Ryerson University

Zones of Political Power:

Cell Phones and Group Formation

in Kenya and The Philippines

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Draft two for defense committee

Zones of Political Power: Cell Phones and Group Formation in Kenya and The Philippines

Masters of Arts (2006)
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The weeding for their wisdom on the ABSTRACT midance through the process of the

This thesis proposes a way to examine the form of connection between cell phone use and the formation of groups advocating political change and democratic reform in developing countries. It uses two political events – the People Power II demonstration in Manila, Philippines in 2001, and the national election in Kenya in 2002 – as case studies to test a framework, one that draws from articulation theory and actor-network theory, and is informed by a history of development communication.

Cell phone technology has achieved a worldwide subscriber adoption rate like no other digital technology. People in so-called developing countries have been particularly fast adopters of cell phone technology, with Africa being the fastest growing market in the world since 2002, and the Philippines now the world's leader in the number of text messages sent each day. Popular media reports describe people's use of the cell phone as an instrument for the organization of potent political resistance in the digital age. This thesis strives to ground assumptions of the "power of texting" in a robust examination of the factors that lead to the formation of social groups that successfully and peacefully replace governments believed by popular opinion to be corrupt.

The first part of the paper reviews the theoretical foundations used to triangulate an examination of the topic. The second part reviews details of the two case events, including socioeconomic and telecommunications conditions that may have contributed to the formation and organization of social groups and the political ideology conveyed during these events. The third part brings together various types of data – voting patterns, poverty, telecommunication policy, and cell phone network coverage – to expose possible correlations between those geographic areas in developing countries that are cell phone enabled and the potential political influence those with access to mobile handsets can exert.

The thesis concludes by arguing that cell phone network coverage maps are useful tools in the study of social and cultural phenomenon for three reasons: cell phone networks are dedicated and singular, they track network penetration density in targeted regions with specific economic and demographic criteria, and they enable the tracking of network expansion over time, indicating emerging regions for wireless social communication and economic development. These maps may be read as zones of political power, enabling those with access to the technology to promote their political agenda, while those without access may be disadvantaged.

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INTRODUCTION

Between the acting of a dreadful thing
And the first motion, all the interim is
Like a phantasma or a hideous dream
The genius and the mortal instruments
Are then in counsel, and the state of man
Like a little kingdom, suffers then
The nature of an insurrection.

- Shakespeare, Julius Caesar, II. i. 63-69

In January 2001, over one million people gathered at the Epifanio de los Santos Avenue (EDSA) in Manila, Philippines, to protest the sudden halting of the impeachment trial of then President Joseph "Erap" Estrada. The President was up on corruption charges and both the Filipino mainstream media and general public were closely monitoring the trial. A majority of Filipinos believed Estrada was guilty and wanted him removed from office, but in middle of the trial eleven senators thought to be under Estrada's influence aborted the proceedings. News of this spread quickly, resulting in a mass protest demonstration in which the people demanded the resignation of the president. The gathering at EDSA was at the same site as the People Power revolt in 1986 that resulted in the overthrow of the Ferdinand Marcos regime. This new demonstration was called People Power II, or EDSA2. After four days of demonstrations at EDSA, the military backed the protesters, and President Estrada was forced to resign.

Across the Indian Ocean, on December 27, 2002, the Republic of Kenya held its first presidential elections since 1997. The Kenya African National Union party (KANU) had been in power since Kenya's independence in 1963, and the incumbent president, Daniel arap Moi, had been barred from running again due to constitutional changes. Kenya had been governed under a one party election system since 1967, and although multi-party elections had been held in 1992 and 1997, international observers considered both elections flawed and undemocratic, resulting in Moi being returned to power on both occasions. As a result of Moi being barred from running in another, KANU selected Uhuru Kenyatta as its presidential candidate in 2002, the son of Jomo Kenyatta, its first president when Kenya first gained independence. The election was won not by Kenyatta, however, but by Mwai Kibaki of the National Rainbow Coalition party (NARC) in an election that saw the largest voter turnout in its history, and that international observers determined to be fair and largely free of corruption. Kenya had its first new ruling party in 39 years.

What links both these stories is not just political change achieved through the peaceful and democratic actions of its citizens, but the popular opinion that the cell phone played an important role in the organization of people for purposes of political resistance.

In recent years there has been increasing attention paid to the role of new information and communication technologies (NICT) in developing nations (Dauber, 1981; Forsyth, 1990; Press, 2004; UNDP, 2001b). One of the focal points in many of these writings is how the development of the telecommunications infrastructure plays an increasing role in

citizens' struggle for and exercising of democratic rights (Rheingold, 2002; McIvor, 2003; Hoffmann, 2004; Sonaike, 2004). Such political activity can take a number of forms, including public demonstration, participation in elections, media campaigns, better communication of human rights abuses, and so on.

The cell phone, and in particular its ability to enable people to send short text messages from one handset to many others, has received special attention in the wake of recent political events such as the ones mentioned above. In each of these events, the use of the cell phone to assist in the organizing of groups for political resistance has been presented in the mainstream media as a crucial, if nearly revolutionary, tool for achieving political change. After Filipino President Estrada resigned from office, he was quoted as saying, "I was ousted by a coup d'text" (Pertierra, 2002).

This thesis proposes a way to examine the use of mobile phone technology for political change in developing countries. It draws from both articulation theory and actor-network theory for its framework, using discourse analysis to examine various texts about the events, and informed by a history of development support communication. It uses stories of the two political events mentioned above as case studies to apply this framework, and ultimately arrive at new questions for ongoing research. I argue that that cell phone network coverage maps are useful tools in the study of social and cultural phenomenon that involve the cell phone for three main reasons: cell phone networks are *dedicated and singular*, they track *network penetration density* in targeted regions with specific economic and demographic criteria, and they enable the *tracking of network expansion*

over time, indicating emerging regions for wireless social communication and economic development. For these reasons, these maps may be read as zones of political power, enabling those with access to the technology to promote their political agenda, while those without access may be disadvantaged.

Something is happening

Cellular telephone technology was first proposed by Bell Labs in the late 1940s but was considered unmarketable and for the most part shelved until the 1970s, although a limited service of vehicle-based mobile phones became available in selected cities in the United States in the 1950s (Townsend, 2000). In 1983, the product was re-launched as a widely marketed consumer device. The infrastructural requirements needed to support cell phone communication were considered less cumbersome and cheaper than those of traditional landline phones, since extensive networks of cables, telephone poles, or digging to get wires underground was not needed. This made installing such technology easier for developing countries, most of which had grossly inadequate landline phone systems. Cell phone technology enabled those who could afford the handsets and services a new, highly mobile, and more reliable way to communicate over long distances.

Cell phone technology has achieved a worldwide subscriber adoption rate like no other digital technology. In 2002, the cellular telephone industry reported 1.1 billion subscribers around the world, and is projecting nearly 2 billion subscribers by the end of 2006 (Cellular News, 2005). In 2005 alone, over 800 million handsets were sold. This

outstrips general Internet usage, in which in 2005 it was estimated that a little over 927 million people around the world used some form of land-based Internet (Argaez, 2005). People in developing nations have been particularly fast adopters of cell phone technology, with Africa being the fastest growing market in the world since 2002. More people in Africa now use cell phone than traditional landlines (Ferrett, 2004).

Anyone attempting to examine the implications for political activism brought about by cell phone technology immediately experiences a number of challenges, the first of which is the challenge of reductionism, the belief that very complex things can be adequately explained by presenting sweeping generalizations about it regardless of content.

Therefore, in this paper, I do not attempt to postulate a global truth for the intersection of technology and politics. Nevertheless, in the examples mentioned above, and certainly in others, it can be observed that something *is* happening, something that on the surface bears study because these small mobile communication devices have been asserted as playing a part on some level in forms of political struggle. Indeed, for centuries people have been resisting, demonstrating, and organizing in the name of better rule and to have a greater say in who governs them, except that many of these people today carry these strange new devices that enable them to send and receive short messages to others over channels subvert the traditional private and state-run broadcast systems. It is the presence of this tool, one that was not available before 1983, that leads to a series of questions:

- o How does the cell phone change the organization of political struggle?
- o Would protest actions in the two examples described above have had the same outcome without the presence of the cell phone?

O What implication does this have for civil society, or the public sphere?

Perhaps by understanding better how people's use of the cell phone aids in personal and group mobilization in these historical events, an even richer potential for peaceful political change can be tapped.

Still, the challenge of reductionism to a subject like the cell phone and political change remains. How does one glean insight into the relationship between people and technology in a way that also does not isolate such insight to the context of only one single occurrence? Conversely, how does one generalize potential insight while also recognizing the unique circumstances of each occurrence? John Law is particularly articulate when describing the conundrum of capturing any social phenomenon:

There should be no identity, no fixed point... Neither is it simply a random set of bits and pieces, wreckage spread about the hard shoulder of the superhighway of theory. But how to say this? How to talk about something, how to name it, without reducing it to the fixity of singularity?... How to talk about objects (like theories) that are more than one and less than many? (Law, 1999)

Political events in which the cell phone has been reported to play some kind of role number more than one, therefore there is the need for something to be better understood on a broader, theoretical, scale. At the same time, no two occurrences are exactly the same, therefore there is also the need to diversify such understanding so as not to graft

potential insights from one event onto another without due consideration of its unique factors.

So we are divided right at the start of our journey. How do we study the subject so as to lead to the articulation of a phenomenon brought about the introduction of an object like the cell phone without falling into the trap of oversimplifying things just for the sake of theoretical and organizational convenience? Curse or thank the end of modernity, the post-Renaissance philosophy that claimed that one could objectively study social phenomena like a science, for making our task more challenging by introducing the acknowledgement that the study of all social phenomena is inherently subjective. Yet it is this very division that draws us near to the subject in the first place to discuss, research, seek to understand. It is the Thing: "Long before designating an object thrown out of the political sphere and standing there objectively and independently, the *Ding* or Thing has for many centuries meant the issue that brings people together because it divides them" (Latour, 2005: 23). In the essay "From Realpolitik to Dingpolitik", French professor of sociology Bruno Latour suggests that one can never successfully argue a political or social phenomenon as a matter-of-fact, since in such instances what is posited as fact is actually rhetoric. Rather, the thing that gathers people to discuss is not matters-of-fact, but matters-of-concern. This shifting of focus from facts to concern empowers our investigation, since facts are required to be proven or disproved, while concerns are expressed. Within such expression comes a series of choices needed to frame it and give it language.

The thing-seen

We inspect the thing-seen not as the operation of an organism upon an environment nor as the operation of an environment upon an organism, but as itself event.

(Mills, 2005: 293)

In this investigation, my choice is to examine each case event primarily through two theoretical perspectives, actor-network theory and articulation theory. Actor-network theory, whose key developers include Latour and Lancaster University sociology professor John Law, demands that the inter-relationships between human and non-human actors be taken into account when examining social action. Articulation theory, initially conceived by political theorist Ernesto Laclau with later contributions by Birmingham cultural studies professor Stuart Hall, requires that nothing be taken for granted when arguing that two ideas have a relationship to each other. Development support communication (DSC), our third pillar, provides a history and contemporary set of questions for viewing work in international development, ones that began to emerge in the 1970s after a period of failed development projects under the modernization paradigm.

By applying these theories, this thesis paper draws from both cultural studies and social science frameworks to provide a qualitative and cross-disciplinary analysis to the research question. Cultural studies is appropriate to an examination of a cultural moment

or phenomenon that includes some form of computer-mediated communication (CMC) because of its critique of determinist or revolutionary values, and in its attempt to posit alternative ways of understanding the relationship between culture and technology (Slack and Wise, 2002: 485), "an ongoing conversation" about political issues, questions, responses and directions. (Hall, 1990: 11). Likewise, there is a thread in contemporary social science theories that acknowledges that any examination of human communication processes cannot be isolated from its context, and that any study that ignores context suggests that such communication either exists in a vacuum or is universal regardless of locale, culture, language, class, or other social factors (McQuail, 1994). The advantage of a cross-disciplinary approach to the topic, I would argue, lies in their respective contribution of such context. Cultural studies and social science each look at the subject in ways that are both similar and different enough that any insights into the subject that each render can be compared to the other. This contributes to a deeper understanding of the responses to the research question than could be accomplished alone.

The paper will proceed with an overview of the research question, the methodology, and an overview of the theoretical perspectives used throughout. This will be followed by a review of relevant literature on each of these disciplines. Both case studies will then be examined in some detail, including their socio-economic contexts, with a particular focus on the role of the cell phone in each of the two societies. An application of these theories to the case studies will then ensue, followed by discussion and concluding remarks.

RESEARCH QUESTIONS AND METHODOLOGY

The primary research question is, "What is the form of connection between cell phone use and the formation of groups advocating political change and democratic reform in developing countries, and under what conditions do they emerge?" Two cases of events will be studied that in the investigator's opinion exemplify this relationship. The case events are The People Power II demonstrations, also known as the EDSA2 rally, in the Philippines in January 2001, and the national elections in Kenya in 2002. These case studies have been selected so that they satisfy the following criteria:

- 1. That the number of cases is manageable for the limited scope of this thesis, but offer enough potential depth of analysis to gain valuable data;
- That they offer the potential for further theory building about a larger collection of cases (Stake, 1994);
- 3. That the case studies exist "in the same universe" as to the type of event and activity, so that some comparison between the two can take place;
- 4. That the event in each of the two cases is also unique enough to the other to offer the potential for observations of difference.

A summary of the selected case studies is below:

A. People Power II Demonstration

When: January 2001

Where: Manila, Philippines

Position on UNDP HDI 2005: 0.758

Medium (HDI 0.500 to 0.799)

Description of event: Mass protest of
Filipino citizens at the EDSA Square in
Manila, the capital, in protest over the
postponement of President Estrada's
impeachment trial. Over one million people
gathered for over four days, after which
time the military backed the protestors and
the government fell.

Relevance to study: Wide news reports that people communicated and organized the demonstration by sending messages through their cell phones. The cell phone was later credited in some reports as being a new revolutionary tool.

B. Kenyan National Elections, 2002

When: December 2002

Where: Kenya, especially Nairobi and other locations across the country

Position on UNDP HDI 2005: 0.474 Low (HDI below 0.500)

<u>Description of event</u>: National elections in Kenya that brought the opposition leader Mwai Kibaki of the NARC party to power after 39 years of rule by the KANU party.

Relevance: Reports suggest the NARC opposition party used the cell phone as a campaigning tool to rally support. A wide turnout to the elections was achieved with little violence and few reports of corruption. More limited media coverage as to the use of cell phones.

Table 1. Brief comparison of selected case studies

The item "Position on UNDP HDI 2005" indicates the country's position on the Human Development Index Report 2005, issued by the United Nations Development Program (UNDP). The UNDP uses several indicators to arrive at the HDI figure: life expectancy at birth, adult literacy rate, combined gross enrollment ratio in education institutions, and GDP per capita. Countries that score above 0.8 are considered to have high human development, 0.5 to 0.799 medium, and 0.5 or less are low. In addition to this, the UNDP also tracks progress on other fronts, including human rights, treatment of women, health

care, and environment (UNDP, 2005). Tracking of HDI figures over a number of years allows for trends in nations' progress in human development to be compared since 1975 when the index began.

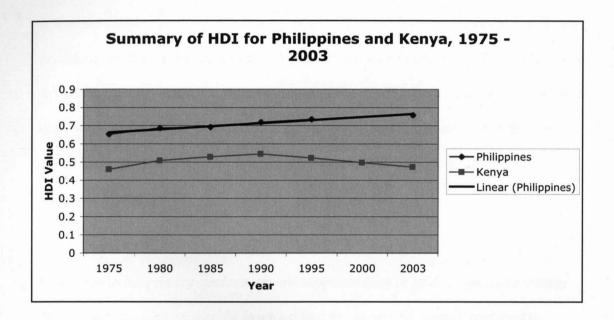


Table 2. Summary of HDI for Philippines and Kenya, 1975 - 2003

As we see, the Philippines has seen steady improvement in its HDI during this time, whereas Kenya reaches a peak of 0.546 in 1990 before sliding back to a level today that is closest to where it was in 1975. The UNDP's 2005 country report on Kenya focuses on its economy and the need for better industrialization as a key component for human development (UNDP, 2005a).

This particular pairing of cases is appropriate to the research objectives based on the criteria set out above. Both events are similar in terms of the overall objective of the event: to bring about some form of political change in their country at the national level.

As well, organizers behind both events used the cell phone in at least part of the strategy in bringing people together about the issue, as well as in mobilizing them to some type of action. Having said that, the cases are distinct from each other in important ways: their respective geographical location, history, position on the UNDP HDI, sociopolitical and economic conditions, and state of their telecommunications infrastructure. Therefore, it is reasonable to suggest that the events are distinct from each other in some ways, and yet in other ways share certain commonalities such as the increasing penetration of the cell phone in their culture, and their struggle to operate within increasingly globally integrated economies.

In addition to the primary question, several supplementary or guiding questions emerge.

These will become more specific as we explore the theoretical perspectives used to investigate them:

- 1. What are the social, political, and economic forces at work, including their telecommunications policy and infrastructure, which may have served as influencing factors in the penetration of cell phone technology and its use by citizens?
- 2. How does class and gender affect the type of political message communicated by citizens during these events?
 - 3. What might we be able to generalize in any of the answers to any of our research questions, that holds important directions for future research?

METHODOLOGY

The following data gathering techniques have been employed:

- Document analysis: Books, articles, websites, reports, and other texts were examined to determine contemporary theoretical views of the subject.
- Discourse analysis: Texts describing the two events were examined using discourse analysis to determine dominant and popular beliefs held by the culture at large, and other potential oppositional readings.
- Demographic analysis: This analysis was to assist in acquiring a demographic profile of populations in the two countries in order to inform the secondary research questions, for example who does and does not use cell phone technology in each of the two societies. This enables us to ground the other data in terms of who has access to the technology, who does not, and how this in turn may have some bearing on the formation of social groups for the political activity in the events.

THEORETICAL PERSPECTIVES

The research uses theories that come from both cultural studies and sociology perspectives. Cultural studies is appropriate to an examination of a cultural moment or phenomenon that includes some form of computer-mediated communication (CMC) because of its critique of determinist or revolutionary values, and in its attempt to posit alternative ways of understanding the relationship between culture and technology (Slack and Wise, 2002: 485), "an ongoing conversation" about political issues, questions, responses and directions. (Hall, 1990: 11). Likewise, there is a thread in contemporary

much a theory as much as it is a discursive framework for international development projects.

Work in international development following its emergence after World War II was primarily concerned with a modernization approach of installing First World technology, economic practices, and political ideology into the Third World, requiring of the industrialized nations enormous investments in money and equipment targeted at recipient nations (Melkote, 2001). This approach came under increasingly heavy criticism from development agencies and recipients of aid in the 1970s because these development projects did not ultimately meet its own objectives, paving the way for a less top-down, more participatory model in which beneficiaries of development aid would be integrated as partners in the work rather than as passive recipients. Thus, the discourse around this paradigm of international development emerged after the modernization paradigm began to break down. It is believed that in using the participatory model, development objectives could be better achieved (Wilkins, 2000).

