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The Possibility For Peaceful, Global, Participatory Governance: A Political Evolution Enabled by the Internet and Manifested by Crowds

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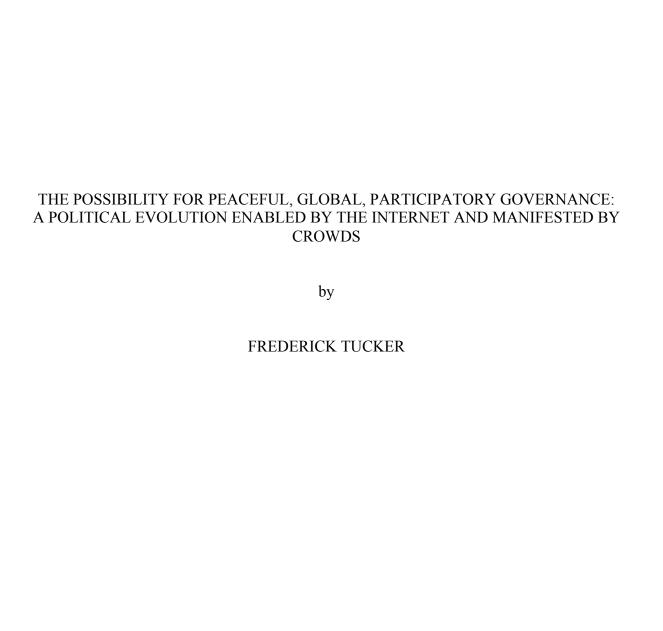
THE POSSIBILITY FOR PEACEFUL, GLOBAL, PARTICIPATORY GOVERNANCE:
A POLITICAL EVOLUTION ENABLED BY THE INTERNET AND MANIFESTED BY
CROWDS

by

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Abstract

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This paper argues that peaceful, global, participatory governance is possible in the 21st century

with the aid of the Internet and other forms of abundant, instantaneous, recorded communication

(AIRC). Such a polity, however, must replace militarized republics and autocracies to be

realized. No historical precedent exists for militarized governments to disband voluntarily. The

realization of peaceful, global, participatory governance depends on popular resistance in its

most potent, yet least militaristic form—political crowds. On the basis of professional and

independent research, analysis of primary and secondary sources, and participant observation,

this thesis details the historical development of AIRC, the political systems it enables, and its

potential to unite the scattered social movements that occasionally succeed in modifying and

overthrowing individual governments, but have heretofore been incapable of replacing them with

a single peaceful, participatory government, due to inadequate communication methods.

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Firstly, I wish to thank my parents for supporting me from day one. They taught me to love, to read, and to love reading. To Dylan, my younger brother, thank you for not getting your Master's Degree before me. I would additionally like to thank my older brother, Kevan, for making me not want to be an artist.

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Finally, I wish to thank my partner, best friend, and role model, Sharon Barbour, Esq., for emboldening me to achieve my greatest ambitions.

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INTRODUCTION

Thesis Statement

This thesis argues that inadequate communication methods have hindered widespread

egalitarian, democratic cooperation, leading to violent social conflict and oppressive governance.

Peaceful, global participatory governance, however, is now possible with the help of the Internet,

and other means of abundant, instantaneous, recorded communication (AIRC). Repressive

governments and ethnocentric, anti-democratic ideology nevertheless allow violence to endure

despite being counterproductive. There is no historical precedent for repressive governments to

voluntarily abdicate power, or for technological advances alone to alter political systems. There

is, however, a long-established tradition of mostly unarmed and unorganized citizens achieving

political goals by forming crowds that halt the machinations of repressive governments through

non-violent non-cooperation, occupation of strategic space, and tactical violence as a weapon of

last resort. The Internet enables resistance movements throughout the world to coordinate mass

action, and may facilitate the democratic, egalitarian governance necessary for avoiding future

violent conflict.

Definitions

AIRC

AIRC is an acronym for abundant, instantaneous, recorded communication, which

includes short-message-services (SMS), email, file-shares, and the World-Wide-Web. 21st

century communiqués travel tens of millions of times faster than they did a few hundred years

ago, and can be computed at approximately one quadrillionth the cost.[1] The development of

handheld AIRC devices—smartphones—has decentralized the means of communication, adding

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to the abundance of communiqués. Finally, humanity possesses the economic capacity—yet not the political will—to provide AIRC to everyone, everywhere, at any time. The establishment of 'everybody-to-everybody' communication would enable equal access to political discourse, and equal voting capabilities regarding all public decisions.

Power

Power is people's potential and kinetic transformation of their surroundings. Power is conducted by individuals and enhanced quantitatively and qualitatively through cooperation. 'Repression' occurs when people treat others not as cooperators, but as things to be transformed, killed, or displaced. The superior power of cooperation makes repression most productive when used not to kill and physically manipulate others' limbs, but to coerce others into using their power in a prescribed manner, a cooperative dynamic known as 'exploitation.' Exploitative cooperation can additionally be achieved absent the threat of violence, through cultural and intellectual persuasion—often referred to as 'hegemony.'[2] The synthesis of repressive, exploitative, and hegemonic power will be referred to as 'oppressive power.'

Autocracy + Democracy = Republic

'Autocracy' will refer to political systems in which oppressive power is concentrated in one person or organization. Examples of autocracies in this paper include the French, Iranian, and Nepali monarchies, the domestic Egyptian and Nicaraguan military dictatorships, and foreign occupations. 'Democracy' will refer to the peaceful, timely resolution of social conflict through collective planning, equal voting power, and cooperation by the ideological minority according to the terms voted on by the majority.

Abstractly, 'republics' are political systems in which enfranchised individuals democratically vote for representatives who democratically vote amongst themselves on issues,

or on additional layers of representation. All 'representative' political parties will be referred to as 'republican' parties, including the U.S. Democrats and Republicans, the Bolsheviks, the Indian National Congress, the Muslim Brotherhood, and the Nepali Maoists. Historically, all republics have been complex autocratic-democratic hybrids formed by the struggle between autocratic and democratic social movements. Thus, each republic falls somewhere on the spectrum between autocracy and democracy. Republics on the democratic end of the spectrum— such as those in England, Germany, Turkey, India, and Japan—are typically ruled by parliaments made up of democratically elected parties that legislate exclusively, yet democratically, and form majoritarian coalitions to control their nations' militaries. Republics that are somewhat more autocratic—such as the U.S., France, Russia, and most of Latin America—have presidents that operate autocratically within the confines of the executive branch, but who nonetheless are democratically elected by the populace, and are held in check by other, more democratic branches of government. Governments like Iran's and China's, finally, push the limits of what can be called a 'republic,' and what must be termed an 'autocracy.'

Daily life even in highly democratic-republics remains largely private.[3] Privately owned businesses are held in check by republican laws, but are governed by individuals or groups of owners who may vote amongst themselves, but nevertheless are not voted into ownership and wield significant autocratic powers over their employees. Private homes may likewise be held in check by republican laws, but are usually ruled autocratically by patriarchs, adults, and other intra-family power dynamics. Deaths attributable to work exceeded all violent deaths in 2002.[4] Domestic violence is so private as to be hard to calculate, though effects upwards of half of women and children.[5] Given the autocracy of private affairs, comparing the autocratic-

democratic dialectic of overall societies—such as China and the U.S.—is more complex than merely comparing their public sectors.

Crowds

Crowds may form to achieve political goals, or to participate in religious, music, and sporting festivals. Crowds differ from other human aggregates—such as traffic—by coordinating mass actions, such as chanting, or committing mass arson. This thesis, however, is concerned only with political crowds in the context of their opposition to repressive governments that serve and protect oppressive social hierarchies. Crowds, nevertheless, may enforce established social hierarchies, such as during the U.S.' Red Summer of 1919, or the 2002 massacre of Gujarati Muslims.[6]

Literature Review

The End of History?[7]

Academics of various disciplines dissected mass movements throughout the 20th century. James C. Davies and Charles Tilly documented the economic, political, and repressive conditions that typically led to mass mobilizations.[8] Frances Fox Piven and Misagh Parsa explored the social processes that typically resulted in widespread and sustained mobilizations.[9] Ervand Abrahamian and Barbara Ehrenreich revealed the playful, yet militant nature of crowds.[10] Mancur Olson and James A. Morone explained some of the social dynamics that have limited the power of mass movements, and have allowed the reestablishment of exclusive, oppressive polities.[11] Most of these scholars seem to disagree with Francis Fukuyama, who claimed after the fall of the Berlin Wall: "the triumph of the West, of the Western *idea*, is evident first of all in the total exhaustion of viable systematic alternatives to Western liberalism."[12] His assertion,

however, is not contradicted by their research, which suggests that mass movements have regularly overthrown autocracies, and have dramatically altered social hierarchies within republics, but have been unable to create fair, democratic polities that rely on mass, direct participation.

Studies regarding the political impact of AIRC have been largely limited to local and regional social movements, and their ability to overthrow autocrats and modify republics. The result is that these studies exaggerate the power of the Internet to impact local politics, while overlooking the Internet's transformative global impact. Authors like Clay Shirky, Nahed Eltantawy, and Gilad Lotan have explored 21st century political activism against autocratic governments, focusing on the extent to which hardware and software was used to mobilize crowds in Belarus, Tunisia, and Egypt.[13] Any causal claim they make is vulnerable to refute by the existence of all pre-Internet revolutions, or the fact that the crowd in Egypt grew considerably after the Internet was almost completely shut down on the night of Jan 24.[14] Authors such as Harry Bouwman, Paul H.A. Frissen, and John Taylor, meanwhile, detail AIRC's ability to improve republican governance, whether by informing the public, enabling this public to communicate better with its representatives, or by digitizing government services.[15] This research suggests that crowds can overthrow autocracies and modify republics, and that the Internet can make both crowds and republics better and faster. Fukuyama's assertion that there is no viable alternative to Western liberalism, meanwhile, remains intact.

(Non) Viable (Non) Alternatives

Social theorists Michael Albert, Erik Olin Wright, and Frissen have each posed alternative societies that are more democratic and egalitarian than our own, and contain elements of Karl Marx's maxim—people working according to their abilities, and consuming according to

their needs.[16] Nevertheless, none of these alternatives involve global, participatory democracy or global resource sharing, thus requiring republican solutions—or no solutions in Frissen's case—to global conflict. These alternatives do not de-commodify labor or consumer goods, but instead maintain 'socially necessary labor' as the basis for valuing goods, and private property as the basis for determining who has access to which consumer goods, thus valuing people.[17] Frissen and Albert, moreover, do not sufficiently address how people today can challenge the power of militarized republics. Ultimately, each hypothetical is either not an alternative to contemporary society, or is not a viable alternative.

In *Public Administration in Cyberspace* (1998) Frissen "develop[s a] new theory of anarchism," based not on a "pyramid[,] but an archipelago of contested and fragmented meanings and institutions."[18] Rightfully noting that enhanced communication techniques have dwindled the managerial class, Frissen sees this as an opportunity not to enable everyone to participate in management, but to free humanity from management.[19] Dismissing pluralist democracy as the "science… of control and problem solving," Frissen advocates "a 'cool' way of doing science: no ideals, no convictions, no beliefs."[20] Whether or not his system is economically viable, or could resist organized, militarized societies of millions, his insistence that AIRC enables this form of anarchism is contradicted by history. "An archipelago of contested… institutions" accurately describes the pre-AIRC world of sovereign, competing bands, clans, tribes, nations, and corporations, as well as the world today.

In *Parecon* (2003), Michael Albert imagines an alternate society that attempts to empower workers by substituting capital markets with entitlements and earned privileges.[21] *Parecon*—a portmanteau meaning 'participatory economics'—advocates replacing autocratic and republican capitalist production with a similar, unaccountable archipelago of democratic but

exclusionary workers' councils.[22] Consumption in *Parecon* is based on a minimum standard of living decided by a series of increasingly exclusionary, republican residential councils that begin at the neighborhood level, advance to the ward level, and reach their apex at the county level.[23] Such parochial bureaucracy may have been necessary for pre-internet societies, but is no longer necessary.

