberals, minorities,

and religious organizations, to voice their opposition to the Mubarak regime. Tufekci and Wilson, in one of the most highly cited journal articles on the Arab uprisings¹¹, depict the public sphere before online communication as inefficient because of governmental repression: “Person-to-person communication was also severely restricted due to fear and self-censorship . . . for many people, the online sphere might have been the only context in which they encountered dissident content.” (p. 366). Tufekci and Wilson attempt to show through their project, which is based on a survey of media-use by Egyptian protestors over a four day period, how the “new system of political communication” (p. 377), characterized by digitally mediated communication, helped protestors coordinate and organize actions. But most importantly, to the authors, the new system made it possible for Egyptian “citizens” to express and negotiate their desires for change.

The unphysical space. Tufekci and Wilson’s depiction of the Internet as a “forum” is not uncommon in “public sphere” articles. Many of these articles describe the Internet and social media using physically and spatially related terms: “forum” (Khamis & Vaughn, 2011; El-Nawawy & Khamis, 2014), “space” (Douai, 2013; Khamis & Vaughn, 2011; Ray, 2011), “sphere” (Ray, 2011; Khamis & Vaughn, 2011; Douai, 2013; Lynch, 2011), “arena” (Douai, 2013), and “platform” (Douai, 2013; Ray, 2014; Khamis & Vaughn, 2011; Tufekci & Wilson, 2012). However, the Internet is a de-materialized space in these articles and some questions that emphasize the materiality of space are absent: What are the characteristics of these virtual spaces in terms of physicality, materiality, and architecture? How does the design of these spaces affect communication? What are the implications of communicating within certain designs and patterns for the mediated discourse? How do power relations work in this space? These questions are

¹¹ according to Google Scholar

absent in most of the articles. Even if they refer to a physical space and its interaction with the virtual, online “space” is not described as a material object. Instead, it is represented as a non-material, out-of-reach entity. This lack of materiality precipitates an analysis that lacks engagement with other important sets of knowledge and displays modes of thought that are reproductive of utopian communication stances.

The young. In this virtual space, the “young” are the main actors, identified as the primary occupants of the public sphere:

“Young, educated urban elites who have traditionally played an outsized role in driving Arab politics—may be profoundly altering societal norms, religion, the state, and international politics.” (Lynch, 2011, p. 302)

“The young political activists were able to utilize social media effectively and productively to oust Mubarak from power and to pave the way for change in the post-Mubarak era.” (Khamis & Vaughn, 2011, p. 147)

“Led mainly by a media savvy young generation, Arab ‘counter-publics’...”
(Douai, 2013, pp. 29-30)

The domination of the “youth”, in the sampled “transcendence”, “network”, and “public sphere” articles, reinforces a certain construct of youth: represented homogenously with race, class, etc., not being fully explored. This homogenization conveys a sense of authority when the author examines the role of the youth: the academic perceives the function of the youth to be operative of the machines without fully exploring their complex contexts. This homogenization is also reflective of a romanticized notion of the young. The vibrant and appealing image of young people is more compatible with the imagined liveliness of the Internet.

New technology and language. Works that look at social media from the perspective of the public sphere also tend to shed light on the role of “discourse” in shaping democratic movements. This is not surprising, as the public sphere, in traditional Western intellectual thought, is perceived as a place for deliberation (Habermas, 1991; Arendt, 1977). Yet, when examining the role of talk and deliberation in energizing the Arab movements, academics in the sampled articles usually ignore the main question of implicit power relations in defining this examined discourse. Rather, they pay attention to the traditional notion of “discourse” as referential language. As an example, Tufekci and Wilson (2012) perceive that “one of the most important events in the transformation of the Egyptian public sphere was the diffusion of Facebook particularly its Arabic language service” (p. 366). This expansion of Facebook to include Arabic is celebrated, while implications of this action for power and knowledge relations, including nationalism, are discounted. Their work does not consider critically, for example, the impact of language homogeneity on the building of societies and the establishment of their systems.

Grammar: Future and present. Looking at grammatical choices made in “public sphere” texts reveals that although the examined articles were written in different years, some are characterized by the use of the present or future tense, especially in their concluding sections, to describe events that happened in the past. This is relevant not only to “public sphere” articles, but also to those of the other examined models. In the “public sphere” discussions, some articles rely on the present and future tenses to provide conclusions about the movements in question. Douai’s (2013) conclusion, for example, reads:

Arab ‘counter-publics’ refers to those arenas in citizen association . . . ‘Counter-publics’ may include those ‘oppositional’ segments of the ‘public sphere’ . . . Led mainly by media savvy young generations, Arab “counter-publics’ include the resistant remnants of the labor movements, the new rights movements, and other repressed voices. (p. 30)

Khamis and Vaughn (2011), at the end of the article, state, “Although there are many unpredictable outcomes in today’s wave of Arab awakening . . . one fact remains: the technology race *will* [emphasis added] continue, and so will the political and communication struggles in the rapidly changing Arab world” (p. 161). Tufekci and Wilson (2012) end their article, stating: “The events in North Africa and the Middle East are now being shaped by a new system of political communication which sets into sharp relief the importance of digitally mediated interpersonal communication” (p. 377). The use of the present tense and the future tense in the concluding parts of these articles reflects the optimistic stance of the examined academic discourse towards new technology: the assumed positive effects of online technologies are ongoing and continuing. The present tense also endows the academic vision with normality and timelessness. If an academic’s vision is delivered through the use of the present and future tenses, the vision is rendered as a timeless fact (Fairclough, 2013) while histories and contextual conditions are disregarded.

As indicated above, the use of the present tense is not unique to “public sphere” articles and, rather, is present in other models, including the sampled “transcendence” literature, here taken specifically from their conclusions:

“One cannot but assume that social media *will* [emphasis added] continue to play a growing role in political, societal and economic developments in the Arab region.” (Frangonikolopoulos & Chapsos, 2012, p. 18)

“The underlying truth may be that the Internet is simply very difficult to contain with filters . . . The power of modern technology, such as the Internet, is in the way they can be used to seize an advantage that alters the political calculus in the system.” (Wagner & Gainous, 2013, p. 273)

In the “tool/network” discourse, some examples include:

“Social networking systems support the linkage of people and technologies into fire spaces in which the movement of information is the key affordance.” (Potts & Jones, 2011, p. 355)¹²

“But with no doubt it is thanks mostly to the Internet and its media tools that today the Syrian activists have more means than in the past to expose the crimes committed by the regime.” (Trombetta, 2012, p. 11)

“They [social media] provide important resources in the currency of emotional support, interest and sympathy. These resources are invaluable.” (Ems, 2014, p. 729)

I don’t mean to suggest by these references that each academic included relies on the present tense to conclude their arguments. This would be a superficial and misleading argument. The observation, though, is intended to attract attention to how the present tense is employed in a good number of articles across the models to deliver the author’s discursive construction of the assumed role of technology in igniting, speeding up, or energizing the movements. The use of a particular tense is indicative of how academics

¹² “Fire spaces” is a term used by the authors to describe the movement of information on Twitter.

view the role of technology in terms of temporality. The effect of new technology is assumed to be relevant to the present. This signals disregard for the historical element of the movements. The use of the present also highlights the interminglement of power and academic discourse; it signals how academics position themselves to sets of knowledge they reproduce and, thus, to the movements. That authors rely on the present and future tenses in their conclusions about the events demonstrates a tendency to build a utopian image of the future and, also, hesitancy to look at the past.

Corporeality

I have found only two articles, both published in 2012, that look at corporeality to understand the intersection between new media technology and the Arab protests. Floriana Bernardi (2012), from the University of Bari in Italy, argues that the aim of her research is to examine the way “cyborgs” reshape their bodies as places for semiotic writing and social mediation to encourage the “rise of new social and political discourses”. She highlights ways protestors’ bodies became signs of protest by burning or demonstrating in the streets. Their Internet writing, she explains, was an extension of these semiotic processes. Advantages to the employment of this model include using a materiality-based perspective, through which Bernardi, I believe, becomes aware of other traditional forms of writing, such as graffiti and messages on plastic cups etc., which coexisted with digital technologies. The materiality of her analysis also provides her with an opportunity to observe the broader context of “biopolitical production” (p. 11), rather than only new technology, in the building of identities and subjectivities within this process. She emphasizes hegemony, body, discourse, and construction of subjectivity, which distinguishes this type of analysis from others.

On the other hand, the credibility of the networking model and the predominance of its logic within the academic field, I presume, has hindered the maturity of the examined body model in relation to discussions of the Arab Spring. Bernardi, for example, argues that the uprisings “validated Castells’ theory of the Network society” (p. 12). She argues that “citizens’ awareness – if not proper democracy – can spread through the nodes of network connections, those un-hierarchal spots of social and political mediation independently interdefined” (p. 12). While her main argument concerns the convergence of the body and web, her statement proves the contrary: democracy, equality, and un-hierarchy belong to the web. In one part of her analysis, Bernardi also maintains that while Western mass media has rejected the supposed “existence of a cyber-Islam” (p. 4), social media has exerted an important power in the fostering of the revolutions in question. She elaborates that technologies modified the balance of powers. This argument, I believe, negates the foundational theory of her argument. Here, new technologies are constructed as having an influential power, distinguished from previous communication artifacts. The web has become symbolic of the longing for democracy and equality. The allusion to the youth as the main actor in the Arab Spring is a sign of the broader influence of technological utopianism. The overarching argument of the article is that young people are the main actors who employ technology to achieve democracy and make revolutions.

