

FORECASTING EGYPT'S FUTURE POLICIES AND POLITICS

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Abstract:

A series of games solved for Bayesian Perfect Equilibria on Egypt's future policies and politics is offered. The model indicates the current military junta, piecemeal democratization, and a radicalized opposition are all expected to continue. Western friendly policies associated with the Mubarak regime, i.e. the 1979 Camp David Peace Accord between Egypt and Israel, counter-terror intelligence and operations assistance, are forecasted to continue. A game attempting to solve the Egyptian political crisis following the 2011 revolution is also presented. It offers a solution to secure more democratic concessions from the Egyptian government, credibly promoting a future democratic Egypt: Aligning moderate elements of the opposition closer to the military, away from more radical elements of the opposition, notably the Muslim Brotherhood, maintained credible hope for more democratic reforms.

Introduction

I offer an assessment of likely developments in Egypt over the next few years based on a game theoretic analysis that examined the strategic interplay of 16 players, including diverse sources of political influence inside and outside of Egypt. The model that was used (Bueno de Mesquita 2009, 2011), has a track record of approximately 90 percent accuracy and is, therefore, likely to provide a useful window on Egypt's future. Unfortunately, the picture it paints is not uplifting.

The Egyptian revolution during spring 2011 was hailed as an opportunity for democratization from the autocratic Mubarak regime. Many saw in the populist uprising hints about what was to come for

the Egyptian people. Unfortunately, my applied game theoretic analysis does not offer much support for the idea of substantive democratic change. The predictions drawn between January and mid-March, 2011 have thus far been correct, suggesting that the data used to analyze the Egyptian case are likely to be reliable.

Table 1 displays my assumptions regarding who the key players are; their position on the form of governance (1); position on relations (2); their potential influence; salience for the issue; and their resolve to stick to their position (low values) or to seek consensus whatever its contents (higher values). The variables are defined in the appendix, as well as the meaning of positions on the issue scale.

Table 1¹²

Players	Influence	Position	Saliency	Resolve
Barack Obama	40	(1) 10 (2) 0	20	(1) 8 (2) 15
John McCain	5	(1) 10 (2) 0	30	(1) 8 (2) 15
John Kerry	6	(1) 10 (2) 0	25	(1) 8 (2) 15
Joseph Lieberman	4	(1) 10 (2) 0	30	(1) 8 (2) 15
Hillary Clinton	8	(1) 10 (2) 0	40	(1) 8 (2) 15
Field Marshall Hussein Tantawi	75	0	95	20
Lt. Gen. Sami Hafez Enan	47	0	95	20
Mohammed Badie Muslim Brotherhood	32	100	85	40
Ayman Nour Al-Ghad Party	19	60	85	20
Sheik Yusuf al-Qaradawi	15	100	85	15
Abdel Nouri New Wafd Party	22	40	85	20
Hossam Badrawi NDP	16	0	85	20
Phillipe Maystadt EIB President	6	(1) 10 (2) 0	30	(1) 8 (2) 15
Angela Merkel	15	(1) 10 (2) 0	25	(1) 8 (2) 15
David Cameron	14	(1) 10 (2) 0	30	(1) 8 (2) 15
Nicolas Sarkozy	14	(1) 10 (2) 0	25	(1) 8 (2) 15

¹ For variables whose numerical value does not change between games, the values solely listed apply to both games.

² It is important to point out the model is also designed to calculate for exogenous 'shocks.' It models the effect of players leaving the game/switching positions. Implicit in the analysis is the calculation done for players like Sarkozy, being defeated in the recent French presidential election, the two generals stepping down, etc.

The equilibria derived from my application of the multi-player game solved for Bayesian Perfect Equilibria shows the Egyptian military as not interested in democratizing Egypt. Indeed, its interest is to stifle democratization in order to maintain their ability to extract monies for its own profit and to secure its hold on positions of power. The military have and will be both the de facto and de jure most powerful in Egyptian politics. The Muslim Brotherhood, though claiming to be interested in democratization, is more likely to renege according to the analytic results. The Brotherhood seems to be using initial participation in the democracy movement as a means to gain power and use it as a tool for their future prospect of running Egypt. According to the applied game theoretic analysis, the Muslim Brotherhood is expected to become an increasingly radicalized opposition force (See Figure 1). The leaders of the West, particularly President Obama, Prime Minister Cameron and Chancellor Merkel, will be more interested in extracting Egyptian policy concessions salient to their own voters rather than in promoting a true democratic government. The moderate opposition members in Egypt are expected to lose significantly in the upcoming elections and to become a marginalized voice in Egyptian politics. None of this bodes well for the future of democratic competition.