Articulation Theory

Articulation, as a formal theory, emerged in Ernesto Laclau's book *Politics and Ideology* in *Marxist Theory* (1977), primarily as a counterpoint to Marxist class reductionism, in which he cites its failure to account for variations in discourses previously associated with particular classes. "Not everyone believes what they were supposed to believe or

acts the way they were supposed to act" (Slack, 1996: 118). Laclau was not satisfied with suggestions that differences in discourses within certain classes were mere anomalies, and set out to argue that there were no necessary links between concepts, and that concepts did not necessarily have links with all the others. Laclau formulated this in relation to political practice, and in particular how a dominant groups exerts hegemony. Hence, articulation theory emerged as an attempt to understand political practice and hegemony in a way that was not class reductionist. Stuart Hall helped bring articulation theory into contemporary cultural studies. In dialogue with Communications Studies professor Lawrence Grossberg, Hall argues that articulation is the form of connection that can be made when two different elements come together under certain conditions. The link is not necessary or absolute for all time (Grossberg, 1996).

Hall's contribution to articulation theory enables its use as a tool in cultural studies, though Laclau's original concept is certainly also in keeping with it since it was born out of Marxist theory. One of cultural studies' main concerns is to examine the relationship between institutions and power dynamics within society, institutions that may be public or private. Groups that challenge such power dynamics may use such examination as an ideological foundation for political action. As such, cultural studies, as a field of inquiry, is as much a political project as it is an academic discipline, one that emerged from Marxism, not social science.

Actor-Network Theory (ANT)

Actor-network theory was the eventual name given to a set of ideas that attempted to better articulate the interaction that exists between the totality of agents in a social network, both human and non-human, that acknowledged its dynamics as existing in a heterogeneous environment. Its seminal writers include John Law and Bruno Latour, and include key concepts from French philosopher Michel Foucault, Science and Technology Studies professor Michel Callon, and others. In it, objects play as much a role in the network of social interaction as the human. This can include the objects themselves (eg., telephones), their supporting infrastructure (transmitting support devices), its regulatory and financial framework (public and private sector), and the types of human actors (users, salespeople, technicians, etc.). Wiebe Bijker refers to this as the "sociotechnical ensemble" to denote this network of objects, infrastructures and humans and the roles they play (Bijker, 1996). ANT emerged out of a growing belief in the 1990s that social science's historical approach to its subject, as being similar to that of the natural sciences could no longer serve it. Social activities of groups could not be placed in a Petri dish, discerned for its properties, and then declared to contain a certain number of absolute truths; hence, the need to introduce subjectivity into the social sciences grew. There was the additional problem that sociologists tended to "talk of the social and then ...they talk of the technical" (Law, 1991: 8). Born out of a branch of sociology called science and technology studies (STS), ANT shares a certain purpose with cultural studies in that it is interested in issues of power and the exercising of political will, and does not consider such actions to exist in a homogeneous environment.

The theoretical perspectives and discursive framework used for this paper have between them certain similarities and differences that enable a unique triangulation of the topic. All three emerged in a post-modernist academic environment that acknowledged the difficulties and errors made in the name of modernism, that its attempt to evaluate a social phenomenon through quantitative methods, fixed models, and a Western authoritarian belief in the attainment of provable knowledge more akin to the natural sciences could accomplish nothing more than a highly reductive set of conclusions whose purposes was simply to satisfy its own assessment criteria. All three also resist preconceived notions and assumptions about a subject before engaging in its study, and include recognition of group action as including non-fixed and ever-changing conditions. Thus, I propose that all three perspectives have a compatible ontology, and where they differ is in their epistemology. Development support communication is concerned primarily with an approach to development projects in a way that recognizes the role of the aid recipient as a vital contributor to its form and execution. Articulation theory, as rooted in cultural studies, provides a theoretical tool for the analysis of ideas that claim to have some kind of relationship with each other, and how those ideas find constituents for political action. Actor-network theory provides a framework for the examination of sociopolitical action that includes all actors, human and non-human alike.

It is from these three perspectives that we can extend our secondary research questions to encompass their unique positions, and hence gain focus of the parameters of our investigation:

- Development support communication: Looking at the emergence of the cellular

 phone network as a development project, what cultural, economic, and political

 factors contributed it? Do citizens of developing countries participate in the

 development of the cell phone infrastructure, and if so, how?
- O Articulation theory: How is the relationship between the cell phone and its use as a tool for political activism articulated? Does this articulation hold up to scrutiny?
- O Actor-network theory: What is the "sociotechnical ensemble" of the two case study events? From this, what can we glean about the role of the cell phone and its relationship in the culture of both these societies, and of the world at large?

LITERATURE REVIEW

This literature review is divided into two parts. The first part reviews literature pertaining to the theoretical framework of the topic, articulation theory and actor-network theory, within the context of a cultural studies approach. The second part reviews literature pertaining to works bearing on the substance of the topic, development communication.

I. Theoretical Framework

DISCOURSE ANALYSIS

Discourse analysis is the name given to a number of methodological tools that examine language in use, including written and spoken, which is used to enact social and cultural activities, perspectives and identities. It seeks to understand the content and context of language in a way that departs from mere grammatical analysis in favour of one that roots the interrelationships between language and society. Hence, discourse analysis strives to reveal underlying ideologies that may contained within language, and the social and cultural activities they provoke (Gee, 1999). Actor-network theory and articulation theory are two methodologies that exist within its framework.

Part of the tradition of social constructivism, proponents of discourse analysis assert that reality is socially constructed and dependent on human interaction, experience, and perception, that a fixed ontological reality does not exist. Under the tenet, forms of human interaction exist as being actively shaped by the human actors themselves through a series of choices some of which may in turn also be shaped by other human actors. It is

the relationships between people that form temporary nodes of social reality that interest social constructivists.

By moving away from a mere grammatical analysis of the sentence or the clause in favour of an analysis of linguistic units and the social conditions and ideologies that surround them, discourse analysis views language use as social action and tied to social relations of identity, inequality, power, and social struggle. In this regard, language is viewed as not mere structures but rather as practices (Palmquist, 2001).

Gee argued that discourse analysis is a "reciprocal and cyclical process in which we shuttle back and forth between the structure (form, design) of a piece of language and the situated meanings it is attempting to build about the world, identities, and relationships" (p. 99). The inclusion of the context in which a discourse occurs is crucial, because without it, it would resort to the type of positivist, universal, and reductive analysis that we are trying to avoid. The inclusion of context also acknowledges the complexity of texts and their forms, and may be viewed as within the tradition of "functional grammar" which is more of a sociological pursuit than pure linguistic, and seeks to examine language as a site of social struggle (ibid.).

Vicki Kit Lee Yung (Yung, 2003) argues that the main drawback of discourse analysis is that it situates context as residing almost exclusively in history, institutions, and social conditions, but that materiality is often ignored. Any inclusion of the material world in

discourse analysis studies is rare, and she raises examples in which they do, including one study of conversation at a dinner table during American Thanksgiving in which objects play crucial roles in the shaping of conversations (Goodwin and Goodwin, 1992 in Yung, 2003). She suggests, similar to Latour, that the ignoring of the material world in discourse analysis activities fails to take into account a large volume of contextual elements. Gee's own "six areas of reality" derived from the situation network begins with the reality of (1) the meaning and value of aspects in the material world, the other five being (2) activities, (3) identities and relationships, (4) politics, (5) connections, and (6) semiotics (Gee, 1999). Thus, like many theories and methods, discourse analysis may be in the process of shaking off its exclusion of objects to open up to the wider net of social and cultural context, as the increasing acknowledgement of their contribution continues.

ARTICULATION THEORY

Articulation theory was first described by Ernesto Laclau in his book *Politics and Ideology in Marxist Theory* (1977) and later expanded by Stuart Hall and others in the cultural studies arena. Laclau believed that ideas did not necessarily have given links to other ideas. Any linkages made are possible because they are articulated. In *Politics and Ideology in Marxist Theory*, he argues that two obstacles had come to hinder theoretical practice: first, the connotative articulation of concepts at the level of "common sense discourse" (p. 10), and second, the rationalist articulation into essential paradigms. Any approximation to so-called concrete ideas presupposes increasingly complex conceptual articulations and "not the mere exposition of properties of a simple conceptual whole" (p.

10). Laclau saw many difficulties with this. Ideas that were believed to have become concrete and exist in common sense discourse could engage in sweeping generalizations and vast assumptions in order to justify its claims. His dissatisfaction with such intellectual presumptiveness sprang from Marxist class reductionism: many Marxist writers at the time (and even today) wrote extensively about how working classes acted, what they believed and struggled for. Exceptions to this were believed to be mere anomalies and for the most part disregarded (Slack, 1996). Laclau argued against the ignoring of such phenomena, believing that to do so was intellectually lazy, and that it missed potentially vital elements of the inner workings of how political beliefs were exercised. Articulation became a way to ensure that any position or argument of a relationship between two ideas contained the necessary rigor to make the link, and that any possible complications or exceptions to such relationships were acknowledged. Since Laclau formulates this in relation to political practice, and in particular how a dominant group exerts hegemony, articulation theory is rooted in an attempt to understand political practice and hegemony in a way that is not class reductionist.

Laclau's book contains a series of essays in which the articulation of particular discourses is illustrated. Two examples will show how articulation is used. In chapter one, on Latin America, he argues Andre Gunder Frank's position on its relationship to capitalism, summarized briefly as follows: a) dualism of feudalism and capitalism is a myth, b) Latin America has had a market economy since its beginning, c) Latin America has been capitalist since the beginning, d) this dependent nature is cause for its underdevelopment.

lacking a basic definition of capitalism. For Marx, capitalism was about a mode of production, whereas Franks refers to it only as an economic system, which Laclau calls incorrect and vague (p. 40). Frank therefore assumes a relationship between Latin America and capitalism based on a connotative articulation of a false concept. Without this articulation, the result is an assumption that one can rest on describing the internal logic of a system without questioning its foundations.

In a later chapter, Laclau asks the question "What is populism?" and says that as a term it gets used without apparent clear definition. It is assumed to mean "of the people" and that this has a relationship to a particular class, but which people is never clearly defined.

Laclau attempts to articulate a theory of populism that is not bound by class ideologies, and in so doing problematizes assumptions made of the relationships between political ideologies and class behavior. Classes and empirically observable groups do not necessarily coincide. The dual reference to "of the people" and to classes constitutes a "double articulation of political discourse" (p. 167). Symbols and values of "peasant struggles" are reformulated in urban populations as an ideological expression of struggle, not in reference to a concrete social base (p. 172). Therefore Laclau offers the following theory of populism, that it consists in the presentation of popular demographic interpellations as a synthetic-antagonistic complex with respect to the dominant ideology.

Stuart Hall and Jennifer Slack are two theorists who brought articulation theory into contemporary cultural studies. Slack argues that although Laclau and Hall make the theory most prominent, one should also recognize the contributions of Althusser,

Gramsci, and Marx. Althusser contributes an awareness of the complex levels involved in a total ideology, that these levels have relations with each other that both compliment and contradict, and that therefore the attempt at drawing relationships between ideologies at a one-to-one level is reductionist and false (Slack, 1996: 117). From Gramsci, hegemony figures prominently in Laclau's formulation of articulation, as a theory that exposes common sense connotations within ideologies. Marx contributes an awareness of the social relations that take place as a result of abstractions, and how this is manifest at the levels of such abstraction rather than uniformly through all groups by a mode of production. Slack emphasizes the importance of context through which practices emerge, and the lens that both articulation theory and cultural studies provides.

Slack maintains that Stuart Hall's contribution to articulation theory is the most sustained and accessible (Slack, 1996: 121). In dialogue with Lawrence Grossberg, Hall argues that articulation is the form of connection that can be made when two different elements come together under certain conditions. The link is not necessary or absolute for all time (Grossberg 1996: 141). This phrase, "under certain conditions", is crucial for the context of articulation because it requires the researcher to determine under what conditions exactly such a connection can be made. Keeping with his particular brand of cultural studies that links ideology to social action, Hall adds that often what is articulated is the linkage between discourse and collective public forces:

The theory of articulation asks how an ideology discovers its subject rather than how the subject thinks the necessary and inevitable thoughts which belong to it; it enables us to think how an ideology empowers people, enabling them to begin to

make some sense or intelligibility of their historical situation, without reducing those forms of intelligibility to their socio-economic or class location or social position (p. 142).

There can exist, therefore, a relationship between a discourse and related social forces, but that relationship is not a given. Discourses in and of themselves do not always find their agents, but form within a certain conjuncture that create spaces within which social movements or practices can emerge. Ideological forces seek out articulations with social groups who are operating within particular historical contexts and who are attracted to the promise of empowerment that such discourses offer (Hanczor, 1997). However, this does not mean that all discourses find their agents, or that there is a necessary relationship between an ideology and its potential constituents.

ARTICULATION AND HEGEMONY

Hegemony is loosely defined as the dominance of one group over other groups, done without the threat of physical force, to the extent that the dominant party can negotiate cultural perspectives to become skewed to favor the dominant group (Wikipedia contributors, 2005: "hegemony"). In society, dominant groups maintain their dominance not by an explicit message to sub-dominant groups of their maintained status, but through a much more subconscious process that makes their values and ideas the accepted norms of all society. The belief in what constitutes "common sense" is often an indication of what beliefs are held by society as hegemonic, and by whom.

In his essay "Encoding/Decoding", Hall offers an analysis of three hypothetical positions from which the decodings of a discourse may be constructed. Though he frames this theory within the context of a television message, it is also possible to apply it to any message or belief that exists within the popular culture. The first position is the "dominant-hegemonic" position, in which the receiver is operating inside the dominant code, and the correctness of the discourse is accepted at face value; the "negotiated" position includes a mix of accepted hegemonic elements with a series of exceptions to the rules; finally, the "oppositional code" position completely reworks the message with alternative terms of reference. The oppositional code is hence counter-hegemonic.

Significant political moments occur when events that are usually decoded in negotiated positions begin to take on oppositional meanings (Hall, 1980). Maintaining hegemony requires constant work so that even ideas that are counter-hegemonic become absorbed into the mainstream and accepted in a way that does not threaten the position of the dominant group (Hebdige, 1991).

Hall warned about the necessity to understand the difference between primary and secondary articulations. Primary articulations are those that take place between groups and all of society, whereas secondary articulations are those that take place within and between groups that have a relationship to each other based on the belief of a shared ideological position. Secondary articulations therefore may be more isolated from the larger debates occurring in broader society outside of those groups who simply hold a common way of thinking between themselves about an issue. For instance, the arguments

against gay marriage by Christian groups could be considered a secondary articulation when isolated from the debate of the issue that occurs in broader society that includes more than just the religious perspective. Restricting analysis to secondary articulations, according to Hall, could become "nothing more than a high-level, advanced game for academic deconstructionists" (Hall, 1998: 53). The "rule of thumb" to avoid this is to make certain that any articulated discourses or ideologies identified as coming from a specific group or groups can connect to discourses in the society at large. At the same time, there also exist contradictions of articulations within and between groups. Such contradictions may be difficult to reconcile but must be acknowledged, otherwise one is tempted towards reductionism to explain these.

Given each writer's offerings on the theory, some reflections on articulation may be useful in our approach to the subject of this paper. First, articulation enables a way to examine discourses without advocating a dogmatic or determinist position. It provides a framework for encouraging deeper thinking before the author draws any relationships between ideas and social forces. It demands clear definitions of terms used and awareness of any assumptions before the work can begin, coupled with an acknowledgement that even when a position is offered it be clear that any such position is possible only because it has been articulated to exist under certain conditions and at a given moment in history.

ARTICULATION AND POST-MODERNISM

Does the above definition suggest that articulation is post-modernist? After all, it does suggest that articulation is relativist, which is also one of the characteristics of postmodernism. Hall's own embracing of articulation comes at the same time as his rejection of post-modernism – or, more precisely, his argument that post-modernism represents nothing particularly new from early 20th-century discourses that struggled with modernism. Its message that history ends at this stage of human development ignores the fact that whatever characterizes this point in history has not actually spread to threequarters of the world (Grossberg, 1996: 134). Hall acknowledges the contribution postmodernism has made to new subjective positions, saying that these came at a necessary time of updating theories that were at work during its day. It was also at this juncture that articulation happened to emerge into the discourse of theory making, primarily as a response to Marxist class reductionism through Laclau. This suggests that the two theories have a relationship because they gained attention during the same period, and indeed they do. Both acknowledge that reality is relative and subjective. But whereas the post-modernists argue that all reality is subjective, articulation argues that reality is discernable but any attempts at explaining it must not be confined to ideologically concrete or reductionist descriptions. The relativity with articulation, therefore, is with respect to such articulations existing in a given moment in space and time, a moment that the theory acknowledges does actually exist, but may be different from other moments. This is quite unlike the complete relativity that attempts to deconstruct the very basis of space and time as does post-modernism. It is a key difference. Articulation remains a theoretical tool from which one can view the relationships between ideas that exist in the

world, whereas post-modernism had become an entire ontology that questioned the rationality of the world in the first place.

Therefore, not post-modernist by any means, articulation may be considered instead to be post-Marxist since it emerged initially as a reaction against Marxist class reductionism, and was later taken up by Hall and others as a tool to avoid all reductionism, particularly those that theorists may be tempted to draw when working within the realm of cultural studies. But Hall does not abandon post-modernism altogether, and still acknowledges the value that it added to the diverse range of discourses that emerged in response to the modernist project. "Post" does not need to mean the complete abandonment of the thing it has followed, he says, but rather "using it as one's reference point" (Grossberg, 1996: 149).

ACTOR-NETWORK THEORY (ANT)

Bruno Latour (2005a) describes actor-network theory as the story of an experiment so carelessly started that it took a quarter century to rectify it and catch up with what its exact meaning was. It exists as a branch of science and technology studies (STS), which argues that society is not purely social, but "sociotechnical" (Law, 1991). Two other theories fall under the STS umbrella, the social construction of technology theory (SCOT), and systems theory. Actor-network theory was the eventual name given to a set of ideas that attempted to better articulate the interactions that existed between the totality of agents in a social network, both human and non-human, that acknowledged its

dynamics as existing and evolving in a heterogeneous environment. Its influential writers include John Law, Bruno Latour, and Michel Callon, and include key concepts from Michel Foucault and others.

In ANT, objects play as much of a role in the network of group formation as much as humans. This can include the objects used by humans themselves (eg., telephones), their supporting infrastructure (transmitting support devices), its regulatory and financial framework (public and private sector), and the actual people (users, salespeople, technicians, etc.). Wiebe Bijker refers to this as the "sociotechnical ensemble" to denote this network of objects, infrastructures and humans and the roles they play (Bijker, 1996).

ANT argues that the approach by social science to view group agency as being observable in a positivist empirical study is fundamentally flawed, and is devoid of an awareness of politics and power. For the social scientists, the inclusion of local contexts or anything that could be interpreted as relativist was seen as being bad science — and it was, at least in terms of its relationship to modernism. ANT's essential critique of social science was that it studied the social as if it were fundamentally separate from the objects that those acting within a network used. Latour argued that modernity required "the complete separation between the natural world (constructed, nevertheless, by man) and the social world (sustained, nevertheless, by things)" (Latour, 1993: 31). Sociologists tended to "talk of the social. And then …they talk of the technical" (Law, 1991: 8).

Though born as a response to practices in sociology, ANT also shares a certain purpose with cultural studies in that one of its interests lie in issues of power and the actioning of political will, and does not consider such actions to exist in a homogeneous environment. Local experiences of group formations could exist in and of itself distinct from other events even of a similar nature, but those similarities would not necessary spell universal truths for all. ANT's embracing of this form of relativism provoked critics to argue that to do so was a form of immorality, and that irrationality would soon follow (Law, 1991). Supporters of ANT respond that it is the necessity to examine social formations in context that enables it to better articulate politics, otherwise reductionist conclusions in the guise of science could lead one to believe that an articulation of political agency had taken place, when really it is simply satisfying its own narrow criteria. Having said this, proponents of ANT also acknowledge that determining and examining this context, and its many diverse social formations, is hard and slow work (Latour, 2005a).