Nathan Jurgenson (2012) also links the online and offline and views information and the physical as bits and atoms that “augment” each other. He cautions against viewing the online and offline as separate spaces as this leads to a digital domain distant from histories, morality, interests, and institutions that control the physical. Yet, there is

an abiding sense in the article that the communicative constraints that limited communication in the past have been removed with the emergence of new media. Jurgenson states “the Internet allows for ideas created by just about anybody to spread rapidly across the globe: people can more effectively network and organize . . . In physical space, one’s potential audience is often small . . . with social media, *people can see the difference they are making*” (p. 33). For Jurgenson, the Internet transforms the communication landscape in the manufacturing of dissent, bypassing limitations of geography and space. “Anybody” can now share information, unconstrained by distance. New media becomes the fertile ground upon which a democracy in the Middle East can take place.

Further Reflections

The discussed intellectual models, in spite of their differences, centre on representations of technology embedded, with varying degrees, in long-standing utopian constructions. These different models, or ways of speaking, reproduce the utopian image of technologies as powerful entities transcending temporal, spatial, and geographical boundaries (transcendence); they extend the utopian anticipation of ideal decentralized communities (network); or they participate in extending the utopian vision of a cosmopolitan public sphere where minorities can express their opinions without disruption of people’s harmony and unity (public sphere). Even the few articles that speak within the corporeality model are not unshackled from these prevalent utopian dreams.

The primary focus of this project is not to critique individuals, undermine their works, or counter either the plausibility of their efforts or the credibility of their work.

Neither is the goal of this analysis to assess the credibility of the Internet or bring defining conclusions about the interactions between social media and the Arab and Iranian movements. Rather, the goal of this project is to map the contours of these different discursive constituents, to destabilize their reductive engagements with the movements in MENA and these movements' respective politics, society, and sets of knowledge, and to problematize their embeddedness within a longer cultural history of Western responses to technology. I would like to conclude this chapter with thoughts on the underlying and problematic assumptions informing the discussed models, leaving deliberation on these to the final chapter:

Where is the question of *power*? Although many of the articles address the struggle between the state and the people in the region of MENA, not many heed the question of power in regards to technology. How does a society or a group – its culture and its power relations to other groups – shape and define the design and usage of technology? Many examined arguments focus on how technology ignites, facilitates, diversifies, and energizes democratic movements, without exploration of the effects of the relationship between the maker and the user. The transcendental model perceives new communication technologies as power, while the network model perceives them to be pure and fair instruments, dependent solely on their usage. Such disengagement with questions of power – colonial, imperialist etc. – ignores the multiple causalities of a complex system, of which technology constitutes a part.

Disembodiment. Disembodiment is another pattern related to the alienation of the human body in discussions surrounding technology. In part, though, this separation between body and technology enables different discourses to imagine virtual technology

as something different from the real. Because of this separation, social media is imagined as possessing qualities removed from people's behavior and as being more compatible with nature's smooth dynamics. This separation contributes to a normalization of a discourse that celebrates the productions of the human and makes them distinct from human physical abilities, capabilities, and skills.

Fascination with youth. I see in my analysis a repeated effort to construct the Arab and Iranian youth as leaders of their region's future. This discursive aspect looks to the future and overlooks the past. Instead of recognizing culture, tradition, heritage, and legacy, utopian ways of speaking about technology neglect history and empty the present of historical roots and cultural memory. Preoccupation with youth enhances the perspective that these societies must look forward, adopting Western ideals and technology while also letting their young lead the way. The focus on the young as the main actor also marginalizes the role of other groups and categories in mobilizing the movements: women, racial minorities, unions, disadvantaged economic classes, villagers, workers, religious leaders, intellectuals, nationalists, political parties etc. The image of young urban people leading the movement is a dangerous one as it discards the work of others who have lived and engaged with the movements, even if briefly. Dissolving their stories means surrendering to a utopian narrative where the vital youth are the only imagined future.

Preoccupation with connection. All of the models concern themselves with questions of connection: through nodes (network), through abolition of boundaries (transcendence), or through development of a cosmopolitan space (public sphere). The body model articles do so by integrating a network perspective. The models –

transcendence, tool, public sphere, and body – converge on communication as a contact that brings people closer, and centre on the marginalization of mishaps and breakages that go through communication. This extensive preoccupation with connection produces a repertoire of ways of speaking that enhances this meaning of communication. The transcendence model sustains the transcendental possibilities of social media that annihilate temporal and spatial boundaries, envisioning the Arab and Iranian movements as inevitable phenomena of these possibilities. The network model articulates this longing for connection through images of decentralized communities, which are connected widely, if not strongly. The public sphere enhances the normative vision of the Internet as a public space into which people meet and communicate harmoniously. This preponderance of connection reduces the meaning of communication to fiction: What about unloaded videos? Deleted Facebook statuses? Failed protests? Unpopular tweets? These impasses and limitations of communication and other multiple and complex communication systems that interact with social and political dynamics are paid much less attention in these models.

Chapter 6: Analysis of Academic Discourse in Media, Pedagogy and Policy Settings

In a country like Iran, it's mostly pro-western, technology-friendly and iPod-carrying young people who are the natural and most frequent users of Twitter. They are a tiny and, most important, extremely untypical segment of the Iranian population. (Morozov, 2009, p. 12)

This is it. The big one. This is the first revolution that has been catapulted onto a global stage and transformed by social media. (Anderson, 2009, p. 2)

Academic discourses are not confined to academic institutions. Rather, they flow into public arenas. They intermingle with media, professional, and political discourses. In many cases, academics are relied upon to comment on significant events and public issues. In the previous chapter, I delimit my analysis to journal articles for the sake of constructing a systematic analysis. In this chapter, I illustrate how historically rooted utopian models of technology shape some contemporary academic arguments in different discursive platforms – public, pedagogic and policy-setting. This chapter looks different from the previous one. While, in Chapter 5, I provide a systematic investigation of research academic discourse, I approach Chapter 6 with more flexibility to give myself enough space to explore other discursive sites and expand the scope of my work. This chapter, however, involves the same textual and linguistic work employed in the previous chapter. Through micro textual analysis, I can further highlight the role of three technologically utopian approaches (transcendence and dystopianism, tool/network, and public sphere) in shaping academic conversations about the movements in MENA.

The three approaches are accentuated through a critical discussion of three cases of academic arguments related to the impact of new communication technology on

political participation in the Iranian and Arab movements. These arguments occur in different sites. Firstly, Clay Shirky and Evgeny Morozov's arguments address the Arab and Iranian movements. In examining these academics' arguments and commentary on the MENA movements, I discuss the semantic and linguistic structures of their spoken and written texts. Secondly, Castells' book (2012) is sometimes used for university teaching about protests in the Middle East. Beside the value of his writings on the Arab protests, Castells is a scholar who has gained "academic stardom" (Bell, 2007, p. 55). His books and writings on the "information age" have "been favorably compared with landmarks in classical sociology such as Weber's *Economy and Society* or Marx's *Das Kapital*", and associated with other scholars such as Anthony Giddens and Daniel Bell, who are known for their "sociological grand" theories (Bell, 2007, p. 55). Thirdly, I have chosen Mark Lynch for his use of an epistemological model that is different than those of Shirky, Morozov, and Castells, and also for his involvement in the production of policy-setting documents on the MENA movements, including those published by USIP, an institution funded by the American Congress.

While the previous chapter is a systematic survey of one segment of academic scholarship, this chapter draws selectively on diverse academic scholarship so as to delineate some important features of what I characterize as broad utopian thinking in different settings and genres. My choice of the academics is based on my personal understanding of discussions produced to address the MENA movements. By presenting these academics' arguments and linguistically analyzing them, I provide an insight into how technological utopianism, characterizing scholarly literature, can traverse other domains: the public, the pedagogic, and the policy-oriented. Discussing Shirky, Morozov,

Castells, and Lynch, I tap into a variety of settings and genres (talks, interviews, books, reports) epistemologies (transcendence and dystopianism, tool/network, and public sphere) and academic fields (communication and media, sociology, and political science).

Transcendental and Dystopian Models

Shirky and Morozov's arguments appertain to public-academic discourse in that the arguments of Shirky and Morozov are understood to represent the divide in popular academic discourse between cyber-transcendental and cyber-dystopian scholarly work. As I argued previously, however, I see these two views as belonging to a single approach, extending from the same foundational notion: that technology constitutes a sovereign power in changing societies. The difference between the two visions lies in the qualities they project onto technology. The transcendental vision approaches technology with hope while the dystopian does so with misery and despair. This section will illustrate this further.