Albert, moreover, idealizes labor, rightfully distrusts people to voluntarily work according to his standards, and reintroduces labor and consumer markets to solve these problems. Albert proposes that people be coerced into working harder than they would like to by rewarding overproduction with increased consumption privileges and "social recognition," reminiscent of the Pavilions for Declaring Goodness in Ming Dynasty China.[24] Rather than a capitalist labor market, each workers' council would be required to quantify the 'natural' difficultly of every task, as well as each individual's 'natural' capability to complete each task. By factoring together difficultly, capability, and individually-necessary-labor-time—which would require multiple people to monitor everything everybody does—workers' councils could calculate 'effort,' and reward it with consumption rights above and beyond republican derived entitlements. Albert does not attempt to similarly alter consumer goods markets, perhaps recognizing that capitalist markets are—if nothing else—efficient enough to facilitate everyday consumption. According to historian Roy Mottahedeh:

> Information about prices is… the quickening breath that sustains the life of the bazaar, and the mechanism by which these prices adjust to new information on supply and demand is so refined as to seem almost divine. "God sets prices," according to a saying ascribed to the Prophet Mohammed, and most medieval Islamic jurists agreed than an unseen hand that operated with such efficiency must be the hand of God.[25]

Parecon, ultimately, is a federal republic dominated by Protestant-work-ethic fueled worker-bureaucrats whose every move is watched and judged by omnipresent workers' councils. Such a

society is not only impractical, but contains enough local and personal advantages, and potentially unresolvable social conflicts to drive the privileged toward the restoration of private ownership and capital markets. Rewarding overproduction with overconsumption, moreover, is a sure recipe for environmental disaster.

In *Envisioning Real Utopias*, Erik Olin Wright identifies several local experiments in participatory democracy and egalitarian consumption—including Participatory Budgeting (PB), which I will discuss at length in Chapter 1—and addresses several short- and long-term strategies that such movements can use to challenge the authority of repressive governments.[26] Wright suggests each experiment and strategy might play a role in "subordinat[ing] the state to civil society" and creating "participatory socialism."[27] Each of Wright's economic solutions, however, is market-based, including "labor-controlled solidarity funds," "unconditional basic income," and workers' collectives such as the Mondragón Cooperative Corporation.[28] His model democracies are exclusionary rather than global, and while participatory on a local level, require representation and supervision of representatives beyond that.[29] Wright identifies Wikipedia as a "technology-mediated… voluntary association," but does not suggest that such a network-produced global project has only recently been made possible by AIRC, and that AIRC can similarly enable a global polity in which anybody can take part in any social decision, rather than relying on representatives.[30] Wright is admittedly critical of his own propositions, but suggests that the totality of these myriad arguments makes up for a single, viable alternative to capitalism and republican democracy. Wright, like Frissen and Albert, ultimately imagines a federated, republican 'archipelago' of sovereigns not particularly different from the national and international republics, autocracies, and corporations that hold power in today's society.

Methodology

By synthesizing and building upon the aforementioned works, I will argue that the Internet has the capability to enable global resistance to capitalism, autocracy, and republicanism, and the power to facilitate peaceful, global, participatory governance. I will additionally delineate the social processes needed for such a political evolution. This thesis will blend the disciplines of history, sociology, and political science to analyze past and present societies, and extrapolate an immediately feasible, but as yet unrealized alternative. Using the method described by Charles Tilly in *Historical Sociology*, contemporary and historical social structures and processes will be examined alongside one another to chart the political development of human society.[31] Unlike Tilly's quantitative analysis of every documented rebellion, my focus will be on 'revolutionary' crowds that have succeeded in either overthrowing or radically altering social hierarchies and political systems, thus making this thesis more 'historical political science.'

The link between communication, governance, and oppression will guide Chapter 1, which will chart the evolution of communications technology and analyze the political systems that are suited to each form of communication, including the Iroquois Confederacy, the United States of America, and the Soviet Union. Chapter 1 will include a case study of New York City's Participatory Budgeting process (NYC-PB), examining whether it is viable alternative to republican democracy, and how it can utilize 21st century communications technology to foment widespread participation. Chapter 1 will finally include a description of how global labor and consumption could be carried out and managed voluntary, and social conflict resolved through global negotiation and democracy.

Chapter 2 will detail why the evolution of communications technology enables—but does not necessitate—the evolution of political systems. Social, political, and cultural factors will explain why oppression endures in the 21st century despite being unnecessary and counterproductive. Chapter 2 will recognize all forms of oppressive power—including class, gender, nationality, race, age, ability—but will deal primarily with interpersonal power in its most concentrated, potent, and widespread contemporary forms: militaristic governments versus political crowds. Chapter 2 will discuss the social processes that have enabled crowds to manifest, and temporarily overcome oppressive power, but that have thus far enabled new oppressive polities to arise, or old ones to resurrect. The primary focus of this chapter will be the role of the crowd in what I will call the 'Global Rebellion of 2010-3'—encompassing the Arab Spring revolutions and Occupy rebellions, among others. I will additionally draw upon various commonalities between historical crowd-enabled revolutions, including the French, Russian, Indian, Egyptian (1952), Iranian, and Nepali revolutions. Finally, putting into practice the more abstract theories devised in Chapter 1, I will examine the power and limitations of AIRC on the mobilization and machinations of contemporary crowds, and the role that AIRC-enabled crowds might play in bringing about peaceful, global, participatory governance.

In the Conclusion, I will explore a few of today's globally recognized problems, including corporate consolidation and malfeasance, the NSA spying program, environmental destruction, and the threat of nuclear war. Using the methodology established in Chapters 1 & 2, I will explain the dynamic process whereby anti-democratic, anti-egalitarian institutions simultaneously develop the technical and social infrastructure required for peaceful, global, participatory governance, while repressing social movements that aim to achieve such a state. I will additionally examine how these global conflicts—and the real possibility of human

extinction—may deepen existing oppression or prompt the global solidarity needed to manifest a global revolution that perhaps may bring about peaceful, global, participatory governance.

This thesis will survey a variety of print and digital first and second hand sources, including academic papers, news media, court records, and websites. I will additionally draw upon my personal experience as a researcher, journalist, community organizer, and participant-observer in political parties, crowds, and democratic experiments. Chapter 1's analysis of NYC-PB derives from two years of participant observation, as well as research I conducted as an intern at the Urban Justice Center's Community Development Project (CDP).[32] References to the 2006 Nepali revolution originate in part from research I conducted in Kathmandu, Gorkha, and Rolpa, the results of which have been published previously under the name Fritz Tucker.[33] Chapter 2's discussion of Occupy Wall Street includes participant observation previously chronicled in the *Indian Journal of Politics and International Relations*, Manhattan's weekly print newspaper *Our Town Downtown*, and a variety of digital media.[34] Knowledge regarding the Working Families Party (WFP)'s role in Occupy Wall Street stems from unpublished accounts of my experience as a WFP employee from 2011-2.

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CHAPTER 1: THE EVOLUTIONARY POTENTIAL OF THE INTERNET

Chart A: Historical Governing Potential

Era	200,000-5,000 B.C.	5,000 B.C.-1800 C.E.	1800-1900 C.E.	1900-1975 C.E.	1975 C.E.-Present
Form of Communiqué	Oral	Writing/Drawing	Audio-Visual Records		
Transmission (Speed)	Human (3-10 Mph)	Horse, Sailboat (8-25 Mph)	Railroad, Steamboat (6-100 Mph)	Telegraph, Radio (Speed of light)	Satellite (Speed of light)
Production & Storage Capacity	Brain	Scribe	Printing Press	Film, Record	Computer
Political System	Local Tribe	Regional Monarchy	National Republic	International Republic	Global Democracy

Chart A divides history into five eras, which represent timeframes, not deadlines. The corresponding forms of communication, transmission, etc. are not universal, but rather the predominant ones used by the dominant societies of each era. It was only during the last century that the majority of humans became literate.[35] Literacy, however, has never guaranteed regular access to literature. Today, nearly a third of humanity has regular access to a library—the Web— that contains more written and recorded information than any other ever.[36] Universal literacy and instant access to all human records are no longer prevented by technical or productive limitations, but by social conflict.

Slow, Oral Communication

Language Barriers

Social conflict is more likely when communication is absent or ineffective.[37] Governance, meanwhile, is impossible without communication. The prevalence of violence throughout human history is logical, given that groups were physically incapable of regular communication beyond a few dozen miles, and were not necessarily capable of linguistic communication with their neighbors. A group incapable of communicating with its neighbors might maximize its power to transform its surroundings and cooperate with others by killing or

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displacing these neighbors and settling their land with members of its own linguistic community. Separated by enough space, even groups that are linguistically capable of communication cannot constantly negotiate peaceful solutions to quotidian quarrels, and thus might erroneously—or even rationally—resort to violence.

Oral communication is well adapted for solving conflict that arises between groups of 10-100 people in direct proximity to each other. Regional linguistic communities that wish to obtain more territory and cooperative power—but which depend on slow, oral communication—must find ways to govern without everybody-to-everybody communication. In the absence of instantaneous communication, rapid transit, and densely urbanized space, the five Iroquois nations could not organize direct negation between a few thousand people confined to Upstate New York.[38] Representatives of these nations instead convened occasionally in a central location: Onondaga.[39] The Constitution of the Iroquois Confederacy—which helped inspire the federal government of the United States—mandated that conflict be settled through dialog between the 50 Iroquois chiefs.[40] Even with 50 people, dialogic conflict resolution may have proved too difficult. The 50 Iroquois chiefs were split into bicameral discussion groups, both of which required unanimity.[41] Their political system could thus be called a federal, republican dialogracy.

The Practical Limitations of Hearsay

Oral communication typically requires human relays through space and time that rely on the health of each individual and his or her ability to remember and transmit the entire communiqué. Some lengthy oral communiqués—such as the Iroquois Constitution, the Rigveda, the Odyssey, and the Qur'an—may have been transmitted verbatim for many generations. Individuals have also run marathons to deliver important communiqués. Even so, the longer each

communiqué and the more people involved in its communication, the more opportunity there is for error. Court transcripts of the Salem Witch Trials exemplify this imprecision. On 29 August 1692, Mary Barker testified that Goody Johnson had turned her into a witch, a claim that could have ended in Johnson's death.[42] Even a high-stakes, legally binding communiqué such as Baker's does not seem to have been intended to be a verbatim account of the event. Justice John Higgenson's court transcript, likewise, was his interpretation of the testimony, not a literal transcription. Hearsay, thus, is not particularly reliable at best, and can just as easily be entirely fictional.

Slow, oral hearsay, while not ideal, may facilitate participatory governance among scores of people—like villages or workplaces—and republican governance among thousands: such as the Iroquois Confederacy, or Occupy Wall Street's Spokes Council.[43] History, however, provides no precedent for a densely populated urban society dependent on food importation being able to coordinate the vital, daily transaction of goods and services without precise, abstract, alienable, and transmittable information. Most urban societies have used numbers, calendars, currencies, and at least pictographs to represent basic foods and social relations. Even a system of abstraction and alienation as seemingly simple as *quipu*—the Andean communication method using colored, knotted cords—was complex enough to facilitate a society of millions, a task that could not have been completed by memory.[44]

Production and Storage of Oral Communiqués

Different communication methods affect the scope of governance, as well as its form. In a community dependent on unrecorded, oral communication, harmony relies on speakers taking turns.[45] In *Here Comes Everybody: The Power of Organizing Without Organizations* (2008), Clay Shirky labels such communication "one-to-one" and "one-to-many."[46] Instantaneous,

unrecorded communication—typified by radio and television—enables 'one-to-everybody' communication, and parallel governing structures. Abundant, instantaneous, recorded communication (AIRC) permits 'everybody-to-everybody' communication. The Internet has created the capacity—though not the reality—for everybody to compose abundant public communiqués that can be accessed by everybody, anytime, anywhere. Any political system—real or imagined—that does not take advantage of this equalizing capability is archaic.