A PRACTICAL EXAMPLE OF ANT

In his essay, "Technology is Society Made Durable", Latour (1991) offers a simple example of how actor-network theory can be used to view a simple group formation around a single purpose. A hotel manager wants guests to leave room keys to the front desk whenever they leave the building, to be picked up each time they return. The manager has several ways of doing this: by verbally informing guests as they check in, by posting a sign at the front desk as a reminder, by adding a heavy weight to the room key that makes it unattractive for them to leave the hotel with the key in their possession, or a

combination of all of these. Recognizing that not all guests will comply with the request, the manager nonetheless wants to improve the odds, and could do this by employing each method simultaneously. Each additional element in the campaign – or "loads" – increases the chances that guests will comply, that they would agree to the "program", and reduces the number of people who would not comply, or be "anti-program". All the "actors" in the network that contribute to the group action are essential to its success: the hotel manager, the sign, the verbal request, the word "please", the weight on the key, and so on. Latour argues that any attempt to understand power struggles in society must also take into account the role of both human and non-human actants (Latour, 1991).

PLACING THE HUMAN AT THE FORE

The inclusion of non-human artifacts in actor-network theory does not automatically mean the human is left subservient to the object. Such a position would be amoral and therefore contradict the political project in which ANT claims to be interested. "To say that there is no fundamental difference between people and objects is an analytical stance, not an ethical position. And to say this does not mean that we have to treat the people in our lives as machines" (Law, 2001). Latour agrees, arguing that ANT is not the empty claim that objects do things instead of human: "...it simply says that no science of the social can even begin if the question of who and what participates in the action is not first of all thoroughly explored, even though it might mean letting elements in which, for lack of a better term, we might call non-humans" (Latour, 2005a).

USING ANT

Latour offers a framework for the application of actor-network theory that is rooted in a critique of "sociology of the social" in favour of "a sociology of associations" (2005a). In it, he suggests that it is the embracing of uncertainty that opens doors of enquiry not possible with a pursuit of a positivist finding. Each "uncertainty" – Latour names five of them – comes with a number of questions, clarifications, and suggested guidelines, and the researcher is encouraged not to shy away from such uncertainties. This framework – perhaps we will call it a roadmap – will serve our investigation of political events that use cell phones.

The first source of uncertainty is "no group, only group formations". Such group formations are best evidenced as *controversies*, or items that cause discussion, such as exposure in the media. Latour offers a list to things for which to watch in regards to such controversies over agency:

- Agencies are always presented in an account as doing something, making some difference to a state of affairs;
- What is doing the action is always provided in the account of some "flesh and features" that make them have some form or shape. Latour call this "figuration".
 The investigator need not be concerned about the type of figuration, which can include the ideo, techo, or bio.
- Actors will engage in criticizing other agencies accused of being fake, archaic, irrational, etc., or those opposed to their own.

O Actors are able to propose their own theories of action to explain how their own agency's effects are carried over.

Any group that has created such controversy will likely have at least one *spokesperson*. If one examined what the spokesperson(s) for such groups say about it, one might notice certain patterns in the articulation of the group's purpose: justifying its existence, invoking certain rules of its action and precedents and offering up one definition of it against all others (p. 31). From there, it is possible to determine if elements in the network are *intermediaries*, which transport meaning without transformation, or *mediators*, which transform, distort, translate, and modify the meaning or the elements they are supposed to carry (p. 39). In ANT, there are dozens of mediators present that transform meaning within and outside the network.

The second source of uncertainty is "action is overtaken". On this point, Latour suggests that when describing the actions of groups to refrain from the use of determinist phrases, such as "the determination of action in society", "the power of the unconscious", or "the will of the people" (p. 45). In our examples of the use of cell phones, such determinist phrases might include, "the revolutionary power of the cell phone." Such descriptions should stay fresh and not fall on the clichés initiated by social science disciplines (yes, he takes swipes at social science every chance he gets). Instead, the investigator could use what Latour calls *under-determination* of action arising from the uncertainties and controversies about who and what is acting when the group acts (p. 45). Next point: an actor is made to act by many others, therefore ask, "Who are the others?"

The third source of uncertainty is "objects too have agency". Here Latour inserts the key characteristic that distinguishes ANT from other theories in STS, to choose to view objects participants in the course of action. His case for doing so is to ask what is left if one were to mentally remove the objects from a social formation. "As soon as you start to have doubts about the ability of social ties to durably expand, a plausible role for objects might be on offer. As soon as you believe social aggregates can hold their own being propped up by 'social forces', then objects vanish from view and the magical and tautological force of society is enough to hold *every thing* with, literally, *no thing*" (p. 70). The key questions to ask about any agent are the following: Does it make a difference in the course of some other agent's action or not? Is there some trial that allows someone to detect this difference (p. 71)? That said, objects help trace social connections only intermittently. A list of situations in which an object's activity is made easily visible, and therefore ripe for observation, include:

- When the object is in the early state of its *innovation*, as in an artisan's or inventor's workshop;
- When the object is approached by users who are themselves rendered ignorant and clumsy by some form of *distance*: distance in time, such as in archeology; distance in space, such as in ethnology; or distance in skills, such as the need for training or education;
- When the object breaks down;
- When the object has receded to the background, in which case it can be brought back into light by using archives, documents, museum collections, etc.

o When the object itself is expressed or described in fiction literature. (p. 82)

The fourth source of uncertainty is "matters of fact vs. matters of concern". Though there is a section in his book Reassembling the Social (2005) on this idea. I refer instead to Latour's description of it in Making Things Public (2005) because it connects back to the concept of the "thing" described in the introduction of this paper. If postmodernism was successful at anything, it was revealing the lack of clarity that exists in things: that they are not clearly defined, delineated, do not contain obvious matters-of-fact. That which can be argued as a matter of fact is often simply that, an argument, one that Latour suggests exists as an *aesthetic* of it. Matters of fact are dependent on a host of contexts. which therefore can be counter-argued, making the task of fact making very challenging. When U.S. Secretary of State Colin Powell presented his case to the United Nations about Iraq's weapons of mass destruction, he stated, "Every statement I make today is backed up by sources, solid sources. These are not assertions. What we are giving you are facts and conclusions based on solid evidence"(p. 18). Of course, what was presented as facts on that day has remained unproven, even if the presentation itself, its aesthetics, may have been impressive. What are presented as matters-of-fact are actually matters-ofconcern. Latour's guideline is that no social explanation is necessary, simply the expression of concerns.

The fifth and final source of uncertainty concerns the actual reporting of research using ANT, which Latour refers to as "writing down risky accounts". This brings us back to the question of "What is a network?" and he arrives at a somewhat surprising answer. He

argues what determines a "good text" that uses ANT for its theoretical framework is a deep effort to actually trace a network:

A good ANT account is a narrative or a description or a proposition where all the actors *do something* and don't just sit there... As soon as actors are treated not as intermediaries but as mediators, they render the movement of the social visible to the reader. (p. 128)

Therefore, the "network", in these terms, is nothing more than an indicator of the quality of the text about the topic at hand. In a bad text, Latour argues, only a handful of actors will be designated as the causes of all the others, which will have no other function than to serve as a backdrop or relay for the flows of causal efficacy (p. 130).

In many ways, Latour offers researchers who choose to employ ANT a life preserver. The often-confusing terrain of determining how one describes a social network "accurately" makes way for an open endorsing of uncertainty as the place to start, since true uncertainties have the potential to come at the subject with an open mind and few assumptions. Actor-network theory offers the researcher a set of tools and terminologies to describe the formation of a group formation.

II. Methodological Frameworks

DEVELOPMENT COMMUNICATION

There is no universally agreed-to definition of development. Storey defines it as "the systematic improvement in the quality of life, as defined by those participating in the process" (in Wilkins, 2000: 104). Melkote indicates that what constitutes improvement is often what is in question among scholars (2001). Storey describes improvement as occurring at two broad levels: external to oneself (e.g., economy), and internal to oneself (e.g., hope). Though this is very broad, it nevertheless indicates a recognition that development cannot be about economic improvement exclusively, but include less tangible aspects of life that constitute overall emotional health for an individual and community, including the empowerment of a community to claim ownership over their own development. Other scholars share this point of view (Daubler and Cain, 1981). Indeed, empowerment and community are important elements of contemporary discourse of development communication.

A universally accepted definition of development communication is no less elusive, and it is the definition of what constitutes communication that is in question. Some argue that communication refers strictly to the delivery systems of information and communication technology to a group: the infrastructure of wires, towers, computers, phones, televisions, and the content that makes use of such infrastructure. Others argue that communication includes all of culture, including the communication between individuals, their customs, traditions, language and so on, that all contribute to social movements (Melkote, 2001).

These two views are also linked with particular discourses of development communication. Those who view it as a function primarily of information delivery and infrastructure tend to fall into the *modernist* camp of the field. Those who identify with the latter description tend to support the *participatory model* of development communication. Before getting into the specific differences between the two, however, it is important outline a brief history of development so that we may situate both discourses in the conditions from which they each emerged.

A SHORT HISTORY OF CONTEMPORARY DEVELOPMENT PRACTICES

Development, as it is practiced today, emerged after World War II primarily as a response to the need to reconstruct war-torn Europe. In 1941, Winston Churchill and Franklin Roosevelt signed The Atlantic Charter, which contained a series of agreements on international cooperation encompassing trade, labour, and world peace. Twenty-six countries signed this charter. In 1943, it was followed up by the establishment of an organization called The United Nations Relief and Rehabilitation Administration (UNRRA), supported by 43 countries, with a mandate to deal with war refugees. The establishment of the United Nations (UN) was not far behind, and formally came into existence on October 24, 1945, a mere two months after Japan surrendered following the bombing of Hiroshima and Nagasaki, prompting the call for a formal declaration of the end of the war in Asia. The primary purpose of the UN was to prevent future wars from occurring, and was built on the ashes of The League of Nations, the failed international organization established by the Treaty of Versailles after World War I. In spite of its similarities to the League of Nations, there were important differences with the UN, for

instance the emphasis in its charter on international economic aid and cooperation as opposed to militaristic and diplomatic tactics used by its predecessor.

Early World War II recovery activity consisted primarily of points contained in The Marshall Plan from The United States, in which President Truman committed 2.5% of his country's GNP to humanitarian assistance in Europe that aimed to prepare the European economy for U.S. products and protect it from Soviet influence. At the same time, the Bretton Woods system of international economic management was established to outline commercial and financial relations among the world's industrialized nations, and through it several multilateral institutions were founded, including The World Bank, The International Monetary Fund (IMF), and The General Agreement on Tariffs and Trade (GATT).

The success of The Marshall Plan spawned interest by so-called Third World nations for similar programs. Beginning in the 1950s, the UN turned more of its attention to these regions, and Truman responded by proposing The Four Points program, specifically designed for the Third World. Early humanitarian programs mirrored many of the values and objectives of its Marshal Plan predecessor. Its focus was primarily on improving the conditions within recipient nations for capitalism and on resisting communist influence. Economic and financial aid was positioned as a project for "modernization and capital investment," while the latter was phrased as a noble attempt to "strengthen freedom-loving peoples around the world from the evils of aggression" (Melkote, 2001: 51). Given that every African nation at the time was a colony of either Western or European

countries, much of the continent became a playing field for competing ideologies.

Development followed that pattern, and African nations that opened to capitalism and agreed to resist Soviet influence received the benefit of aid from The Four Points Program.

"Modernization" is key to our understanding of how development communication progressed through the 1960s. Early development communications projects in the Third World focused on the installation and diffusion of technological innovations in order to create a better infrastructure for the spread of media messages to recipient populations for the purposes of conveying the hegemonic ideas of its sponsors, who saw themselves as nation builders. Lucian Pye wrote, "The building of a modern mass media communications system is an essential element in the nation-building process" (Okigbo and Eribo, 2004). In this model, it was believed that the mere communication of an ideology to a group would result in the absorption and acceptance of that ideology, thereby better preparing them for the new economic and political realities that lay ahead. Examples of development projects under this model include the distribution of televisions, radios, and other broadcast media, and the development of programs to convey the preferred messages. Hence, the attempt was to "modernize" Third World states, make them more like their industrialized donors. Several things were needed for this: a distribution of innovations in the form of communications technologies to recipients of foreign aid, a mass media system to create the messaging, and an acceptance by its peoples of its related ideology that what was happening represented progress for its struggling societies.

This top-down model of development communication was consistent with the scientific and technical rationalizations at the time, reflected in communication models that dominated social science fields. These models were concerned primarily with how a message is sent along a channel by a communicator, and how a receiver (person) absorbed such messages. Examples of these models include the Osgood and Schramm Model (1954), The Gerbner Model (1956), and The Maletzke Model (1963). Although Maletzke attempts to inject an awareness of social context in his model, overall it can be said that each of these models, and others during its day, were *transmission models* of communication and encompassed a linear relationship between transmitter and receiver, suggesting a cause-and-effect relationship between the two.

FROM MODERNIZATION TO PARTICIPATION

The modernization paradigm of development came under increasing criticism in the 1970s. Aid beneficiaries were not responding to the distribution of innovations, nor to their related mass media messages, in the way they were supposed to. In spite of the large amounts of money contributed to the project, both the overall goal of development – to improve the conditions of the quality of life – and the specific objectives of the Four Points program – mainly capitalist and anti-communist – were not being met. At the same time, as African states continued to declare or be granted independence from their colonizers, a growing awareness of the impact of colonization on these states was continuing to make its way through Western academia. The top-down model of

modernization came to represent another tool in the colonial history that many African nations were now trying to shake off. Clearly, a new development paradigm was needed.

Development support communication (DSC) responded to descriptions by field workers in developing countries that placed a greater emphasis on their work being about the empowerment and self-determination of those for whom the aid was targeted. DSC represented changes from the modernization approach to development communication in that it emphasized the participation of recipients of aid to have a direct say in how resources were being shaped to respond to their needs. In doing so, there required a greater awareness of how a group could be empowered to determine what improvement of quality of life actually meant, as well as a clearer understanding of the roles of power between and within societies. Melkote describes the essential characteristics of DSC in the following way:

- o It is based on the work done by development agencies, not universities;
- o It encompasses a horizontal decision-making model, not top-down;
- o It is grassroots and local, not of international mass media;
- Its tools are small media (video, film strips, traditional media, group and interpersonal communication), not mass media (broadcast, newspapers);
- It aims to create a climate of mutual understanding between benefactors and beneficiaries, not a climate of acceptance of a pre-determined ideology in order to absorb innovations from developed nations. (Melkote in Wilkins, 2000)

Speer and Hughey (1995) offer three guiding tenets for development support communication. First, empowerment is achieved through effective organizations. Second, effective organizations are sustained by strong interpersonal relationships. Finally, individuals need to activate their social consciousness, but more so, also need to move towards social action as a part of an organization. Activating social consciousness can take many forms, from protests to debating to theatre, but in so doing an organization of some sort must emerge or be present in order to catalyze social impulses, and this can be one role for aid organizations.

Development support communication, the empowerment paradigm, the participatory model of development – these are the names given to the discourse that emerged after the modernization paradigm began to break down in the 1970s. It may be viewed for our purposes as the dominant *but not exclusive* paradigm of international development by development agencies and non-governmental organizations (NGOs) today.

DEPENDENCY THEORY

In addition to development support communication, one other important development perspective to consider for the context of this paper is dependency theory. This emerged in the late 1950s primarily from Raul Prebisch, Director of the United Nations Economic Commission for Latin America, who argued that development and under-development were interrelated processes, and that economic activity in richer countries often led to economic problems in poorer countries. Prebisch asserted that poor countries exported

primary commodities to rich countries only to have them sold back to them when the rich countries manufactured these into products (Ferraro, 1996).

Theotonio Dos Santos describes dependency theory as pointing out "...an historical condition which shapes a certain structure of the world economy such that it favors some countries to the detriment of others and limits the development possibilities of the subordinate economies" (Santos, 1971: 226). Dependency theory can be viewed as a description of the relationships between developed and underdeveloped countries in a way that includes issues of economic dominance and external influence that are political, economic, and cultural in nature (Sunkel, 1969). Such relations between dominant and dependent states tend to reinforce and intensify patterns of inequality.

Ferraro (1996) describes several propositions that form the core ideas of dependency theory. The keys ones are:

- Underdevelopment is a condition fundamentally different from undevelopment.
 Underdevelopment refers to a situation in which resources are being actively used, but used in a way which benefits dominant states and not the poorer states in which the resources are found.
- 2. The distinction between underdevelopment and undevelopment places the poorer countries of the world in a profoundly different historical context. Poor countries are not "behind" or "catching up" to the richer countries of the world. They are poor because they were integrated into the European economic system only as

producers of raw materials or to serve as repositories of cheap labor, and were denied the opportunity to market their resources in any way that competed with dominant states.

- The diversion of resources over time is maintained not only by the power of dominant states, but also through the power of elites in the dependent states.
- 4. Alternative uses of resources are preferable to the resource usage patterns imposed by dominant states, but there is no clear definition of what these preferred patterns might be.

Servaes (2004) brings dependency theory into African post-colonialism by arguing that after a colonizer leaves its colony, its ongoing presence is assured after the end of its rule due to the institutional and economic foundations for life in the colony from that point forward. Such countries have little choice but to begin their post-colonial period using the same administrative and economic structures left behind by the colonizer. Hence, the economic growth of one country is dependent on that of the other, and in the context of a global economic system, dependent countries can expand only as a reflection of the self-expansion of dominant countries.

CASE STUDY I: PHILIPPINES

Socioeconomic Context and Discussion

The Philippines has a rich media culture in urban centres like Manila, less so in the rural areas, and has a configuration of media sources that may seem somewhat unique compared to Western countries. In addition to cell phones, radio and print media are prevalent in many areas, including *komiks* (comics). Television and film is primarily dominated by American and Australian content, with little indigenous production and what production there is tends typically to be low budget (Pertierra, 2002).

Cell phone technology was introduced in the Philippines in the late 1990s, partly as way of providing a solution to the serious problems in its landline telephone infrastructure. Up to 1993, the Philippine Long Distance Telephone Company (PLDT), a private firm responsible for the installation and maintenance of domestic phone infrastructure, had monopolized the telephone landscape and was clearly failing at the task. In 1980, there were a mere 1.3 telephones for every 100 people, and a large backlog of installation applications led the government in 1993 to open the market to other phone companies. As a result, two new carriers, Smart and Globe, both primarily foreign owned, began installing a great number of landlines and cell phone towers. By 1998, the Philippines had gone from about 1 million land line subscribers, when the deregulation legislation was first introduced, to 6.5 million subscribers, amounting to a 650% increase in five years.

The Internet, by comparison, has about 3.5 million users in the country, consisting largely of women who are either fully employed or in school. (Pertierra, 2002).

Today, the Philippines is the text messaging capital of the world. In the first quarter of 2001, it was estimated that there were over 7.2 million cell phone subscribers, sending an average of 65.4 million text messages each day. By 2002, the number of subscribers had grown to 10 million, transmitting about 100 million text messages a day. This is double the world average for texting (Pertierra, 2002). There are a number of reasons for the rapid popularity of the technology. The average salary in the Philippines is about \$1 per day. Even with new lines installed, land-based phone subscriptions are too expensive for the average citizen; with regards to Internet access, less than one percent of the population actually has a personal computer, though Internet access through public terminals and cafés is quite popular. Cell phone technology, by comparison, is more dependable, cheaper, while adds the potential functionality of being a portable Internet access point (Rafael, 2003). Of all the forms of communication available in the Philippines – voice, data, text, video – text messaging on cell phone is by far the cheapest, and young people and those in lower income brackets are able to afford it thanks to phones that operate on prepaid card that do not require a contract or credit history (Celdran, 2002).