Evgeny Morozov has pursued his PhD at Harvard and published a number of books concerning social media. His writings have appeared in many newspapers and magazines – the *Guardian*, *New Yorker*, *Foreign Policy* – and in less mainstream media as *Dissent* magazine. He has given TED talks and appeared in other academic and non-academic platforms. Clay Shirky holds an academic position at New York University. He has written for the *New York Times*, *Wall Street Journal*, and *Wired*. He was hosted, more than once, by TED to speak about the role of social media in resisting oppressive regimes and defying governmental censorship and was also interviewed by TED in regards to this issue.

I begin with Shirky and although I focus primarily on his commentary on the Arab and Iranian movements, I refer, first, to his book, *Here Comes Everybody* (2008), which has gained much popularity and recognition. Unsurprisingly, the book does not discuss the MENA movements as it was published prior to the events. However, I allude to Shirky's vision of media and technology in this book in order to prepare for the discussion of his commentary on the MENA moments.

Because it is written accessibly for the public, the book does not follow traditional academic or scientific approaches to the examination of communication technology. It does not involve theoretical exploration. Rather, it is based on anecdotal evidence, highlighting, through these examples, potential benefits of new technology. In Chapter 4 of his book, Shirky, however, provides a sweeping account of communication technology development, which I assume to represent his "transcendental" view of new technology.

The account goes:

We are living in the middle of the largest increase in expressive capabilities in the history of human race. More people can communicate more things to more people than has ever been possible in the past, and the size and speed of this increase, from under one million participants to over one billion in a generation, makes the change unprecedented, even considered against the background of previous revolutions in communication tools . . . None of these examples [the telegraph, the telephone . . . etc.] was a simple improvement . . . Instead, each was a real break with the continuity of the past, because any radical change in our ability to communicate with one another changes society. (p. 106)

In this assessment of technological development, Shirky construes a transcendental image of technology, from the angles of both space and time. His choice of terminology – “increase”, “unprecedented”, “radical change”, and “revolution” – emphasizes the transcendental spirit. Usage of the cardinal numeral “one billion”, the superlative adjective “the largest”, and the quantifier determiners “more” and “ever”, amplify the assumed transcendental capabilities of new technology. On the other hand, the past is associated with the negation marker “none”.

In his description of the history of communication, Shirky provides generalizing propositions, including that the “expressive capabilities” of the current historical moment are unprecedented in “the history of the human race”, and that technological change also “changes society”. He does not address how we measure “expressive capabilities”, or what this means. He does not indicate how technology changes society, or in what ways these changes occur. Instead, he argues that “when new technology appears, previously impossible things start occurring” (p. 107). He utopically attributes to new technology the ability to achieve the “impossible” without complicating or substantiating this statement.

Shirky’s later discussion of the Iranian and Arab movements reproduces these utopian arguments about technology. In his talk during the 2009 TED@State event, Shirky proclaims Facebook and Twitter helped citizens in different parts of the world, such as Nigeria or China, overcome government censorship and these social media could change the political structures of these countries. Nearly 1,500,000 people viewed this talk. A month later, Chris Anderson, from TED, interviewed Shirky, asking him to comment on the Iranian protests of 2009 because, according to Anderson, Shirky’s analysis “could hardly be more relevant” (Anderson, 2009) to the event in Iran.

The interview transcript reveals two problems related to the production of this text, both of which act as significant possible obstacles to scholars formulating an informed judgment about an important event such as that of the Iranian protests. Firstly, the interview followed Shirky's TED talk (2009) in which he praised tremendously the general role of social media. Anderson's conversation with Shirky is, therefore, governed by internal rules: both Anderson and Shirky are talking within the defined construction of technological utopianism. Their construction of social media in Iran is already defined by the preconceived notion that social media always aids people in resisting their governments. Thus, this interview can be seen to reinforce the existing argument about social media, rather than to approach the existing argument critically in order to challenge or test it. In the interview, Shirky extends the application of his previous utopian philosophy about social media to a new historical event (the Iranian protests) that happened in geographical, political, and social contexts different from those that he had referred to in his previous TED talk (the cases of China, Nigeria, etc.). Shirky discusses the events in China, Nigeria (Shirky, 2009), and Iran (Anderson, 2009) as a homogenous group and construes them all as having been "transformed by social media" (Anderson, 2009).

The other problem regarding the discursive practices of the Shirky/Anderson interview is that the discussion happened while the events being analyzed were just taking place. Although Shirky is aware of this fact, he still declares with certainty what he assumes to be the important role of social media in what he describes as the "Iranian Revolution". At the beginning of the interview, he states that:

I'm always a little reticent to draw lessons from things still unfolding, but . . . this is it. The big one. This is the first revolution that has been catapulted onto a global stage and transformed by social media. (Anderson, 2009)

The statement is contradictory. While Shirky explains he is not fully willing to provide a judgment of an ongoing protest, he describes the movement as a “revolution” and social media as a main factor in the movement. Whether the Iranian movement can accurately be described as a revolution and whether social media were indeed instrumental in the movement, both are significant questions that require considerably more time to answer. This description of the Iranian movement as a “revolution” and the role of social media as an essential component of that revolution come as assertions without qualification. The use of short and syntactically and lexically simple structures – “this is it. The big one” – conveys the deterministic nature of Shirky's argument regarding the Iranian movement. The linguistic simplicity of the statement is complicit with what his argument entails: the absence of sensibility of the complex history and ambivalent political ramifications of the Iranian movement.

The interview transcript records an uninterrupted conversation in which Shirky defines the events of Iran as a revolution caused by social media then argues that Twitter “caused the greatest impact”, finally confirming that social media is “helping build a global community, forged more by technology and a desire for connection, than by traditional political or religious divides” (Anderson, 2009). The fact that the conversation moves smoothly from one point to another, without hesitation or a return to previous argument, underscores the expectations of the conversation have been pre-structured. This pre-established structure endows the conversation with a promotional, rather than

critical, character. This non-critical aspect is revealed by celebratory, transcendental, and promotional diction: Shirky uses the word “extraordinary” to describe the effect of Twitter. The promotional character of his conversation derives from the transcendental model that Shirky relies on to understand the role of social media in the protests of Iran. Shirky’s comments suggest that technology is a natural element that can overcome political and religious chasms. He promotes social media not only as progressive in the human world, but as a force that has transcendental qualities. In Shirky’s view, these technologies are benevolent by nature.

In the interview, when discussing the effects of Twitter, Shirky tends to describe a process that operates autonomously from human intervention and direction. He presents Twitter as an agent that follows its own logic without human input. He makes clear, for example, that the surveillance of the Iranian governments is ineffective because the Twitter “medium invents itself in real time” (Anderson, 2009). The agency of the Iranian people, on the other hand, is never examined in Shirky’s description of Twitter activity. Rather, individual Twitter users are presented anonymously. At the end of the interview, for example, Shirky states, “*Someone* [emphasis added] tweeted from Tehran today that ‘the American media may not care, but the American people do’”. During the whole conversation, no protestors or activists are identified by their names or by their activities in the protests. This lack of identification with the people testifies to how Shirky’s fascination with Twitter comes at the expense of real engagement with political and cultural processes in the Iranian movement.

Shirky’s views on social media have evolved over the years. In his 2011 audio interview with Benjamin Gottlieb and Arezou Rezvani, titled as “How Social Media

Abetted the Arab Spring”, Shirky’s analysis locates social media activities within their specific political contexts. However, in this interview, Shirky still insists that the role of social media “is such a big deal”. Shirky began the interview saying: “I don’t think you can say people’s revolt as a kind of general category. One of the things we’ve seen is that different regimes respond in different ways to different pressures” (Gottlieb & Rezvani, 2011). In spite of the care Shirky takes to shield his arguments from charges of simplification, he still employs an active transcendental vision of social media.

My analysis here is not intended to debunk the utopianism in Shirky’s arguments, since Chapters 2 and 3 of this dissertation already critique this type of knowledge. However, I here draw attention to what characterizes Shirky’s transcendental vision, as it represents many utopian arguments about technology, especially those disseminated in public arenas. Significant is Shirky’s disengagement with key political, cultural, and historical dimensions of the phenomena he brings to attention. While, in the later interview (2011), he distinguishes among the Arab governments their levels of dictatorship, his analysis is limited to a set of superficial markers. In his analysis, the tumultuous stories of power, classes, and bodies all give way to social media. Shirky, in addition, fails to recognize social media as value-laden instruments, which, just as other entities, such as religion, culture etc. need to be examined within their complex, ambivalent, and messy history and structures. Rather, he represents social media as tools that can transcend the boundaries of politics, space, and time. In the interview, he argues that the effects of social media, in relation to the Arab uprisings, were, first, “allowing citizens to, synchronize their opinions”. This was shown, he argues, through the role of Kifaya movement, a “blog-based movement [that] . . . allowed for a bunch of

ideologically distinct actors in the Egyptian political scene to all agree that, whatever else they disagreed about, they wanted Mubarak out” (Gottlieb & Rezvani, 2011). Secondly, the online movement allowed Egyptians

to coordinate action . . . spread that message throughout the population without having to get permission or help from state media. And then the third thing, which I underestimated but has turned out to be one of the few universals of this wave of protest movement, is documenting the results. (Gottlieb & Rezvani, 2011)

In Shirky’s analysis, social media has a powerful role that transcends the constraining axes of time, space, and politic: first, facilitating coordination of movements (transcendence of space); second, having a role in “synchroniz[ation]” of citizens’ opinions (transcendence of politics)¹³; and third, having the benefit of documenting the events (transcendence of time).