Written Communication

The Physical Properties of Writing

Writing—like oral communication—requires transmission via humans, aside from the occasional use of independent carrier-birds. Between the harnessing of wind and horsepower and the advent of steam power, the most powerful chiefs, emperors, and presidents could only regularly send long-distance communiqués at approximately 25 Mph. The fastest methods of delivering communiqués, coincidentally, were the most powerful weapons—ships and horses. It should not be surprising then, given the speed and form of delivery, that imperial communication networks were geographically similar to wealth-redistribution networks. Raw and labored-upon materials were mostly sent in the opposite direction of communiqués, from oppressed to oppressor—though sent back to the oppressed if needed to quell rebellion.[47]

Literature allows ideas to be stored indefinitely. Unlike audio-visual recordings, writing does not allow consumers to re-experience the past, but rather access each author's interpretations of history—and occasionally an author's purposefully misleading falsehoods.[i] Accurate or not, written information was only as good as the paper it was printed on. Widespread

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[i] For an example of literature that blends truth with artistically and politically motivated falsehood, see: Heller, J., (1988). *Picture This*. Putnam: New York.

use of literature necessitates regular transcription by a class of literati, who must keep old texts up to date with contemporary literary traditions and the ever-evolving vocabulary and grammatical structures of the spoken word.[48] Even so, millions of ideas and labor-hours have been carelessly and purposely destroyed, a fate met by much early Islamic literature.[49] Had it not been for the timely death of Ögödei Khan, and had the Mongolian power structure not required a face-to-face meeting in Mongolia to decide his successor, much mediaeval European literature could have easily met a similar fate.[50]

<center>*The Political Ramifications of Writing*</center>

Precise, alienable communiqués technically enabled global governance. The scope and quality of historical governments, however, were limited by transmission speeds, and production and storage capabilities. Written communiqués that require days or years for transmission cannot replace face-to-face dialog for negotiating resolutions to all social conflicts in a timely manner. If a third person joins an equal dialog, everybody involved can only speak a third (1/3) of the time. Each new person who joins a dialog adds one integer to the denominator (1/X), increasing communication difficulties, though on a decelerating J-curve. Written communication, on the other hand, increases in complexity both quantitatively and qualitatively with each new addition to the communication group. All 50 Iroquois chiefs participating in the Grand Council in Onondaga could have transmitted nearly a half-hour's worth of communiqués to every other chief in 24 hours. Had the Iroquois chiefs stayed home and written each other—and had they all lived exactly one day away from each other—each communiqué would have required 49 pieces of writing, and 98 labor-days for delivery and return. One round-robin would have taken over three months, and would have required over 13 labor-years, not including the labor involved in composing the 2,450 communiqués from natural resources. Each additional person who joined

this writing group would have increased the amount of labor and resources by additional factorials, represented by an increasing J-curve. Negotiation among equals in a society of millions was just as impossible with slow, written communication as it was with slow, oral communication. If societies were to maximize their cooperative power, however, they would need to continually incorporate more people who they could not regularly negotiate with, a process that has historically relied in part on writing, and with it a different purpose to communication. Regional, national, and international societies have typically been governed through one-to-many communications by dictators—in the literal sense of the word—who command rather than negotiate with their subjects. The Iroquois nations could have adopted a political system based on writing, but would have had to abandon their federal, republican dialogracy in favor of a political systems based on one-to-many communication, such as monarchy.

Writing's labor-intensive production and storage processes favor centralized power and class variation. Only societies able to harness enormous amounts of raw materials and skilled labor could regularly communicate highly reliable information over long distances. Centralization of skilled labor, the means of production, and storage facilities—libraries—is unjust, but economical. Literacy, moreover, does not come as naturally as linguistic skills. Insofar as select occupations and navigation of public space does not require literacy, there are economic benefits to a society that does not train everybody to be literate. Counter-intuitively, those at the apex of power structures who can harness the labor of others are often illiterate as well. That Jesus and Muhammad were likely illiterate, and that Senator John McCain calls himself "computer illiterate," suggests not that these powerful men have lacked intelligence, but that privilege has allowed—and political structures have demanded—that they devote all their

time to the most important, effective social task—talking and listening—while others do everything else for them.[51] The economic benefits to centralization and class variation, however, do not explain why Brahmin, Chinese bureaucrats, the Catholic Church, White-American slave-owners, and men across the globe have gone out of their way to suppress literacy and access to literature among opposing castes, classes, races, and genders.[52] Repression and monopolization are economically counterproductive, but do produce and maintain oppressive privilege. Urbanization and regional governance, however, necessitated writing, and with it the likelihood of social stratification.

Railroads, Records, and Republics

From History to Record

Compared to the technological progress of the previous few thousand years, communication methods changed rapidly during the 19th century. Photo- and phonographs allowed audio-visuals to be recorded, alienated, and viscerally re-experience by consumers, rather than approximated through descriptions and renderings. Recorded facial and gestural communiqués provoked emotion in consumers more efficiently, reliably, and cross-culturally than did written words. As with literature, oppressors have developed and utilized audio-visual technology while suppressing its use by those they oppress. After Bay Area Rapid Transit (BART) authorities publicly shot and killed an unarmed, prone Oscar Grant, BART spokesperson Linton Johnson said the widespread online availability of three videos capturing the incident from separate angles did "a disservice to the integrity of the investigation because people form opinions, and then they can't give independent recollections of what they actually saw because they are tainted by the videos."[53] Nevertheless, audio-visual evidence changed the

way ordinary people analyze the veracity of claims. In *Islamic Historiography* (2003), Chase Robinson writes "whereas written history *can* be made to conform closely to the imperative of the present, oral history *always* conforms to it."[54] Whether or not this is true, people today are as skeptical toward anything not caught on tape as last millennium's historians and anthropologists were toward oral tradition.

<div align="center">

An Industrial—Not a Communication—Revolution

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The most notable technological development of the 19th century was the development of the steam engine. Electric communications technology had been invented, but was not streamlined until the 20th century. The steam engine increased transportation speed by a power of ten and production capacity by hundreds of times—quantified in terms of the power of typical horses.[55] This industrialization enabled a demographic shift on par with that caused by the domestication of plants and animals. Centralized, steam-powered factories provided jobs in cities for former peasants, who were brought to the cities more efficiently and fed with imported food, all due to the power of steam. Printing presses made tens of thousands of copies an hour, requiring over a billion pounds of paper to be produced in the U.K. in 1900.[56] Literacy and literature flourished, allowing more voices than ever to join public discourse. Newfound opportunities for oral communication impacted all urbanites, not just the growing literate minority. A 19th century urbanite's daily opportunity for oral communication extended to populations that would have required decades of travel throughout villages to match.

These epochal changes in industry, however, left unchanged the one-to-many nature of human communication. Precise communication still necessitated human transportation, albeit mechanized and at speeds closer to 100 Mph. Communiqués could not be produced, stored, and transmitted in a manner that allowed everyone to regularly negotiate resolutions to social conflict

with everybody else. The most advanced communication techniques, moreover, still relied on increasingly complex, centralized production processes that could be monopolized by elites.

Crowds: Auxiliary Forces

The most dramatic effect of mass urbanization was the ever-larger crowds it facilitated and the impact this had on political systems. Armed only with primitive weapons and facing increasingly powerful firearms, it was citizens' solidarity that gave them a more potent short-range weapon than anything possessed by professional militaries. At the forefront of this battle was the Parisian crowd, which overthrew the French government in 1789, 1795, 1830, 1848, and 1871.[57] Individual cities captured by crowds, however, could be laid siege to by cannon. Revolutionary, urban crowds were not equipped or organized to chase professional armies through forests, mountains, deserts, and swamps. 19th century crowds could also not count on simultaneous, intra- and international rebellions such as exist in today's globalized society. To compete with urban crowds, political capitals—such as Versailles, Washington D.C., Albany, and Calcutta—once the foci of urbanity, were removed from major population centers, which themselves were redeveloped to incorporate long, broad avenues suitable for shooting cannon into the midst of crowds.[58] Ordinary citizens, nevertheless, were able to hold their governments accountable like never before.

What 19th century crowds could not do was govern. Despite the often egalitarian, democratic attitudes of revolutionaries, post-revolution polities were only as democratic and egalitarian as communications technology, social processes, and cultural factors allowed them to be. Unable to accommodate the direct, dialogic, and democratic participation of everybody who participated in the revolution, post-revolution polities were typically dominated by well-organized elites. Crowds, moreover, do not necessarily mobilize or succeed in achieving political

demands just because conditions haven't changed, or have gotten worse. This is especially true if new leaders are popularly perceived as revolutionary icons. This process—rule by an exclusive elite, overthrow by an energetic majority, rule by a different exclusive elite—has aptly been described as 'revolutionary,' a word that may or may not imply forward progress, but definitely implies a return to something resembling the original state of affairs.

The Rise of Republics

Industrialization enabled republican governance by facilitating the growth of densely populated urban areas and faster travel between rural ones, allowing for occasional—but not constant—elections. Political evolutions from autocracy to republic were forced upon autocrats by urban mobilizations in every case, from the U.S. and France, to Iran and Nepal. Even then, various social groups often had to fight for suffrage one by one. When the U.S. republic was founded, only propertied, White men were allowed to vote for and become representatives. Poor White men, then Black men, then all women, then Black Southerners again had to fight deadly battles for the right to vote—not on issues, but to elect people who would ostensibly represent them.[59] Voter suppression, nevertheless, remains rampant in the 21st century U.S.[60]

Republican governance is a pragmatic solution to the historical dilemma of slow, limited, unrecorded communication. Republics aren't ideal for autocrats, who typically try to compromise democratic processes, or move as many social interactions as possible out of the democratic arena and into the private. Republics aren't ideal for democrats either, who prefer direct participation. In the 19th century, however, direct participation was unachievable on a global, national, and even regional scale. Thus, democrats had to either accept non-ideal levels of participation in ever-expanding republican polities, or hearken back to more participatory, local

societies that could never contend with the cooperative—albeit oppressive—power of national republics.

Light-Speed Communication

(Non) Physical Properties

In the 20th century, streamlined manipulation of electromagnetic waves essentially negated space and time for earthbound communiqués, turning the entire world into a giant village. Electrical telegraphs and radios enabled communiqués to be alienated not only from their creators, but from all human accompaniment. Conference calls enabled group discussion resembling the Iroquois' Grand Council without requiring travel time, but without the benefit of visual cues. Enhanced communication speed enabled one-to-everybody communication, but did not solve key problems regarding production, storage, and consumption, and thus did not enable everybody-to-everybody communication the way computers would by the end of the century. Until then, instantaneous radio and telegraphic communication was a return to oral communication, and all the problems associated with it. Global, participatory governance remained confined to science-fiction novels, such as Alexander Bogdanov's Martian communist colony in *Red Star* (1908).[61]

Light-Speed Demagoguery and Subversive Radio

The increased speed and scope of communication primarily benefitted those who owned the means of communication production. It allowed some of the 20th century's most influential nationalists—including Hitler, Roosevelt, Nasr, and Castro—to speak directly to practically all of their subjects, and to their extra-national sympathizers.[62] Television added faces and gestures to communiqués, strengthening this one-way bond between producers and consumers.

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Consumers could influence production by choosing whether or not to listen, and what to listen to.[63] Producers, therefore, competed with one another by tailoring content to consumers' tastes, and by monitoring who was consuming what, when, where, and why.[64] By developing constant multimedia content and expanding service economies, governments and major media corporations enabled some consumers to live more sedentary and isolated lives than ever. On the other hand, mass ownership of and access to two-way communication devices—such as telephones—may not have enabled global, participatory governance, but did expand the scope of public discourse in unprecedented ways. Political activists took advantage of the power of instantaneous communication to propagate their ideas more widely than ever, and to mobilize crowds around the world.

The political importance of instantaneous communication can be seen in the targeting of telecommunications infrastructure during violent conflict—for purely military reasons, and in order to influence public perception. Revolutionary crowds in Iran and Egypt targeted telecommunications infrastructure, while Fidelista and Sandinista guerillas in Cuba and Nicaragua prioritized the capture of radio stations in order to try to mobilize urban crowds.[65] In 2011, Egyptian crowds torched the National Democratic Party's headquarters in Cairo, police stations throughout the nation, and looted the files of the secret police.[66] This was tolerated by the Egyptian military, which only intervened as the Cairene crowd surrounded the presidential palace and state television station.[67]

Global Republics

Shortly after streamlining instantaneous communication, people attempted global governance, the autocratic-republican-democratic dialectic of which was shaped by existing intra- and international power dynamics. The League of Nations (1919-1946), like the Iroquois

Confederacy, involved dozens of sovereign governments organizing collective action through consensus rather than democracy. Reliance on consensus allowed more powerful governments in the League of Nations to bully less powerful ones when intractable conflict arose. Western European governments insisted that ascension by Eastern European governments to the League be contingent on commitments to protect minority rights.[68] These same Western nations then blocked Japan's proposal that every member "commit itself to racial equality."[69] Protecting the rights of Eastern Europe's German minority became a major platform of the Weimar Republic, which later used this rhetoric to rationalize leaving the League and militarily manifest a 'Greater Germany.'[70] The United Nations (1945-present) constitutes over a hundred governments that purport to represent practically every territory and person on earth. These governments— autocracies and republics alike—ostensibly sacrifice some of their sovereignty to the U.N.'s republican processes. Nevertheless, the veto power of the world's five most powerful nations— the U.S., U.K., France, Russia, and China—ensures republican-democracy for some, trumped by the autocracy of an elite few.