The Event

The act of a using simple message service (SMS) or text messaging on a cell phone is as follows: a message, sent as a simple text packet similar to email, is sent to an individual,

appearing on his or her screen initially as an alert that a message has been received. After reading the message, the user has a range of options, including replying, forwarding, saving for later, deleting, or composing a new message. The limited keypad and screen size on the phone promote a high degree of brevity in the composition of the message, for example the question, "Where are you?" might be entered as "wr ru?" Whenever one sends or forwards a message, the sender has the option of addressing it to one person or many, depending on the number of contacts in her personal address book contained in the cell phone's memory, as well as to other recipients she may wish to add at that time.

Once selecting the recipients, the message is sent, and other messages may now be read, repeating the scenario.

The Filipino People Power II demonstration has been the subject of much attention in the mainstream media and academic research. During the demonstration, it had been widely reported that the use of text messaging over cell phones played a key role in the rapid mobilization of people to gather at the site. Individuals had received a number of text messages, for example "Go 2EDSA, Wear blck", which in turn were forwarded to others in their personal cell phone address book (Rafael, 2003). Other message were more detailed, for example this one that appeared on day three of the demonstration:

Military/PNP nids 2 c 1 million critical mass n EDSA 2 moro, Jan. 19, 2 make decision against Erap, pls join, pas on. (Celdran, 2002)

Within the time frame of the protest, it was reported that a total of 1.16 billion text messages were sent across the network (ibid.).

Many news reports credited the use of text messaging as the reason the protest was so successful in gathering so many people in a short period of time (Burton, 2001; Coronel, 2002; Larmer, 2001; "Power to the Beeper," 2001; Underhill, 2001). One protestor said, "The phone is our weapon now. The power of our cell phones and computers were among the things that lit the fuse which set off the second uprising, or People Power Revolution II" (in Rheingold, 2002). Another individual commenting on how widely messages were circulated said, "We formulated a message...and sent it out that night and I turned off my phone.... By the time I turned it on in the morning, the message had come back to me three times" (Rafael, 2003).

The main themes emerging out of popular (and some academic) writing about the event can be summarized as follows:

- The cell phone was a determining instrument in enabling the protestors to achieve their goals.
- 2. The use of the cell phone enabled all Filipinos to come together under the cause of demanding Estrada's resignation; other types of divisions primarily economic and social was not a factor, except for political differences if an individual was an Estrada supporter.
- 3. The formation of temporary social networks that mobilized people to the rally emerged from direct citizen-to-citizen engagement, without the typical leadership

of NGOs, via the spreading of messages among personal address books.

Therefore it is more difficult to trace the point at which the message originated.

These will serve as basic problematics for our discussion in this chapter.

Determinism

Greenberg, in his 1964 research into the spread of news of the Kennedy assassination in 1963, demonstrated that a majority of the population first heard of the event through non-media sources, in particular directly from other people. This occurs during what he calls a "Type III" event, represented in Fig. 1 as "E", defined as one of "extreme urgency, importance and high dramatic quality which are sure to come to the attention of almost everyone and which get very high and rapid media attention" (McQuail, 1993). His theory became known as the J-Curve of news diffusion.

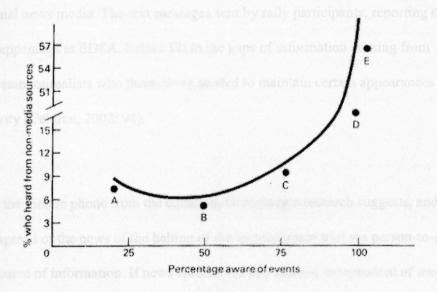


Fig. 1: J-curve of news diffusion (Greenberg, 1964)

News of the postponement of the Estrada trial in the Philippines would have been considered a Type III event, due to the importance of the trial by the Filipino public and

the attention being paid to it by the news media. Viewed under Greenberg's theory, this suggests that when the trial was halted, news of it would have spread quickly and primarily from person-to-person, not through mass media sources. But, given the amount of and prevalence of text messaging as a form of person-to-person communication in the Philippines, some interesting questions arise. Does the ease and portability of cell phones, sometimes referred to as "the city in your pocket" (Kopomaa, 2000), promote a type of news diffusion for a Type III event that, while at once being personal and through nonmass media sources, at the same time imitates broadcast in some small but significant way due to its ability to support one-to-many or many-to-one communication? Does getting news of an event from a friend have more credibility than that of a media journalist, or less? Some observers of the EDSA2 rally noted the use of text messaging as a way that participants in the demonstration augmented information coming from the traditional news media. The text messages sent by rally participants, reporting on the latest happenings at EDSA, helped fill in the gaps of information coming from mainstream journalists who themselves needed to maintain certain appearances of objectivity (Celdran, 2002: 98).

Extract the mobile phone from the equation, Greenberg's research suggests, and you still have a spread of the news of the halting of the impeachment trial via person-to-person as a key source of information. If news spreads via this method independent of media, what does or can the cell phone change? Certainly, the acceleration of time and space relationships of already occurring social communication phenomenon: messages were sent very quickly and potentially to anyone, from around the corner to around the world,

in addition to a potential role for private citizens to augment or even contradict reports coming from mainstream journalism. These point to some important elements introduced by the cell phone in that they are "always-on" personal devices, always ready to receive and send information; there is virtually no change in the content of a text message when it is forwarded, therefore very little "noise" in the content of the information occurs when it is passed on unless someone has edited it. These elements should not be under-estimated in the study of emerging social dynamics that enable people to engage more directly in political action and democratic processes.

This analysis suggests it would be incorrect to argue in favour of a technological determinist position with respect to the event. The cell phone did not create the public desire for political change. Pertierra's survey of Filipino cell phone users found that although 73.2% received text messages about the rally, only 44% decided to attend as a result of such messages, though 74.8% agreed that cell phones played an important role in the organization and running of the rallies (Pertierra, 2002: 119). Instead, it would be reasonable to argue that: i) it *mediated* communication of group action based on an already established and publicly desired outcome of the President's trial (Rafael, 2003: 9), ii) it accelerated certain relationships of time and space in the formation of groups to come to the rally, iii) it enabled participants, once there, to be organized and informed more efficiently. Other media, including television and print journalism, provided the public with information on the state of the trial, which in turn enabled those opposed to Estrada to decode such messages in their desired ways, either accepting the information or filtering them through negotiated or oppositional positions (Hall, 1980). When the

Ferdinand Marcos regime fell in 1986 also partly due to large demonstrations, phone systems in the Philippines were in a much more chaotic state, though print media, television, and radio helped stir public opinion in much the same way it did during the events leading up to People Power II (Brisbin, 1988). Thus, there is safer ground to assert that through a broad combination of factors, the conditions were in place for the type of public action that eventually manifested by the time the impeachment trial was actually halted.

Class and Message

Heurtin (2005) argues that the choice in architectural design to organize group formation for civic representation and decision-making has a bearing on the discursive form it promotes, often taking the form of either a semicircle or full circle. He refers to this as "differential relations between the representing and the represented". A circular formation, such as in theatre-in-the-round, favours visual communication, dialogue, and exchange, because people can see each other in addition and in relation to the focal point at the centre. A semi-circle formation, such as in an ancient Greek amphitheatre, promotes speech and critique, particularly critique of that which is at the centre: the masses are assembled at one side with a focal point at the centre, and the person at the centre does not need to turn very far to see the gathering. According to Heurtin, semicircle architecture also promoted a word that "can only legitimately draw inspiration from an authority exterior to the assembly: The People" (p. 769). Hence, the two formations connect to different forms of representation.

Though people were gathered at various disparate places around EDSA, the people at the rally nonetheless had a central focal point, suggesting a semi-circle formation, or one that promoted speech and critique if Heurtin's analogy is to be applied. Public speeches act as "living experiences in bringing people together and making them affiliate or disaffiliate with the positions held" (Mondada, 2005: 876). Certainly, the participants were critiquing Estrada's presidency, and in this regard their essential purpose was united, even if there were differences in the interpretations and details of the many opinions held by individuals represented at the rally. The form of speech, however, is more problematic, since in this case its modes included verbal (shouts, chants, speeches), textual (cell phone messaging, banners, signs) and iconographic visual imagery. That said, it might be suggested that in spite of the myriad of discourses and discursive forms occurring at the rally at the micro level, the essential message at the macro level from the protesters' point of view was "Estrada out." This will also serve as the "program" in our analysis of the event using Latour's ANT framework.

Other writers raise issues with the type of political message that is associated with access to the technology having been limited largely to middle and upper classes and those in urban areas. Rafael (2003) argues that though the EDSA2 rally may have had the appearance of a revolution, the political message associated with the demonstration was decidedly reformist, one more interested in cleaning up the power structures than reinventing them:

The interest of Generation Txt lies not in challenging the structures of authority but in making sure they function to serve the country's needs. This reformist

impetus is spelled out in terms of their demand for accountability and their intention of holding leaders under scrutiny. Through their gadgets, they hold on to this holding, keeping watch over leaders rather than taking their place or putting forth other notions of leadership (p. 10).

Similarly, Strom (2002), in his research into how a Filipino barangay (small village) uses the telephone, notes that for most people the very *concept* of a telephone is unfamiliar, and is used only when there is no alternative because of the high cost and low sound quality, and even then the few phones available are used mainly to pass messages onto other people in the village. For Strom, these raise issues of economics and affordability and not low service levels, as the primary reason for the poor infrastructure in rural areas; the service levels for these areas could be much higher if people could afford them, but because people cannot afford them, phone carriers are reluctant to increase service – a vicious cycle. For those interested in the relationship between communication technology and acts of political resistance, more research must be done on the political discourses promoted by groups within a society who have access to such technology, and, just as important, what discourses are being left out by virtue of who does not.

Anonymous Citizens?

Pertierra's research (2002) supports the argument that public opinion was already very much in favour of the President's impeachment, with people spreading anti-Estrada jokes and graphics on their cell phones, reinforced by coverage of his impeachment trial on television and other news media. He also argues that the belief that the demonstration formed initially as a result of a decentralized movement of anonymous citizens, along the

lines of Rheingold's *smartmob* concept (2002), is largely false, that in fact several political activist groups were behind the first wave of text messages to be distributed (Pertierra, 2002).

Going back to our three problematics about this case example, then, it could be stated that:

- The cell phone was not a determining instrument in enabling the protestors to achieve their goals, but mediated already-present social attitudes about the president, and potentially accelerated and made more efficient the formation of such groups for the purposes of protest.
- 2. It is an exaggeration that the cell phone enabled all Filipinos to come together under the cause of demanding Estrada's resignation; access to the technology was still divided along socioeconomic lines, and there may be a relationship between the profile of a typical person who has access to the technology and its associated political message (reformist).
- 3. Activist groups were behind the first initial waves of messages that led to the mass forwarding that quickly led people to EDSA Square. Therefore, the arguments that the rally emerged from direct citizen-to-citizen engagement, without the leadership of NGOs, are doubtful.

The question remains, however, was role *did* the cell phone play? There is a continuing belief, as demonstrated by this event, in the relationship between the use of the cell phone

as a communication tool and its positive effect on the formation of groups that promote political change and the advancement of democracy. It is the articulation of this relationship that will be tested in this paper.

CASE STUDY II: KENYA

Compared to our case study of the event in the Philippines, there are relatively few writings on the Kenyan election that pay attention to the role of the cell phone specifically. Nevertheless, there are enough reports and articles, as well as a host of background information to contribute to its context that I would argue that a well-grounded reflection of the event can still take place, but this does not detract from that fact that in this particular event that there is a need for more research that pays attention to the effect that cell phones may have had on the election, particularly from the point of view of individual voters. I will offer a starting point on one possible approach in this paper.

The Event

As described in the introduction, the Republic of Kenya held its first verifiably free presidential elections on December 27, 2002. The incumbent, Daniel arap Moi of the Kenya African National Union party (KANU), whose party had been in power since Kenya's independence in 1963, had been barred from running again due to constitutional changes. Kenya's government had been a one party election system since its independence in 1967, and although multi-party elections had been held in 1992 and 1997, international observers considered these elections that returned Moi to power on both these occasions flawed and undemocratic. Moi was barred from running in another,

and KANU selected as the presidential candidate in 2002 Uhuru Kenyatta, son of Jomo Kenyatta, its president when Kenya first gained independence. But the election was won not by Kenyatta, but by Mwai Kibaki of the National Rainbow Coalition party (NARC), in an election that was determined by international observers to be fair and democratic, with the largest voter turnout in its history. Over 55% of registered voters went to the polls, electing Kibaki with over 62% of the popular vote. Kenyatta came in second with 30.6% of the vote (Carr, 2002).

During the election campaign, reports cited the role of the cell phone for two distinct but equally important purposes: 1) in the election campaign mounted by NARC to potential supporters, encouraging them to vote for their candidate; and, 2) in its use by international election observers to keep in contact with each other to provide ongoing status reports of individual polling stations.

A newspaper report by Francis Nzaywa (2002) illustrates the use of the cell phone by campaign organizers as an important strategic tool in getting people out to vote in general, and to consider voting for their candidate. It is reproduced here in its entirety, unedited:

National Rainbow Coalition (NARC) supporters in Western Province have resorted to use cellphones to campaign for their presidential candidate, Mwai Kibaki.

The supporters are now sending short messages to people's mobile-phones urging them to vote for Kibaki during the December 27 General Election.

In the Short Message Service (SMS) messages, they also ask the receivers to reciprocate and send the same message to 10 other voters to ensure the message spreads wider.

The message captured on several cellphones in the town read in part "You are a real Kenyan. Your vote is very crucial in this election. Since you are dying for change like the rest of us, vote for Kibaki. A vote for Kibaki is a vote for Change. Do not waste it."

A businessman in Kakamega town, Steve Ambulwa, who received a similar message said he had sent the same to at least nine of this friends

Mumia's NARC parliamentary candidate, Wycliffe Osundwa, said the party was using all possible means to reach the majority of voters.

He said NARC was not ready to take any chances in this year's General Election.

The former Assistant Minister added that, the party supporters mooted the use of the cell-phones as they realized that they were even more efficient than addressing rallies.

Kagai (2002) reports three aspects of the use of cell phones and text messaging that played an important part in the elections and the opposition party's campaign:

1. Planning: Political strategists developed databases of their supporters who had cell phone numbers and used "viral marketing tactics" to have these supporters send the campaign message to the other contacts in their address books. As well,

the people manning the polling stations could call for support in case of any incidents.

- 2. Campaigning: The use of text messaging in support of Kibaki was effective partly because Kenya has more than one million mobile phones subscribers, outstripping landline subscribers, and a message to one cell phone number could reach at about four people.
- 3. Reporting: As soon as votes were counted, even in remote areas, results were communicated immediately; in previous elections ballot boxes needed to be transported to key counting points and it was believed vote rigging would take place during transportation.

Other observers have noted the cell phone's role in the progress towards better elections monitoring and anti-corruption efforts:

The availability of cellular phones militated against corrupt practices, with EU observers witnessing a greater depth of involvement because of the ease of telephone communication. Political organizations were transformed by being constantly and immediately in contact as events occurred. Equally, observers could promptly publish on the Internet any electoral irregularities or incidences of coercion. Clearly, technology and improved levels of communication already play important roles in calibrating electoral registration and results, but now they can help facilitate the improvement and transparency of electoral practices in Kenya and elsewhere (Deegan, 2003: 4).

SOCIOECONOMIC CONTEXT AND DISCUSSION

Kenya is located on the eastern coast of Africa, and is bordered by Ethiopia, Somalia, Tanzania, Uganda, and Sudan. It has a population of 32 million people over a total area of 582,650 km². It is divided into seven provinces: Central, Coast, Eastern, North Eastern, Western, Rift Valley, and Nyanza. The capital, Nairobi, is considered its own region and not within a particular province. Its main economic activities include tourism and agriculture, and in 1993 its government introduced a series of economic reforms typical to those of other developing countries operating in a period of increasing globalization. These reforms included the removal of important licensing, price controls, and foreign exchange controls. Although Kenya's GDP has been steadily improving over the last several years, poverty and infrastructure remain key areas for improving the quality of life. The HIV/AIDS epidemic, as in other regions across Africa, has virtually outdone its previously high population growth that had been achieved due to higher birth rate and improved health care (Wikipedia contributors, 2005).

Kenya has a media usage profile that is on the higher end of the scale for nations that are classified by the UNDP as having a low HDI. There just over 300,000 landline phones in the country, but the number of cell phone subscribers has now topped over 1 million (Lehr, 2005), with each phone being used by approximately four people. Internet users amount to about 400,000 people, while radio remains the largest mass media broadcast medium with over 3 million receivers (CIA, 2005). Television has just over 730,000 sets in the country.

BRIEF POLITICAL HISTORY

Kenya's modern colonial history began in 1885, when the country became a German protectorate over the Sultan of Zanzibar's costal regions. 1888 saw the arrival of the British East Africa Company, and by 1890 the Germans had handed over regions under its control to the British.

In the early 20th century, British settlers began moving into the interior central highland areas of Kenya to farm coffee, among other crops. In the 1930s, the influx of over 30,000 of these settlers had become a powerful economic force, and the British Empire acknowledge their role in colonial Kenya's economy by rewarding them with political powers. This same region of the country was also home to over one million members of the Kikuyu tribe who had no legal claim to the land under European law. These people sustained themselves primarily as landless farmers, but the British limited their means by banning their legal right to grow coffee and imposing a land tax. As a result, many Kikuyus moved to the cities to find work.

The Mau Mau rebellion against British rule brought Kenya under a state of emergency from 1952 to 1959. One of Britain's responses to the crisis was the establishment of Operation Anvil in 1954, which brought Nairobi under military siege, and the formation of the Home Guard, which although headed by the British was composed of African loyalists and was responsible for killing 42% of the Mau Mau insurgents.

CONTEMPORARY POLITICS AND COMMUNICATIONS ISSUES

Kenya's first election that brought Kenyans to legislative council was held in 1957. When the country gained independence on December 12, 1963, the Kenyan African National Union (KANU) was elected to form a government, led by Jomo Kenyatta, who became president and remained so until his death in 1978. Daniel arap Moi had been selected as Kenyatta's replacement, and remained president until his defeat by the National Rainbow Coalition (NARC) in the 2002 election.

NARC was a coalition of two parties: the National Alliance Party of Kenya (NAK), which was to the right of the political spectrum, and the Liberal Democratic Party (LDP) on the left. Though the Kibaki's election to the presidency was hailed as the start of a new age of optimism in Kenyan politics, his time as president since then has nonetheless been controversial. Kibaki ran on a platform of improving education, eliminating corruption from government, and bringing Kenya a new constitution to replace the one still left in place since their independence from Britain. Though he has delivered on the education promise, a referendum to endorse his proposed new constitution on November 21, 2005 resulted in a defeat for the president, and as of this writing he has fired his entire cabinet (BBC News, 2005, Nov. 23).

