THE INTERNET AND DEMOCRACY:
VIRTUAL IMPACTS ON THE POLITICAL LANDSCAPE

by

EMMA JEAN-MARIE RAGAUSKAS

(Under the Direction of Shane Singh)

Abstract

In this manuscript, I will explore the relationship between the increase in Internet usage and democratization in seven Middle Eastern nations. I plan to look at this hypothesized relationship over twelve years from 2000 to 2011. I will look to see if there exist any significant relationships between an increase in Internet usage and democracy as measured by nine different indicators. I hypothesize that I will see positive gains in each of these nine models as an increase in Internet usage should allow for greater communication and better access to information that should in turn increase political participation and assist each nation in moving towards a more democratic government.

INDEX WORDS: Internet, Democracy, Civic Culture, Arab Spring, Middle East
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SECTION 1

BACKGROUND

The last twenty years have shown how drastically the global landscapes can change. Communications technologies have evolved drastically and only continue to expand their reach into peoples’ daily lives. One can see the impacts of these technologies in almost every aspect of western life, from how news is received to how people shop and bank. Communications technologies allow people to send massive amounts of information around the world with speeds only dreamt about even two decades ago. The main source of this exchange in the era of global communications technologies is the Internet. This medium allows for citizens to serve in both the roles of producers and consumers of information. These roles have become particularly pronounced in the later 2000s with Web enabled mobile devices and the ever-increasing presence of social media in the lives of people around the world.

These advents in technology have not been lost on the government machines either. A vast majority of governments and governmental organizations maintain websites to spread their own information and utilize these technologies to promote their own services and missions. For instance the United States’ government maintains well-put together, easily accessible websites for the vast majority of its executive cabinets such as the White House, Department of Defense, and Department of State. With this constant exchange of culture, politics, and other forms of information and data invading daily life one may likely begin to question what impact this has had on governance and the international political landscape. Modern democracies, such as the United States and Germany, are some of the biggest contributors in the area of Internet politics.
The use of social media and other Internet based media in American political campaigns over the past ten years have been immense. In Germany the ever prevalent debates on Internet policy, usage, and perceived censorship has given rise to the *Piratenpartei Deutschland*.¹ A phenomena not unfamiliar to participants of the United States politics with the events of the Stop Online Piracy Act (SOPA) and the Protect IP Act (PIPA) of 2011, two acts that had reached United States congress in 2011 regarding the legality of certain kinds of Internet content. These movements serve to illustrate how influential the Internet has become in the modern political culture.

One can see the impacts in highly developed western civilizations, but these technologies have also managed to penetrate the lesser-developed regions of the world in the form of Internet technologies, as well as SMS technologies. Even though its impacts are more evident in some nations than others the fact remains that this medium has penetrated almost every country around the globe. Between 2000 and 2005, the number of global Internet hosts skyrocketed from roughly sixty million in 2000 to over three hundred million in 2005.² As the number of Internet hosts has risen so has the amount of global Internet penetration. In 2001, the estimated number of Internet users per 100 inhabitants in the developing world was 2.8 million.³ By 2005, that number had increased by a little less than 5 million users to 7.7 million users per 100 inhabitants throughout the developing world.⁴ The most recent survey puts the estimated number of Internet users per 100 inhabitants in the developing world at 24.4 million.⁵ When combining these numbers with those of the rest of the world the total estimated number of Internet users in the

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¹ "Pirate Party joins Schleswig-Holstein parliament"
² Chadwick, *Internet Politics: State, Citizens, and New Communications Technologies*
³ *ICT Data and Statistics 2011*
⁴ Ibid.
⁵ Ibid
world comes to roughly 127 million per 100 inhabitants compared with the 40 million in 2001. These increasing numbers, especially the exponential growth seen in the last five years in the developing world, combined with recent events in the Middle East and other young democracies give cause to question whether this spread of Internet communications and technology has lead to an increased spread of democracy in the global community.

The idea of technological impacts on democratization is a question of significant value for politicians, humanitarians, and citizens throughout the world. As I explore the dynamics between these two concepts it is important to categorize the variables to be observed. For this question the independent variable will be the Internet usage of in the nations around the world. The dependent variable for this paper is the more nebulous concept of democracy. The debate continues on which indicators are the most appropriate and provide the most realistic vantage point of democracy within nations. As such several different indicators were chosen: Polity, the CIRI Indicator for Freedom of Speech, the CIRI Indicator for Freedom of Association, the CIRI Indicator for Freedom of Electoral Self-Determination, Freedom House Scores on Political Rights, Freedom House Scores on Civil Liberties, the World Governance Indicator for Political Stability, the World Governance Indicator for Voice and Accountability, and the CIRI Indicator for Physical Integrity Rights. The selection of each variable and their associated hypotheses will be discussed at later point.

To gain a better perspective into the events of the Arab Spring and if a statistically significant relationship exists between the percent of Internet usage and democratization I chose to study several of Middle Eastern nations over the years of 2000 to 2011. The nations included: Egypt, Jordan, Libya, Saudi Arabia, Syria, Tunisia, and Turkey. These nations were chosen for

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6 Chadwick, *Internet Politics: State, Citizens, and New Communications Technologies*
the similarities in the economic and cultural influences within the nations, and secondarily for the similarities in political timelines. These nations were also chosen due to the fact they share similar levels of developmental progress, and allow the impact of these technologies on developing democracies in the Middle East to be seen.

I first turn to the development of the relationship between the Internet and democratization in theory and relevant literature. Then I follow with a discussion on the selected variables and methodology, followed by the results of the models and an analysis of the work. Finally, I conclude with a discussion what implications or further research questions remain after discussion on the Internet and its relationship to the democratization process in the modern age.