In 1917, a republican workers' council—*soviet*—in St. Petersburg, Russia helped initiate the Bolshevik Revolution with the ultimate aim of creating an egalitarian society based on universal suffrage, workplace democracy, a global republic, and the abolition of private property.[71] The Bolsheviks developed chapters of their party in almost every nation, appealing particularly to academics and the most oppressed classes, races, genders, and nations.[72] The Bolshevik Revolution, nevertheless, achieved none of its major goals, all of which were either impossible or unlikely without AIRC. The lack of a global economy, ideology, and communication system all contributed to the absence of a global revolution, and thus the formation of a global republic. By the time the Union of Soviet Socialist Republics (USSR,

1922-1991) was founded, the *soviets* had been subdued by the central government. In 1920, Leon

Trotsky—the once democratically elected chairman of the St. Petersburg *soviet* turned general—

began subjecting disobedient workers to military discipline, including capital punishment.[73]

Money, private property, taxes, and wage labor were all reintroduced by 1922.[74] Finally, even

the geographically limited, bureaucrat-dominated Russian republic evolved, within a decade, into

one of the most autocratic non-monarchical governments in history.[ii]

The Internet would not have necessarily solved these problems, but would almost

certainly have made them more obvious to outside observers. Russia's geographic isolation, the

widespread murder of dissidents, government monopolization and manipulation of information,

and the human capacity for uninformed optimism contributed to the paucity of reliable

information about the Soviet Union.[75] Initial supporters of the Bolshevik Revolution—such as

John Reed, Emma Goldman, George Orwell, and Richard Wright—typically had to witness its

post-revolution polity first-hand to realize that it was not fulfilling the ideals of the revolution,

though not all of them left these encounters alive.[76] From 2008-9, while in Kathmandu, I

witnessed a similar phenomenon among supporters of Nepal's Maoists, who lauded the Maoists

from afar, only to become more nuanced after arriving in Kathmandu. Nevertheless, the

Bolshevik Revolution's experiments with local participatory democracy, resource sharing, and

its hopes for global, republican solidarity make it one of the most politically and intellectually

polarizing events to this day. Many advocates of democracy still believe in the Bolshevik

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[ii] Like all autocrats, however, Stalin did not have absolute power, nor was his leadership absolutely secure. A few days into Germany's invasion of Russia, the Politburo surprised Stalin at his dacha to request that he centralize more power into his own hands. As they arrived— knowing how badly he had mismanaged the war—Stalin "crumpled in his chair," assuming they were there to arrest him. This insecurity may help explain why Stalin had tens-of-thousands of his own officers executed during the war. See: Braithwaite, R., (2007). *Moscow 1941: A City and its People at War, (pgs. 82-3, 332).* Profile Books: London.

program, despite its technological basis—instantaneous, limited communication—having been transcended by the 1980s.

Abundant, Instantaneous, Recorded Communication

The Physical Properties of AIRC

Communication production, storage, and transmission costs have decreased exponentially over the last few decades, allowing for more communication than ever before, and necessitating the creation of a universal, digital language: binary code.[77] Humans of most linguistic communities now utilize convenient interfaces—such as keyboards and screens—to interact with computers that digitize and record audio, visual, and linguistic communiqués. Software responds in prescribed, algorithmic manners to this digital input, before translating its digital output back into easily understandable audio-visual communiqués.[78] The speed at which these computations take place make users feel that they are communicating directly with one another, even though each communiqué has been translated to and from a much longer script, and may have traveled thousands of miles from one computer to another.

Exponentially increasing production, storage, and transmission capacity has created increasingly smaller computers. Portable, handheld devices produce a variety of multi-media communiqués that can immediately be posted to the Web for anybody to consume, and which potentiate the consumption of any public information at any time, anywhere. Digital photography and sound technology have already transformed their respective fields. Academics, meanwhile, have benefitted immensely from the Web, which functions as a decentralized library with easily searchable information. Owners of information have found it increasingly difficult to maintain

monopolies on intellectual property, but nevertheless try to repress file-sharing and government and corporate whistleblowers.

<div align="center">*The Political Implications of AIRC*</div>

AIRC has the power to enable everybody-to-everybody communication for the first time in history. Unlike conference calls and other forms of one-to-many communication, chat-rooms and message boards enable all participants to simultaneously produce abundant written communiqués, which can later be located via search-engine and consumed at leisure. Before the Internet, labor costs made it infeasible for everybody to engage in dialogic, democratic resolutions to any social conflict anywhere. With AIRC, it costs more to exclude people than to simply allow everybody access to everything. Oppressive social structures, processes, and anti-democratic ideology—not technology—are what prevent peaceful, global, participatory governance from becoming a reality.

Mass accessibility to communication—and thus governance—potentiates a paradigmatic shift in people's participation in global decisions: from professional participation to voluntary. Currently, many impactful decisions are monopolized by those with power over others, and oftentimes are made by people uninterested in the issues at hand, who engage in intellectual labor merely to accumulate social and financial capital.[iii] There is no longer a technical reason

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[iii] In his autobiography, U.S. Secretary of Defense Robert Gates admits to have habitually worked on crossword puzzles to stay awake during NATO meetings that excluded diplomats of non NATO-member states and the public of NATO countries themselves. During one unnecessarily long NATO meeting in Bucharest in 2008, Gates, Secretary of State Condoleezza Rice, and President George W. Bush bargained with one another as to who could leave, and who had to stay to represent the U.S; this, despite the fact that thousands of peace activists would likely have voluntarily attended the meeting and perhaps have advocated for policies representative of a majority of U.S. citizens polled at the time—such as cutting national defense spending, and a quicker withdrawal of all U.S. troops from Iraq. See: Gates, R., (2014). *Duty: Memoires of a Secretary at War, (pg. 194).* Alfred A. Knopf: New York. Also:

for one's physical location or occupation to determine which decisions he or she engages in.
AIRC allows interest to be the determining factor in how individual's choose which of society's
billions of processes to engage in. Exclusionary, coercive, and parochial processes are
nevertheless endorsed by autocrats, republicans, and even those trying to advance democracy,
including residential and workers' cooperatives, participatory budgeting experiments, and social
theorists.[79]

In *Here Comes Everybody* (2008), Clay Shirky details how hierarchal organizations are
necessary to coordinate the actions of thousands of people who cannot all communicate with one
another effectively.[80] Slight reductions in coordinating costs allow for greater managerial
efficiency.[81] Massive reductions in coordinating costs, as is the case with AIRC, allow
everybody to communicate with everybody, thus making managerial oversight and hierarchy a
hindrance to communication.[82] Mass, networked, voluntarily produced projects such as
Wikipedia, Flickr, and Linux already exist. Each of these social projects involve more
collaboration than could possibly be managed by a professional class, or commissioned by an
owning class. Instead, people have voluntarily worked according to their abilities to
cooperatively solve commonly perceived needs. Such a volume of voluntary labor, moreover,
cannot be monetized without omnipresent monitoring. AIRC ultimately makes coerced,
monetized labor—like republican governance—a counterproductive practice upheld by
repression and hegemony. Peaceful, global, participatory governance has become not just
possible, or phenomenologically preferable, but potentially more efficient.

Gallup (2014). *Military and National Defense*; and Newport, F., Jones, J., & Carroll J., (14
August 2007). & "Gallup poll review: Key points about public opinion on Iraq," in *Gallup News
Service*. Retrieved on 3/9/14 from gallup.com.

Digital Democracy

Speculation about future technology and its ability to transform society is a worthy academic pursuit, practiced by people such as theoretical physicist Michio Kaku, who believes immortality and teleportation to be technologically feasibly in the near future.[83] Rather than speculating, however, I will limit myself to technology that currently exists and pose a hypothetical polity that is democratic, egalitarian, and in which labor is voluntary.

A hypothetical individual in an immediately realizable society could log onto the Internet from his or her home and access a global educational policy website. Having previously worked for the non-profit One Laptop Per Child, he or she believes each person should have a personal computer, and that classrooms for children should have accommodating workstations.[84] He or she searches the educational website's list of proposals, finds a trending one that fits his or her specifications—or creates one, if there are none—and votes for it. Browsing the education discussion board, our individual comes across a popular critique of the One Laptop Per Child proposal. The critique claims that providing everybody with a personal computer is a waste of resources and encourages anti-social behavior. The author proposes that adults should not lecture groups of 20-30 children, and that classrooms should be redesigned for interest-led group activity with minor adult supervision, according to the School in the Cloud educational method developed by Sugata Mitra.[85] This proposal is itself critiqued by a person claiming that he or she is the true follower of Sugata Mitra, whose initial Hole-in-the-Wall educational experiment should guide educational policy.[86] This person proposes that children be free-range, their whereabouts monitored only by electronic implants, and that computers be incorporated into all indoor and outdoor urban infrastructure for people to use at their leisure. Along with this proposal is a promotional video depicting what life might be like if 'all the children were as free

as the dolphins in the sea.' Our individual finds this third option anxiety inducing, so votes against it, writes a scathing comment, and votes for the first two options. He or she may check on the proposals at any time to see which one is winning, and change his or her vote accordingly. If any of the proposals he or she has voted for or against are modified by their original author, our individual will be alerted via his or her electronic profile, at which point our individual can modify his or her vote.

Without having to go anywhere, our individual has engaged in more direct, democratic processes than have most people alive today. This lack of movement is not due to laziness. Rather, only a system this accessible can enable constant participation among billions of people. Any political system requiring a few hours for each effort—or days between communiqués— could never enable so much cooperation between so many people. This digital democracy may not appeal to autocrats, or republicans who distrust people and believe they need to be managed. It should, however, appeal to all democrats, as well as all republicans who genuinely believe in representational democracy. By the Law of Large Numbers, the least representative system imaginable would be lots of people voting on one person to represent them. By the same law, the more numerous the voters for each issue, and the more widespread the voting pool, the more representative it is of the entire population. Global participatory democracy works insofar as people trust millions of strangers to make all the decisions they don't have time to help with.

Sharing

Every day, there are billions of quotidian social conflicts that simply require sharing, which can be determined digitally. Sharing is already deeply ingrained in most cultures, and would be even more so if society was organized around it. In *Society Against the State* (1987), anthropologist Pierre Clastres writes about his time with the Guayaki, a small, polyandrous

group of Amazonian hunter-gatherers. One of their ultimate taboos—which may make them physically sick if broken—is for a Guayaki man to eat the meat of an animal he has killed.[87] At the end of the day, each hunter distributes his kill to his family, but never eats the meat prepared by his—often shared—wife.[88] This culturally coerced interdependence helps the Guayaki preserve solidarity in the face of social conflict. AIRC allows society to coordinate such egalitarian sharing among billions of people.

Right now, a person can make a dinner reservation using the website/app OpenTable.[89] Each account—linked to an email address—can make one reservation per time slot. The time slots, however, are allocated on a first-come first-serve basis. The participating restaurants, meanwhile, require monetary payments for services. In a hypothetical non-market economy, insofar as there are people who voluntarily cook for and serve strangers—which there may or may not be—a person could make an online reservation at a free restaurant. If more than one person tried to make a reservation for the same time slot, rather than resolving this conflict on a monetary and first-come first-serve basis, a software program could award the reservation to the person who has not used that particular service in the longest. If there are multiple people for whom this applies, a random winner could be selected algorithmically and alerted immediately. With a system of deference and lotteries in place, people could bid on whatever they like and always be assured an objective, fair outcome.