Sy (2004) traces the progress and effect of globalization in Africa with respect to its telecommunications infrastructure. The International Telecommunications Union (ITU) came to be under UN authority in 1947, initially formed out of previous telegraph and telecommunications international agreements dating back to 1865. Its responsibilities

included international brokerage to regulate the international telecommunications marketplace, radio frequency allocation, and all other technological and commercial activity related to information gathering, retrieval, storage, and dissemination. Development projects in what he calls the first post-colonial period (1960-1970) were characterized by allegiances to Cold War political ideologies, (similar to what was identified earlier in this paper). At that time, Kenya was favoured by Western countries for its pro-capitalist political stance. During the second post-colonial period (1970-1980). a significant shift had taken place with respect to ITU's perspective on telecommunication infrastructure development projects, favouring pro-business activities that benefited the development of a country's market economy, indicating that "at least the demonstrated market demand for telecommunications should be provided where they are the most cost-effective way to meet registered demand and to provide minimum telephone access to more provincial areas" (p. 69). Added to this was Kenya's support by such institutions as the World Bank, whose investment of the country worsened its debt to other countries. Projects during this period supported the economic interests of primarily European and American economies: cell and landline phone towers were erected around coastal cities, urban centres, as well as sites of economic value such as mineral and agricultural centres. Under this criteria, 70% of the rural population was left out, with only marginal access to telecommunications services (p. 70).

In addition to the problems experienced by Kenya due to external economic pressures, additional domestic issues continued to affect its development and political stability.

Akhahenda (2004) describes the relationship between nationhood, political stability, and

economic growth. According to him, the ongoing tensions between ethic groups in Kenya are likely to continue to retard its overall development progress. The tribal/ethnic breakdown of groups is as follows: Kikuyu 22%, Luhya 14%, Luo 13%, Kalenjin 12%, Kamba 11%, Kisii 6%, Meru 6%, other African 15%, non-African (Asian, European, and Arab) 1% (CIA, 2005). People in power, even the ones in the new government, are likely to be most representative of one ethnic group or tribe over the others; development under this model is stunted as resources are aligned to benefit particular groups over others. To Akhahenda, each group can be considered its own "micronation" or "ethnonation", therefore nation building in his view involves movements of members of these micronations to think about the entire nation of Kenya as well (p. 125). This gravitation towards tribalism was cited as one of the reasons Kibaki's draft constitution was rejected in the recent referendum: the vote was "...a protest against what is largely seen as Kikuyu [tribal] hegemony... In a country where almost every political issue is seen and judged through a tribal prism, the fact that the president surrounded himself with a clique of politicians and technocrats from one area of the country was never a plus for him" (BBC News, 2005a, Nov. 23).

With regards to the cell phone, the limited but enthusiastic response to their use in the election is once again quickly mitigated by an awareness of the relationship between poverty and access. The 2005 UNDP report on Kenya states that although mobile phone technology has greatly improved the *potential* for access across the country, especially compared to the dismal state of its landline phone infrastructure, it remains expensive for most Kenyans, and in rural areas stable sources of electricity remains an issue (UNDP,

2005b). One possible solution to which the report points is the movement towards solar electrification: the number of families who acquired electronic devices like televisions and cell phones in rural areas who used this form of energy generation increased three to four fold, thereby also enhancing their productivity and ability to communicate (p. 26). Although the Kibaki government has made claims about wanting to make progress to develop better ICT policy, advancement remains slow. For example, the government recently announced the desire to pass a Freedom of Information Act, which was cautiously welcomed by journalists, but no progress has been made on it to date (Okoth, 2005). The Communications Commission of Kenya, its main regulatory body, was recently dissolved for unclear reasons (Opiyo, 2005). Another article reports that mobile phone carriers in Kenya are still losing money, particularly on international calls, further contributing to an unstable telecommunication environment (Alare, 2005).

Any remaining notion of the political landscape being rewritten anytime soon due to the continued use of the cell phone for election management and campaign waging is quickly brought into focus when one views a map of cell network coverage in the country:

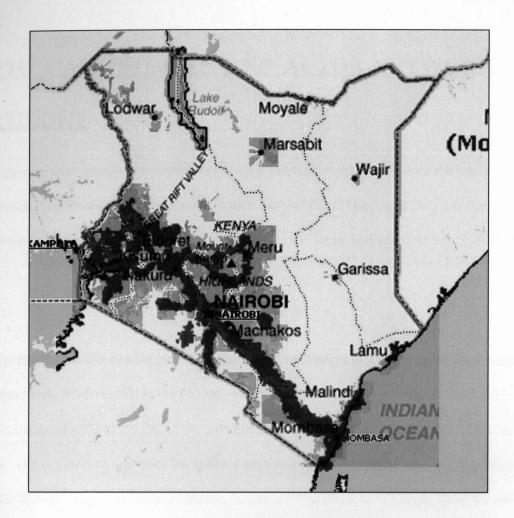


Fig. 2: Cell phone network coverage in Kenya. (Source: The GSM Association)

The coverage map shows that cell phone access is limited to the southwestern part of the country, including all of Mombasa and Nairobi, the coastal areas and to the border of Uganda, that each serve industry and tourism. This is consistent with our earlier point that communication development projects since the 1970s have been motivated primarily by economic interests and demonstrated demand of use. These coverage maps will be examined more later in the paper because they offer some important observations when correlated with other data.

THE CASE STUDIES AND ACTOR-NETWORK THEORY

Actor-network theory provides a way to view the case events in terms of the totality of objects, both human and non-human, which enabled the formation of the particular groups, and provides some tools for reflecting on the social and political implications of them.

The first task will be to identify to whom we are referring when speaking of these social formations. With respect to the Filipino event, it is those involved in the EDSA2 rally that eventually led to the fall of the government. This consisted of the masses at the rally, the rally organizers, and even the military personnel who eventually backed the protesters after the third day of the demonstration. In terms of the election in Kenya, there are three distinct but interrelated groups that together were important in the people's exercising of their democratic rights that led to the incumbent president's defeat, and each of whom used cell phones in some way toward that effort: i) the campaigners for Kibaki who used cell phones to spread messages in support of his candidacy; ii) the electorate who voted for Kibaki, some of whom likely received these messages; and, iii) the election monitoring officers who used the cell phone to communicate their findings to each other, and who ultimately reported that the election was fair and democratic.

We can now begin to identify a "sociotechnical ensemble" of both events (Bijker, 1995). This will comprise of as many elements as possible that contributed in some way to the formation of the social network in each event, bearing in mind Latour's point that in order for it to be considered part of the network it must have some effect on the actions of other agents within it (Latour, 2005a). The items in the ensemble will be limited to those that have a reasonable impact or insights into the research question; noting the muscles in arms to lift the cell phone to the ear, for example, will not be included since it is not deemed relevant to the political implications of the research question. Images from both events found in Appendices 1 and 2 will help inform some of the objects in both these lists.

EDSA 2	Kenyan Election 2002
<u>People</u> : protesters, protest organizers, military personnel	People: campaigners, electorate, election observers
Objects used by people: cell phones, text messages, banners and signs, clothing	Objects used by people: cell phone, text messages, ballots
Supporting infrastructure: cell phone network including towers, text messaging technology, phone carriers, common language	Supporting infrastructure: cell phone network including towers, text messaging technology, phone carriers, common language, ballot booths
Regulatory and financial framework: telephone carrier market deregulation legislation, foreign investment, and by implication due to the movement towards global integration of economies that lead to the economic conditions to encourage deregulation, the World Bank, International Monetary Fund, and World Trade Organization	Regulatory and financial framework: telephone carrier legislation, foreign investment, and by implication due to the movement towards global integration of economies that led to greater foreign investment, the World Bank, International Monetary Fund, and World Trade Organization

Table 3. Sociotechnical ensemble for case study events

Local/Global Duality

Right away, a number of issues emerge from this list. First, how far does one extend the network of actors when some of the conditions that produced the environment for the formation of the group are global in nature? There is no doubt that without the improvement of the Filipino telecommunications infrastructure brought about by deregulation legislation introduced in 1993, the use of the cell phone in the EDSA2 rally could not be counted on as nearly as much of a factor in the formation of the protest group. Yet, such legislation emerged in a time of increasing integration of the economies of individual nation-states, encouraging competition in areas once dominated by public monopolies and supported by a complex international technological network that made the flow of capital much easier (Castells, 2000). International institutions such as The World Bank (WB), The International Monetary Fund (IMF), and The World Trade Organization (WTO) were key to this movement. Is it useful or relevant to include them in our list? Or, does it dilute the "localness" of the case event? Similarly, the same observations can be made in the Kenyan case event. Both of its two major mobile phone carries, Celtel and Safaritel, are either owned or have strong investment interests by European companies (Cellular News, 2005), and it can be argued that without such foreign interests there would be much less investment capital for the building of the cell network that ultimately assisted in some way the success of the election. Foreign investors half a world away played some part in the construction of a telecommunications environment that supported the formation of a particular group that ousted the leaders that let their investment in the first place.

This point deserves closer examination, for there is a clue here that pertains to the relationship between global economics and the objects that exist in an analysis of a social formation similar to these and other political protest events. The presence of devices like cell phones in the hands of consumers are possible due to the international flow of capital leading to investment in developing countries to better prepare its economy and infrastructure for capitalism, and in particular as a market for first-world products and services. Global capitalism, in its search for new markets, new products for those markets and cheaper modes of production, found lucrative markets for technology products, using the discourse of individualism (a mobile phone and email account for every person) within an ideology of "an increasingly inter-connected world" used by marketers to urge consumers to acquire them, not just within advanced capitalist nations, but in developing nations as well. The upgrading of the telecommunications infrastructure was often a condition of the economic reforms that developing countries were required to adopt in order to qualify for loans from the World Bank and other such institutions. Rafael (2003) writes:

Like many third world countries recently opened to more liberal trade policies, the Philippines shares in the paradox of being awash in the latest technologies of communication such as the cell phone while mired in deteriorating infrastructures such as roads, postal services, railroads, power generators and land lines.

But consumers are also citizens. And just as communications technologies play a role in the spread of global capitalism, so do they also play a role in the communication among and between citizen groups for their various causes, whether local or global. Kingwell (2000) argues that the contemporary expression of citizenship is both local and global and based on a kind of "shared vulnerability", one not exclusively residing in a nationality that is defined by the borders of nation-states. This shared vulnerability is consistent with the principles of the Universal Declaration of Human Rights, which entrenches individual rights even if such rights contravene laws of his or her own state. In the Declaration, everyone is subject to the rule of law, but only "for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order and the general welfare of democratic society" (p. 49). According to Kingwell, one acts into a role of citizenship. In this regard, the citizen is an active participant in the process of citizenship itself, one that is linked to the "deep insight that we owe a duty of justice to our fellow citizens" (p. 22).

It is here that we arrive at a key paradox of global capitalism, one that may help reconcile the issue of the local/global duality in the sociotechnical ensemble drafted above. It has to do with whether the products of global capitalism, particularly those of digital communications technology, end up, when in the hands of increasingly politically aware citizens, becoming the very instruments which have the potential to disrupt its hegemonic hold, manifested through such acts as the ones in which this paper interested, which replace governments either through protest (Philippines) or through election (Kenya) – and, indeed, the same governments which enacted legislation that ultimately created the economic and telecommunications environment that gave them the technology in the first place.

In spite of the assertions of the anti-globalization movement that the nation-state is in decline, there is a strong argument that capitalism depends on the existence of the nation-state for its survival in order to provide a labour pool and a complex regulatory and legal framework (Wood, 2003). So does it also depend on the global communications infrastructure to provide a vehicle for the flow of capital and the maintenance of relations with such nations, and it is the very same sophisticated telecommunications infrastructure upon which capitalism depends for its survival that simultaneously can become an equally sophisticated and potent tool for its disruption by citizen groups.

Within the context of his of her labour, nationality or culture, an individual may perceive his or her citizenship as being connected to the state. In the Philippines, for example, many individuals acquire work by being overseas contract workers, Filipino citizens who work as imported labour in other countries (Pertierra, 2002: 80). But, within the context of social justice struggles, one's own perception of citizenship may extend beyond the boundaries of the nation-state, to a global awareness, since people far beyond the confines of a nation's borders can share the collective vulnerability present in the midst of such struggles, as long as an awareness of such struggles can be forged. Even if a local experience of political injustice is unique to that locality, the injustice itself can be understood far beyond it, ultimately shared and for which a wider collective response is necessary². This may be the accomplishment of the anti-globalization movement, that they made citizens of anyone who shared their cause (Kingwell, 2000: 21), and that they

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² Indeed, this may also describe in part the motivation behind this thesis.

demonstrated that the same telecommunications network depended on by global capitalism for its continued dissemination could be used against them.

Looked at from this perspective, then, one can argue that the inclusion of global forces in an examination using ANT is legitimate since it does have some effect on the actions of other agents within the network – but that its inclusion makes such analysis much more complex due to the number and scale of objects required to study.

Clothing as a "load"

Another issue in the EDSA2 example is the presence of the military and its decision to switch sides and back the protesters, which was a major contributor to the Estrada's resignation and the conclusion of the rally. The image below shows the military personnel surrounding the rally participants. One of the "loads" to identify for both the military and the protestors was the choice of clothing of uniform required to wear. The army personnel are easily identifiable by their uniform, giving the appearance of institutional group strength, unified action and armed support of the state. Many of the protestors also followed requests to wear particular colours, white or black ("Go 2EDSA, Wear blck"). This gave the impression of a strong oppositional force, though less unified than the military because not everyone actually wore the requested colours, and also because there was more than one colour requested, black or white.



Fig. 3 People at EDSA2 rally with military personnel at top



Fig. 4. Protesters at EDSA2 rally, many wearing black.

Nevertheless, recalling the differences between a program and an anti-program, clothing can be identified as a "load" both on the "program" (anti-Estrada, from the protesters perspective) and the "anti-program" (pro-Estrada, from the state's perspective) in the dynamics of this actor network. During this period, the military would have assumed the dominant-hegemonic position during the rally, while the protesters would have represented the oppositional code. On day three of the rally, rally organizers sent the following message through their cell phones: "Military/PNP nids 2 c 1 million critical mass n EDSA 2 moro, Jan. 19, 2 make decision against Erap, pls join, pas on" (translation: military/pnp needs to see one million critical mass in EDSA tomorrow, January 19, to make decision against Erap. Please join, pass on) (Celdran, 2002). Army commanders had begun considering backing the protest, and on day four, they did, and the announcement of Estrada's decision to resign came soon after.

The decision by the military commanders to back the Estrada regime no longer was a key moment for the protest's social network and position to achieve its goal. It was the moment in which the military moved from dominant-hegemonic to a negotiated position to finally join the protesters in assuming an oppositional code, and hence adding to a counter-hegemonic position. Significant political moments, in Hall's view, occur when events that are usually decoded in negotiated positions begin to take on oppositional meanings (Hall, 1980), and this is exactly what took place in this instance. When this occurred, the "load" of the clothing of the army went from "anti-program" to "program",

contributing to the show of force of the rally and at a level of support that one could argue even Estrada knew he could not overcome.

To be clear, the military's decision to back the protesters did not suddenly make them "members" of the actor network identified here. Indeed, they always were part of it, simply on the anti-program side of the group's objectives. Like the hotel clerk who wants his guests to leave the room key at the front desk, those who do not comply with the request are not suddenly "disowned" from the network, it simply makes the clerk strategize different ways to get them to comply. The protest organizers and rally participants, like the hotel clerk, had particular, stated, clear objectives for the formation of their network. The number of loads that added weight to the support of that objective increases the odds of it being achieved, according to ANT. The more people they can convert from anti-program to program, the closer they are at achieving their stated objective, and the more weight those converts in turn add to such objectives.

Latour's Roadmap

Let us move through the ANT roadmap identified earlier to see if it adds insight to the case study events.

NO GROUP, ONLY GROUP FORMATIONS

Both events qualify as controversies, items that cause discussion. Both events were covered in the mainstream media, though as noted earlier the volume of coverage of the

Filipino example vastly outweighs that of the Kenyan event. Here, questions can be raised about the reasons for this difference in coverage. Was the EDSA2 rally considered more "newsworthy" by the mainstream press? Was there a difference that one event looked like revolution even if it wasn't, while the other was a relatively peaceful election? Did media bias play a role in the selectivity of coverage of each event, suggesting that news stories in Africa are not considered as interesting as those in Asia? If so, what are the reasons for this? Many writers have commented on the West's treatment of Africa in their media outlets, stating, among other points, that if the story is not about a disaster it rarely gets mentioned (Sarin, 2003; Siddiqi, 2001; Versi, 2004). We will not review these points here in any great detail, except to note the difference in the volume of available literature, both popular and academic, between each case, and the questions they raise.

Moving on, the particular controversies were ones over agency because both events have been presented as accounts of doing something, making some difference to a state of affairs; that what was doing the action was some kind of "flesh and features" that gave them shape; and, that the agents criticized those who held oppositional positions of their own. On the last criteria, "Actors are able to propose their own theories of action to explain how their own agency's effects are carried over", there are some issues between the two case events. Clearly, there is no shortage of theories and explanations in the EDSA2 example, but this is not the case with the Kenyan example. One reason for this may lie not just in the difference in the amount of popular writing between the two events as noted above, but the clear presence of spokespeople in the former and the apparent

absence of them in the latter. Protest organizers in the EDSA2 rally offered commentary and theory on the role of cell phone text messaging in their campaigns. In the Kenyan election, no apparent spokespeople for the cell phone campaign is evident. One might assume that the spokespeople would be the campaign strategists that proposed and executed the use of the technology and distributed its content, but this is not verifiable. There are, by contrast, statements by election observation groups on their use of the technology (Deegan, 2003), but this amounts to only one out of three of our identified groups in this case that used the cell phone in the election in some way. Hence, a working theory of the role of text messaging in the Kenyan example is currently lacking.

Admittedly, without this one faces one of Latour's uncertainties, since a position that the cell phone had a mediating role in the formation of groups that contributed to the election of Kibaki is a bit of a leap of faith. Nevertheless, it is important that the leap be made, encouraged by Latour's instruction to embrace such uncertainty.

ACTION IS OVERTAKEN

An actor is made to act by many others. Who are the others? Certainly, as noted earlier, the role of the military, the economic forces of globalization and its relationship to the global citizen, the protest and campaign organizers, and individual citizens in their relationship to each other. One issue that emerges here is the argued connection that personal digital technology like the cell phone promotes a non-hierarchical and decentralized form of communication, that messages from anonymous citizens somehow emerge into the network to influence others and gather support for its purposes. This also suggests that the origins of text messages that make their way over cell phone networks

are indiscernible. Both these assertions are incorrect, insofar as the research shows. Pertierra was able to trace the origins of the messages associated with the EDSA2 campaign to what he calls a "mobile phone brigade" (2002: 110), comprising of a tapestry of activist groups and citizen coalitions who began the first wave of messages by sending them to their own members first, then allowing them to be distributed to the wider public. Similarly, it is known that the NARC campaign was behind the text messages sent out in support of Kibaki, and that the election observation officers selforganized in their communication about during polling. Therefore, though there is plenty of evidence in both cases that actors acted as a result of other actors, one should be cautious in proposing that the spread of messages was completely non-linear from its point of origin; rather; it may be better described as a pyramid, top-down, until a critical mass of messages had been disseminated through the network to individual citizens, at which time they took on the more circular, non-linear pattern commonly associated with this type of communication. This point also supports Latour's other principle, the use of under-determination, or what one might call intelligent caution as a guidepost in describing any observable phenomenon in the action of the actor network (2005a: 45). This assists us in avoiding any potential pitfalls derived from the over dependence on clichés to describe such phenomenon.

OBJECTS TOO HAVE AGENCY

If one were to mentally remove all the objects identified in our sociotechnical ensemble, one may get a very different picture of both events: masses of scantily-clothed people gathered for protest or polling, demanding action or wanting to vote with no means to

other than perhaps raising their hands, with opposing forces of some kind who may be present but unidentifiable because they too are nearly naked, the only thing to identify their opposition being perhaps the content of their speech.