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SECTION 2
THEORY AND LITERATURE REVIEW

As I begin exploration into this question it is important to address one of the major difficulties facing such research, and that would be innate lack of value, either good or bad, of the Internet. One must take note that while the Internet can prove a valuable tool and means of democratization that the driving factor here is not only the Internet, but also the users of the technology itself. As Grill and Bremmer both indicate the Internet has a value-less existence.\(^8\)

The Internet is a tool that allows for more open communication in the modern world, but as Bremmer indicates this tool can also be turned against the people and be used for anti-democratic purposes.\(^9\) A sentiment that is also echoed by Larry Diamond as he emphasizes the liberating and censorship capabilities of Internet based technologies.\(^10\)**11** Diamond mentions in his work, *Liberation Technology: Social Media and the Struggle for Democracy*, that more than three-dozen states filter or completely block access to the Internet from their citizens.\(^12\) However, even in the most repressive of regimes there are instances of web-based technologies having a liberating impact, or at least the potential to do so. Accounts of North Korean defectors carrying

\(^11\) Ibid.
\(^12\) Ibid.
cell phones home to report human rights violations is one such instance of communications and web based technologies having an impact even under the pressures of repressive regimes.\textsuperscript{13} Bremmer shows how such tools are used by authoritarian regimes to keep better track of its citizenry, and by means of controlling speech and promoting pro-government ideology.\textsuperscript{14} Due to the capabilities of the Internet to both harm and protect its citizens, it is important to keep in mind that the Internet is more an enabler of democracy and not a requirement or automatic catalyst that would change a autocratic regime overnight. However, even with these examples of regime controlled Internet activities there have also been many examples of how the Internet has assisted citizens in their pursuit of democratization. Indonesia, Malaysia, and Serbia are all provided as reoccurring examples.\textsuperscript{15} Peter Ferdinand even quotes several leading government and military officials in saying that the open communication often provided by the Internet poses a “persisting threat” to authoritarian regimes.\textsuperscript{16} The Internet provides a means through which citizens can communicate, organize, and exchange ideas.

However, even with the Internet’s ambiguous nature there remains the possibility of a positive impact from Internet usage on the democratization process. A recent Pew Research Center survey showed that forty-one percent of participants say that they receive most of their national and international news from the Internet.\textsuperscript{17} With increased access to information the general population is able to be more informed, and can stay up to date on the global positioning that occurs within international politics. This in turn encourages the political leaders to be more observant of these conversations and idea flows as they become more and more ingrained in the

\textsuperscript{13} Ibid.
\textsuperscript{14} Ibid.
\textsuperscript{15} Ferdinand, Peter, ed. “The Internet, Democracy and Democratization.”
\textsuperscript{16} Ibid
\textsuperscript{17} Pew Research Center for the People and the Press. "Internet Gains on Television as Public’s Main News Source."
minds of the average citizen. This also holds true for new policies enacted by outside nations. The digital media carries such policy information to the general population today much faster than it has in years past, and with fewer middlemen as well. For instance, if a person desires they are able to look directly at video produced at the scene of a demonstration. As these citizens see other nations demonstrating democratic acts and speaking about new ideas they could be inclined to make a stronger push for similar occurrences within their own nations. The Internet creates a means for such information to spread more rapidly than with previous methods.

The Internet allows people to better communicate and more rapidly discuss the new ideas, concepts, and general information they are receiving. Over the course of time, these new ideas can be conveyed to the masses. Political participation is of particular importance for many of the issues and debates involving democracy. There is a wide consensus that political participation is a requirement of democracy.\(^\text{18}\) In the modern context the population is often faced with the issue of the privatization of political participation, and the modern citizenry turning away from the more traditional and formal forms of political participation.\(^\text{19}\) However, this privatization of political participation is not entirely a loss. It has also provided citizens with alternative means to communicate their needs.\(^\text{20}\) While not all of these attempts at using informal forms of communication and participation are completely successful, in fact some such as the 2009 protests in Iran had little impact overall, these types of activities still show promise going into the future. This is especially true when one considers the historical context of alternative forms of participation; unions and other protest movements for instance had large impacts on the pathway to many of contemporary western democracies. These innovations in communication


\(^{19}\) Ibid.

\(^{20}\) Ibid.
and association were able to change the political landscapes for many western nations in the same way that I theorize that the Internet allows for change in developing democracies around the world.

The Internet helps in the dispersion of these new ideas and allows for the public to participate in these alternative forms of participation in several different forms of participation. In a sense, the Internet serves as a newspaper, town hall, and encyclopedia. These stages are a conceptualization of Rosanvallon’s dimensions of participation, which as discussed earlier is widely considered a grounding principle of democracy. The parts of this process are “expression (speech that gives voice), involvement (seen as assembly and banding together), and intervention (actual collective action)”\(^{21}\) Each of these concepts corresponds closely to one of these three dimensions.

As a newspaper, the Internet conveys current events. This allows for users to access this information and, in a non-censored country, view the many different perspectives on each event in almost real time. Additionally, in censored nations there are ways to get around the firewalls or other censorship processes should an individual desire to see such information. This newspaper concept corresponds to Rosanvallon’s dimension of involvement and expression. The citizens are able to actively inform themselves and produce information through involvement in this medium. By participating in this manner one can also see the citizenry able to band together by self-selecting their sources. Additionally, this form also provides the participants a means of expression from these dimensions.\(^{22}\)

The town hall portion is where people can voice opinions, discuss possible outcomes, and respond to the changes within their society, for good or bad. As these discussions evolve they


\(^{22}\) Ibid.
tend to trend overall towards more moderate and established viewpoints among the collaborators. This is the manner in which Internet technologies promote all three dimensions of participation. Through this sort of town hall activity one can see how citizens express their opinions, assembling into groups or factions, and ultimately building up to different types of collective action.23 One such example of this is the 2010 Arab Spring events that occurred in Egypt, web based technologies are often considered to be the source of many of the protests that occurred in this period.24 Additionally, one can see how web based technologies are assisting in participation in this manner through programs such as the Ushahidi program through which citizens were able to report voter fraud issues in the 2010 elections in Egypt.25 This program allowed for individuals to participate in these three dimensions as well in a virtual town hall setting.