This system of sharing could easily replace the consumer goods market, the real estate market, the labor market, etc. It would require some democratic decisions regarding various timeframes for various goods—like yearly reservations of domiciles, weekly job reservations, daily food reservations, and hourly restaurant and movie theatre reservations. Rather than a monetized market based on socially necessary labor value, supply, and demand, the market

would simply consist of what exists. If nobody decides to mine diamonds, diamonds will not appear on the market no matter how many times society votes to allocate everybody one diamond ring. Voluntary—rather than coerced—labor is phenomenologically preferable, would indicate what goods are truly worth people's while, and would incentivize reductions to humanity's currently unsustainable environmental transformation.

These democratic and egalitarian governing methods have historically worked at the local level. This does not mean that parochial societies are morally advantageous. Egalitarian and democratic societies will often expand until experiencing insurmountable logistical difficulties at which point they must either stay exclusive or increase overall cooperation through oppressive means. The requisite hardware for global, participatory governance now exists, as does much of the software. Websites like OpenTable, FreshDirect, Ticketmaster, Meetup, and Craigslist currently allow customers to reserve spaces, commodities, and services, but run on monetary or first-come first-serve bases, rather than algorithmic sharing mechanisms. The software merely requires slight modification. Society, on the other hand, requires more radical transformations.

Participatory Budgeting Experiments

PB in Porto Alegre

In 1989, prompted by local democracy activists, the municipal government of Porto Alegre, Brazil bestowed a portion of its budget to a council of representatives from local labor unions and residential committees.[90] Citizens voluntarily attended meetings to discuss how to spend the money, proposed budget items, and voted on them. Despite high rates of individual turnover from year to year—as one might expect from time-consuming voluntary labor—overall participation grew consistently.[91] Out of this network grew countless neighborhood associations,

which not only engaged in PB, but mobilized crowds with political aims such as claiming control over more of the municipal budget, and demanding a greater police presence at local schools.[92]

Porto Alegre's PB has been less a manifestation of democratic ideals, and more an expression of technological capacities and the dialectic between autocratic, republican, and democratic forces. Without regular access to AIRC, local assemblies would dialogically come to decisions, then send representatives to do the same at more centralized meetings.[93] After one year, inter-group hostility forced the meetings out of the hands of particular community organizations and into what was perceived as more neutral municipal facilities.[94] The entire operation, meanwhile, has been dependent on funding from the government, albeit a democratically elected republican one. When the Workers' Party lost the 2004 municipal election, the incoming Popular Socialist Party vowed to maintain the participatory councils, but gradually exerted more control over them in the coming years.[95]

Porto Alegre's PB movement has since spread to more than 1,500 cities worldwide.[96] The participating nations—which include almost every nation in the world besides China and Russia—typically practice other neo-liberal policies, including alienating responsibility for social welfare, health care, and even military functions to the private sector. Thus, alienating legislative functions arguably benefits both the governments involved, and the newly empowered citizens.

NYC-PB: Mobilization Successes

In 2011, Brooklyn's District 39—where I was born, raised, and lived at the time—was one of four initial NYC districts to institute PB. Citizen participation in budgeting was one of many struggles throughout the decades by District 39's residents to exert control over their communities, whether by challenging discriminatory housing practices, or by organizing stroller rallies to stop New Deal redevelopment in Downtown Brooklyn.[97] Like in Porto Alegre, NYC-

PB involves government cooperation and funding—approximately $1 million per district, per year—but is largely managed by a handful of community organizations: in particular the Participatory Budgeting Project (PBP), Community Voices Heard (CVH) and the Urban Justice Center's Community Development Project (CPD). In two years, these governmental and non-governmental organizations facilitated the participation of 10-20,000 people who otherwise would have had no direct, democratic control over taxpayer money.[98]

In what is said to be an attempt to ensure the participation of all New Yorkers, even those who are too poor to access the Internet, NYC-PB consists mostly of face-to-face meetings. There is a way to post ideas and vote online. On *pbnyc.org*, however, and on my Councilmembers' website, the links to "participate" and "vote" don't allow users to do either digitally, but instead prompt them to attend meetings, show up at polling sites on election days, and go door-to-door to tell other people to vote, go to meetings, and go door-to-door to get more people, etc., a 'get-out-the-vote' strategy pioneered by Jacksonian Democrats in the early 19th century.[99] This strategy was not used to create Wikipedia, which has coordinated the creative, voluntary participation of over 20 million people to write over 30 million articles with almost a billion edits.[100] The budgeting process begins with Neighborhood Assemblies, where everybody is lectured on what kind of project is eligible—only infrastructure development—even if they already know this. People then split up into groups of five to ten, taking turns voicing ideas and writing them down on giant pieces of paper, which are later digitized, often by unpaid interns. In the second stage, Budget Delegates attend an informational meeting, then form subcommittees corresponding to municipal departments: Parks and Recreation, Transportation, Education, etc. These smaller groups later meet to discuss the ideas from the Neighborhood Assemblies, are supposed to make site visits to all the potential development locations, then must call their municipal departments

to price the projects. The Budget Delegates are supposed to continue meeting every 2-4 weeks for 3-4 months to check in with one another, all the while supposedly turning as many ideas from the Neighborhood Assemblies into ballot items as possible. A few weeks before the vote, the Budget Delegates are encouraged to make giant posters for all their projects, which are then displayed at face-to-face expos. Lastly, people are encouraged to vote at polling sites where their residency—not their citizenship—is confirmed. Voters receive giant paper ballots with sparse descriptions of each project in their district, and may vote for five of them, rather than vote for one, deliver yes or no votes on every single project, or vote on anything outside their city council district. At every stage of the process, Councilmember staff and the community organizations canvass participants for their email addresses. The only digital part of NYC-PB for the average participant is the regular promotional emails they might receive from the community organizations and Councilmembers.

NYC-PB: Mobilization Failures

NYC-PB has not just failed at prompting participation among non-whites and lower income earners equal to their citywide demographics. NYC-PB has been worse at this than the republican electoral system they believe to be unjust.[101] Almost every privileged group—whites, people with incomes over $75,000, people over 35 years old, and those with more education— were not only overrepresented with respect to citywide demographics, but with respect to their involvement in 2009's citywide, republican elections.[102] These discrepancies generally became worse between years one and two of PB in NYC. The major exception was women, who have been overrepresented in both years of NYC-PB relative to their demographics and their participation in 2009's city council elections despite note being targeted for participation.[103] The minor exception is people in the lowest of income bracket—under $10,000—who are still

underrepresented with regard to their demographics, but did vote in 2013's PB process at a 5% higher rate than they did in the 2009 city council elections. This is likely not due to but rather in spite of the process' dependence on face-to-face meetings, and might instead have to do with the fact that two of the main organizations that run NYC-PB—CDP and CVH—are political action groups that primarily serve low income communities, and thus can mobilize these communities using 'get-out-the-vote' tactics already developed for traditional elections.

Aside from rampant social injustice, I believe the primary reason for NYC-PB's widespread underrepresentation of traditionally disenfranchised social groups to be its underutilization of AIRC. As CDP's research and policy intern in summer 2013, I conducted a quantitative and qualitative analysis of 33 telephone interviews with Budget Delegates—out of 274 participating Budget Delegates from 2012-13.[104] The most frequent Budget Delegate complaint (12 out of 39 overall complaints) was that the process required either too much time or inconvenient times. Of those 12 complaints, seven blamed the meetings, while only two blamed coordinating pricing with city agencies. Only one respondent—who was from the richest participating district, and who herself was not a housing project resident—complained that people in the housing projects lacked Internet access. As a Budget Delegate facilitator in 2013-4, I spent more time planning, traveling to, and attending face-to-face meetings than helping my Budget Delegates with their *raison d'être*: pricing the projects. None of my Budget Delegates, moreover, lacked Internet access.

I am not suggesting that all impoverished New Yorkers have Internet access, and thus could participate equally in a digitized process. Only 86% of Americans reported having Internet access in 2013.[105] New Yorkers were well within the first standard deviation regarding state-by-state home-Internet access in 2011.[106] What I am suggesting, however, is that those New Yorkers

who can't afford Internet access are less likely to be able to attend time-consuming, face-to-face meetings, especially given that people with less free time have even less free time in common. The vast majority of responding Budget Delegates (23 of 28) reported spending only 0-3 hours per week on their projects, which is close to the amount of time they likely spent traveling to meetings, and may even include that time. 7 of 12 people who complained about time issues reported spending between 0-3 hours per week on PB, including one participant who claimed to have spent zero hours calling departments and pricing projects on his own.

NYC-PB: The Vote

On election days, participants gather in common locations and typically spend a few minutes voting for up to five budget items from lists of 10-25. As far as I can ascertain, the number of ballot items is due to the paper ballots, as well as the need to reserve voting locations and thus get as many voters through the polls before the reservations end. The first casualties of face-to-face paper balloting are almost all past budget items that do not receive funding, which typically do not carry over to the next year's ballot. Thus, each year, most of the work accomplished by Budget Delegates—much of it unnecessary—is discarded.

Time-consuming labor processes and face-to-face paper balloting also effect which ideas from Neighborhood Assemblies are turned into ballot items. Budget Delegates theoretically represent their communities by turning as many ideas from Neighborhood Assemblies into ballot items as possible. Due to the labor-intensive process, those who have copious free time or are personally vested in a project are more likely to provide the labor needed to complete it, oftentimes only doing so for the projects they wish to see funded. 13 of 33 responding Budget Delegates explicitly stated that their reason for becoming a Budget Delegate was to advance a personal project. The second most frequent complaint by responding Budget Delegates (10 of

39) had to do with these conflicts of interest. Requiring Budget Delegates to work on random

projects might help, but would likely reduce overall participation. Mandating that Budget

Delegates work on one random project for every project they choose to work on has also been

proposed at NYC-PB Steering Committee meetings, but has not been adopted. These solutions

are problematic, as coerced labor does not necessarily result in quality labor, would necessitate

more managerial oversight, and would go against PB's ethos of voluntary participation.

The NYC-PB facilitators have attempted to reduce the social conflicts within

subcommittees by encouraging subcommittees to compete with one another. Knowing that

winning projects are typically between $100,000 – $300-000, facilitators from each

subcommittee urge Budget Delegates to bundle or cut various projects to meet these standards,

rather than encouraging Budget Delegates to more accurately represent the ideas proposed at

Neighborhood Assemblies. Facilitators for each subcommittee are told by those who run NYC-

PB to discourage Budget Delegates from creating as many ballot items as possible—their alleged

raison d'être—due to the increased likelihood that a subcommittee will have more winning

projects if they only have 3-6 projects on the ballot. Such tactics—reminiscent of

gerrymandering and pork-barreling—are designed to exploit technical loopholes and manipulate

voters, not to encourage as much and as equal participation as possible.

Participatory Budgeting, as it is currently practiced, may not live up to the ideals of those

who envision it to be a model for a more participatory, global society. NYC-PB may not even

live up to the immediate goals of its practitioners. In many ways, NYC-PB mirrors the

democracy it wishes to replace, and is ultimately subordinate to it. PB, nevertheless, has become

one of the most intellectually and culturally important factors in promoting participatory

democracy throughout the world. It may not be creating the social processes for global,

participatory democracy, but is helping to create the requisite social networks. PB even

contributes to the necessary technical infrastructure. Ballot items for computers have constituted

more than a fifth of winning projects in NYC-PB from 2011-3, by far the largest subset of

projects voted on by AIRC hungry New Yorkers. Digital options would almost definitely

increase overall participation, might equalize participation among social groups, would allow for

more leisurely deliberation, and would enable voters to deliver yes or no votes on an unlimited

amount of projects. The Councilmembers and community organizations that manage the

meetings, events, and the get-out-the-vote campaigns might find their time and resources put to

better use providing Internet access to people without it, possibly calling people before the vote

to see who doesn't have Internet access and bringing smart-phones, tablets, or laptops to their

homes or jobs. The likelihood that professional organizations that sustain themselves through

market relations will purposely negate their usefulness is small, as will be demonstrated in

Chapter 2. Mass movements with democratic, egalitarian demands typically involve networks of

volunteers with little left to lose, and who thus are willing to take utilize unorthodox methods to

achieve unpredictable results.