Objects played an important role of agency in the formation and execution of both events. and they were also participants in the course of action, but one must be cautious to argue that any object, even the cell phone, had the single determining role. Greenberg (in McOuail, 1993) showed that during political events of high controversy, people heard of it primarily through other people and not through mass media. This not to denigrate in any way the crucial role that objects played in the sum total of the social formation and their ability to struggle towards its objective. Could the social formation in both case events have come together without the associated objects? We cannot answer definitively no or yes, but assert a doubt that it would have happened in the same way without the presence of objects, therefore a role for objects and for us the cell phone in particular is evident. "As soon as you start to have doubts about the ability of social ties to durably expand, a plausible role for objects might be on offer" (Latour, 2005a: 70). The object in question, the cell phone, is made easily visible as a result of it still being in a relative state of innovation; it is still largely considered a new object in the cultural and political landscape, compared to, say, radio, which has been around since the early 1900s. The newness of the cell phone continues to make it a subject for controversy, a *Thing*. At the same time, it is also made visible by a kind of distance, specifically distance either in access – due either to expense or regional restrictions of the cell network – or skills – due to people's different levels of aptitude or comfort with the technology.

MATTERS OF FACT VS. MATTERS OF CONCERN

All observations made in the two case events with respect to the cell phone are presented primarily as matters of concern, not matters of fact, and that they exist as expressions and not descriptions.³

WRITING DOWN RISK ACCOUNTS

Latour proposed that a network is actually the narrative or description of a social formation in which all the actors do something and act as mediators that render the movement of the social visible to the reader (p. 128). In my description of the many actors in the two case events, I have attempted to elucidate on their characteristics, connectedness, and sometimes-uneasy relationship to each other. The picture of the network described here will help to inform the ideas of the next chapter, in which the basic relationship of the two concepts in the research question is tested: the use of the cell phone as a communication tool and its positive effect on the formation of groups that advocate political change and the advancement of democracy.

³ I confess a certain unease with this. Although I believe Latour is correct that it is difficult (read: impossible) to assert an argument as a matter of fact, that no one outside of God can claim enough knowledge of a social formation to offer a true and accurate description of it, how does one move away from this without moving into cultural or political relativism? Articulation theory, by comparison, does not suggest that "reality" does not exist, only that it is exists insofar as how it is articulated, and that the choice of how it is articulated is inherently political. Perhaps the same is true with ANT, otherwise the use of ANT as a tool for political argument potentially renders it as being useful only for the purposes of criticism, which the political Left may be good at, but what else? Professor Aijaz Ahmad argues that the biggest problem with the modern-day Left is that is only able to articulate what it is against.

THE CASE STUDIES AND ARTICULATION

THEORY

Articulation enables a way to examine discourses without advocating a dogmatic or determinist position, providing a framework for encouraging deeper thinking before drawing any relationships between ideas and social forces. It demands clear definitions of terms used and awareness of any assumptions before the work can begin, coupled with an acknowledgement that even when a position is offered that it be clear that any such position is possible only because it has been articulated to exist under certain conditions and at a given moment in history.

First, it should be determined if articulation is appropriate to the study of the question.

After mapping out some of the terrain of the topic, as above, it is restated that the relationship that to examine involves the cell phone and its positive effect on the formation of groups that advocate political change and the advancement of democracy. This relationship is appropriate to an examination using articulation theory because: a) it concerns a relationship between two things already argued to have some sort of connection; b) this relationship is not argued to have existed for all time and in all places, but is specific to a particular time, the 1990s and after, and in a particular place, which for us is the Philippines and Kenya; c) the relationship also concerns the intersection between social action and a particular discourse, in this case the discourse that the cell phone empowers people for political change. This discourse is evidenced in the literature reviewed.

Conditions for connection

Articulation asks under what conditions such a connection can be made. Here one can say that the conditions are the social, cultural, political, and historical realities that enable the discourse to become social action. Specifically:

- The political and legislative environment that enabled the telecommunications infrastructure to move towards the support of digital mobile devices;
- The investment by companies to install the wireless networks;
- o The availability of cell phone handsets to a buying public;
- The presence of a class of people in the respective societies that can afford the new technology, within the regions that wireless communication is available;
- The proliferation, and, to a certain extent, acceptance of popular discourse that
 espouses the convenience and value of mobile communications;
- The identification in popular discourse of a political issue or condition around which has developed a critical mass of people who express a desire for some kind of change or resolution to it;
- The existence of some kind of social organization, grassroots or otherwise, that is able to galvanize such popular discourse into action, using cell phone technology along with other strategies.

One can view the installation of the cell phone network as a modernist development project. In the cases of both the Philippines and Kenya, there is evidence of the call for a

better telecommunications infrastructure coming also from within its own borders, not just as as a modernist project of First World technology imposed on developing countries against its will. Filipinos were clearly yearning for better telephone service, given the sorry state of its landline system for years. In Kenya, too, a desire for better communications services came from its government and through several UNDP reports that captured the views of field workers relaying the identified development needs coming from their constituents. That said, there are complex questions regarding how the expressed need for a better telecommunication system originated within their society. Did it in fact come from the people themselves who desired better long distance communication with friends and relatives? Or did it stem from their government's economic agenda, which recognized its disadvantage in being potentially left out of an increasingly integrated global economic system that is dependent on advanced communication technology for its operation? Or was it something that combined these viewpoints, perhaps the popularizing of discourse of the benefits of wireless technology through mass media? If the second or the latter, then dependency theory would be an appropriate framework to examine the issue, because it argues that development and under-development are interrelated processes, that even after a country's independence, its former colonizers create the institutional and economic foundations for life in the country from that point forward. Hence, the economic growth of one country is dependent on that of others. In the context of a global economic system, dependent countries can expand only as a reflection of the self-expansion of dominant countries (Servaes in Okigbo and Eribo, 2004).

One could argue, therefore, that when it came to the installation of wireless communication technology in both countries, both DSC and dependency dynamics may have been at work: the people desiring better distance communication because they had been exposed to the discourse of the benefits of it; and the governments and business sectors for the economic advantages, given the clear dependence on the global communications network for economic growth. To describe the same principle allegorically, if a coffee merchant insists to his slaves over and over that they need coffee for a better quality of life, and then he sets them free and the former slaves then become customers of his coffee, do they do so out of their own free independent choice, or because the merchant's message was accepted by them, or because both these factors are at play?

Let us identify, too, that these discourses are interrelated. D.K. Wagner (1999, in Pertierra, 2002) writes about the "rhetoric of the technological sublime", in which he argues that in developing countries, the rhetoric of technology dwells upon the benefits of technology transfer as the engine of growth. Discourses of sublime technology are those that embody "naturalistic, teleological and utopian conceptions of technology" (p. 13). For developing countries, this discourse focuses on what new technologies can "do", without getting into "how, and toward what end, technology will be selected and implemented within an historical context subject to contingencies of historical accident and strategic action" (p. 25). It is unclear here what Wagner means by historical accident (and besides, how does one articulate that something that occurred in history was an accident, unless one were to go to the extreme of post-modernist discourse that argues

that all history is nothing but a series of random events, ordered for documentation convenience in order to construct arbitrary meaning?). Nevertheless, his point appears to be that the utopian positioning of technology through its discourse inscribes itself as a solution to many issues within developing countries, and this creates a need to have the technology. I would add that such solutions are intended for those problems that were created through the history of colonialism and modernism. Pertierra illustrates an example of this discourse in action through an advertisement taken out in a Filipino national newspaper two months after the EDSA2 rally:

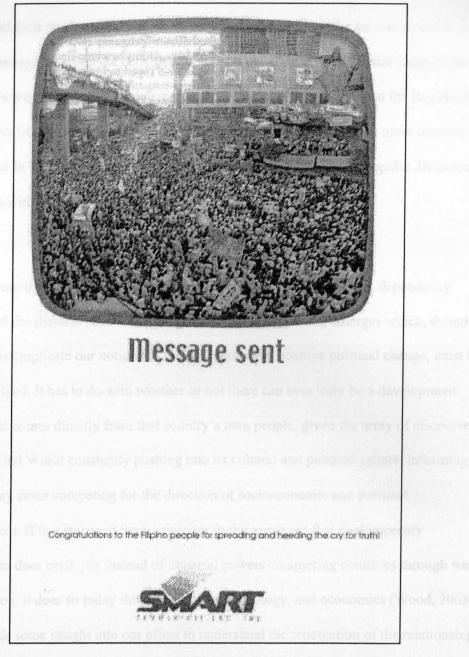


Fig. 5. Advertisement taken out by Filipino phone carrier following EDSA2 rally (Pertierra, 2002)

Though the ad appears to come across as a kind of a public service announcement and celebration, it clearly has business interests in mind when looked at more closely. It positions the cell phone, and its use for text messaging, as the instrument of positive political change, and the company logo at the bottom implies a connection between this

change and their products and services. In addition, the fact that the ad was placed in a national newspaper when the demonstration itself occurred only in Manila suggests the company's wish that the discursive message be communicated not just in the locality of the event itself, but across the country, thereby potentially creating even more demand for the product in both urban and rural regions, as well as reinforcing the popular discourse associated with the ad to a wider region.

Viewed from this combination of development support communication, dependency theory, and the rhetoric of the technological sublime, something emerges which, though it appears to complicate our notions of the cell phone and positive political change, must be acknowledged. It has to do with whether or not there can ever truly be a development project that comes directly from that country's own people, given the array of discourses from the First World constantly pushing into its cultural and political sphere, informing, and in many cases competing for the direction of socioeconomic and political development. If this is true, it lends credence to the argument that contemporary imperialism does exist, but instead of imperial powers conquering countries through war and invasion, it does so today through culture, technology, and economics (Wood, 2003). It also lends some insight into our effort to understand the articulation of the relationship in which this paper is interested: perhaps citizen and activist groups' use of cell phone for political reform is an exercise in using one hegemonic force to overthrow another, that agents are at once operating in a dominant hegemonic mode in terms of embracing the principle of the technological sublime which is rooted in the appeal of First World technologies, while simultaneously using it to galvanize constituents to support an

oppositional position towards its own elected representatives. The combination of the two adds up to a political position that is largely reformist, supporting and reinforcing Rafael's argument (2003). This point will be explored more in the discussion chapter.

The constituency of objects

The next question that comes up in our analysis using articulation theory is, "Who were the constituents that embraced this ideology?" This is the point at which articulation theory and ANT converge. The constituents are the human actors listed in our sociotechnical ensemble in the previous chapter, and although one cannot reasonably argue that the non-human actors (objects) are constituents per se, as objects are not exactly unbiased either, but, rather representative of, or inscribed with, a particular ideology or ideologies. It is possible to debate the myriad of ideologies that each of the objects in our list represents, and we might even enjoy the semiotic carnival this would ensue, but it is not possible in the scope of this paper to fully do this for each identified object, institution, and financial movement. The cell phone, for example, can represent an ideology of connectedness, but also economic exclusion (Strom, 2002), disembodiment, mobility in the city (Kopomaa, 2000), and so on.

However, three things can be said generally about the constituency of objects. First, as observed above, objects are encoded with multiple possible associated ideologies, and not even necessarily ones that its innovator may have intended. In this respect, objects become sites for ideological struggle. Guns have multiple purposes, but as objects they

also exist as sites for ideological debates around crime and punishment, gun owner rights, hunting, property, political power, military might, and so on.

Second, the ideological associations with objects are in no way connected simply to their use. McLuhan (1964) argued, "Our conventional response to all media, namely that it is how they are used that counts, is the numb stance of the technological idiot." Objects are not good or evil just because someone uses them for good or evil purposes. The effect of a technology, in McLuhan's view, is much more subtle, occurring at the level of altering sense ratios in often subconscious ways. Conversely, one need not posses the object to adopt an ideology about it. Those who do not own a cell phone, but who nonetheless are exposed to popular discourse associated with emancipation through technology can become constituents of it, and come to associate technology with that ideology even if they themselves have never used it.

Third, even if a social group does not subscribe to a particular object's dominant ideology, this does not preclude them from using it for their own purposes, in effect recoding, adapting, or even ignoring some of its ideological implications to suit local needs, particularly if such an object is part of a larger network of objects used by a social formation for a particular purpose. For example, it was argued earlier how globalization contributed to international economic conditions that resulted in foreign investment in developing countries for the improvement of telecommunications infrastructure. One does need not support the ideology of globalization in order to use cell phones for the purposes of political reform. In fact, as anti-globalization demonstrations around the

world have demonstrated, often it can be the innovations emerging out of the globalization paradigm that also empower people to disrupt it. This, of course, is assuming that an object's associated ideologies are even within consciousness, and have not as of yet disappeared into the fabric of culture. (This is why Latour's list (2005a) of situations in which an object's activity is made easily visible is so valuable, for it gives clues as to where to look within a culture if this has take place.) But, assuming that an object, as a site for ideological struggle, symbolizes such ideologies that still operate in the culture at some conscious level, they may be encoded, decoded, and recoded in many ways and by many people, each representing different places on the scale of the three hegemonic positions.

Articulation into social action

There can exist a relationship between a discourse and related social forces, but that relationship is not a given. Discourses in and of themselves do not always find their agents, but form within a certain conjuncture that create spaces within which social movements or practices can emerge. Ideological forces seek out articulations with social groups who are operating within particular historical contexts and who are attracted to the promise of empowerment that such discourses offer (Hanczor, 1997).

Emancipation, independence from central authority, mobility, group coordination – I propose that these were the ideas swirling around popular media and culture that found constituents in mobile phone users who, when placed in an historical moment of *potential*

political change, became empowered to use the technology to form a political force, even if just for that moment. Though this articulated relationship is not necessarily true for all time and all places, it did provide some kind of "glue" for the two case events of this paper. It likely also reflects a relationship for other events in which this combination of discourses, coupled with a politically motivated group formation and a tool like the cell phone, converge within a moment in history in which some group action can be galvanized. How each group manifests such momentary power is of course filtered through each locality's culture, politics, social structures, customs, and language.

This relationship between discourses and social action is extremely fragile. Alter one or more of the discourses that enable this social formation, and it is possible that the social formation changes with it. For example, China is currently said to be imposing a mobile phone real-identity system to weed out "illegal text messages". Positioned as a way of reducing the amount of text spam that appears on the handsets of the country's 100 million subscribers, the system would also immediately render pre-paid cell phones inoperable until its users register their contact info into the system (COMTEX, 2005). Currently, sixty per cent of mobile phone subscribers in China use pre-paid phone accounts, most of them young people who do not have a credit history. Looked at through China's history of human rights abuses and suppression of dissent, it is easy to suggest that the real-identity system is another strategy at disempowering the organization of political activity that may be contrary to the interest of the state. It alters one of the key discourses, independence from central authority, which in turn would alter the way it empowers people by the promises the discourse would otherwise offer.

Is cell phone use for political activism a secondary

articulation?

Hall warned about the necessity to understand the difference between primary and secondary articulations. Primary articulations are those that take place between groups and all of society, whereas secondary articulations are those that take place within and between groups that have a relationship to each other based on the belief of a shared ideological position. Secondary articulations therefore may be more isolated from the larger debates occurring in broader society outside of those groups who simply hold a common way of thinking between themselves about an issue. Restricting analysis to secondary articulations, according to Hall, could become "nothing more than a high-level, advanced game for academic deconstructionists" (1998: 53).

Articulation also requires that all assumptions be checked so as not to fall into universal truths or sweeping generalizations. It must therefore be asked if the belief in cell phone use for effective political activism qualifies as a secondary articulation. Does it hold true only for those who have a stake in the answer to that question to be yes? Do we desire a particular answer to that question because we long for positive examples of the empowerment of ordinary people to stand up for their democratic rights — for hope? Reading the popular media reports coming after the EDSA2 rally, one would think that the cell phone was a cause for revolution. One protestor was quoted as saying, "The phone is our weapon now. The power of our cell phones and computers were among the

things that lit the fuse which set off the second uprising, or People Power Revolution II" (Rafael, 2003: 3).

If secondary articulations occur within and between groups that have a relationship to each other based on the belief of a shared ideological position, then two things may be observed when reviewing the analysis of discourse emerging from these and other examples of cell phone use for political activism. First, the notion that it is an effective tool for group formation and organization, even for purposes of political activism, is not a secondary articulation; otherwise, the Chinese government would not be imposing realidentification systems on users for sending text messages. The debate around the use of the tool as one component of bringing people together that shares certain interests is one that is taking place across broader society, even if the positions around that debate diverge. This leads to the second observation: the belief that the cell phone's use for group formations results in "positive things" for its people is clearly an arbitrary value judgment that has no necessary relationship to its actual use. It is a determinist position because it suggests that the cell phone can only be used for "good" and not for "bad", though of course good and bad are arbitrary judgments in and of themselves that change depending on one's point of view. There is clear evidence that this belief does not hold up. During EDSA2, pro-Estrada officials were also using their cell phones to organize support for their position, even if in the end it was a losing battle (Pertierra, 2002). During the recent race riots in Australia, several news reports cited the use of text messaging to gather and organize rioters (Reuters, December 12, 2005). Therefore, one must separate the reasonable idea about the cell phone's potential for the effective

organizing of group formations from the misleading value judgment of the cell phone's "exclusively positive" role in society that would blind us to the other and sometimes ugly purposes for such groups to form. Such acknowledgement is necessary not only because articulation theory requires it, but because, in the spirit of the political project from which it comes, it needs to better inform political strategy if a response to such destructive political expression is to be crafted.

Articulation theory, with its emphasis on an examination of non-necessary relationships between ideology and social action, provides a valuable critical lens through which the effectiveness of development support communication can be investigated. It demands the investigator have a clear understanding of the social, political, cultural, historical, and economic factors that may have led a group to embracing a particular ideology for the purposes of further empowerment. Such an effort requires much work, but is necessary to avoid connotative articulations of concepts at the level of "common sense discourse", and the rationalist articulation into essential paradigms (Laclau, 1977).

DISCUSSION

So what?

If, after this assembly of "matters of concern" about the topic, one continues to believe that there is some relationship between the cell phone and its use for political change in developing countries, at some point one comes up against the inevitable question, so what? What difference does knowing this make? People are still living in oppressed conditions, dealing with poverty, many dying of disease that, though treatable, remains untreated for many unjust reasons.

In the preceding pages, I have questioned the myths of the cell phone and its use for political purposes, especially those close to the determinist side of the argument. Cell phones, and those who use it, still exist inside a complex web of actors including ones that are institutional, political, and economic, representing differing and conflicting ideologies, some of whom may not even necessarily be interested in democracy. So we end where we began – with no absolute answers, no universal truths, nothing that can be passed on to an NGO to say, "Here's how to fix everything."

Yet, what is intriguing about the question, "What difference does the cell phone make?" is that it also cannot be definitively concluded as, "None". No one can reliably claim it has made no difference, and in the two case events that we examined, it was demonstrated that the cell phone and text messaging did play a role in some way, not one

that was revolutionary or determinist, but a role nonetheless. In one event, it accelerated time and lessened space relationships to form large groups for peaceful political dissent that resulted in the resignation of a leader viewed by the majority of its people to be corrupt. In the other, it became a tool for spreading electoral messages in an election that saw the highest turnout in that country's history, and enabled election monitoring officials to reduce voting irregularities and declare quickly that the polling that had been fair and democratic. The events differ in scale and impact for many complex reasons, but the cell phone is a presence in both of them nonetheless. Is it reasonable to suggest that future examples of their use for political organization in other places may emerge? I would argue that it is.