The Lead up to the Egyptian Revolution

The Egyptian revolution came as a surprise for most academics. Hosni Mubarak enjoyed nearly thirty years in office and was entrenched in his position as president of

Egypt. However changes in important factors, namely age, the economic crisis in Egypt, and a reduction in foreign aid receipts caused him to lose support, making it impossible for him to maintain office. Age has a unique effect on incumbency prospects. Although leader survival generally increases with age, eventually age turns against survival prospects. This happens when questions arise among key supporters about whether they will continue to receive the optimal mix of public and private goods that have led them to support the current leader in the first place. Once key coalition members believe that they are at serious risk of losing these benefits after the leader passes they become open to alternative leadership options. Essentially, they hedge their bets. Specifically, faced with uncertainty about the future flow of goods, coalition members look to healthier potential leaders that can more reliably continue to provide these goods. Egypt's senior military officers enjoy pocketing goods from the budget, state industrial and financial institutions that are not easily calculable by observers. Ahmed Ezz, a senior member of Hosni Mubarak's NDP party, provides a useful example of the goods that key Egyptian coalition members to Hosni Mubarak received. He held more than 60 percent of market share in the Egyptian steel industry through his Al-Ezz Dekheila Steel Company.³

Hosni Mubarak was over eighty-two

³ Richard Leiby, "The Rise and Fall of Egypt's Most Despised Billionaire, Ahmed Ezz," Washington Post, April 9, 2011: http://www.washingtonpost.com/world/the-rise-and-fall-of-egypts-most-despised-billionaire-ahmed-ezz/2011/03/29/AFVgNG9C_story.html

years old at the time of the revolution and there were rumors that he was afflicted by cancer. After the revolution, Mr. Mubarak's lawyer disclosed that he was, in fact, suffering from stomach cancer.⁴ This is likely to have been known by members of his inner circle. His age and deteriorating health made his supporters, namely senior military officers, question his viability as a future leader of Egypt, which meant that the goods they received under his charge were also in doubt.

The economic crisis did not help his political survival prospects either. Most of the people affected by the economic crunch felt in Egypt were not part of Mubarak's coalition of key backers. However, en masse they would be able to have a credible chance to overthrow the government. In 2010, it was estimated that Egypt had a 9 percent unemployment rate and had 20 percent of its population underneath the poverty line (Central Intelligence Agency). The bleak prospects for the average Egyptian with a government indifferent to their harsh existence made it quite tempting to put regime change in motion. Whether or not they succeeded in overthrowing Hosni Mubarak depended on the response by the Egyptian security forces. Their response would ultimately depend on foreign aid coming into Egypt.

Perhaps, the least understood and one of the biggest factors fueling the revolution was the foreign aid given (or, more particularly, not given) to Egypt. Since 1979,

Egypt has been one of the largest recipients of US foreign aid, behind only Israel in foreign aid receipts. It is not a coincidence either that the foreign aid came after the peace accord with Israel. Prior to signing the peace accord, Egypt virtually received nothing from the United States; afterwards it saw an exponential spike in contributions from the US. A recent Pew Research Center poll found that over half of Egyptians want to end peace with Israel.⁵ The use of foreign aid has been effectively given to keep Egypt at peace with Israel. A recent Gallup poll found that nearly three quarters of Egyptians favor ending American foreign aid to Egypt.⁶ Why would Egyptians favor cutting foreign aid from the US? Without these foreign aid contributions, the Egyptian government would be at the very least incentivized to have icy/hostile relations with Israel. Foreign aid has been a tool to extract policy concessions from Egypt that are conducive to the interests of the United States and the security of the region.

Since 1979, Egypt has maintained fairly good relations with Israel, as it recognized its right to exist, acted as a mediator between Israel and its Arab neighbors and aided the US and other Western countries in intelligence and counter-terror operations. It did so because providing these benefits to the US in exchange for aid left it better off than engaging in policies that would have a negative effect on the amount of foreign aid

⁴ "Egypt's Hosni Mubarak Has Stomach Cancer," BBC News, June 20, 2011
<http://www.bbc.co.uk/news/world-middle-east-13845484>

⁵ Pew Research Poll April 25, 2011:
<http://pewresearch.org/pubs/1971/egypt-poll-d-emocracy-elections-islam-military-muslim-brotherhood-april-6-movement-israel-obama>

⁶ Gallup Poll February 6, 2012:
<http://www.gallup.com/poll/152471/egyptians-oppose-economic-aid.aspx>

it received. Egypt received an average of two billion dollars per year since the Camp David peace accord.⁷ Most of the aid was spent on the military. The military used it both as a mechanism to secure defense funding and to enrich senior officers. Having the money funneled into the military strongly entrenched Mubarak politically as the military helped suppress freedoms of speech, press and assembly throughout his tenure. It was essentially a free resource good that strengthened Mubarak's hold on power by giving him sufficient capital for private goods allocations that would keep him in power and create a loyalty norm against domestic challengers.