As these discussions evolve into established viewpoints they come together to form an encyclopedia of sorts. As the previously mentioned town hall forums help solidify the new ideas the people are also incorporating them into their daily interpersonal relations in the physical world. Through this process of exposure, enabling open debate in an easier to access forum, and the eventual collection and encryption of these new viewpoints in the political and cultural psyche of the people the Internet provides a different spin to the traditional path to democratization and political participation than has been seen in society prior to advent of such technologies. This final form of Internet influence is the ability of the Internet to collect and encrypt information in the political psyche touches on the second and third dimensions of participation. This incorporation of knowledge allows for people to band together and become involved. This occurs as knowledge is absorbed into the community and taken into the normal

23 Ibid.
25 Ibid.
cultural practices. This sort of political socialization allows for members of the community to better participate and move towards a more democratic state.

This process of allowing for the exposure of new ideologies and the addition of new knowledge to the society itself has helped promote the concept of a global civil society. As I have explained such a process of exposure and response allows for the democratic process to work its way through the citizenry, and enables people to further democratize their nations. The ability of web based technologies to have this sort of impact is characteristic of the evolving debate on global civil society, which is generally understood to include the “sphere of ideas, values institutions, organizations, networks, and individuals located between the family, the state, and the market and operating beyond the confines of national societies, politics and economies”.

The concept of global civil society also promotes the idea of a “global world framework” and an atmosphere in which humanitarian goals can be better achieved. Both of these would be key in progressing towards a democratic state. The three means through which the Internet can serve to help encourage political participation work together to help the citizens to participate in what the literature increasingly refers to as a global civil society.

Lina Dencik presents the argument that this global civil society can provide a platform through which changes can occur, and shows how the media can help coordinate and encourage these changes. This is done by again creating an arena in which there is room for debate and communication, and this in turn allows for a society to progress its way to more democratic ideals. The ability for a society to do this is indicative of a deliberative democracy, in which the concept of democracy is centered on the idea that preferences of the citizenry are transformed

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26 Dencik, Lina. *Media and Global Civil Society.*
27 Ibid.
28 Ibid.
rather than aggregated. This idea of the transforming of preferences plays directly into the
discussion of how exposure to new ideas and information through information and
communications (ICT) technologies. The process of creating this kind of global citizenship has
been facilitated by such technologies, and this allows for the blurring of traditional lines and the
movement of politics and citizenship to a level beyond that of the traditional nation-state. The
ability of Internet based technologies to facilitate such discussions and the transformation of
ideas is crucial to this theory. This is due to the fact that the transformation of ideas and
preferences allows for societies to continue to progress toward adequate participation within the
global civil society and the promotion of deliberative democracy.

Peter Dalhgren also advances a similar theory of progress by implying that the Internet is
utilized in the advancement of civic culture. He defines civic culture in two parts. Separating
culture as the “collective meaning making” In this sense one can see how culture itself is a
manner of aggregating preferences as Denick suggests is necessary for a deliberative
democracy. Dalhgren also states that one could simply say that civic culture is what comes
within civic society, but rather than rely on this redundant definition he suggests that civic
culture is more the whole summation of all political participation and socialization that a person
receives, a process previously mentioned that is being widely impacted by the changes in
communications technologies. Dalhgren also puts forth four dimensions of civic culture that
would be impacted by the use of the Internet: Relevant Knowledge and Competencies, Loyalty

29 Ibid.
30 Ibid.
31 Dalhgren, Peter. 2000. “The Internet and the Democratization of Civic Culture.” Political
Communication 17, no. 4
32 Dencik, Lina. *Media and Global Civil Society.*
33 Dalhgren, Peter. 2000. “The Internet and the Democratization of Civic Culture.” Political
Communication 17, no. 4.
to Democratic Values and Procedures, Practices, Routines, Traditions, and Identities as Citizens. These four categories correspond to the previously discussed processes of political participation, and provide an additional set of dimensions that would be impacted in an Internet driven process of democratization.

The concept of a staged process of the impact of Internet usage is not unique and can be found in many accounts of the Arab Spring. Howard and Hussain broke apart this series of events into six different phases. These phases are: preparation, ignition, street protests, international buy-in, climax and follow-on information warfare. The preparation and ignition phases correspond to Rosanvallons’ dimensions of expression and involvement it was during these stages that one would have seen the citizens airing their grievances and further collaborating and developing their wants and needs. Local wants would slowly aggregate and eventually lead to an ignition event that, while ignored by the government, would be widely noticed by the general population. The third phase was assisted in large part by online coordination and brought people to the streets. This shows how the Internet is capable of helping activists to overcome the traditional activation issues generally associated with collective action.

Howard and Hussain’s fourth phase of technological impact on the Arab Spring protests was international buy-in. During this phase the international community became more aware of the plights of the citizens within these nations, primarily through digital media mediums. These phases built up to the climax phase, which became the events commonly referred to as the Arab Spring. The final phase described as “follow-on information warfare” refers to the tumultuous

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34 Ibid.
36 Ibid.
situations left after the 2010 protests, in which various members within the respective nations were left to play out the revolutionary narrative.\footnote{Ibid.} These phases provide a framework in which the dimensions of political communication and the processes associated with the developing global civic society can work together with advances in telecommunications technologies to produce political changes. This example and the previously discussed processes show how the Internet is capable of impacting the traditional forms of political participation. It is through these impacts and modernization of the political participation process that the Internet is capable of having a positive impact on the democratization process in the modern age.
SECTION 3

METHODOLOGY

Measurement becomes a key issue when considering this question. For the purposes of this study there is a need for measures that are broad enough to be applied as globally as possible, but also sensitive enough to capture the unique situations within each nation. Beginning with the independent variable of Internet usage within each country, there are many different measures for the same concept. However, for the purposes of this paper it was decided to use the percentage of citizens using the Internet as captured by the International Telecommunications Union.

Several international organizations collect information on Internet usage, and even within these organizations there are a variety of different measures one can choose from in looking into the Internet penetration of a nation’s population. The International Telecommunications Union (ITU) provides several different measures of this data. These statistics range from the number of users per 100 inhabitants in an area to more approachable statistics such as those covering the percentage of Internet users in each country. The latter of these measures is what will be utilized for this project.