Again, we end as we began: something is happening. And while something is happening, it is important that we examine these cultural moments in relationship to the "ongoing conversation" about issues, questions, responses and directions (Hall, 1990: 11). What additional contribution can we make to this conversation?

Non-violent engagement

Each of the two case events represents campaigns of political resistance that removed national leaders without the use of violence or bloodshed. One of the criteria for their selection was that an analysis could enable the potential for further theory-building about a larger collection of cases (Stake, 1994). This is important to a field of study like cell

phones and group formation for political purposes, as further examples of it appear in mainstream media every day.⁴

Swiss sociologist Hans Geser (2004) argues six consequences for communication between and within groups as a result of the cell phone. Though he describes this for the purpose of promoting organizational development for the business and public service sectors, it is possible to interpret them for our purposes as well. They are:

- Decentralization and bilateralization of intrasystemic communication: Cell phones
 promote direct horizontal communication that can challenge the structures and
 processes of formal organization. Communication channels are no longer
 authoritatively predefined. Less information about peripheral events flow into the
 organizational centre. Such horizontal exchanges potentially breed autonomous
 subgroups and informal organizations.
- 2. Shrinking spheres of individual responsibility and individual decisions: Cell phones provide a means to extend central authority by making it easier for individuals to contact superiors or leaders, which can in turn expand consensus and mobilize support for a position or order. Such "just-in-time consultations" can substitute traditional forms of supervision and instruction that usually rely on preplanned meetings.

⁴ A Google News Alert for the text string 'cell phone text message' that I subscribed to since December 14, 2005 resulted in at least one article per day on the social aspects of text messaging appearing in mainstream news media in North America.

- 3. Shifts from supraindividual and intraindividual to interindividual determinants of social action: Cell phones promote "social facilitation" to a similar degree that face-to-face interaction does. They also act as a medium for collectivization, strengthening networks (decentralized social fields constructed by each individual's personal capacities and needs) while simultaneously weakening communities (collectivities which are shared identically by many members who share causal impact on their individual thinking and behaviour) (Wellmann, 2001).
- 4. <u>Higher interactional integration of "translocal elites" and "place-independent communities"</u>: Cell phones facilitate communication among members of a network, irrespective of their current location and movements, enabling them to maintain knowledge and diffuse new knowledge quickly, and increase opportunities to consult and influence each other.
- 5. Speeding up and intensifying system-environment interactions: Cell phones can shorten the time span between an event occurring and its communication to others on the network.
- 6. Facilitation of exchange processes and increase in the transactional efficiency within social systems: Cell phones enable short-term just-in-time adaptations to unpredictable changes in needs. Each phone user is empowered to make more efficient use of his or her social resources.

Below is a summary some of the points made earlier regarding the groups involved in acts of political resistance and their various interactions. This summary does not represent a complete or absolute description of the group dynamics involved in the events, but lays down a basic foundation for the expression of matters of concern regarding cell phone use, using Geser's framework above.

Broadly speaking, five groups of human agents may be identified as being active in an operation of group political resistance: i) the organizers or spokespeople of the resistance, ii) active supporters of the resistance, iii) the spokespeople opposing the resistance, iv) participants in opposition to the resistance, and, v) witnesses.

Latour describes spokespeople as those who justify the existence of the movement, invoke certain rules of its action and precedents, and offer definitions of it against all others (2005a: 31). There are also the supporters of the spokespeople's position or ideology, in which individuals such as ordinary citizens, who may have been previously unaffiliated with the spokespeople's ideology, may choose to align with this ideology and potentially engage in some type of coordinated group action. The supporters' philosophical alignment to the spokespeople's argument may be temporary, but would connect to already present discourses in the public sphere, an essential characteristic if they are to be considered primary articulations. Individual supporters may also choose to follow or not to follow the rules of engagement offered by the spokespeople; any supporters who choose not to follow these rules are not necessarily in opposition to the spokespeople's essential position, but may demonstrate it in different ways. However, if

spokespeople and supporters even temporarily form a group for the purpose some form of active political resistance, they may collectively be considered an *offensive political* front.

On the other side of the political issue, it is possible to map this duo of agents and define spokespeople and supporters that represent the opposition to this resistance, forming a *defensive political front*. These comprise the third and fourth groups summarized above, and in the occurrence of a political protest, they may not even be locally present during the event, but are nevertheless symbolically present as representatives of the ideology or position being opposed by the resistors. In cases in which the state forms either the offensive or defensive fronts, they may also have the military as a support in addition to other agents, as long as a military chose to support the state and its ideology.

Finally, witnesses of the event may be viewed as a fifth group. Witnesses are defined as those who experience the event through some form of sensory input, mainly through sight or sound (Wikipedia contributors, 2006: 'witness'), but do not necessarily participate in the event itself in an overt fashion. Witnesses as a group is more problematic to define compared to the other groups, as they may not necessarily align to a particular position related to the issue. Witnesses may be comprised of random bystanders, or who individually may lean towards an opinion on one side of the issue or another; who may have no opinion at all; who may or may not have prior knowledge of the context of the event. In both case events, witnesses were present: individuals who saw the protest in The Philippines either in passing or by deliberately choosing to watch; and, in the Kenyan

election, the official election observers who had a formal responsibility as witnesses. The distinction between these two types of witnesses is important: as the Filipino example demonstrates, individual witnesses may not necessarily constitute a group or political force unless they exercise some form of agency either during or after the event, one that may align close to one of the positions on the issue swirling about the public sphere, or argue for new ones; conversely, witnesses who exercise agency may do so as individuals with no defined group affiliation, but their choice to exercise agency may still connect to discourses about the issue already at play in society. As in the Kenyan example, the formation of a group that defines itself as having a witness role may do so with the intention of having minimal impact on progress or the outcome of the event, but their formal presence, even as mere reporters of what they witness, may indeed have some bearing on how it plays out (Deegan, 2003: 4). Witnesses who exercise no agency do not affect other channels in the actor network, and therefore have little or no bearing one way or another, at least in terms of ANT.

Mondala (2005) asserts the role of the public in not just reflecting matters of civic concern, but in actively participating and acting into their context: the public is not existing as a pre-existing social structure, but forms in response to and interactively with its sociopolitical environment. Ordinary conversations occurring in the public sphere can act as the primary locus where collectives are locally designed by talk-in-interaction, where alliances, communities of opinion, and groups sharing views of the world are constantly assembled through everyday activities. In our case events, it is the forms of these ordinary conversations, happening in various modes and occasionally mediated

through technology like the cell phone, that interest us. Conversation is converted into action when a group of individuals form through the efforts of some kind of organizer, to become or act into a collective voice that has the potential to be something of a political force.

With these basic definitions and frameworks in mind, how might the forms of action and the formation of the various social groups that participated in the two events be expressed? I propose the following:

- Organizers and other spokespeople articulate ideologies (Grossberg, 1996; Latour 2005a) by organizing and spreading messages that attempt to galvanize social forces into group formation. Such ideologies find constituents (Hanczor, 1997) often by tapping into already existing discourses circulating in the public sphere.
- Some citizens, in the process of acting into their sociopolitical context, align with such ideology and have the potential to become a loosely associated group (Mondala, 2005).
- A unique political moment is possible when discourses that previously existed in dominant hegemonic codes begin to take on oppositional meanings (Hall, 1980).
 This can be triggered by an event (McQuail, 1993), or a call to action (Deegan, 2003), enabling them to transition from witnesses to potential participants.
- Organizers and participants who form a temporary allegiance under these circumstances constitute an offensive political front, using their shared adopted ideology as the glue that holds them together.

- Some form of group action representing political resistance ensues to make their shared ideology more tangible, facilitated by the organizers/spokespeople who state the political objective of the event or campaign (Latour, 2005a). The success or failure of the group's action will be viewed against this objective.
- Opposing forces, including those that continue to support a dominant hegemonic position (Hall, 1980), constitute a defensive political front, composed of people in similar social roles (organizer/spokespeople/participant). If the opposing force were the state, the military may be one of the factions representing the opposing force.

 The opposing force may also state its objective, but more likely it may already be understood that its objective is to maintain some type of status quo that it has itself defined, since as the dominant group in society it maintains it hegemony by influencing what in society is considered to be "common sense" (Hebdige, 1991).
- o Either political front can wage similar tactics to achieve its goal, including demonstration, media campaign, and so on, resources permitting. Either side must respond quickly to the other's dynamics and strategies.
- Witnesses to the event may not necessarily act as direct participants, but can choose to act into their own agency by reporting events filtered through their own biases, therefore reinforcing particular ideologies. Some witnesses may also be present for the purposes of reporting what they see.
- Resolution occurs when the offensive political force's objectives are either achieved or subverted. If they are successful in achieving the goals stated by its spokespeople, a victory has occurred for them and a unique political moment has been realized, such that a previously held dominant-hegemonic position may now

be read in oppositional terms (Hall, 1980). If such goals have not been achieved, the defensive political front has been successful in subverting an attempt to reverse a hegemonic position, and previously held positions return. This does not necessarily indicate that the oppositional force has permanently quelled the resistance, since dominant groups in society must constantly work to maintain their hegemony, only that a threat presented by the offensive forces has temporary been subverted.

What factors may be at work in the success of the political resistance to achieve its goals?

There are certainly many, but would include:

- That both the spokespeople of the resistance and some number of citizens are successful in becoming constituents of a shared discourse, who are attracted to the promise of empowerment that such discourses offer and who are operating within particular historical contexts (Hanczor, 1997);
- That the resistance is able to demonstrate this critical mass of support by attracting a significant number people willing to enact their agency in alignment of their shared position;
- 3. That the resistance, in whichever combination of actions it wishes to pursue its objectives, is able to respond to the tactics of oppositional forces quickly enough to successfully counter them;
- 4. That they have an effective network of message reinforcements and access to communications channels so that its spokespeople can continuously convey

their collective ideological position (Latour, 2005a), either through mass media or other forms of communication.

Geser's principles can be mapped onto key phases noted in the above descriptions of the formation of social groups for political resistance and their factors of success. In each phase, the cell phone may represent a constructive effect – potentially amplifying and augmenting it – a retarding effect, have no effect at all, or a combination of more than one of these.

I. Phases of the event

Phase	Cell phone's potential contribution to phase				
Organizers and spokespeople articulate discourses supporting their position	 Decentralization and bilateralization of intrasystemic communication can enable the spread of messages to occur quickly, but prevents spokespeople from completely controlling the distribution of the message, risking the possibility of being discovered by opposing forces, or having their argument misrepresented; Shrinking spheres of individual responsibility and individual decisions enables spokespeople to be contacted at any time for consultation or making statements; Shifts from supraindividual and intraindividual to 				
	interindividual determinants of social action promotes a wider network of potential constituents of the ideology.				
Some citizens align with discourse	 Decentralization and bilateralization of intrasystemic communication allows citizens to spread messages and information quickly and easily to each other, but the information could also be sent to opposing forces, or be reinterpreted; Shrinking spheres of individual responsibility and individual decisions allows people to potentially contact spokespeople to learn more; Shifts from supraindividual and intraindividual to interindividual determinants of social action promotes a wider network of potential constituents of the discourse; Speeding up and intensifying system-environment interactions reflects the potential for citizens to forward messages quickly to others in their personal contact list. 				
Event or call to action enables transition of citizens to become	 Decentralization and bilateralization of intrasystemic communication enables organization and quicker 				
active participants in event	responsiveness of participants during event; o Shifts from supraindividual and intraindividual to				

Group action of political resistance now underway	 interindividual determinants of social action allows for greater facilitation of the movement of the formed group while event is in progress; Higher interactional integration of "translocal elites" and "place-independent communities" enables the network t stay in touch with latest developments and adjust strategy if necessary; Speeding up and intensifying system-environment interactions enables quick response to changes in strategy; Facilitation of exchange processes and increase in the transactional efficiency within social systems promote just-in-time adaptations to changing needs of political event, enabling participants to change strategy in response to opposition reaction. 			
Opposing forces counter resistance	 Potentially can use all strategies noted above, but for the purposes of supporting an oppositional position to political resistance 			
Necessity for each side to respond quickly to the other's strategies	 Speeding up and intensifying system-environment interactions enables quick response to changes in strategy; Facilitation of exchange processes and increase in the transactional efficiency within social systems promote just-in-time adaptations to changing needs of political event, enabling participants to change strategy in response to opposition reaction. 			
Witnesses choose to report events	 Decentralization and bilateralization of intrasystemic communication enable witnesses to make own observations about the event and potentially communicate them both to participants and non-participants of event; Higher interactional integration of "translocal elites" and "place-independent communities" enable witnesses to form own network independent of either of the two political forces, if so chosen. 			

Table 4: Phases in an event of political resistance and the cell phone's potential contribution

II. Success Factors

Success factor	Cell phone's potential contribution to success factor				
The resistance is able to demonstrate a critical mass of support	 Decentralization and bilateralization of intrasystemic communication enables wide spread of messages to many outside its own immediate network; Shifts from supraindividual and intraindividual to interindividual determinants of social action promotes collectivization and strengthening of network; Higher interactional integration of "translocal elites" and "place-independent communities" enable communication 				
	interactions shorten the time span between an event occurring and its communication to others.				
The resistance is able to respond to the tactics of oppositional forces quickly enough to successfully counter them	 Shifts from supraindividual and intraindividual to interindividual determinants of social action promotes collectivization and strengthening of network; Higher interactional integration of "translocal elites" and "place-independent communities" enable communication among members of a network, irrespective of their current location and movements, enabling them to maintain knowledge and diffuse new knowledge quickly, and increase opportunities to consult and influence each 				
	other; Speeding up and intensifying system-environment interactions shorten the time span between an event				
	occurring and its communication to others; o Facilitation of exchange processes and increase in the transactional efficiency within social systems enable short-term just-in-time adaptations to unpredictable changes in needs.				
The resistance has an effective network of message reinforcements and access to communications channels	 Decentralization and bilateralization of intrasystemic communication enables wide spread of messages to many outside its own immediate network; Shifts from supraindividual and intraindividual to interindividual determinants of social action promotes collectivization and strengthening of network to increase 				
spd there is no alternati	communication both within and outside its immediate network boudaries; Higher interactional integration of "translocal elites" and "place-independent communities" enable communication				
protocol in targeted reg	among members of a network, irrespective of their current location and movements, enabling them to maintain knowledge and diffuse new knowledge quickly, and increase opportunities to consult and influence each other.				

Table 5: Success factors in an event of political resistance event and the cell phone's potential contribution

Geser also makes reference to "tightly knit cellular structures based on a fine distribution of local antennas... Locally oriented political campaigns may become more vigorous because parties use cell phones systems to target electoral propaganda to the populations of precincts or countries" (2004: 31). It is in Geser's attention to the locality and limits of cell phone antenna distribution that we locate another valuable proposal regarding its relationship to the conditions under which such group formations emerge: the notion of cellular networks as zones of political power.

Cellular network coverage maps as zones of political power

Cell phone network coverage maps are useful tools in the study of social and cultural phenomenon for a number of reasons:

- O Unlike the Internet, which users can access through a variety of means, such as telephone lines, cable modems, ADSL, and T3 high-speed connections, cell phone networks are *dedicated* and *singular*; that is, they correspond to fixed physical localities that indicate where users are able to access the network, enabling the potential for demographic analysis within those regions. Users of cell phones have no choice but to be physically within a network area in order to use their handset, and there is no alternative other than to use a cell phone network to operate it.
- O Cell phone network coverage maps track *network penetration density* and *network*protocol in targeted regions, indicating how many cell phone reflector towers are
 located in given areas, and what network protocol(s) it support(s). It would be
 reasonable to propose that the higher the population, the larger the number of

handsets and therefore the deeper the network penetration, but this would need to be tested on a region by region basis to be confirmed. Network protocols are important because some are older than others, for example analog vs. digital PCS; regions with more sophisticated protocols may correlate to certain economic and demographic trends, but again this would need to be tested to be sure.

Since each phone carrier issues its own network coverage maps, it is possible to track trends of network expansion over time, indicating emerging regions for wireless communications and economic development, since carrier companies are more likely to let business interests rather than social needs dominate decisions of where to build the next part of the network (Strom, 2002).

It is possible to examine the kinds of events such as the ones studied here with data that combines cellular network coverage maps and other useful data, including poverty levels, election data, and so on. Such an examination would be useful in gaining a deeper understanding of the nature of potential political influence exerted by users of the technology, and the speed and mobility in which related messages can exist and be spread.

With regards to the Philippine example, Rafael (2003) argued that there exists a bearing on the political ontology of those who can afford cell phone technology primarily because they come from the middle or upper class, and that this can be summed up as being a reformist position and related calls to action: "The interest of Generation Txt lies not in challenging the structures of authority but in making sure they function to serve the

country's needs." The same could also be suggested of the election in Kenya, that the message spread by campaign organizers was not revolutionary, but reformist: vote for Kibaki. In each case, the political ontology remained consistent, even though these are two countries at very different positions in their national human development, as indicated by the UN's Human Development Index, noted in chapter 2.

Let us take a simple example correlating four sets of data using the election in Kenya.

Kenya has two main cell phone carriers, Celtel and Safaricom, whose network coverage maps indicate service in the following areas:

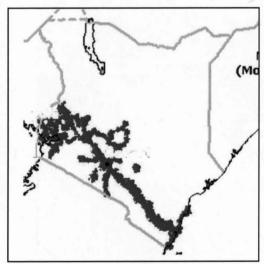


Fig. 6. Safaricom cell phone network coverage area for Kenya. (Source: The GSM Association)

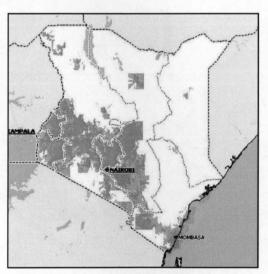


Fig. 7. Celtel cell phone network coverage area for Kenya. Darker areas represent areas of deeper network penetration.

(Source: The GSM Association)

Notice there are redundant coverage areas on the maps, indicating competition between the two carriers for customers in those regions. If we were to combine the coverage areas from the two maps, and add in the names of cities and towns, we would get the following:

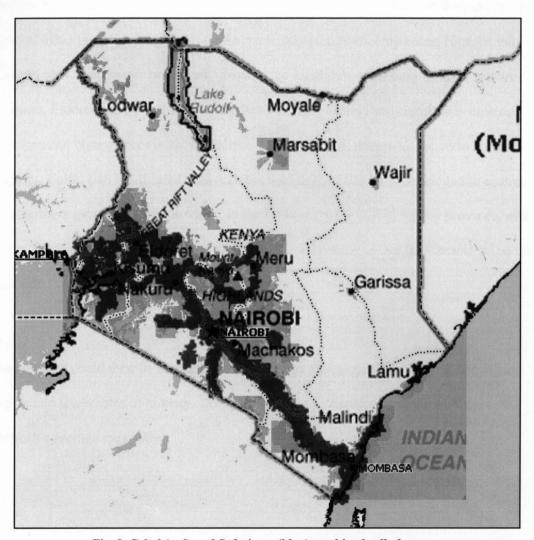


Fig. 8. Celtel (red) and Safaricom (blue) combined cell phone network coverage area for Kenya.