The type of transcendental account put forward by Shirky has developed alongside, but in outward opposition to, a dystopian vision of social media. Whereas Shirky’s talks bear optimistic titles such as “How Social Media can Make History” (Shirky, 2009), Morozov’s TED talk is titled “How the Net Aids Dictatorships” (2009). Shirky and Morozov differ in their readings of how the Internet and social media affect social and political change. However, their talk titles display a similar conceptualization of “net” and “social media” as the agents of different processes of doing, as agents of “material processes” (Fairclough, 2001). The Internet and social media are credited with the power to “make”, “abet”, and “aid” in significant historical and political developments. The receiving objects of these actions are significant constructions:

¹³ Notably, Shirky uses the word “synchronize” to describe the dynamics of public opinions, a word connotative of technical dynamics more so than political dynamics.

“history”, “the Arab Spring”, and “dictatorships”. The structure of their talk titles highlights a notion held in common by Shirky and Morozov, despite their disparate conclusions. Both perceive social media as agents determining the shape of events and conditions: Shirky’s arguments imply that social media produces an historical turn towards a better future, while, to Morozov, social media contributes to gloomier outcomes. The causality underlining these arguments is one-dimensional: technology as an agent produces desired or hated states. Just like the utopian account of Shirky, the dystopian vision of Morozov is a one-sided vision that ignores antagonisms and contradictions inseparable from technology.

In opposition to the rosy picture drawn by Shirky, Morozov, in his book *The Net Delusion* (2011), which lists different case studies, depicts a bleak portrait of the Iranian movement driven to its end by cybertechnology. Morozov focuses on how the Iranian government formed a cybercrime team, hunting activists and sending threatening text-messages to its citizens. The Iranian government’s actions to suppress democracy, according to Morozov, were echoed by Russia and China, which, in succession, worked to tighten all online dissenting activity. Here, the Iranian movement’s activists were treated as “dangerous” “thanks to the ubiquity of social media” (Morozov, 2011, p. 10).

In further discussing the influence of social media on the Iranian movement, Morozov (2009), in a TED talk, says that social media networked activists effectively and “operational[ly]”. However, “having access to them [social media] assisted authoritarian states”. Morozov asserts that blogs and networks worked as “open sourced intelligences”:

In that past, it would take you weeks or months to identify how the Iranian activists are connected to each other. Now you actually know how they are connected to each other by looking at their Facebook page. (Morozov, 2009)

Rather than deconstructing Shirky's notions of technology, Morozov actually uses the same concepts employed by Shirky in order to argue for the negative role of communication technology. In doing so, he shows a similar lack of a sense for contradictions and dialectics. He recognizes that the influence of social media goes beyond the boundaries of time and space but insists that this reach benefits dictatorships rather than resistance movements. Morozov represents social media as inherent risks over which dictators have agency, while ordinary people do not.

Both Shirky and Morozov converge upon a shared view of communication technology as an independent force, but Morozov fares better than Shirky in terms of critically understanding social and political processes. Morozov's arguments underscore patterns that are different from Shirky's. Morozov visualizes political change as a top-down process, whereas Shirky portrays an optimistic reality in which change is carried out from bottom, i.e., from the social media user. Shirky aligns social media with ideals such as harmony and cooperation, while Morozov's discussion centres on the dogmas of control and domination. These differing patterns validate the argument that Morozov carries out a more critical analysis of technology and holds a better grip of technology's political and historical contexts than Shirky. Morozov's orientation, however, is problematic in its dichotomous constructions and in how it is articulated in reaction to the optimistic discourse on technology rather than displaying a balanced engagement with different practices, discourses, and structures entangled with technology. This reactionary

pulse of Morozov's arguments, I suggest, is restrictive and limiting to the production of comprehensive and engaged understandings of political movements and technological innovations.

The title of Morozov's article, in *Foreign Policy*, for example, "Picking a Fight with Clay Shirky" (2011), represents the clearly bipartisan stance Morozov takes towards social media. In the article, Morozov argues that he is

much more interested in understanding the long-term impact of new technologies on authoritarianism and here I also have to consider how it may boost their attempts at surveillance, propaganda, censorship and even the trivialization of public discourse. (p. 4)

I agree with Morozov that the growing censorship and surveillance is worthy of examination, but we are restricting ourselves in the same deterministic discussion when we assume that censorship of the Internet indicates growing authoritarianism. If we assume that Internet surveillance truly boosts authoritarianism, then, this entails that an authoritarian government becomes stronger because of social media. Actually, in examining the historical course of governments, we learn that an increase of authoritarianism has led, in many cases, to a faster collapse, e.g., the fall of the Italian Fascist regime, the Soviet Union, and some Arab dictatorial regimes.

Morozov does not provide different grammars of thought in relation to the interaction between social media and the MENA movements than those of Shirky. This is why we find similar patterns in their descriptions of the movements. As another example, Morozov, in his book *To Save Everything, Click Here* (2013), describes the Egyptian movement as being led by "the liberal and pro-Western youth" (p. 128). Morozov

assumes the young were the people who led the movement. He postulates that because of their “leaderless revolution” based on social media, the young were “locked out of politics” (p. 128). Morozov’s discussion mirrors Shirky’s: it inverses it, but does not change its essence. Both Shirky and Morozov assume that: (a) the young mobilized the movements of MENA, (b) these movements were leaderless, and (c) there was a causal relationship between communication technologies and the success or failure of the movements. In the same way Shirky deterministically attributes to new communication technology the *success* of the movements, Morozov (2013) affirms that “the Internet . . . is making those revolutions very difficult to complete” (p. 128).

This deterministic vision of technology is exactly what enables Morozov’s dystopian and Shirky’s transcendental discussions to represent the virtual as a process radically different from the real. The very notion of the Internet is endowed with phenomenal properties that locate it far from unremarkable regular material space. Rather than examining the Internet as an extension of the real, bound to the social, economic, and political structures and processes of the material world, the transcendental, and dystopian visions alike endow the Internet with autonomous powers and, thus, entail a series of deterministic constructions of historical, cultural, and political structures of relations.

Network Model

Moving from a popular academic discourse to a more strictly academic one, I will focus in this section on Manuel Castells, specifically his book *Networks of Outrage and Hope*, in which Castells discusses the Arab uprisings in two chapters. I focus on Castells because of his academic importance. His theories on new communication technology are

relied upon tremendously in teaching and research forms of academic discourse. Castells' "networking" theory is perceived by many to maintain a middle line in debates on the role of communication technology in political movements. Castells himself describes his argument about the networking role of technology as realistic and un-deterministic. He (2012) confirms this position by describing the debate on the causal role of technology in social movements as a

meaningless debate. Of course technology does not determine social movements or for that matter any social behavior. But Internet and mobile phone networks are not simply tools, but organizational forms, cultural expressions and specific platforms for political economy. (p. 103)

While I concur with Castells that technology does not determine the dynamics of social movements, I believe his work presents a (soft) utopian model in which technology is presumed to help build genuinely democratic communities. Before studying Castells' analysis of the Arab movements, I would like, first, to refer briefly to his earlier work in order to illustrate his famous theorization about informationalism and networking.

Castells (2000) conflates technological systems, theoretically, with social structures, just as the title of his emblematic book, *The Rise of the Network Society*, suggests. He emphasizes connection between the social and the technological: While technologies by themselves are not determinants of a society's future, the capacity of a society to master their technologies, according to Castells, decides their progress and destiny. Castells sees the emergence of computer-mediated communication and networking technology, where the audio, visual, and written modes of communication are all blended, having affected deeply human communication and, thus, human culture.

Castells explains that new technologies have transformed cultures and brought about information diversification and audience segmentation and, thus, power decentralization. Informational technologies, he believes, encourage communication within underprivileged segments of society and provide protection and a secure place for subordinated groups to express themselves openly, and, hence, the power to reverse unequal social power relations. They have produced, according to Castells, virtual communities, which are

[Real] communities, but not physical ones, and they do not follow the same patterns of communication and interaction as physical communities do. But they are not “unreal”, they work in a different plane of reality. They are interpersonal social networks, most of them based on weak ties, highly diversified and specialized, still able to generate reciprocity and support by the dynamics of sustained interactions. (Castells, 2000, p. 389)

Information technologies are creating, what Castells calls, the “network society”: “a society whose social structure is made of networks powered by microelectronics-based information and communication technologies” (Castells, 2004, p. 3). These networks are open and able to expand to include new nodes as long as the new nodes have the same values or goals. This type of theory positions political change and democracy as a result of interactions between people and technology, which can spread through nodes of networking communication.