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CHAPTER 2: THE REVOLUTIONARY POTENTIAL OF CROWDS

Crowds as Historical Actors

Throughout history, relatively unorganized, mostly unarmed citizens have amassed in public to influence or overthrow their governments. Crowds may use primitive weapons—such as flaming sticks and stones—but can devastate cities with the speed of a professional, modern air force. Though crowds have been the midwives of revolution, their inability to govern has excluded them from mass participation in newborn polities. Thus crowds are traditionally one of three historical actors in a revolution: the other two being existing elites and awaiting elites.

The same logistical problems that have prevented crowds from governing are what make them the most likely harbingers of peaceful, global, participatory governance in the Internet age. Crowds are networks of small organizations and individuals generally acting voluntarily, not hierarchal organizations designed to coerce labor and bodily sacrifice out of working and martyred classes. The need for members of crowds to eventually go home, eat, sleep, and work makes their voluntary demobilization practically inevitable, as opposed to professional armies, whose voluntary demobilization is unheard of. Many members of revolutionary crowds have subsequently taken part in rapid, post-revolution remilitarizations, as was the case in Napoleonic France, Bolshevik Russia, and Khomeini's Iran.[107] The Nepali revolution of 2006, on the other hand, has shown that remilitarization is not inevitable, but rather contingent on specific social processes that do not always arise. Now that the technological prerequisites for peaceful, global, participatory governance have been met, revolutions manifested by networks of volunteers so numerous as to be incapable of formal, hierarchal organization may finally form post-revolution governments.

Revolution's Stage: Geography and Demography

Revolutions—rebellions that significantly alter social hierarchies—typically involve both traditional warfare and political crowds.[iv] Revolutions fought predominantly in rural areas—such as the Cuban and Chinese revolutions—rely on professional armies. These armies may be well armed, but nevertheless rely on guerrilla tactics to strike at the government's periphery. These professional, hierarchal organizations are simultaneously the revolutionaries, and the elite in waiting. Crowds are an almost entirely urban phenomenon, including the plague-ridden, Athenian crowd that dethroned Pericles, as well as those manifested during the French, Russian, Egyptian (1952 and 2011-3), Iranian, East German, Nepali, and Tunisian revolutions.[108] One notable geographic exception to this is the 1930 Salt Satyagraha, in which Indian crowds marched through cities, towns, villages, down rural roads, and to uninhabited beaches throughout South Asia, the most densely populated rural region on earth.[109] Still, it is reasonable to assume that as humanity urbanizes, crowds will play an increasingly pivotal role in politics. The more populous a crowd, the less it must rely on advanced weaponry and instead on solidarity. Armed only with torches, rocks, and each other, crowds have amassed in broad daylight to directly confront governments at their geographical center, occasionally forcing professional militaries to leave, disintegrate, or stay in their barracks.[110]

[iv] While crowds took control of Cairo, Tehran, and Kathmandu—in 1952, 1979, and 2006 respectively—the Muslim Brotherhood and Egyptian Communist Party, the Iranian Mojahedin and Feda'iyan parties, and the Nepali Maoist party all fought traditional wars against the government in the countryside. See: Azimi, F., (2008). *The Quest for Democracy in Iran: A Century of Struggle Against Authoritarian Rule, (pg. 222).* Harvard University Press: Cambridge. Also: Botman, S., [Daly, M.W. ed.] (2008). "The liberal age, 1923-1952," in *The Cambridge History of Egypt, Volume 2: Modern Egypt from 1517 to the End of the Twentieth Century, (pg. 306).* Cambridge University Press: Cambridge. And: Tucker, F., (Fall 2012). "Jana Andolan: The people's movement in Nepal,' in *Zeteo: The Journal of Interdisciplinary Writing, (pg. 9-16).*

People's aversion to violence is demonstrated in the streets. Revolutionaries and governments alike gain cultural legitimacy—and thus solidarity—with massive, public, non-violent demonstrations, such as speeches, street theatre, and poetic yet political chanting.[111] Both revolutionaries and governments also gain legitimacy through effective use of violence perceived as self-defense.[v] Thus, street theatre could be said to include a member of Occupy Wall Street's 'Black Bloc' gesturally or linguistically teasing a member of the New York Police Department in order to provoke well-publicized repression. Acts like these may appear masochistic if devoid of context, but can be politically advantageous if sensed by an audience that might become solidary and help overpower the 'aggressor.' Arundhati Roy, whose words have won her the Booker Prize and have provoked lynch-mobs—directed at her—said about the guerrilla warfare of the *adivasi* in Central India's jungles:[112]

> The Gandhian ethos is a very frightening ethos in the forest; because the Gandhian ethos [is a] performance that requires an audience... And in the forest, there's no audience… In a society that doesn't belong to the rest of society… how do hungry people go on a hunger strike? How do people who don't have any money not pay their taxes or do civil disobedience?[113]

Non-violent crowds benefit from their violent potential, which they use to achieve political goals. Revolutionaries, like the governments they oppose, typically resort to violence only after many non-violent methods of resolving conflict have failed. The Bolsheviks, the Muslim Brotherhood, the Iranian People's Mojahedin, and the Nepali Maoists all contested republican elections when allowed, led strikes or boycotts, and only went to war after these tactics proved unfruitful.[114] The cycles of the Chinese Boxer Rebellion of 1899, meanwhile,

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[v] The U.S. president with the highest approval rating—post WWII—was George W. Bush in September of 2011. See: Gallup (20014). "Presidential approval ratings – Gallup historical statistics and trends." Retrieved on 3/9/14 from gallup.com.

corresponded with ongoing drought, becoming move violent when the rain abated and subsiding when farming became fruitful.[115] The world's most notorious practitioners of non-violence either resorted to violence themselves—such as Nelson Mandela's African National Congress—or were part of larger mass movements that contained violent elements, as was the case of Gandhi's involvement in Indian Independence, and Martin Luther King Jr.'s involvement in the Civil Rights and Black Power movement.[116]

Gandhi cemented his status as charismatic leader of crowds—and elite in waiting—by practicing organized non-violent resistance: *satyagraha*. Much of the British government and much of the Indian populace found Gandhi's *satyagraha* phenomenologically preferable to the rural guerrilla warfare and violent, urban riots that were occurring contemporaneously.[117] Like most leaders, Gandhi mediated the relationship between the British government and the Indian populace by publicly articulating demands and privately negotiating with both sides. His status as *satyagrahi* gave him the additional power to provoke popular hatred and concerted action against the British by subjecting himself and his followers to violence without allowing it to escalate.[118] If Indian crowds attacked the British, Gandhi insisted his *satyagrahi* "army should be ready to cope with any emergency" and "still the frenzy of mobs… [with] a few hundred, maybe a few thousand… spotless deaths [to] once and for all put an end to the riots."[119] Each side was coerced into obeying him out of fear of the repercussions of the symbolism of his death. His moral authority, the political importance of his mediation to both sides, and the power of a culturally resonating gesture allowed Gandhi to control, to a certain degree, the policy of one of history's most powerful empires, and the actions of millions of his sympathizers by publicly refusing to eat.[120]

Mobilizing the Troupes

Crowds generally are coalitions of various social groups—including political parties, unions, and kinship networks—as well as unattached individuals. These people coalesce around economic, political, and/or repressive conditions commonly perceived to be unbearable. These conditions typically have social origins, but are left unaddressed due to a political impasse between opposing social groups. These political impasses are resolved by demonstrations of collective power either coercing one side into conceding, or outright warfare that ends in new social dynamics.

In *Toward of Theory of Revolution* (1962), James C. Davies linked economic crises and mass mobilizations with his now famous 'J-curve theory:' "revolutions are most likely to occur when a prolonged period of economic and social development is followed by a short period of sharp reversal."[121] Most rebellions suggest this increased likelihood, including the 2010-13 Global Rebellion, which occurred shortly after the Great Recession of 2008-9. What Davies' theory did not account for, however, is why successful rebellions—revolutions—occur so infrequently compared to recessions and depressions. The 2008 subprime mortgage crisis recessed global GDP, most dramatically in the U.S. and Europe, where revolutions did not occur. In Tunisia and Egypt—where revolutions did occur—GDP slightly recessed and grew respectively.

In *States, Ideologies, and Social Revolutions* (2004), Misagh Parsa compares the Iranian, Nicaraguan, and Filipino revolutions of 1979-85, helping explain why economic conditions contribute to revolutions and to what extent. Parsa points out that overthrown governments have been highly invested (>33%) in the economy and have thus been more likely to become the focus of workers' struggles, which otherwise would have been directed against the capitalist classes.[122]

Parsa also asserts that revolutions are more likely to overthrow highly exclusive governments, particularly ones dependent on foreign investment.[123] Parsa details how dependent the Iranian, Nicaraguan, and the Filipino governments were on U.S. aid, concluding that it allowed these governments to ignore the demands their populaces.[124] The American, Haitian, Indian, Chinese, Cuban, East German, South African, Nepali, Tunisian, and both Egyptian revolutions also overthrew governments that either were heavily dependent on foreign aid or centered in foreign locations.

Parsa's studies also focus on the coalitions that make up revolutionary crowds. Parsa posits that financial crises—similar to highly exclusive polities—contribute to revolutions by prompting broad coalitions to form between the consistently rebellious working classes and the newly destitute members of the middle and upper classes.[125] His research and that of Ervand Abrahamian into the demographics and demands of the Iranian crowd show it to have been predominantly students, intellectuals, clergy, middle-class shopkeepers, and white-collar government employees whose demands focused mostly on winning political freedoms and ending government violence.[126] High-school and university students were found to be especially active due to being "highly concentrated in colleges and universities," where their "extensive communication networks… facilitate their collective action."[127] The Iranian, Nicaraguan, and Filipino revolution would likely not have succeeded without late-stage general strikes by the working classes, a feature that has stymied the 2014 civil unrest in Venezuela.[128] In Iran, Nicaragua, and the Philippines, ongoing government repression of crowds led workers to mobilize and commandeer factories in the name of protesting the repression, and to demand political rights—the right to vote and unionize—not higher wages or lower taxes.[129] Economic desperation may exist to a certain degree in all revolutions, but is not typically people's primary

concern. Nevertheless, economist Mancur Olsen was not alone when he posited that rational individuals only act in groups for monetary benefits and that political action is either a roundabout way of achieving personal economic advantage or else is motivated by lunacy.[130] Likely aware of this strain of public discourse, the militant crowd of the Iranian Revolution made unambiguous their political aspirations by destroying banks, police stations, and the British Embassy, while leaving cash, jewels, carpets, and other consumer goods untouched.[131]

People's aversion to violence is demonstrated by the fact that government repression often stimulates resistance, which in turn necessitates further repression. In *The Crowd in the Iranian Revolution* (2009), Ervand Abrahamian describes how Shi'a mourning cycles of 40 days drove the Iranian revolution throughout 1978. Crowds would mobilize around public funerals for those killed 40 days earlier, which repeatedly culminated in the killing of more crowd members, thus prompting more mourning periods, and more mobilizations for public funerals—some of the best opportunities for renewed resistance.[132] The Nicaraguan and Filipino crowds manifested most dramatically after popular leaders—Chamarro and Aquino—were assassinated. The Nepali revolution used the sixteenth anniversary of the 6 Apr 1990 massacre that ended *Jana Andolan* ('people's movement') to mobilize the crowd that would eventually overthrow the monarchy on 24 Apr 2006 in *Jana Andolan II*.[133] The Egyptian Revolution of 2011 was predominantly mobilized by two groups: the Facebook page "We are all Khaled Said," made to commemorate and mobilize around the deadly, public beating of a young anti-corruption activist; and the April 6 Youth Movement, named after a textile worker strike in 2008 that ended in the death of four workers at the hands of the police.[134] Occupy Wall Street activists similarly mobilized people around the deaths of the aforementioned Oscar Grant, as well as capital punishment victim Troy Davis.[135] While there is little historical precedent for republics to be overthrown by crowds, any

militarized government has the potential to initiate cycles of violence that can change social and political dynamics rapidly and thoroughly.