Clearly, Celtel has a wider network across the country than Safaricom, but Safaricom also competes with Celtel for customers in every observable area on the map, as it holds

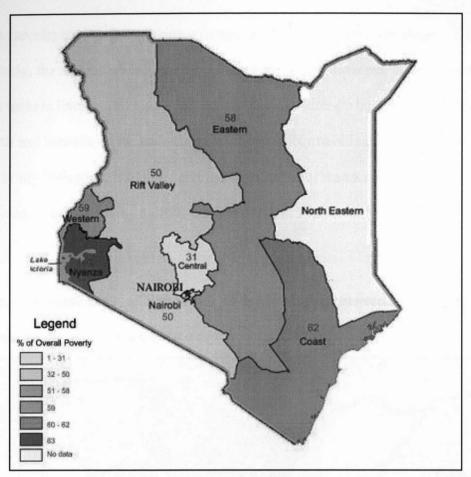


Fig. 9. Poverty map for Kenya (Woldemariam, 2003)

Although the map shows that poverty across the entire country is very high, the lowest poverty regions are in Central province (average 31% of people in overall poverty), Nairobi and Rift Valley Province (50% each). Coast province has 62% overall poverty, and limited network coverage in coastal areas due to the reasons noted above. One interesting trend to note is that although both Western and Nyanza provinces have high poverty rates, 59% and 62% respectively, both provinces have near complete cell network coverage. This may be explained in part by their locations on the continent. Both provinces border Uganda, Nyanza being closest to Lake Victoria, also shared with Uganda, each representing potentially important locations for commerce and transportation with the country, which in 2005 ranked ten places higher on the UN

Human Development Index, placing it in medium human development range.

Conversely, the regions where poverty is highest and where little cell phone coverage is present include Eastern and North Eastern provinces, which are bordered by Ethiopia on the north and Somalia on the east, countries that possibly have limited trading importance if HDI is any indication, Ethiopia ranking 26 places lower than Kenya at 170, and Somalia not even registering an HDI ranking (UNDP, 2005).

Combining all these maps, a fuller picture of the correlation between socioeconomic status and access to cell phone technology emerges.

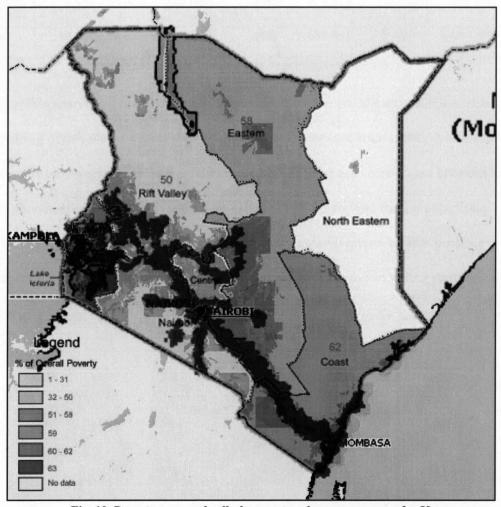


Fig. 10. Poverty map and cell phone network coverage areas for Kenya

Province	Turnout	KANU	%	NARC	%	Cell coverage	Vote turnout compared to average	NARC vote compared to average
Central	58%	249,556	27.41%	653,874	71.82%	high	high	high
Coast	31%	78,287	28.31%	182,299	65.92%	low	low	avg
Eastern	27%	111,632	23.60%	356,648	75.39%	low	low	high
Nairobi	41%	75,862	20.70%	281,496	76.82%	high	low	high
North Eastern	20%	28,147	65.63%	14,581	34.00%	low	low	low
Nyanza	54%	54,417	6.48%	505,793	60.19%	high	high	avg
Rift	54%	701,833	53.60%	551,332	42.11%	medium	high	low
Western	53%	124,273	19.30%	505,716	78.52%	high	high	high
National	46%	1,424,007	29.28%	3,051,739	62.75%	and salating states and	Commence of the	

Table 7: Kenya 2002 presidential vote by province (Leer, 2002) with added columns on cell phone network penetration

There is no suggestion here of a determinist relationship between voting results and cell phone use in the campaign, as there is a host of other factors that would have contributed to the decisions of individual voters to support Kabaki. But the fact that in certain regions there is consistent correlation between the data above suggests that this question of cell phone network coverage maps and its potential to indicate not just wireless communication reach but also sociopolitical and culture movements would be a rich field for cultural studies and social science to pursue.

If Rafael is correct in suggesting that the discourse of political messages contained in cell phone texting campaigns will remain decidedly reformist while the lower classes of

the historically dialectical relationships between them throughout the last two centuries, that make the articulation of political activism augmented with an instrument like the cell phone, as demonstrated in both our case events, so interesting.

CONCLUSION

In this thesis, I explored case studies of two events in which the cell phone was said to have played a role in its citizens' ability to exercise democratic rights to remove two governments, one in the Philippines in 2001, and one in Kenya in 2002. Using actornetwork theory and articulation theory, together with discourse analysis and a foundation in development support communication, the details of each case event were examined to test the viability this relationship, and proposed principles for further theory building.

The investigation supported the following positions:

- The cell phone played an important part in the formation and organizing of social groups that emerged in both case events, particularly for protest participants in the 2001 EDSA2 rally, and in the communication between monitoring officials in the 2002 Kenyan election. The role of the cell phone in influencing voter decisions in Kenya is less certain, but evidence supports that a texting campaign did take place.
- During the EDSA2 rally, the cell phone played another important role in the reporting of events by people outside a central authority or traditional journalism community, who were freed of the expectation to write with an appearance of objectivity.
- We identified three types of social groups common to both case events that each
 contributed to the success of the group's stated objectives: the *organizers*(campaigners, NGOs), the *organized* (rally participants, voters), and the *witnesses*(election officials, rally event eye-witness message senders).

- Popular writing of the impact of the cell phone for purposes of political activism implies a revolutionary or determinist place in contemporary society, supporting D.K. Wagner's concept of the "rhetoric of the technological sublime". In our study, we found that the cell phone was not the determining instrument in the success of either campaign, but mediated and accelerated social movements already in play.
- The notion of direct citizen agency, or the "smartmob", in which text-messaging campaigns come from a self-organizing anonymous public with no central body like an NGO, is largely false. In both case events, organizers initiated messages before they spread to the public at large. Determining the origin of the messages of the two case events, therefore, is possible.
- The cell phone's popularity in The Philippines emulates a primarily verbal, or story-telling culture. The tone and content of text messages reflect a form of written speech.
- Communication development projects in developing countries since the 1970s have been motivated primarily by economic interests and demonstrated demand for use, in spite of the discourse of the participation paradigm in which local needs help determine the focus of such projects.
- O When it came to the installation of wireless communication technology in both countries, both DSC and dependency dynamics may have been at work simultaneously: the people desiring better distance communication because they inevitably had been exposed to the discourse of the benefits of it; and the governments and business sectors for the economic advantages, given the clear dependence on the global communications network for economic growth.

- O In addition to their handsets, participants in both events were supported by a large network of agents, including supporting technical infrastructures, regulatory and legislative frameworks, and other semiotic loads that reinforced the strength of the key message such as clothes and banners.
- Economic and cultural globalization must be factored into an awareness of the supporting infrastructure of social formations that emerge using cell phone technology, since they often support the policies at the national and local level that enable the development of such infrastructure and promote a consumerist society.
- Consumers are also citizens. Just as communications technologies play a role in the spread of global capitalism, so do they also play a role in the communication among and between citizen groups for their various causes, local and global. The products of global capitalism, particularly those of digital communications technology, may end up, when in the hands of increasingly politically aware citizens, becoming instruments to disrupt its hegemony, manifested through such acts as the ones in which we are interested that replace governments either through protest (Philippines) or through election (Kenya) and, indeed, the very same governments which enacted legislation that ultimately created the telecommunications environment that gave them the technology in the first place.
- o In the Filipino example, the decision of the military to back the protesters was a key moment for the protest's social network and its position to achieve its goal. It was the moment in which the military moved from dominant-hegemonic to a negotiated position to finally join the protesters in assuming an oppositional code, and hence counter-hegemonic. When this occurred, the "load" represented by the

- army's clothing went from "anti-program" to "program" from the protesters point of view, contributing to the show of force of the rally and at a level of support that Estrada could not overcome.
- Although objects do not have a determining role in the outcome of the events, they
 do have various forms of agency and play a crucial role in social formation.
- o Three things can be said about the constituency of objects. First, objects are encoded with multiple possible associated ideologies, and not even necessarily the ones that its inventor may have intended. Second, the ideological associations with objects are in no way connected simply to their use; conversely, one need not posses the object to adopt an ideology about it. Third, it is possible that even if a social group does not subscribe to a particular object's dominant ideology, this does not necessarily preclude them from using it for their own purposes, in effect recoding, adapting, or even ignoring some of its ideological implications to suit local needs.
- Emancipation, independence from central authority, mobility, group coordination were the ideas swirling around popular media and culture that found constituents in mobile phone users who, when placed in an historical moment of *potential* political change, became empowered to use the technology to form a potent political force, even if just for that moment.
- The notion that the cell phone is an effective tool for group formation is a primary articulation, occurring at many levels in society. But, the belief that use of the cell phone can result only in positive things is clearly an arbitrary value judgment that

- has no necessary relationship to its actual use, and therefore is a secondary articulation.
- Cell phone network coverage maps are useful tools in the study of social and cultural phenomenon for a number of reasons: one, cell phone networks are dedicated and singular; two, cell phone network coverage maps track network penetration density in targeted regions; three, they enable the tracking of trends of network expansion over time, indicating emerging regions for wireless social communication and economic development.
- Cell phone network coverage maps represent zones of political power, enabling its constituents to promote its political agenda. The dominant agenda, reformist, potentially further isolates the lower classes until they too join the network in numbers that represent some kind of critical mass, at which point the dominant agenda may either shift or be accepted by the lower classes as well.

The genius and the mortal instruments

This paper began with a quote from William Shakespeare's play *Julius Caesar*, a tragedy about the conspiracy and assassination of the Roman emperor at the hands of his friend Marcus Brutus.

Between the acting of a dreadful thing
And the first motion, all the interim is
Like a phantasma or a hideous dream
The genius and the mortal instruments
Are then in counsel, and the state of man
Like a little kingdom, suffers then

The nature of an insurrection.

- Shakespeare, Julius Caesar, II. i. 63-69

Brutus is persuaded to kill Caesar because of growing public concern over what would become of Rome if Caesar were successful in turning it into a monarchy under his dictatorship. Brutus struggles with his own conscience before receiving a letter that ultimately secures his conversion, one that he believes represents the will of the people: "Brutus, thou sleep'st: awake and see thyself!/Shall Rome, etc. Speak, strike, redress!" (II. i. 46-47). Although the source of the letter is unknown, Brutus nevertheless is convinced that the leader must be removed, a decision he makes not out of his own desire for power, but for the sake of what he believes is the public's right to justice. The rest of the play deals with the events in the aftermath of the slaying, including the turning of public opinion against Brutus and his co-conspirator Cassius by Caesar's friend Mark Antony.

This passage brings to light the tension that exists in matters that pertain to the removal of a leader between the moment of choosing to act and the act itself. Once the decision to act is made, the genius (the human plan) and the mortal instruments (objects) now can work together, and "the state of man …suffers …an insurrection" (II. i. 67-69). But Brutus is a tragic character, motivated to kill his friend Caesar by a belief in the honour and patriotism of the act that is nonetheless lined with fear of what a future for Rome holds with him in a position of absolute power, and the source and validity of the letter that seals his decision is vague. In the end, Brutus displays a tragic naiveté as he is easily persuaded that the letter speaks for the entire Roman people.

What is remarkable about Shakespeare's passage is his recognizing the need for the "genius" and the "instruments" to come together before the rebellion can occur, and acknowledgement of the tension between the desire to act and the moment of acting. Like the events studied in this paper, the will to act, the instruments, and the acting all must be brought to together to pursue an outcome, one that, if it is to have merit, would be rooted in the people's desire and expression for their right to democracy, fairness, and justice.

This is perhaps the greatest challenge for groups that engage in political resistance in the name of better lives for their people: how do they know their course of action will lead to their desired outcome? People need to have the right to gather, communicate, express, dissent, question, and demonstrate against abuses of power. But one's conviction that an act will result in a desired outcome does not necessarily make it so, even if it has been well articulated. The cell phone may be an effective instrument for the formation of groups that oppose unjust political leaders – to "speak, strike" – but whether or not the actions of such groups ultimately result in an improvement in their lives and in their national development – to "redress" – remains to be seen.

APPENDIX 1: IMAGES FROM EDSA2 RALLY

All images source: http://members.tripod.com/twist14/edsa2/thepictures.html



Fig. 11.1: View of EDSA2 rally from above



Fig. 11.2. EDSA2 rally with banners



Fig. 11.3. People at EDSA2 rally.

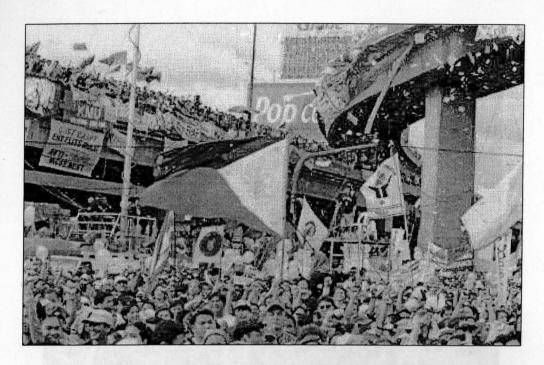


Fig. 11.4. Banners and people at EDSA2 rally, ground level view



Fig. 11.5. People at EDSA2 rally from above, surrounding Jesus statue

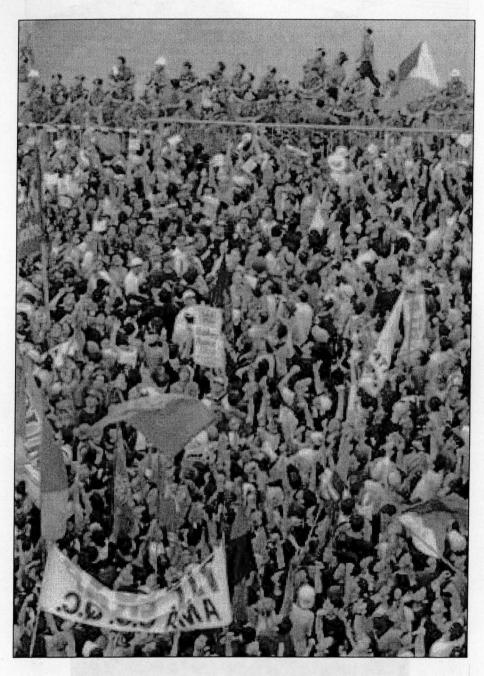


Fig. 11.5. People at EDSA2 rally with military personnel at top

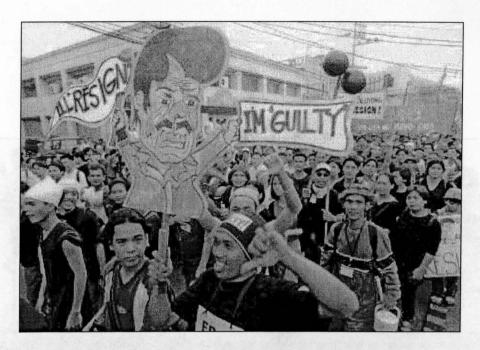


Fig. 11.7. Protesters at EDSA2 rally with banners

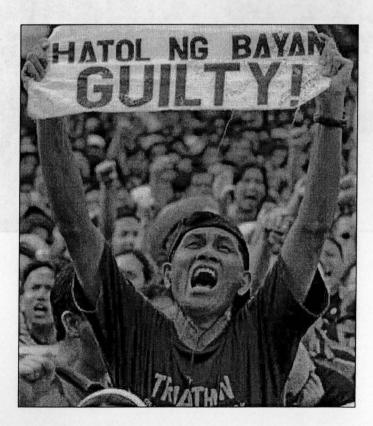


Fig. 11.6. Protestors at EDSA2 rally with banners



Fig. 11.8. Protestors at EDSA2 rally with banners

APPENDIX 2: IMAGES FROM KENYAN ELECTION, 2002

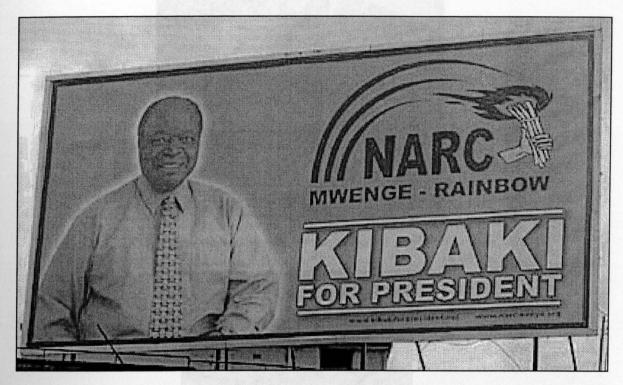


Fig. 12.1. Billboard advertisement for Kibaki, 2002 presidential election (Leer, 2002)



Fig. 12.2. Torn poster for Uhuru Kenyatta, Kenya 2002 presidential election (Leer, 2002)

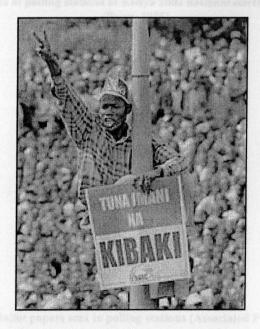


Fig. 12.3. Giddy Kenyans turned out by the hundreds of thousands today to see their longtime ruler, Daniel arap Moi, hand over power to a new president, Mwai Kibaki. (Associated Press, 2002)

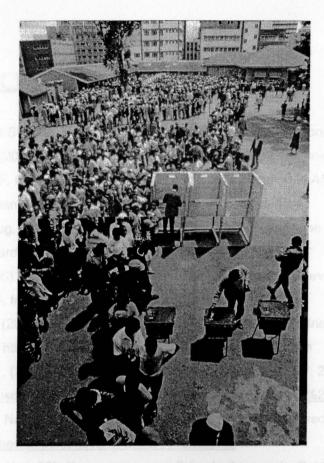


Fig. 12.4. Crowd waits at polling stations at Kenya 2002 national election (credit: Betty Press) (Press, 2005)



Fig. 12.5. Ballot papers sent to polling stations (Associated Press, 2002a)

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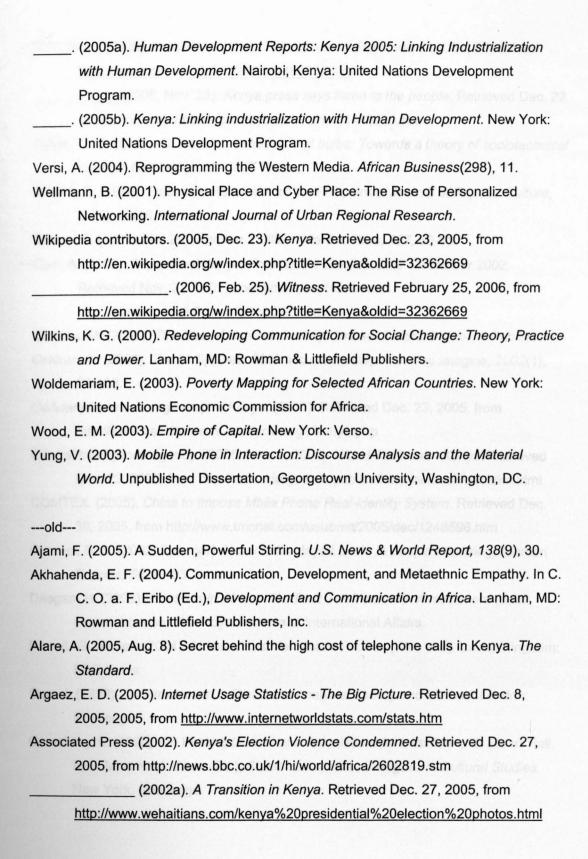
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