Using the percentage of citizens using the Internet as a measure for the independent variable will enable the models to capture the members of the population that do not, for whatever reason, maintain a personal Internet connection, but still access the Internet on a regular, or semi-regular, basis. This should prove particularly useful as one observes populations in developing societies and nations in which individuals are less likely to maintain a private
Internet connection or subscription, and are more likely to utilize public connections as made available by the government or aid organizations. This should allow for the study to capture individuals using the Internet through alternative connections instead of relying on the data available on the wired connections or subscriptions. Other measures would not fully capture the citizens using such Internet technologies in areas where development is slowed and infrastructures do not exist for each person or household to maintain a private connecting.

Looking at the percentage of individuals using the Internet by country is also more appropriate than looking at the number of Internet subscriptions because it allows for more cohesion across the study as the changes in voter participation and cultural norms regarding human rights violations are more likely to start their mass change on the individual level. In looking at the percentage of individual Internet users over the course of time one will hopefully capture the small changes the aggregate into larger numbers as time progresses, providing data with a better-rounded vantage point from which to make inferences. This variable is measured at the same year as the dependent variables, and is not lagged.

As for the time period for the study, I chose to look at time between the years of 2000 and 2011. This time period was chosen as it provides a twelve-year window during which Internet presence more than doubled in many nations. Additionally, the use and impact of such telecommunications technology increased drastically after 2005 when Internet became more widely accessible for many through the use of mobile devices. As mentioned earlier mobile devices would allow for a greater impact as citizens could more easily report instances of fraud
or violence as with the Ushahidi program in the Middle East, and other such blogging based reporting systems.\footnote{Diamond, Larry Jay, and Marc F. Plattner. *Liberation Technology: Social Media and the Struggle for Democracy.*}

The 2010 protests in multiple nations in the Middle East and North Africa gave way to many of the modern questions regarding the viability of the Internet as a tool of democratization. While dissent, both political and cultural, had long existed within the Middle East before the introduction of the Internet, this and other forms of digital media have provided a new means for individuals to communicate and organize.\footnote{Ibid.} This new tool provided a space in which citizens could report community specific information, through which this dissent could be organized to assist in the creation of organized collective action. Many scholars and politicians have sought these events out as an example of the Internet’s possible capabilities and impact on the democratization process. The nations involved in these protests have become the center of the Internet and democracy debate and have served as the subject of many books and papers since the protests, for the majority, subsided in the years following 2010. The remaining turmoil and large conflicts in nations such as Syria continue to provoke the question as to whether Internet based technologies had an impact on these events.

To gain a better perspective into these events and if a statistically significant relationship exists between the percent of Internet usage and democratization I chose to study several of Middle Eastern nations over the years of 2000 to 2011. I was able to eliminate some of the confounding factors that are often brought into consideration when one looks at democratization prospects by creating this sort of most similar systems design. For instance, the impact of religion is largely mitigated through the selection of these nations, as the majority religion for
most of the region is Islam. The selection of these nations also serves to test the common notion that there was in fact a relationship occurring between the Internet and the revolutionary activities within several of these nations during the spring of 2010. By utilizing this type of research design one loses some of the broader applicability with the models, but by pursuing this model it is also possible to eliminate some of the more confounding factors in democracy, such as religion and other cultural influences, as they are held constant throughout.

I hope to see if there are any significant impacts from Internet usage on the chosen measures of democracy in this region by first looking at these nations. A large amount of the interest in this field has arisen from the Arab Spring events of 2010. This makes it of particular importance to first test this relationship within the region of origin. In an attempt to avoid a selection bias in which one would only be observing nations in which radical change occurred following the Arab Spring protests nations such as Saudi Arabia and Turkey were included as they were nations sometimes included in the Arab Spring, but did not show marked changes in the their governments, such as those seen in Egypt and Syria, following the 2010 protests. The addition of these nations to the sample also provides a more diverse population. Turkey for instance sits at a crossroads of identification, both identifying as an Islamic nation as much of the sample, but at the same time looking to join the European Union and trying to emulate western society. By utilizing a most similar systems design for this project I hope to provide a clearer base understanding of the relationship between the Internet and democratization. In addition to the controls for cultural and regional influences already mentioned, I include gross national income per capita (GNI) for each country in thousands of U.S. dollars in the models. This data was collected from the World Bank Group. ⁴⁰ This measure serves to control for the economic

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development of each nation. Economic development is often brought about in the debate on
democratization processes. Many developed nations around the world provide monetary aid to
developing nations in order to encourage economic development, and different levels of
development can have significant consequences for the political development process. I include
GNI per capita in each model to help control for these effects.

The measurement of the dependent variable of democracy poses an obstacle. There is an
existing debate on the appropriate measures of democracy. Many are considered more
appropriate for certain situations than others. In an attempt to utilize the full spectrum of these
measures this project draws from four different sources of democratic indicators from the
following data projects: Polity IV Project, Freedom House: Freedom in the World scores, the
CIRI Human Rights Data Project, and the World Bank: Worldwide Governance Indicators
project. For the Freedom House measures the scale of each variable was reversed in order to
observe a consistent direction of effects throughout the models. Each project provides unique
challenges and perspectives to this question. I briefly explore the reasoning for the inclusion of
each indicator.

Polity is one of the more widely used sources for democracy data projects. The stability
of scores over time provides for the researcher to observe the major changes within a nation.
Freedom House scores are similar in sample size. These scores consist of two parts one for
political rights and one for civil liberties for each nation, and both were utilized as indicators for
this project. By including both of these scores as indicators for democratic improvement within
nations I attempt to account for the two sides of the debates on of democracy. The first potion of
this argument would be that democracy is heavily determined by the ability of citizens to
participate and freely choose their government represented by the political rights. The second portion of this argument is that democracy involves more than just the ability of citizens to vote, but also their ability to exist in a society in which their rights are fully respected.

I continue this exploration of these arguments by looking at indicators from the CIRI Human Rights Data Project. Samuel Huntington’s work, The Third Wave: Democratization in the Late Twentieth Century, strives to provide a definition. Huntington defines democracy as a form of government, and more specifically a form of government in which “…its most powerful collective decision makers are selected through fair, honest, and periodic elections in which candidates freely compete for votes and in which virtually all the adult population is eligible to vote.” This definition suggests that one looks toward the enfranchisement of each study nation. To achieve a more holistic vantage point on the electoral participation portion of democracy and others I look at data collected by the CIRI Human Rights Data Project. While not explicit descriptors of democracy several of the variables coded by CIRI are democratic in nature and useful to this study.