Networks and Organizations

Crowds have been incapable of post-revolutionary governance insofar as that has meant the organized, systematic oppression of millions. In *Theory of Collective Action* (1965), Mancur Olson gives a variety of practical and psychological reasons as to why he believes people cannot operate in large groups without coercion, and how people free of coercion tend to break into groups of less than twenty.[136] The practical reasons were legitimate pre-Internet concerns. As I demonstrated in Chapter 1, many-to-many communication on equal footing was not feasible for groups of much more than twenty until recently. Since groups of millions were more powerful than groups of twenty, hierarchal governments based on one-to-many communication were likely to develop and did so independently of one another—in Africa-Eurasia, as well as in the Americas. His psychological hypotheses, however, seem less credible. Given the plasticity of human psychology, it seems likely existing anti-large-group mentality and behavior is more contingent on historical developments than on irreversible phenotypes.[137] A global, network-based society based on AIRC in one language, everyday speech in local languages, and memories of a global, crowd-based revolution would likely create a pro-large-group mentality, as well as respect and gratitude toward foreigners.

In *Poor People's Movements* (1977), political scientists Frances Fox Piven and Richard Cloward argue that the lack of formal organization that makes militant crowds unsuitable for post-revolution governance is the very facet that enables them to cause revolutions in the first place. Piven and Cloward describe the network of black "clergymen, small entrepreneurs,

professionals, and labor leaders" that were able to mobilize the 1963 March on Washington specifically because of their lack of economic ties to the white world.[138] They compare this with the Unemployed Workers' Movement during the Great Depression and their experience in the Welfare Rights movement of the 1960s, both of which were more effective in their riotous chrysalis stage, before crystalizing into hierarchal organizations.[139] The leaders of these organizations were not simply bribed by the government but nevertheless stymied spontaneous mobilizations in order to attribute more resources to lobbying, national election campaigning, and their own organizational elections.[140] Piven and Cloward's mobilization theory helps explain the roles of various religious institutions in mass movements. Neither the Iranian Shi'as—before 1980—nor the American Protestants were hierarchically organized, which could explain their widespread support during the Civil Rights Movement and the 1979 Islamic Revolution, when each mobilized congregations and crowds from the relative safety of their religious spaces—and in Ayatollah Khomeini's case from an even safer exile.[141] The official stance of the Catholic hierarchy toward the Nicaraguan and Filipino governments, on the other hand, played a large role. The Catholic Church was somewhat hostile to the Nicaraguan government and thus allowed its clergy to mobilize freely.[142] In the Philippines, however, the Catholic Church allied with the government, forcing revolutionary priests underground.[143]

Egypt's Muslim Brotherhood has stayed relevant through 80 years of tumultuous change by being both an organization and a network. The Brotherhood has been outlawed for most of its existence, but despite this has operated a party of hundreds of thousands from Egypt's capital, contesting elections through alliances with legal political parties and unions, and running 'independent' candidates that sometimes it cannot even control.[144] The hybrid nature of the Brotherhood was displayed throughout the 2011-13 revolutionary period. A week before the 25

Jan 2011 mobilization, the Brotherhood tried to calm people by calling for "constitutional struggle" to end three decades of martial law.[145] The day before the mobilization, which by then promised to be significant, the Brotherhood's leaders officially endorsed it but implored their cadre to respect a 5 p.m. curfew.[146] A few days into the mobilization, which had become one of the largest in world history, the Brotherhood gave its unequivocal support.[147] After Mubarak's ouster—as it became clear that no inchoate party could contend with the Brotherhood in elections—it officially decried the continued occupation of Tahrir Square, while allowing its cadre to attend mobilizations "as an individual, not as a Muslim Brother."[148] The Brotherhood supported the Democratic Alliance's calls to boycott parliamentary elections, then participated in them at the last minute, winning a plurality.[149] Afterward, they promised to not field a presidential candidate, then won the presidency with Muhammad Morsi.[150] After this, the Brotherhood used the full coercive powers of the party, the government, and the police to prevent anti-government mobilizations, to mobilize their own pro-government crowds, to pass a new constitution, to exclude rival parties from office, and to gain control over the military's leadership.[151] The military went along with this until July 2013, when anti-government crowds again immobilized Cairo. Only then did the military oust the Muslim Brotherhood, which reclaimed its outlaw status. Contrasting the Muslim Brotherhood's political vacillations with Ayatollah Khomeini's 17 years of unequivocal demands for the Shah's removal, it is not surprising that the Brotherhood lacked revolutionary legitimacy needed to kill thousands in an attempt to remake the military and subdue the crowd.[152]

Occupy Wall Street

Established Organizations

The uneasy relationship between networks and organizations marked the 2011 Occupy movement. Adbusters, a "global network of artists, activists, writers, pranksters, students, educators, and entrepreneurs" initiated the mobilization.[153] The most successful actions of the 2010-13 Global Rebellion were either not planned by professional organizations like political parties or labor unions, or happened despite the opposition of these organizations—including the General Strike in Oakland and the occupation of the Brooklyn Bridge.[154] Anarchists, socialists, progressives, and libertarians came together in Zuccotti Square, largely agreeing that the U.S.' financial elite—"the one percent"—had brought about the Great Recession and were handing its aftermath just as poorly. As the occupation of Downtown Manhattan's Zuccotti Square continued, however, the myriad ideological groupings made clear their intractable differences in how they believed society should be organized. In my experience, those who occupied Zuccotti Square every day and night were typically in their 20s and generally believed that the government had to be overthrown and replaced with a non-republican system. On the weekends, older professionals came as flâneurs, or to engage in political discussions, typically with the mindset that the Occupy movement would only amount to anything if it could affect the republican political landscape.

One organization whose involvement in Occupy Wall Street paralleled—in several ways—the Muslim Brotherhood's involvement in the 2011 Egyptian revolution was the Working Families Party (WFP), of which I was an employee at the time. WFP is a paid-membership-based organization primarily backed by the Service Employees International Union (SEIU) and the Communication Workers of America (CWA).[155] WFP effects government policy through

lobbying—while promoting the slogan "get big money out of politics"—and by paying its

employees to attend political rallies and campaign for members of the Democratic Party in

almost every election while constantly telling both its employees and its members that it is "an

independent third party."[156] I began to suspect my employers of cultivating a "cult-like culture"

in the workplace soon after working there, only to have this suspicion confirmed while attending

a WFP leadership conference in winter 2013, at which they gave out a pamphlet that stated

"build[ing] a cult-like culture" was a key tenant of their organizational strategy.[157]

WFP did not initially mobilize around for Occupy, but was driven to support Occupy—

and soon became one of its largest institutionalized supporters—only after the mobilization had

succeeded to occupy Zuccotti Square. This success was due in part to WFP's employees. From

the outset, almost every one of my coworkers at WFP—myself included—attended Occupy

regularly. Many, like myself, participated after work and on the weekends, while about ten were

among the few dozen people who slept in Zuccotti Square every night. After about a week,

WFP—while publicly championing Occupy—used its coercive power as an employer to stop

most of my coworkers from attending Occupy during working hours. WFP meanwhile secretly

paid at least four of my coworkers to stay at Occupy full time, despite its protestations to the

public and its employees that the right-wing media was crazy for suggesting this.[vi] As Occupy

wore on, WFP began to mobilize protesters out of Zuccotti Park, incorporating them into its

ongoing campaign to get large corporations to pay more taxes.[158] In December, after Occupy had

been defeated by the NYPD, Bob Masters—WFP's co-chair and political director of the NY

[vi] The media was wrong about WFP scouting for full-time protesters on Craigslist. WFP had plenty of employees who were willing to voluntarily stay at Occupy full-time, and simply paid four of them to continue, hoping they'd represent the interests of WFP in Zuccotti. See: The Week Staff, (11 Oct 2011). "Occupy Wall Street: Are protesters being paid?" in *The Week*. Retrieved on 4/7/14 from theweek.com.

chapter of CWA—explained WFP's attitude toward Occupy at the winter leadership conference I attended. To all my coworkers—some of the most dedicated and ideologically driven members of Occupy Wall Street—Masters claimed that the occupation of Zuccotti Park was bad for WFP, but that the movement's rhetoric, particularly "we are the 99%," was beneficial and would be adopted by WFP to mobilize voters in the 2012 general election. Because of these comments— and the unapologetic admission of cult-like practices—many of my coworkers became as disillusioned with WFP as they had been with the republican system they thought they'd been fighting as employees of WFP. The Working Families Party may do the opposite of much of its rhetoric, but is nevertheless a viable organization that takes concrete steps to achieve the most of the goals stated on its website.[159] The same cannot be said for most of the experimental organizations that evolved during Occupy Wall Street.

Establishing New Organizations

The largest attempt to organize the crowd at Occupy Wall Street was the New York City General Assembly (NYC-GA). The NYC-GA had etiquette similar to that of most anarchist meetings I have witnessed and taken part in. It was open to participation by anybody present in Zuccotti Square, all of whom could vote and all of whom were expected to give constant emotional feedback to speakers by wiggling their fingers in the air to signal positivity, and down at the ground to signal negativity.[160] Like the Grand Council of the Iroquois Confederacy, the NYC-GA consisted of oral communication aimed at achieving consensus. The facilitators of the NYC-GA claimed that consensus was needed to protect 'minorities,' by which they meant women and people of color, both of whom are majorities in New York City and would technically benefit from majoritarian democracy.[161] Unlike the Grand Council, however, hundreds of people participated in the dozens of assemblies. Despite the increasingly

manipulative tactics of the NYC-GA's facilitation crew, the NYC-GA was only able to get hundreds of people to reach consensus a few times in the course of two months.[162] The NYC-GA nevertheless persisted daily, both because of its symbolism, and because supporters around the world had donated over a half-million dollars to it.[163]

The leaders of Occupy quickly realized they could not handle the direct participation of everybody involved and formed a republican organization called the Spokes Council. The Spokes Council would vote to allow new groups, which would only be allowed two spokespeople—one male, one female—per meeting. The Spokes Council, however, was unable to get funding and so embarked on a mission to get the NYC-GA to vote to hand over its money, which was held by the newly created non-profit Friends of Liberty Plaza. Even using the rules they'd invented—and the institution of "emergency proposals"—the advocates of the Spokes Council had to bring their proposal to the NYC-GA five times in one week before getting a crowd to deliver a 90% modified consensus.[164]

In *The 18th Brumaire of Louis Bonaparte* (1852)*, Karl Marx writes, "great historic facts and personages recur twice… once as tragedy, and again as farce," a sentiment that continues to apply to contemporary events.[165] Just as Olson had theorized in 1965, Occupy Wall Street was unable to govern large groups without coercion and subsequently resorted to smaller 'working groups.'[166] These groups were ostensibly as participatory as the GA but had a habit of leaving Zuccotti Square unannounced to undisclosed locations once they'd expanded beyond twenty people.[167] Just as Piven and Cloward had theorized in 1977, Occupy seemed to have a dramatic effect on American politics insofar as it mobilized coalitions of social groups, but has since fallen off the political landscape despite the continued existence of the NYC-GA and Spokes Council, which serve the leaders of these small organizations by proposing agenda items like

trademarking 'Occupy Wall Street,' funding renovations to the their new Harlem office, and organizing "Occupy House Parties" that address the "unfortunate fact of human nature that we more eagerly listen to our peers than to people we don't normally bump into in our sphere of existence."[168] The Egyptian crowd, meanwhile, overthrew its autocratic leader, Hosni Mubarak, then successfully toppled the Muslim Brotherhood-led republican government in 2013 and now faces the almost certain election of Field Marshal Abdel Fattah al-Sisi in an even less democratic process than the one that brought the Brotherhood to power. Try as they might, the crowds in the Global Rebellion of 2010-13 have been unable to come up with national polities more inclusive than republicanism. Until they do, crowds will continue to be the tragic heroes of revolutions, providing the drama with sticks and stones and satire, but ultimately dying for another's benefit.

The Role of AIRC in 21st Century Rebellions

Communication is not the most difficult factor in mobilizing militant crowds. The continuing paucity of rural crowds large enough to battle professional armies in the digital age suggests that rapid transportation is a more pertinent variable, negated only by urbanization for now. In cities, the main mobilizer of crowds is not tactical communication via text-messsage, but the public communication of popular complaints like voting rights, high food prices, or the assassination of a popular leader. Once enough people are in the streets of a city, the rest of the city does not need to be told about it, but can see for themselves.