Whereas informational technologies, to Castells, can be resources for domination and power, they can be tools to reorganize power (Castells, 2000). This double-sided view of the computer as a tool of power and a tool of empowering is in line with the

Marxist tradition which perceives technology as the oppressor's gadgets, but also with the potential for use in class battles against exploitative relationships.

Moving to Castells' analysis of the Arab uprisings, I begin with the introduction of his book (2012) in which he provides a narrative of the Arab movements. The book's very first statement reads: "no one expected it. In a world darkened by economic distress, political cynicism, cultural emptiness and personal hopelessness, it just happened. Suddenly dictators could be overthrown with the bare hands of the people" (p. 1). This signals two categories of register: the first being the implied academic category, and the second, the more explicit poetic category, signaled by the elliptical structures of "no one expected it" and "it just happened" as well as the metaphor of "the bare hands of the people". This combination of registers indicates the nature of the narrative Castells composes: Castells' arguments are an academic exploration intertwined, significantly, with personal hope invested on technology.

Semantic modes of meaning are supportive of this emotionally hopeful vision of new technology: Castells emphasizes negative properties of past history through words like "emptiness", "distress", and "hopelessness" and highlights the semi-historical rootlessness of the protests through "suddenly" and "just happened". These semantic structures all emphasize a utopian image in which the past and future contrast and the transition to that bright future is not gradual but abrupt and fast. This assertion of abrupt change recalls the conundrum of technological utopianism in the West, which depends on a lookout for new and universal possibilities of change.

Castells (2012) argues that this political transition "began on the internet social networks, as these are spaces of autonomy, largely beyond the control of governments

and corporations” (p. 2). Castells does not describe the Internet as merely the “Internet”, as Morozov and Shirky do, but as “Internet social networks”. This way of speaking about the Internet shows preference for the virtue of cooperation to individualism not only on the basis of moral superiority but also efficiency. The Internet, to Castells, was where “a few, who were joined by hundreds, then networked by thousands, then supported by millions . . . to connect with the real concerns of real people” away from the control of the governments and corporations “that had monopolized the channels of communication as the foundation of their power, throughout history” (p. 2).

The network framework that Castells adopts is based on the imaginary that the Internet provides the space for the leap from individual nodes (ineffective) to the revolutionary network (effective) to take place. He imagines the political Arab movements as having emerged spontaneously and effortlessly, not through centralized activities, but by the networking of multiple simple individual nodes. In Castells’ point of view, networks, which were enabled by virtual social networking, leaked into the workings of the political movements. The power of the Arab movements, then, was dependent on a distributed power. This underlying framework of Castells’ exploration of the Arab uprisings is compatible with the cybernetic theory, which imagines organic systems as naturally self-regulating without the need for top-centralized governance: a vision implying the sacredness of natural dynamics, with which technology is compatible.

I must acknowledge, though, that the framework Castells develops recognizes the struggle of the people. The title of his book, *Networks of Outrage and Hope: Social Movements in the Internet Age*, is structured differently than Shirky’s and Morozov’s.

The titles of their examined texts – Morozov’s book *The Net Delusion* and Shirky’s TED talk “How Social Media can Make History” – construct the Internet or social media as their respective grammatical subjects. For Morozov and Shirky, the Internet is the starting point of discussion and determines the type of the conversation that follows. Morozov examines the Internet as an object of darkness, while Shirky focuses on the Internet’s promise. On the other hand, Castells’ book, which discusses some of the Arab protests, is titled differently, implying that Castells’ focus of inquiry is not merely the Internet but rather the “social movements”; the Internet comes as a predicate, as in the phrase “in the Internet age”. The different structures of these titles correspond with the ways these scholars differently envision the role of technology.

Therefore, Castells’ way of speaking is different from the transcendental and dystopian models. Yet, this does not put the networking model outside the technologically utopian circle. Castells narrates the Egyptian 25 January movement, for example, as an outcome of the 6 April Movement, “which created a Facebook group attracting 70,000 followers”; the Facebook group, “We are all Khalid Said”, which was set up by Wael Ghoneim, a “young Google executive”, then ignited the movement. Thus, “internet networks, mobile networks, pre-existing social networks, street demonstration, occupations of public squares and Friday gatherings around the mosques all contributed to spontaneous, largely leaderless, multimodal networks that enacted the Egyptian Revolution” (Castells, 2012, p. 56). The Egyptian government, according to Castells, had difficulty switching off the Internet because the global Internet community “came to rescue Egypt” (p. 62) and circumvented the state’s disconnection of the Internet.

I would highlight a few points of the arguments and statements Castells makes in his book about the Egyptian and Tunisian uprisings. These points highlight the utopianism of Castells' arguments. Firstly, Castells, as with many academics studying the Arab uprisings, focuses on the apparently successful uprisings: the Egyptian and Tunisian protests. Secondly, Castells does not question the desirability of the use of new technology. The Internet social networks, to Castells, are harmonious with offline networks. They are constructed as totally parallel to community networks and he makes no examination of cases where these online networks contradicted or worked in opposition to people's offline networks.

Thirdly, regarding how Castells describes the interaction between the state and the Internet, Castells argues that the government's efforts to cut the internet were technically countered by the people with the help of what he describes as the global community's "hackers, techies, companies, defenders of civil liberties" (p. 62). Even large companies, such as Twitter and Google, Castells argues, have contributed to this revolutionary process by developing programs aiding people against government surveillance. The government blackouts and surveillance were problems, Castells argues, but only at the beginning of the movements. Once the movements have extended their reach, "it is too late to stop it" (p. 66).

These points reveal contradictions in Castells' argument about the relationship between technology and social movements. While he considers political and economic powers important in examining the wider context, he disregards the role of these two powers in the practices, dynamics, and development of technology. I would argue that

this is because of the influence of technological utopianism, which likely inhibits scholarly critical examinations of power relations in the domain of technology.

Technological utopianism in Castells' book becomes more obvious in the critical questions he ignores, as well as in the examples he examines. The book was published in 2012 and reprinted in 2013. However, Castells has taken minimal notice of important questions regarding the political or social downsides of the explosive excitement over technology's role in political movements and their implications for the Egyptian and Tunisian movements. He constructs "the world" as an ideal place in which people from all over the world are imagined as collaborative and harmonious in the struggle the Egyptians and Tunisians made against their regimes. He describes activists mainly as "young". This emphasis on activists' youthfulness stimulates future hope, and frames political actions as self-fulfilling prophecies about democracy.

This network model that conjures society as networks of "young people" is not rare in discussions of the Arab movements. In a widely cited article, "The Role of the New Media in the Arab Spring", Habibul Haque Khondker (2011) uses Castells' theory to emphasize the positive impact of the Internet's "horizontal networks of communication" (p. 676) on the Arab Spring. Similarly, Ilhem Allagui & Johanne Kuebler (2011) look at the organization of the Tunisian and Egyptian events from Castells' network perspective in order to understand the structure of "this cyber revolution and . . . the links that structured Tunisian or Egyptian cyber activities" (p. 1436). Irfan Chaudry (2014) also draws upon Castells' networking theory to examine Twitter's potential in changing the Saudi Arabian politics following the Arab protests. Al-Rawi (2014), Bennet and Segerberg (2011), Trombetta (2012), Paradiso (2013),

Tudoroiu (2014), and Ems (2014) all refer to Castells in their examination of technology and the movements in MENA. This frequent citation of Castells' networking model may not necessarily reflect the exact impact of this model. Nevertheless, it signals the academic community's degree of acceptance and favoritism of this model. The proponents of this model argue that it represents a practical approach to technology through which people can understand ways technology aids political change. Nevertheless, the model lacks critical examination of technological choices and designs. Rather, Castells' model portrays new communication technology as an element necessary for social mobilization and alliance. In his networking model, Castells attaches the Internet to a new logic of social morphology, different from previous traditional notions of society. However, this logic of connected nodes is actually an alternative version of the old cultural utopian dream of a cosmopolitan harmonious society.

Political Model

Another technological utopian strand is that in which scholars focus on the effect of new technology on traditional politics and the public sphere. All of the above utopian modes – transcendental, dystopian, and networking – express hope or disillusion towards technology's assumed capacity to change politics and revive democracy. What distinguishes the public sphere model, though, is its preoccupation with traditional Western understandings of the public sphere as a space for citizenship, deliberation, and democracy. The other examined models suggest, more or less, that people are entering into a new level of rationality with the emergence of new technologies. The public sphere model is more tied to the renovation of older modes of democracy.

People have witnessed the realization of democratic projects in parts of the world in recent decades, e.g. in Eastern Europe. However, there is a common belief in the West that Middle Eastern governments are resilient to citizen demands for democracy. In 2011, Marc Lynch, a political scientist professor and the Director of the Institute for Middle East Studies at George Washington University, wrote a piece, titled “After Egypt”, for the political journal of *Perspectives on Politics* (2011) in which he argues that the uprisings that have swept the Arab region “pose a serious challenge to many of the core findings of the political science literature focused on the durability of the authoritarian Middle Eastern states” (p. 301). This abiding sense among political professors that democracy in the Middle East is enduring a long drawn-out crisis contributes to the backdrop against which the Internet is imagined as a game changer. The emergence of social media, according to Lynch (2012), has influenced the public sphere in Arab countries. Lynch notes, in a *Foreign Policy* article, that the combination of traditional satellite television and “an ever-growing role for social media layered on top of (not replacing) satellite television and existing networks” (2011, para. 5) threatens the authoritarian states of Arab countries.