These data are coded by a multitude of different coders who analyze the Department of State Reports on Human Rights for each country. To gain a more accurate understanding of the enfranchisement of the study nations I will look at the variable of electoral self-determination. This variable captures the enfranchisement of the nation as well as the freedom and fairness of the elections, and as such captures the essence of this definition better than looking at the voting participation rates could.

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41 Huntington, Samuel P. The Third Wave: Democratization in the Late Twentieth Century.
42 Ibid.
43 Ibid.
45 Ibid.
However, even with this definition it would appear that it misses the more human side of democracy that so many scholars preach. With these causes in mind there is a need for another indicator that would more adequately sum up this chosen definition of democracy. In the same work that Huntington lays out a definition of democracy as being formed by “powerful collective decision makers are selected through fair, honest, and periodic elections” he also lays out his three waves of democracy, the third wave continues onto the present day.\textsuperscript{46} This third wave is attributed to deepening legitimacy problems, economic development and crises, religious changes, new external policies, and snowballing.\textsuperscript{47} The first of these “waves” occurred during the 1800s and was successful in helping to create democracies through the American and French Revolutions.\textsuperscript{48} This would also pave the ground for the following cycle of democratizations following World War II as Allied forces occupied former Soviet Union and Nazi territories. The third wave suggested by Huntington is said to have occurred in between 1974 and the early 1990s with collapse of many former U.S.S.R. and other communist territories.\textsuperscript{49} Several of these factors and catalysts for the third wave remain present today. Economic development, legitimacy problems, and religious changes can all be found in the Middle East and in other nations.

This suggests that one should still see evidence of the third wave today. The recent events of the Arab Spring in nations, such as Egypt, from an autocratic regime to a much more modern version of western democracy, all exemplify that this series of changes is still occurring.\textsuperscript{50} In these portions of this definition of democracy that one can see the cultural influences on the democratization process as Huntington describes. In search of data for these more intangible

\textsuperscript{46} Huntington, Samuel P. \textit{The Third Wave: Democratization in the Late Twentieth Century.}
\textsuperscript{47} Ibid.
\textsuperscript{48} Ibid
\textsuperscript{49} Huntington, Samuel P. \textit{The Third Wave: Democratization in the Late Twentieth Century.}
portions of democracy I turn again to the holistic vantage point offered by the data collected by the CIRI Human Rights Data Project. As this new era of democracy seems to be threatened by different rights violations, and attacks on the cultural abilities of citizens. In doing this there is a need to become concerned with two of the more basic civil liberties enjoyed by members of a democratic nation, and these would be the rights of free speech and association. These variables are not only two of the more basic civil liberties, but also means by which members would be able to exchange their own cultures and perpetuate customs. As such they should prove to be useful measures. The CIRI Human Rights Data Project captures both of these aspects of democracy as variables as well.51

The third wave of democratization also provides a basis from which to include data from the World Bank’s Worldwide Governance Indicators project (WGI). This project prides data on several different variables. The two variables chosen for study from this project were the indicators of Voice and Accountability and Political Stability. These scores are aggregate indicators and take into account several different indicators, including CIRI and Polity IV scores. These aggregated measures offer different perspective on the data, as they take into account multiple theories and processes for each score. The scores for each of these variables also allow for a bit more sensitivity for year-to-year changes than would just Polity IV or CIRI scores. Voice and accountability is of particular interest to this question as the sources it draws from include the EIU Democracy Index and helps answer questions on how the electoral processes in a country operate voter and citizen participation as well as the democratic accountability of each

nation.\textsuperscript{52} These indicators speak to the emphasis on electoral accountability put on the democratic process.\textsuperscript{53}

Political Stability is of interest as a dependent variable as it allows for one to capture the relationship that an increase in Internet usage could have on bringing a nation into this third wave of democratization proposed by Huntington. In this third wave of democracy characterized by the legitimacy problems, economic development and crises, religious changes, new external policies, and snowballing one would expect to see an increase in political instability in the data overall with countries moving towards stability as they democratized.\textsuperscript{54} The political stability WGI indicator takes into account data on the frequency of tortures from CIRI government stability from PRS and the existence of orderly transfers and violent demonstrations from the EIU.\textsuperscript{55} It accounts for the intensity of internal conflicts. These conflicts could be ethnic, religions, or regional. This again ties directly to some of the evidence one would expect to see within this third wave of democratization, and provides even more reason to examine the WGI political stability indicator.

By using these measures for Internet proliferation and democratization I form nine different models. Testing the hypothesis that an increase in percent of Internet use should lead to an increase in democratization as measured by the chosen variables. The models include one of each of the dependent variables detailed above and the percentage of Internet usage in each nation as provided by the ITU. For each model my hypothesis will be that I would expect to see positive effects for Internet usage in each model. The OLS models also include a lagged

\textsuperscript{52} World Bank Group. "Voice and Accountability."
\textsuperscript{53} Huntington, Samuel P. The Third Wave: Democratization in the Late Twentieth Century.
\textsuperscript{54} Ibid.
\textsuperscript{55} World Bank Group. "Political Stability and Absence of Violence/Terrorism."
dependent variable, as it is reasonable to argue that these variables rely in part on the level of what each variable stood at the year before.
SECTION 4
RESULTS AND ANALYSIS

I ran the previously stated models through the years 2000 to 2011, using OLS and lagged dependent variables for each model. As one can see in Tables 1, 2, and 3 the first chosen indicators of freedom of speech, association, and electoral self-determination did not provide any significant results, with p-values well above the acceptable thresholds for significance. The p-values for Internet usage are 0.485 for freedom of speech, 0.948 for freedom of association, and 0.769 for freedom of electoral self-determination. Additionally, the models that utilize Polity scores (Table 4) and the World Governance Indicator for Voice and Polity scores (Table 5) do not provide any significant results as the p-values for both measures exceed acceptable levels of significance at 0.604 for the Polity model and at 0.819 for the model of Voice and Accountability. Robust standard errors are also reported where applicable to correct for autocorrelation in the models.