The same parochial mentality that leads contemporary scholars to envision AIRC-enabled local workers' and residents' councils is displayed in their discussion of the impact of AIRC on revolutions. Clay Shirky applies his theory of drastically reduced labor costs to explain how rebels in Belarus can mobilize flash-mobs at the press of a button.[169] Journalists dubbed the

Iranian Green Movement of 2009 the "Twitter Revolution," and the Egyptian revolution the "Facebook Revolution."[170] The Egyptian government may have accepted this narrative and tried to curtail the mobilization by shutting down AIRC. Mobilizing in Tahrir Square on 25 Jan 2011 and torching the National Democratic Party headquarters a few days later, however, was not a random plan hatched by organizers and disseminated to everybody at the last minute to surprise the police. It was a logical, foreseeable course of action derived from the common knowledge and pride of Cairenes, who had amassed in Tahrir Square on 25 Jan 1952 and burned the buildings of the British, who promptly ended their military occupation.[171]

Insisting that AIRC is important for mobilizing particular crowds obscures the fact that instantaneous communication gives humanity the potential to coordinate global mobilizations. The Global Rebellion of 2010-13 involved plenty of global solidarity, but was never based predominantly on calls for global governance. In *The Revolutions Were Tweeted*, Gilad Lotan, et al., document the extent to which Tunisian and Egyptian revolutionaries used AIRC to inform the world of their actions, turning journalism into "a conversation."[172] Many Occupy activists were not only aware of the Tunisian and Egyptian revolutions, but had watched and listened to them in real time. I had attended anti-war rallies of hundreds-of-thousands in D.C. and Chicago, and had interviewed participants of *Jana Andolan II* in Kathmandu. I was nevertheless skeptical about claims that largely unarmed, unorganized crowds could withstand assaults from professional militaries and topple governments until I watched the Egyptian revolution on my laptop from the comfort of my bedroom. Occupy's digital activists thoroughly recorded and disseminated almost every mass action and NYC-GA meeting, often incorporating activists from around the world into these meetings via Skype. What Lotan doesn't suggest, however, is that AIRC has the power to turn individual revolutions into more than spectator sports. Without a

globally coordinated revolution, which requires globally recognized demands, spectators will be sure to witness periodic social conflict that is never fully resolved.

Most importantly, AIRC is needed the morning after the revolution. The various social processes that make people's lives so unbearable require restructuring. AIRC allows global consumption and labor to be organized according to people's abilities, wants, and needs, rather than their social and financial capital. AIRC enables conflicts about what merits legitimate wants and needs to be resolved democratically, as well as broader questions about the overall direction of humanity. It is this newly realized governing potential that may allow humanity to finally break the revolutionary cycle in which governments are overthrown by coalitions who then fight among one another to establish dominance in a new social hierarchy. AIRC allows society to manifest both a global revolution, and a political evolution.

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CONCLUSION

Democratic Development

Peaceful, global, participatory governance is possible, but has not been realized due to anti-democratic social processes and ideologies, forces so salient that global democracy is not a popular demand anywhere. The omnipresent chant during contemporary American mobilizations of 'tell me what democracy looks like! This is what democracy looks like!' is indicative of the populace's conception of democracy. It may indicate belief that democracy is a dialogic process engaged in by people within shouting distance of each other. It may indicate awareness that republics sometimes only respond to mass mobilizations. Finally, taken literally, it may indicate that many Americans react positively to the word 'democracy,' and may believe that they live in a 'democracy,' but have never experienced group deliberation and voting to resolve intractable ideological differences in a timely manner, and fear the thought of submitting to the will of the majority even though they will likely be in the majority a majority of the time.

A democratic culture must be fostered for democracy to become a popular demand. Democracy will not spontaneously arise the morning after a revolution regardless of how many people have access to the Internet, and no matter how many police stations and party headquarters are torched. Participatory Budgeting instills a democratic culture among millions of people worldwide. Its parochialism, however, solidifies millennia old notions that democracy is only practicable among a finite group of people. If democratic experiments are to resonate with outside communities, they must not continually develop more subtle tactics for exploiting loopholes while creating ever more complex bylaws to address these inconstancies. A democratic experiment that expands its demographic and geographic scope by mastering simplicity will gain more allies.

Finally, democratic movements must withstand repression from militarized, non-democratic governments. This is not too difficult a task. Professional militaries can be overcome by crowds of ordinary people mobilized by commonly perceived problems with manageable solutions halted by political gridlock resolved only through coordinated action. The use of mass mobilization by democratic movements everywhere does not derive from convenience. Rather, the form follows the function. Ideological differences can also be overcome by groups of ordinary people discussing commonly perceived problems with manageable solutions halted by political gridlock resolved only through voting. These similarities between crowds and democracies make them both powerful only insofar as participants can overcome minor differences to maintain the mightiest force on earth: solidarity.

Persistent Republics

There is little historical precedent for republics to be overthrown by crowds. Only two crowd-enabled revolutions—Russia (1917) and Egypt (2013)—have overthrown republics, both of which were second stage revolutions. The Russian and Egyptian republics had just come to power, had not had time to fill their militaries with loyalists, and were popularly perceived as being associated with or being no better than the recently toppled autocracies. Republics have been toppled through by armies through wars and coups, but have never been overthrown by crowds after surviving the initial revolutionary stage.

Republics do not avoid being overthrown by avoiding mass mobilizations altogether. Regular elections force ruling parties to respond to popular unrest or risk being replaced by other professional political parties. Multi-party, parliamentary republics are particularly malleable. Minor parties can pull out of governing coalitions at any time, thus necessitating new coalition

formation or calls for early elections. Disenfranchising certain social groups undermines the electoral process, but allows for extreme exploitation, which typically leads to rebellion in the absence of electoral recourse. These rebellions don't necessarily have to threaten to overthrow republics to garner a response. They merely have to attain solidarity with enough enfranchised groups so as to reshape the national electorate.[173] The prevalence of mass mobilizations shows that republics do not represent the will of the populace, but the will of elites to stay in power, including making concessions when receiving existential threats.

The Global Rebellion of 2010-3 did not disprove Francis Fukuyama's post-Cold War observation regarding "the total exhaustion of viable systematic alternatives to Western liberalism."[174] Autocrats in Tunisia and Egypt were overthrown. Major rebellions throughout Europe ended with coalitions dissolving and new republican governments being voted in to office. Occupy never came close to capturing a single city—let alone overthrowing the U.S. government—and resulted in no major changes to the government or financial industry. The crowds of various cities seemed aware of this dynamic as well. Occupy's most popular slogan "we are the 99%," demonstrated unfulfilled yet still hopeful expectations of representation. The Arab crowds on the other hand had no reason to expect representation and so demanded an end to the regime—"*ash-sha'ab yurid isqat an-nizam.*" Given the potential power and the rational politics of crowds, it is less likely that republics are indestructible and more likely that crowds have had the power to overthrow republics but have purposely not done so, knowing of no viable, systematic alternatives.

The only thing that can disprove Fukuyama is the creation of a viable, systematic alternative. New communications technology has transformed the world in many ways since the end of the Cold War. Social conflict and political gridlock, however, stymie society's productive

and political potential. Autocratic and democratic forces continue their opposition, resulting in republics here, military dictatorships there, autocratic private relations everywhere, and democratic experiments rising like roses from concrete, damaged petals and all.[175]

Globalization

Consolidation

Globalization is a historical force with no agenda. Not necessarily good or bad, globalization is shaped by prevailing social dynamics. The overwhelmingly negative connotation toward globalization among democracy and peace activists indicates their losing of the immediate battle to guide globalization. Whether good or bad, many features of globalization— particularly global communications methods and networks—are preconditions for peaceful, global, participatory governance. The global, capitalist economy stimulates these global social networks even against the will of those who wish people to remain separated. Even the quest for global domination eventually provokes more global unrest.

AIRC makes everybody-to-everybody sharing, negotiation, and democracy technically possible. The failure of the Kyoto Protocols displays the need for global cooperation. The long-term benefits of stabilizing climate change require short-term sacrifices, which require global participation. If nuclear-armed nations—who cannot be bombed into submission—do not cooperate, they will gain power relative to the nations that make sacrifices, while reaping the environmental benefits of said sacrifices. The need to incorporate everybody into the same polity has spawned massive cooperative movements throughout history, from the Iroquois Confederacy, to the Soviet Union, and the United Nations, all of which were limited by their respective communication methods and prevailing power dynamics.

The power of cooperation drives oppressors toward consolidation, no matter how much they glorify competition. The economic tendency toward monopolization and society's increasing dependence on AIRC has vaulted nine telecommunications, software, and hardware corporations into the world's top fifty.[176] By increasing their share of the market, these corporations not only profit, but garner additional profits by disallowing their customers free-market recourse. Additional profits afford additional influence in republican governments, which increases profits further by disallowing customers' democratic recourse. When people fail to resolve conflict economically or democratically, however, they resort to collective action made more potent by global communications networks. Telecommunications companies will find it hard to avoid this conundrum. If one doesn't exploit emerging markets, another one likely will. The best they can hope for is to further repress social movements while further enabling them.

Observation

The authoritarian actions of militarized republics can be equally counterproductive. The U.S. National Security Agency (NSA) has teamed up with major telecommunications companies to monitor almost every digital communication it can.[177] The obvious beneficiaries of this program will be future historians, who will rely much less on conjecture than we do. The second greatest beneficiary, however, is likely not the U.S. government. The greatest threats to governments are crowds, which are not conspiratorial, cannot be stopped by a few arrests, and often grow stronger if repressed. The NSA spying program is not a debilitating economic, political, or violent transgression on the order of the Transatlantic Slave Trade, the Amritsar Massacre, or the sub-prime mortgage scheme and subsequent bank bailout. The NSA spying program is, however, a cultural transgression along the lines of Egyptian President Hosni Mubarak grooming his son to succeed him; or the British using pig and cow fat to grease the rifle

cartridges that touched the lips of their Hindu and Muslim soldiers; or the shopping habits of Imelda Marcos and Marie Antoinette.[178] Revolutions are built on coalitions of social groups mobilizing around commonly perceived injustices—all the better for the mobilization if the injustice has done little to actually disempower social groups, or one that brings many outraged groups together. The NSA spying program and other recent accusations show that the U.S. Executive Branch has little trust in anybody, including its NATO allies and colleagues in Congress.[179] Insofar as millions of people maintain trust in the U.S. Executive Branch—wielder of the largest military in human history—public knowledge of the NSA spying program violates that trust, and represents a cultural coup for social movements everywhere.

The End of History?

In the last few hundred years, humanity has streamlined the harvesting and burning of fossil fuels, with potentially apocalyptic consequences. Peaceful, global, participatory governance depends on global revolution, which itself depends on globally perceived problems with social origins and unresolvable political gridlock. There is perhaps no belief more universal than humanity's connection to and dependence on nature. Whether spiritual or materialistic, this belief has been held, fetishized, and worshipped by tribes, clans, castes, nations, and members of secular civil society. By continuing to burn fossil fuels, humanity is literally and figuratively playing with fire. Nevertheless, the likelihood that humanity will unite under a peaceful, global, participatory government is only increased insofar is it is the only political solution to our potential extinction.

There remains one disturbing fact of life in the 21st century. Humanity may manifest a global revolution with so much support from every social sector that the world's militaries hand over their weapons peacefully, only to see them calmly, rationally dismantled, or burnt in an

orgiastic global festival that lasts all night. People may wake up the next morning and share all natural and labored upon materials according to their needs, and work according to their abilities. Still, the shadows of nuclear-powered, nuclear missile equipped bombers may continue to hover. Nuclear submarines might lurk beneath the seas. Our technological capabilities and political systems have made it so that one person could destroy all life on earth, a fact that has been dramatized pessimistically in movies like *Fail-Safe* (1964, 2000), and *Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb* (1964).[180] There are two historical precedents for humans dropping nuclear weapons on urban areas. On the other hand, there is only one known instance where a person was ordered to initiate a two-way nuclear war. During the Cuban Missile Crisis, Vasili Arkhipov was ordered to commit such an act and refused to do so.[181]

Sometimes the fate of revolutions, even the fate of the world, can come down to people like Arkhipov, or General Abbas Qarabaghi, the Iranian Joint Chiefs of Staff who refused to bomb Tehran in 1979, or the Egyptian generals who refused to attack the Tahrir Square rebellion at its height in 2011.[182] Countless revolutions, on the other hand, have been repressed with widespread violence. Humans have a mixed track record when it comes to obeying orders to commit massacres. Aside from the fact that humanity now possesses the tools to put its violent, autocratic ways behind it, nothing else is certain.

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