In his *Perspective on Politics* article, Lynch argues that “it seems impossible to miss the extent to which the new information environment has already changed the texture of politics in many Arab countries” (Lynch, 2011, p. 307). The political effect of social media, according to Lynch, must be examined through the perspective of the public sphere. In other words, there should be more focus on the long-term effects of social media on individual competencies and the broad information environment rather than on the immediate effects of social media on political resistance and battle. Political

change, Lynch notes, should be studied in relation to the capacity of social media to disseminate information and thus to change “citizens”. “These individuals will become new kinds of citizens, better able to stand up to the instruments of state control” (2011, p. 306). Social media, according to Lynch, gives people the ability to “evade state surveillance and control” (p. 307) and, hence, the ability to control and dominant the public sphere.

These above-mentioned *Foreign Policy* and *Perspectives on Politics* articles were not Marc Lynch’s first attempts to explore the effects of social media on the MENA political movements. Four months preceding the onslaught of the Arab uprisings, Lynch produced, in collaboration with other prominent scholars from communication and political science fields, a report for USIP, an institution funded by the American Congress. The report (Aday et al., 2010) analyzes the role of “new media” in the Iranian election. Titled “New Media in Contentious Politics” and headed by a picture of a laptop with the word “Iran Election” appearing on the laptop screen, the report symbolizes the reduced perspective through which scholars try to examine the Iranian protests – “new media” precedes “politics” in the title and the picture is not of people but of a laptop, with the Iranian protests reduced to words on the laptop screen. In both the title and the image, gadgets have more prominence than people. This signifies that the report does not begin from the historical, cultural, and political milieus of the Iranian movement and proceed to position technology in these different intermingled layers. Rather, social media is taken as the basis for the discussion. The report picture’s premise is the blending of social media and political action, and the embedding of political action into technology rather than the other way around. The layout of the image corresponds with the general template

of the report's discussion that suggests new media technology can overcome problems of politics. Technology, in this visual, is not antonymous to democracy and deliberation is assumed to sit well with technology.

Although the report claims to assess both the negative and positive effects of the use of social media in Iran's election, it gives more weight to the ways social media can support contentious political action, including facilitating communication for those who could not easily meet face-to-face and garnering external attention. The authors look at the regime's postelection efforts to mobilize Iranian Internet users to denounce protesters, but argue these efforts were unsuccessful. "Efforts to disrupt access to the Internet went together with efforts to mobilize regime supporters via the Internet. These efforts seem to have been less successful than the efforts of regime opponents" (Aday et al., 2010, p. 21).

This approach to technology, based on assessing the positive and negative impact of the Internet, is reinforced in another report produced by academics, including Marc Lynch (Aday, Farrell, Lynch, Sides, & Freelon, 2012) about the use of new technology in conflicts after the Arab Spring. This report (2012) is less enthusiastic than the previous one (Aday et al., 2010). While it praises the role of social media in spreading information outside the region and garnering world attention, it explains that new media technology did not play a central role in other political activities, such as collective action and regional diffusion. This more skeptical stance towards the role of social media corresponds with the layout of the picture accompanying the article. Whereas the USIP article about the Iranian election is illustrated with an image featuring a laptop in the foreground, this report (Aday, Farrell, Lynch, Sides, & Freelon, 2012) makes use of an image of people (presumably Arabs), some bending over their cell phones and others

taking photos with their cell phones of something hidden in the image. In contrast to the previous report, the protagonists here are humans not technologies, yet these people are all still working within the dynamics of their cell phones, looking in the direction of their instruments. Although digital technology may not have had a tremendous effect on conflicts after the Arab Spring – a scenario that became clearer in 2012, when this report was published – digital media in the report is still construed as part of the public dynamics. Scholars examining the events in question insist that the culture can't be understood without examining these gadgets.

In 2012, Marc Lynch wrote an article for *Foreign Policy*, claiming that “the rise of a new Arab public sphere was facilitated by new technologies” (para. 5). He praised the role of Aljazeera in changing the politics of the region but argues that the rapid rise of Internet penetration and social media

layered additional opportunities for the dissemination of information and ideas onto this top-down broadcasting model. . . . Social media allowed for connections across society, the rapid sharing of information, the coordination of activism, and the expression of political beliefs – even through actions as cheap as the adoption of a revolutionary Twitter avatar. (Lynch, 2012, para. 11)

Invoking Habermas' political theory, Lynch describes the political change in the Arab region as “structural transformation” and explains that “the empowered publics and new flows of information are fundamentally rewriting the rules of regional politics” (para. 19). Differently from Habermas, who describes technology and science as ideology (Feenberg, 1996), Lynch makes a direct connection between informational forms and better social forms, providing another validation for Fukuyama's end of history theory

which places technology and information at the centre of democratic projects.

Technology, in this way, is depoliticized, neutralized, and framed as compatible with the “post-ideological” world declared by Fukuyama.

Yet, witnessing the outwardly dark direction of the Arab protests, which has manifested in civil wars, restoration of dictatorship, etc., Marc Lynch, accordingly, changed his view of the role of social media in relation to democracy and the question of the public sphere. In 2013, he wrote an article for *Foreign Policy* in which he makes a case against the view that Twitter was pro-democracy. In that article, “Twitter Devolutions: How Social Media is Hurting the Arab Spring” (2013), Lynch argues that if Twitter proved useful for the mobilization of protestors, it was not fruitful for organizing political parties and civil society or the “hard, patient work of building organizations” (para. 7). Lynch not only doubts the assumed potential of social media to positively affect the public sphere, but he also attributes to Twitter the failings of the Arab Spring. He asserts in the article that Twitter has contributed to sectarian conflicts ripping the region. This sectarianism, he argues, is “reinforced by the tendency toward polarization and informational bubbles so commonly observed in online environments” (para. 9).

Clearly, Lynch was, to begin with, less excited about the role of social media than other academics, engaged with popular discourses, such as Shirky, or those engaged with other political institutions, including Ethan Zuckerman (with whom Marc Lynch collaborated in the first USIP report). Lynch’s strong political background, I believe, has led him to engage, epistemologically, with the political dynamics of the region. Yet, this shift from a position hopeful of Twitter’s role in changing the political fabric of the region to one that perceives a direct relationship between the developing polarization in

the Arab region and Twitter is symptomatic of a malaise affecting intellectual discourses dealing with technology, especially those that are produced in public arenas.

The first problem that scholars encounter when trying to understand communication technology's influence on political dynamics is the confined discursive domain within which the scholars work. This recognition in no way undervalues the work of Lynch and others. Their works are admirable projects that aim to locate the conditions of possibility and change. But they are intertwined with "technological rationality" (Fisher, 2010). The public's constant search for optimistic opportunities has urged these academics to make simple cases about the role of new technology in current events: the examined academic cases present technology either as ushering people into a new phase of democracy or as damaging social and political structures. They make use of reductive and highly polarized narratives of change. This polarized view is partially because of the fact that academics are not allowed to be ambivalent, especially in public domains. Scholars have to quench the public thirst for simple ideal solutions, a thirst that has been encouraged by a long-standing utopian culture.

The second problematic issue is the lack of material analysis examining politics at the level of technological discursive practices, forms, and architecture. The immaturity of a political perspective of technology (Winner, 2001) explains the pendulum movement of academics in dealing with technology. Development of ideas is natural in the course of an academic's life, but the tendency to prescribe technical solutions when conditions appear bright, then cautioning against those technologies when conditions worsen is indicative of a bigger dilemma in academic discourse. This for-and-then-against phenomenon can be compared to someone prescribing remedies for illnesses without being aware of the side

effects these remedies may cause (Winner, 2001). Similarly, academics pay less attention to the meeting of politics/power and technology when making judgments about the efficiency of these technologies in enhancing democratic processes.

Final Note

The different models discussed are based on different ways to understand new communication technologies and their role in enhancing (or hindering) political change. Castells' networking arrangement is suitable for the cybernetic notion of society in which connection of nodes is understood as effective in achieving goals. Lynch's philosophy is attached to the political traditional notions of civil society and public sphere. Shirky and Morozov are two faces of a causal understanding of the relationship between social media and political conditions. Yet, there are common echoes and threads in their work, intertwined with the search for social and political progress. They are not as descriptive and past-oriented as they are prescriptive and future-oriented. Technological utopianism is visible across these different ranges of academic discussions. This utopianism, however, comes in different sizes and shapes: the utopia of imagining transcendence (Shirky, Morozov), the utopia of imagining political renewal and rejuvenation of older democratic modes attached to civil society and public sphere (Lynch), and the utopian community-centered version of thought (Castells). Arguably, technological utopianism occurs in the face of the political movements in MENA. This technological utopianism leads to a closed set of interpretations about the movements, such as the assumption that the movements lacked central leadership, were led by the young, and were caused, assisted, or halted by new communication technology. Such interpretations reflect

Western long-standing utopian discourses of technology, more so than the historical, cultural, and political legacies of the MENA region.