Looking at the remaining measures of democratization however, I saw different results. The last three variables: Freedom House Scores on Civil Liberties, the World Governance Indicator for Political Stability, and the CIRI Indicator for Physical Integrity Rights all provide significant results, seen Tables 7, 8, and 9 respectively. I observed the first significant findings in the models that utilize the Freedom House indicators for civil liberties. These results within the model of Freedom House Civil Liberties show gains in regards to the democratization process. The effect of percentage of Internet use on the Freedom House Civil Liberties does remain on the threshold of significance with a p-value of 0.050.
The latter two models utilizing the CIRI indicator for physical integrity rights and the World Governance Indicator for Political Stability are of particular interest, as both show negative and significant relationships. The effect of Internet in the lagged model of physical integrity rights has a \(-0.037\) effect on the physical integrity rights for the subject nation in the chosen study period. The physical integrity rights model has a p-value of 0.002. Looking at the model utilizing the World Governance Indicator for political stability there is another negative and significant effect of percent of Internet usage. In this model Internet has an effect of \(-0.019\), and a corresponding p-value of 0.001. It serves to mention that the control variable is also significant in the model on political stability indicating that the relationship between the Internet and political stability is linked to the economic development of the nation as measured by GNI.

These results seem to contradict the hypotheses, as one does not observe any significant positive gains in any of the chosen indicators, in fact for several of the indicators I observed null relationships. The significant results that are observed have negative effects. However, this should likely not be taken at exactly face value. While I observed negative relationships a majority of these countries were under control of what were considered to be authoritarian regimes in during the period of observation.\(^{56}\) The exception to this would be Turkey, the sole nation to have a Polity score high enough to be considered a democracy.

Taking this into account it makes a bit more sense as to why I saw a negative relationship between these two variables. These reigning political powers would likely feel threatened as the political climates began to shift within their nations. This could lead to the political powers within the countries responding with harsh policies, and could easily lead to escalations in force against its citizenry. This type of reaction can be found in human rights literature as nations

\[^{56}\text{Center for Systemic Peace: Home Page. "CSP: INSCR Data Page."}\]
move towards more democratic regimes it can be observed that there is an initial decline in respect for human rights before seeing an eventual increase and positive gain in respect for those rights from the period in which the nation existed as an authoritarian regime. Fein described this “more murder in the middle” type of behavior in 1995. Christian Davenport and David Armstrong furthered this argument. In their 2004 article, they make the argument that transitioning nations are in the process of creating or evolving their institutions, and that there exists a threshold that nations must achieve in order to be able to create an environment in which certain rights are being respected. Prior to this threshold there is not enough stability within the reigning institutions for effective communication or control of all actors within the system. Therefore one observes initial decreases in respect for these rights as states begin to transition.

These articles particularly refer to the respect of physical integrity rights. Taking into consideration that there are significant results in measures of political stability and physical integrity rights indicators I feel I can reasonably argue that these findings indicate a similar situation. Additionally, these are all nations in which large protests broke out in 2010. In several countries the protests would become violent and lead to civil uprisings. These would be situations in which one would unfortunately expect increases in violations of physical integrity rights. Taking all of this into account one can reasonably say that these negative relationships between Internet usage and respect for physical integrity rights is likely due to the instability of the regimes following changes in the political climates of these nations.

58 Ibid.
60 Ibid.
61 Ibid.
This decrease in political stability is in support of the hypothesis that an increased presence of Internet usage would lead to greater levels of democracy. While one would likely see high levels of political stability in more developed democracies in nations looking to transition to democracies one would not expect to observe this same relationship. In order for the nation to transition one would expect a certain level of instability in the political regime. So in this case having a negative relationship between these two variables helps make a stronger case for Internet usage as a tool of democratization. As the Internet makes its way through Rosanvallon’s dimensions of participation, one would expect there to be debate and the occasional conflict as the society works towards have its citizenry more involved and capable of expressing their political agenda.\(^{63}\)

So while the initial reactions to these results may be to assume that they disprove such a hypothesis, there are more relationships at play with the negative correlations that observed between the Internet and the chosen measures of democracy for each model. When one looks more closely at the selected sample and related literature it can be seen how these data may indicate the beginnings of democratic transitions. I would generally expect democracies to show more respect for both physical integrity rights and have higher levels of political stability. However, this is more of the case of what one would expect to see from traditional democracies, and not those in transition as seen in this sample. Such nations are more likely to fall into the same patterns seen in the human rights literature with regards to respect of physical integrity rights dropping in periods of political transition.\(^{64}\) This is related to the negative effect seen between Internet usage and political stability as well as the negative impact on political stability

\(^{63}\) Rosanvallon, Pierre. *Counter-Democracy: Politics in an Age of Distrust.*

as the nation transitions from a stable authoritarian regime into what would hopefully become a more democratic regime.
SECTION 5

CONCLUSION

There is little doubt that advances in telecommunications technologies have greatly impacted the manners in which day to day business is conducted. It is easy enough to look at the rapid increase in Internet access and other web related technologies and fanaticize about their possible future uses and impacts. However, one must take into account that the Internet in its various forms is nothing more than a tool that can be utilized to both liberate and constrain populations. However, even with nations conducting filtering or controlling activities it is possible to see positive impacts from Internet based technologies. Microblogging websites, such as Twitter, have allowed for Chinese activists to reach out to millions to draw attention to abuses of the press.\textsuperscript{65} With more and more people gaining access to the Internet it is easy to see how rapidly communications technologies are impacting the global culture.

The question of the impact that these technologies have had on the political process has developed along side the rapid rise in new telecommunications technologies over the last decade. In recent years, those questions have also evolved to ask how these technologies could be affecting the democratization process, for better or worse. Lina Dencik speaks of this process in the framework of a global civic society.\textsuperscript{66} As members of a society are more able to communicate and express their needs, they are also more capable of developing their society into

\textsuperscript{65} Ibid.
\textsuperscript{66} Dencik, Lina. \textit{Media and Global Civil Society}. 
an arena for a deliberative democracy. This would allow for the transformation of old wants and interests into more democratic ideals.\textsuperscript{67}

Rosanvallon’s dimensions of political participation help describe this transformation process. The Internet allows for his three dimensions expression, involvement, and intervention to develop more rapidly by serving as a conduit for the different dimensions.\textsuperscript{68} By promoting more rapid and worldwide expression, virtual assembly and group work, and assisting in helping overcome some of the initial collective action issues, one can see how the Internet is able to better assist members in the development of political participation.\textsuperscript{69} The participants of the Arab Spring uprisings of 2010, such as Egypt and Tunisia, provide a case study of this process.\textsuperscript{70} The uprisings and protests that took place within the Arab Spring nations brought the concept of the Internet’s democratization capabilities to the global psyche in a rapid and public manner, with Egypt cutting off Internet access within its borders during the height of the protests.\textsuperscript{71} There grew a debate as to whether other nations would follow suit, especially with the volatility of the protest atmosphere within the Middle East at that time.

My research question developed into an analysis of the impact of the Internet on democratization within these Middle Eastern nations. Using several different measures of democracy ranging from individual characteristics, such as the general respect for freedom of speech, freedom of association, and freedom of electoral self-determination, and also more aggregated measures of democracy, such as Polity IV scores and World Bank statistics, I ran

\textsuperscript{67} Ibid.
\textsuperscript{68} Dahlgren, Peter. \textit{The Political Web: Online Civic Cultures and Participation}.
\textsuperscript{69} Ibid.
\textsuperscript{70} Diamond, Larry Jay, and Marc F. Plattner. \textit{Liberation Technology: Social Media and the Struggle for Democracy}.
several models and observe the relationships within these nations. I controlled for the impact of economic development within courtiers by including GNI in each model. I would generally expect to see positive gains in these indicators if these nations were moving towards a more democratic end.

Several of these indicators did not provide any significant results, particularly those that looked at specific aspects democracy such as the CIRI indicators for freedom of speech, association, and electoral self-determination. The World Governance Indicator for Political Stability, Freedom House Civil Liberties, and the CIRI measure of physical integrity rights on the other hand provide significant results. The models of political stability and physical integrity rights I did not see the gains initially theorized. In fact, these measures I saw a negative and significant relationship between Internet and the chosen measure for democracy. This could be initially disappointing, however there are other factors at play that should be taken into account, particularly with regards to the measure of political stability and physical integrity rights. A majority of the nations in the sample were under control of what were considered to be authoritarian regimes in at the beginning of the period of observation, with the exception of Turkey.72 This plays an important role in the interpretation of these results, as one must consider that several of these authoritarian regimes had contributed to the political stability within these nations. The Mubarak regime in Egypt may come to mind as an example. As one considers that these controlling powers would need to be destabilized the results being to seem more appropriate and proved support for the over arching hypothesis that higher levels of Internet access have a positive impact on the democratization process in the countries that have sparked my research question.

The negative relationship between physical integrity rights and Internet also calls for closer examination. Christian Davenport and David Armstrong make the argument that transitioning nations are evolving their institutions, and a threshold exists that nations must achieve in order to be able to create an environment in which certain rights are to be respected.\textsuperscript{73} Prior to this threshold there is not enough stability within the reigning institutions for effective communication or control of all actors within the system.\textsuperscript{74} One would first observe decreases in respect for these rights as states begin to transition into more democratic regimes.\textsuperscript{75} As I observed negative relationships between both political stability and physical integrity rights it is reasonable to believe that these observations are supportive of this threshold argument. This means that these negative relationships observed are more indicative of early movements towards democratization.

One may now begin to question as to what implications these results could have for future research and the political landscape. For future research attempts, as the data becomes available it would be academically interesting and important to continue to follow these nations and see if the proposed explanation for these initial declines within this region hold true. The political climate within the Middle East currently remains tumultuous in many of these nations, but several of the previous regimes have either been removed and replaced by popularly elected governments, or are currently in the middle of political turmoil with serious threats to the standing regimes. Syria is an example of such a nation in which civil unrest generally motivated against the government has caused more that 2.5 million people to flee their homeland since the


\textsuperscript{74} Ibid.

\textsuperscript{75} Ibid.
start of the conflict in March of 2011. As these situations continue to evolve and new data becomes available it will be interesting to see if these findings remain the same over time, and see if a possible staged impact is occurring by lagging Internet usage into four or five year intervals. Additionally, these initial results call for further analysis and study of these impacts in other developing nations. One would likely need to control for other measures in a broader study of this relationship, perhaps including measures for religious and ethnic diversity and population age.

Should the hypothesis continue to hold true the implications could be useful to politicians and those looking to support democratization in similar situations. Should these negative trends be only initial indicators of eventual development into more stable and democratic nations one could find support for early introduction of web based technologies and technology education within developing nations. The encouragement of the introduction of these technologies would not be the sole impact of these results. As previously stated the decline in respect for physical integrity and political stability are indicative of a lack of structure and secure institutions within these nations. While increasing levels of Internet access has allowed for the people to better communicate their wants and further develop towards a deliberative democracy, the process of changing and evolving the institutions within these nations is a task that must be accomplished by people on the ground, and can likely not be done by virtual activism alone. The Internet again serves as a valueless tool, and can be used to either constrain or liberate. That being said the

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76 Syrian Refugees.
observations within these nations appear to give initial credence to the argument that the Internet can assist in the promotion of democracy.

By allowing for citizens to better participate within global political conversations they are encouraged to participate within the evolving global civic society. As they further participate within the global civic society it is reasonable to believe that they will continue to move towards becoming deliberative democracies. This is a debate that is in the early stages of quantitative study, but also one that holds promising results if true. The initial findings presented here give cause for further research that will hopefully positively contribute to the general knowledge and better the understanding of how modern technologies can assist in international political development, particularly in the Middle East.