Chapter 7: Conclusion

Critiquing technological utopianism as a construct is not something entirely new. In order to counter technological utopianism, critics such as James Carey (1989), Fred Turner (2010), and Vincent Mosco (2005) highlight the observation that utopian dreams about technology gloss over deeper problems of inequality and exclusion. In their critique of the utopian way of speaking about technology, they pinpoint what they render as the reality “behind the fantasy of unimpeded information” (Turner, 2010, p. 260), a reality usually relevant to capitalist-labor relations and conditions, which, they assume, technological utopianism, by its mythical or ideological mix, manages to hide.

This dissertation differentiates itself in its study of the link between technological utopianism and events in a different geographical site to understand how technological utopianism has implications for academic interpretations of the recent Arab and Iranian movements and of MENA’s political and social milieus. The dissertation critically analyzes Western academic attempts to construe certain images of the movements in MENA by locating these attempts within long-standing Western discourses of technology, paying particular attention to technological utopianism. This critical stance, however, does not imply that the academics referred to in this work are people with political agendas or capitalist interests or that they have pursued imperialistic motives when approaching the MENA movements. Many of these academics have produced commendable work, championed the protests, and made great efforts to study and analyze the dynamics of the movements. Well-intentioned and well-disposed towards the movements, however, they have produced arguments in which technological utopianism determines the terms by which the political movements are understood. Many of these

terms of reference are drawn from Western forms of knowledge about technology and are characterized by technologically utopian trends rather than being informed by what can possibly be understood of the events themselves.

These lines of thought conceptualize technological utopianism, not as a fallacious approach, but, as a *reality* in and of itself. That is, technological utopianism would not actually be so effective in steering conversations, such as those analyzed in this work, were it not for the multiplicity of its formations, the heterogeneity of its forms, and the proliferation of its knowledge into various institutional discourses. In order to destabilize a constitutive form of discourse as that of technological utopianism, we have to stop treating it otherwise and put more efforts into registering its differences, accommodating its multiplicities, and analyzing its *mélanges*, while also not bracketing off a critical task.

To achieve these two objectives – (a) to depict technological utopianism as a plural form of knowledge and (b) to trace its ramifications in academic discussions of the interaction between technology and the movements in MENA – I treat the subject with a multi-dimensional approach. The first approach reflects on history, theories, and values of Western technological utopianism, and also the enmeshing of the cultural and the material in this fabric. Instead of offering yet another critical history of technology, stipulating capitalism as the heuristic tool to identify problems in discourse of technology (Beniger, 1986; Carey, 1989; Fisher 2010; Mosco, 2005), this study develops an account intended to reflect the ambivalent and manifold state of technological utopianism. Such an historical and plural way of looking at technology is in tune with post-structural and Foucauldian sensibilities and is intended as a means of commenting upon power forms mobilizing Western discourse of technology.

The historical and philosophical part of this dissertation understands technological utopianism as a discursive form, extending, more or less, from older utopias, but also assumes the same utopianism to have been continually channeled, adapted, and reproduced through different processes and institutional practices. Therefore, discourse of technology is understood as multi-layered, feeding off different discursive references: utopian philosophy (Mumford, 1922; Sargent, 2010; Segal, 1985; Sibley, 1973), religious aspirations (Carey, 1989; McLuhan, 1994; Spadaro, 2013), instrumental rationality (Baudrillard, 1981; Enzensberger, 2000; Feenberg, 1991; Sibley, 1972; Winner, 2001), scientific and biological orientations (Mattelart, 1996; Turner, 2010), political reasoning (Winner, 2001; Mumford, 1922), military developments (Kittler, 2010; Saco, 2002; Mumford, 1934), idealistic notions of *revolution* peculiar to the West (Marx, 2011; Arendt, 1977, Winner, 2001), a closed set of spatial designs (network [Castells, 2000; Dyer-Witheford, 1999; Foucault, 1977a; Mattelart, 1996] and public sphere [Arendt, 1977; Habermas, 1991; Saco, 2000]), and vast intellectual scholarship (Carey, 1989; Fukuyama, 1989; McLuhan, 1994; Mosco, 2005; Turner, 2010). These different orders of discourse get together, and interestingly, intersect and constitute this discourse.

Empirical and textual analysis follows the philosophical/historical route to technological utopianism. The textual analysis is mobilized in order to identify regularities and patterns characterizing the examined academic discussions on the Iranian and Arab movements. By caring for “the text”, this study identifies resources that can explain the semiotic workings of technological utopianism in respect to the examined academic discourse, makes visible the link between technological utopianism and

academic discussions of the movements in MENA, and elucidates how these academic arguments produce particular forms of knowledge about the MENA movements. In addition to the philosophical and historical query into the West's relationship with technology and the unearthing of concepts such as *liberation* and *network* (to name a few), this study produces results based on a process of data selection, comparison, coding, and review.

In consideration of these two goals (the provision of a history, which recognizes different possible discursive levels and sites, and the implementation of a programmed textual analysis), I bring into conversation two traditions of discourse: the Foucauldian sense of power and history and CDA's linguistically orientated analysis. The analysis provided in this dissertation differs from CDA on the ontological level. That is, CDA receives its impulse mainly from Marxism, which privileges economic practices as determinants of practices in other fields, and it favors the sense of ideology in which activities are understood as actions towards fulfillment of economic interests (Bengtsson, 2011; Blommaert & Bulcaen, 2000; Curtis, 2014; Fairclough, 2013; Pennycook, 1994; O'Regan, 2006). Inasmuch as this dissertation posits power in different terms than those imposed by CDA, it is informed by CDA's approach to analysis, which is advantageous in providing methodological devices that can help detect power sites in processes of meaning-making. Fuelled by the perspectives of Foucault and CDA, as well as communication history and knowledge, this dissertation offers results that are reflexive and critical but also robust and rigorous. While the results, of course, are not equal to the types of claims made by natural scientists about their research findings, this dissertation does more than critique: it describes, classifies, and details the object of the study.

This dissertation finds that academic journal articles dealing with the interplay between communication and the Arab and Iranian movements, published in three major humanities and social science fields – (a) communication and media, (b) sociology, and (c) political science – between the onset of the protests and the time I was writing the analysis chapters in 2014, reproduced *technological utopianism*. This is evidenced, first, by the fact that the examined literature focuses on Egypt and Tunisia and less on other movements. The progressive notion of the revolution (the belief that a revolution is relatively short and should generate conditions superior to previous ones), in conjunction with the belief that technology is part of *progress*, has energized the notion that new communication technologies can revolutionize, make, enhance, or replace the path to democracy in the region of MENA. Technological utopianism is further indicated by the circularity range of technologically utopian models in the sampled data. Nearly 86% of selected articles rely on what is characterized as utopian models of technology: “transcendence”, “network/tool”, “public sphere”, and “dystopianism”. The other models – “corporeality” and “criticalness” – occupy much less space.

One might wonder how technological utopianism came to dominate academic understandings of communication technology in the political landscape of MENA while leading scholars in Western intellectuality – James Carey (1989), Vincent Mosco (2005), Michel Foucault (1977a), and Friedrich Kittler (2010) – have resisted the formation of technological utopianism or formulated theories roughly out of this domain. After all, Western academia has not left technological utopianism uncontested. However, an explanation for the dominance of technological utopianism exists in the research of this dissertation.

As discussed earlier in Chapters 1 and 2, two characteristics identify traditional narratives of utopia: an endeavor for ascendancy over time and history and preoccupation with distant spaces. The utopian place has usually existed at a distance of space: More's utopia is located in the mythical island of *Utopia*; Bacon's is situated in the island of Bensalem; and Campanella's, likewise, is discovered during the protagonist's voyages. Utopias have also represented new worlds that do not have much history. The physical distance of the MENA movements and the non-urgency to familiarize oneself with their history have created the perfect conditions for Western academic institutions to utopianize the role of technology in these movements. Thereupon, I argue that while utopianism is a staple of Western discourse of technology, it, likely, becomes more prominent when applied to non-Western places and events. So, when the movements transpired in distant territories, there has developed a desire in Western academic discourses to utopically associate these movements, seen as progressive, with new technological innovations rather than MENA's local and historical resources.

Within the analyzed literature, various models conceptualize, differently, society, power, time, space, and other communicative categories. The "transcendence" model formulates technology as capable of transcending the categories of space, time, and politics. The "tool/network" model is ruled by a conception of technology as neutral, often affiliated with the cybernetic grammar of thought and identified with a focus on pragmatic characteristics, such as efficacy and speed. The "public sphere" tends to highlight the space but it brushes aside the materiality of this space. The "corporeal" way of speaking uses the language of the body, presenting a less phantasmal direction. Some differences are reflected in style and linguistic structures. For example, the use of graphs

and technical layouts, as well as the transitive grammar structure, complies with the transcendental model's determinism.