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79 Dencik, Lina. Media and Global Civil Society.
| Variables                        | Estimate | Standard Error | t-value | (Pr>|t|) |
|---------------------------------|----------|----------------|---------|--------|
| Intercept                       | 0.1783   | 0.0919         | 1.938   | 0.0565 |
| Freedom of Speech (lagged)      | 0.4723   | 0.1057         | 4.468   | 2.83e-05 |
| Percent of Internet Use         | 0.0028   | 0.0041         | 0.702   | 0.4850 |
| GNI (Thousands of Dollars)      | -0.0132  | 0.0109         | -1.215  | 0.2282 |

**Multiple R² 0.2564 N 77**
| Variables                          | Estimate | Standard Error | t-value | (Pr>|t|) |
|-----------------------------------|----------|----------------|---------|---------|
| Intercept                         | 0.2020   | 0.0803         | 2.516   | 0.0141  |
| Freedom of Association (lagged)   | 0.5024   | 0.100          | 5.035   | 3.33e-06|
| Percent of Internet Use           | -0.0003  | 0.004          | -0.066  | 0.9477  |
| GNI (Thousands of Dollars)        | -0.0126  | 0.0103         | -1.222  | 0.2257  |

**Multiple R^2 0.2976  N 77**
| Variables                                | Estimate | Robust Standard Error | t-value | (Pr>|t|) |
|------------------------------------------|----------|-----------------------|---------|--------|
| Intercept                                | 0.1720   | 0.07896               | 2.1778  | 0.03265|
| Freedom of Electoral Self-Determination (lagged) | 0.5989   | 0.11008               | 5.4410  | 6.748e-07|
| Percent of Internet Use                  | 0.0013   | 0.00448               | 0.2954  | 0.76855|
| GNI (Thousands of Dollars)              | -0.0010  | 0.0085                | -1.1724 | 0.2448 |

*Multiple R² 0.3817 N 77*
| Variables                  | Estimate | Standard Error | t-value | (Pr>|t|) |
|----------------------------|----------|----------------|---------|---------|
| Intercept                  | 0.4647   | 0.3304         | 1.406   | 0.164   |
| Polity (lagged)            | 0.9973   | 0.3706         | 26.912  | <2e-16  |
| Percent of Internet Use    | -0.0086  | 0.0164         | -0.521  | 0.604   |
| GNI (Thousands of Dollars) | -0.0171  | 0.0431         | -0.398  | 0.692   |

**Multiple R² 0.9234  N 77**
| Variables                          | Estimate | Standard Error | t-value | (Pr>|t|) |
|-----------------------------------|----------|----------------|---------|---------|
| Intercept                         | 0.0055   | 0.0891         | 0.061   | 0.951   |
| Voice and Accountability (lagged)| 0.9201   | 0.0580         | 15.873  | <2e-16  |
| Percent of Internet Use           | 0.0007   | 0.0028         | 0.230   | 0.819   |
| GNI (Thousands of Dollars)        | -0.0112  | 0.0071         | -1.576  | 0.120   |

**Multiple R² 0.8480 N 64**
| Variables                              | Estimate | Robust Standard Error | t-value | (Pr>|t|) |
|----------------------------------------|----------|-----------------------|---------|--------|
| Intercept                              | 0.1219   | 0.18893               | 0.568   | 0.57159|
| Freedom House Political Rights (lagged)| 0.7946   | 0.099989              | 11.529  | <2e-16 |
| Percent of Internet Use                | 0.0227   | 0.014109              | 2.675   | 0.00922|
| GNI (Thousands of Dollars)             | 0.0030   | 0.0333                | 0.133   | 0.8942 |

*Multiple R² 0.6913 N 77*
| Variables                              | Estimate | Robust Standard Error | t-value | (Pr>|t|) |
|----------------------------------------|----------|-----------------------|---------|--------|
| Intercept                              | 0.4110   | 0.1784                | 2.3039  | 0.02408|
| Freedom House Civil Liberties (lagged) | 0.7688   | 0.0970                | 7.9269  | 1.932e-11|
| Percent of Internet Use                 | 0.0213   | 0.0107                | 1.9886  | 0.0505 |
| GNI (Thousands of Dollars)             | -0.0171  | 0.0217                | -0.7876 | 0.4335 |

Multiple R² 0.7567  N 77
| Variables                  | Estimate | Robust Standard Error | t-value | (Pr>|t|)  |
|----------------------------|----------|-----------------------|---------|----------|
| Intercept                  | 0.0342   | 0.0693                | 0.4934  | 0.623558 |
| Political Stability (lagged) | 0.4161   | 0.1888                | 2.2037  | 0.031395 |
| Percent of Internet Use    | -0.0190  | 0.0055                | -3.4406 | 0.0011   |
| GNI (Thousands of Dollars) | 0.0247   | 0.0095                | 2.5940  | 0.0119   |

**Multiple R² 0.5097 N 64**
| Variables                        | Estimate | Robust Standard Error | t-value | (Pr>|t|) |
|---------------------------------|----------|-----------------------|---------|--------|
| Intercept                       | 2.363    | 0.4491                | 5.2618  | 1.373e-06 |
| Physical Integrity (lagged)     | 0.3853   | 0.1194                | 3.2269  | 0.001875 |
| Percent of Internet Use         | -0.0373  | 0.0115                | -3.2321 | 0.001845 |
| GNI (Thousands of Dollars)      | 0.0299   | 0.0282                | 1.0581  | 0.2935 |

**Multiple R^2 0.359 N 77**
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| Freedom of Electoral Self-
  Determination                     | 0       | 0      | 1       | 0.2976 | 0     |
| Polity Score                     | -10     | -4     | 9       | -3.905 | -7    |
| Voice and Accountability         | -1.94   | -1.18  | -0.030  | -1     | ------|
| Freedom House Political Rights   | 1       | 2      | 5       | 2.119  | 1     |
| Freedom House Civil Liberties    | 1       | 3      | 5       | 2.56   | 3     |
| Political Stability              | -2.01   | -0.31  | 0.81    | -0.3332| ------|
| Physical Integrity               | 0       | 3      | 5       | 3.024  | 3     |
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