Accompanying differences between the models is a somewhat noticeable variation between different academic genres in respect to technological utopianism. The second chapter of the analysis section, which examines commentary by Clay Shirky, Evgeny Morozov, Manuel Castells, and Marc Lynch, expands the scope of the academic sample, and traces possible changes in the migration of scholarly *ways of seeing* technology between academic and public genres. While the body of journal publications leans towards and values the seeming rationality, pragmatism, and objectivity of the network discursive framework over the emotiveness and insufficiency of intricacy in the transcendence model, academic arguments in public arenas, exemplified by Shirky and Morozov, reveal extreme versions of technological utopianism. I have not done a systematic study of public and pedagogic academic genres, and I hope that researchers can expand this work, systemize results about features of texts taken from other genres (from *non-research* texts), and compare them to the findings of this study. However, I see from what I have selected, that academics involved in popular platforms, such as YouTube, TED, and books intended for the public, adjust their ideas and arguments to styles and manners that are more appealing to the public, resulting in the use of simplified style, lack of uncertainty and ambivalence, shortage of theoretical grounding, and employment of promotional register.

However, this does not mean academics in the public realm discuss the subject of the MENA movements discreetly from academics in journal publications. The unity of the analyzed texts is shown because of the two levels of intertextuality. On one level of

intertextuality, academics cite each other. On the other level, intertextuality is relevant to meaning and form. The textual reading of the data shows dialectic between individual texts (or the production of an author) and the complex collective formation, which Fairclough names “discourse practice” (2013). Despite differences in genres and models, a set of discursive elements unites them. These elements provide the vocabulary and repertoire for technological utopianism. The following discusses these interconnected and connecting elements and elaborates on some implications of these elements’ diffusion in the examined discourse.

Discursive Characteristics and Implications

Informed by Foucault’s critique wherein he denaturalizes seemingly neutral knowledge and establishes that knowledge is inseparable from power (Foucault, 1971), this dissertation presupposes that knowledge about technology is indistinct from *power*. Forms of power consist in rationalities, normalizations, and codes of knowledge that shape Western discourse of technology. Such forms of knowledge are not easy to scrutinize simply because they are well-woven into the West’s culture and institutions. Categories such as “the network” and “the public sphere”, for example, are embedded in Western common sense, especially in the intellectual domain, of how reality and technology can be viewed. In Chapters 2 and 3 of this dissertation, I analyze discourse of technology as this kind of knowledge permeated by different kinds of powers. By taking into account different forces, I posit that adopting technological utopianism means to surrender to technology, an act Western academic institutions claim to be at least impartial, but also revolutionary, benevolent, and democratic. While articles and texts examined in this dissertation deal with MENA’s politics, they ironically proffer a vision

of MENA's politics adverse to politics since the MENA movements, in these texts, are embedded into the workings of technology (and not vice versa). These texts guarantee that new technology ameliorates, if not transforms, the social and political lives of MENA. This perpetuation of technological utopianism raises questions about the consequences of such discourse in today's MENA politics. Visible throughout the data is academics' attempts to establish the transcendental, neutral or democratic nature of technology away from technology's literary, military, religious and political ties.

In addition to different mechanisms of truth that internally mobilize Western discourse of technology, the context of technological utopianism in the case of the MENA movements amplifies such power relations. The colonial history and the current imperialistic relationship between the West and MENA add another layer of power to the examined academic discourse. Western academia's declaration that technology revolutionized, democratized, or assisted the MENA movements does not only entail forgetting about Western powers that have sustained discourse of technology, but it is also a call to deactivate MENA's indigenous/local knowledge and powers and replace them with the assumption that it is possible to go into better political conditions through the application of technology. Technological utopianism delimits the recognition of MENA's local politics and material actions and shifts attention away from complexities that inhere within Iran and the Arab countries. In producing a simplistic and reduced image of MENA, technological utopianism has, interestingly, re-inscribed discursive binaries between the West and MENA. It has re-entrenched stereotypes about the region: the corrupt and authoritarian MENA (which awoke from darkness thanks to new technology), the oppressed people, and the confined women. Hoping to narrate a

technologically utopian story about MENA, academics actually have articulated, more or less, simple pictures of MENA's political and social landscape.

By failing to do justice to the intricacies of MENA's political and social experiences, academics undermine MENA's local *agency*. The examined data demonstrates a consistent pattern that semiotically deprives people of agency, manifested by the employment of transitive structures (wherein technology takes the place of the subject), un-naming of protestors, and projection of movements as "leaderless". When academics assert the primacy of technology, what is at stake is the limited representation of MENA's people. Power, in examined texts, becomes located not in the hands of the people but is positioned in the distributed nodes of the digital network, the virtual sphere of cyberspace, and the transcendental power of new technology.

New technology, according to the logic of technological utopianism, creates also the perfect conditions for *equality*. MENA's people, who interacted with social media, are characterized in the examined academic discourse as equal nodes, or cosmopolitan communities. Their interactions among each other, presumably, dispense with the hierarchy of traditional non-virtual relations. Further, these people are usually identified as *young*, urban, and tech-savvy. This fetishism of harmony and youth, ironically, promotes a hierarchal vision of MENA's people since it downplays the efforts and work of different social groups. It legitimizes the efforts of the young (and male) and marginalizes the work of others – working class, women, etc. Technological utopianism, therefore, epistemologically, minimizes the embeddedness of political and social affairs in the examined movements.

Arguably, technological utopianism not only shapes views about technology, but also has become the hermeneutic tool with which the MENA movements have been understood. In the examined academic accounts, from Shirky, in the extreme, to more balanced accounts like Castells', the utopian sense of *new beginning* controls the conversation. Tied to the utopian sense of *revolution*, this utopian sense of technology hinders the production of exegetic frameworks that informatively evaluate the MENA movements and their interactions with technology. It generates stories with less human action and less history.

Interpretations that can efficiently record the MENA movements' development, on the other hand, require the replacement of reactive thinking and writing with critical and historical thought. They permit investigations that can explore, as an example, the anti-colonial revolutionary history of the Arab region preceding the late MENA movements. It was not a coincidence that one of the most repeated slogans of the Arab protests, "if, one day, people want to live, then fate has to surrender", was a line of a poem written by the Tunisian poet Abul-Qasim al-Shabbi amid anti-colonial struggle against the French colonization in the 1930s (Gana, 2013). Attempting to explore, recover, and re-activate memory, tradition, and history is to decipher the movements in MENA through the hermeneutics of local types of knowledge that form the region's political and social imaginary of itself, an imaginary that preceded and anticipated the political movements themselves. Such a manner of investigation generates interpretations of resistance as a conjunction of different discourses.

On the other hand, the historical de-rootedness of technological utopianism has had the impact of framing the region in the examined discourse as unpredictable, sudden,

and archaic. Technological utopianism also renders MENA's movements as actions caused (transcendence), accelerated (tool/network), mediated (public sphere), or averted (dystopianism) by new technology. It, thus, reads the movements' temporality through technology's temporal frames of reference. In the same manner, *materiality* diminishes because of the leverage of technological utopianism. Because of the influence of technological utopianism, many academic discussions reduce human bodies to information sources or nodes. As a consequence, we are encouraged to think about the MENA people in these intangible terms. This is evidenced by the ways academics, for example, missed the presence of Arab women in the street and bypassed Arab women's material interactions, rendering activist women as disembodied entities. Academic unrecognition of the materiality of the MENA moments and marginalization of the traditional experiences of space and body not only undermine the physical space and the human body but also underestimate the significant role of social spaces, organizations, and institutions in the development of the movements. Technological utopianism acknowledges a reality of minimum space and advances a notion of MENA's political movements as being disengaged with other social and political activities. It downplays the importance of examining a coalescence of spaces and activities that are needed to understand how the political movements happened. It collapses the complex and multilayered landscape of MENA into a phantasmal space. While it closes off different spaces and horizons that have enabled the movements, technological utopianism places actions epistemologically in the technological space.

I wonder about what kinds of acts, policies, and actions can be engendered by reductive ways of seeing the region of MENA wherein indigenous forms of knowledge

are marginalized, protestors are homogenized and un-named, women are portrayed as active only in the halls of virtuality, and multiple social and material activities are disregarded. One can speculate that if academic discussions produce accounts of MENA with less human action and less history, then a chain of Western misinformed notions, policies, and actions will be reproduced.

I am worried as well that these discursive problems – diminishment of MENA's space and time and celebration of new technology at the expense of people's agency, power, and bodies – have not withered away with the presumed diminishment of the protests in MENA. Rather, they have formed a kind of a template that may guide incoming talks and discussions about future non-Western movements. Just this year, similar accounts of new technology accompanied Turkey's one-day coup and attributed the failure of the military coup to iPhone's FaceTime. The 2014 protests in Hong Kong were, similarly, covered with attention to Instagram. I have not closely followed academic reactions to these new movements, but I fear technological utopianism is not limited to the site of MENA and it will continue to guide academic articulations about the communicative component of movements occurring in non-Western sites.

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