Early in 2010, Hosni Mubarak's future political prospects began to unravel. The Obama administration elected to cut foreign aid in half.⁸ In a costly signal response during a trip to Lebanon in February, the Egyptian foreign minister, Ahmed About Gheit, referred to Israel as an "enemy" and stated that Egypt would back Syria and Lebanon should Israel attack either over a transfer of scud missiles.⁹ Following the peace accord, Egypt had not engaged in any saber rattling with Israel of this magnitude and had enjoyed amicable

ties with its neighbor. The reduction of foreign aid altered its expected utility calculus of following policies salient to the United States and Israel. It then became more desirable to side along the lines more responsive to the Egyptian populace and its Arab neighbors. The reduction in foreign aid became a major problem for Mubarak. The money from the aid was used to enrich his cronies and keep them in line.

Without the money, he would not be able to keep them sufficiently content, and they would look for other potential leaders to deliver them the money they need. It is no surprise that during the revolution the Egyptian security forces stood by as protesters congregated and chanted their calls for Mubarak to go. As the military was shopping for their new man to replace Mubarak, a large influx of foreign aid came pouring in from the US and Europe.¹⁰ The concern over losing prized policy concessions from Egypt made Egypt a very salient issue for policymakers during the spring and prompted the military to get the aid back with added interest.

This concern was due to the opposition groups in Egypt that did not want to maintain the current status quo Egyptian policies with the West. The more moderate members of the Egyptian opposition groups,

⁷ "Factbox: Most U.S. Aid to Egypt Goes to Military" Reuters, January 29, 2011: <http://www.reuters.com/article/2011/01/29/us-egypt-usa-aid-idUSTRE70S0IN20110129>

⁸ Hadeel Al-Shalchi and Lee Keath, "US Aid Cuts Hit Egypt's Democracy Groups," The Boston Globe, April 18, 2010: http://www.boston.com/news/world/middleeast/articles/2010/04/18/us_aid_cuts_hit_egypts_democracy_groups/

⁹ Roe Nahmias, "Egyptian FM calls Israel 'enemy.'" Ynet News; April 25, 2010 <http://www.ynetnews.com/articles/0,7340,L-3880673,00.html>

¹⁰ Nicole Gaouette, "Clinton Announces \$2 Billion of New Egypt Aid in Cairo," Bloomberg, March 15, 2011: <http://www.bloomberg.com/news/2011-03-15/clinton-announces-2-billion-of-new-egypt-aid-in-cairo-visit.html>

¹¹ Sebastian Moffett, Nathalie Boschataud, and William Horobin, "G-8 Pledges Aid to Egypt, Tunisia," Wall Street Journal, May 29, 2011: <http://online.wsj.com/article/SB10001424052702304563104576353392663048626.html>

for example Ayman Nour and Abdel Nouri, wanted neutral ties with the US and the West, and therefore leave the peace treaties established with Israel in doubt. The more radical members of the Egyptian opposition, notably the Muslim Brotherhood, wanted a more aggressive foreign policy with Israel, which could have increased the likelihood of conflict and potentially destabilized the region. In order to remain in power and continue reaping its benefits, the military was thus incentivized to find an optimal position relative to Western and opposition demands.

Egypt’s Future Politics

The research aim of predicting Egypt’s political future was to predict the future structure of the Egyptian government. The structure of government would dictate the distribution of power amongst the competing factions within Egypt. The distribution of power would influence how much power each group would have and if that power held would be sufficient to extract desired policies.

The following scale shows the positions of the players regarding their desired structure of the Egyptian government. They are placed relative to each other.

Form of Government Scale

(0) Military Junta	(10) Some concessions	(40) Liberal Democracy	(60) Islamic Popular Democracy	(100) Islamic Theocracy
(Status Quo)	Power structure remains	Abdel Nouri	Ayman Nour	Mohammed Badie
Tantawi, Enan etc.	Western players	New Wafd Party	El-Ghad Party	Muslim Brotherhood

The positions range from military junta to the establishment of Islamic theocracy. Following the revolution, Egypt was a de facto military junta, so it was coded as the status quo (0). The Western players, notably Obama, Sarkozy, Cameron and Merkel are placed allowing some minor democratic concessions, but nothing substantive enough to make real change towards democratization in Egypt (10). Their weak lexicographic preference for democracy creates the small shift in the type of

government preferred from the one the military prefers. The Western position is to call for some form of Egyptian democratization, effectively serving political rhetoric for respective domestic audiences. A democratic Egypt would make the extraction of select policies from Egypt untenable, but the appearance of an emerging democratic Egypt serves political rhetoric and still provides desired policy.¹²

¹² It is worth noting observation of calls from Western leaders for Egypt to democratize, however

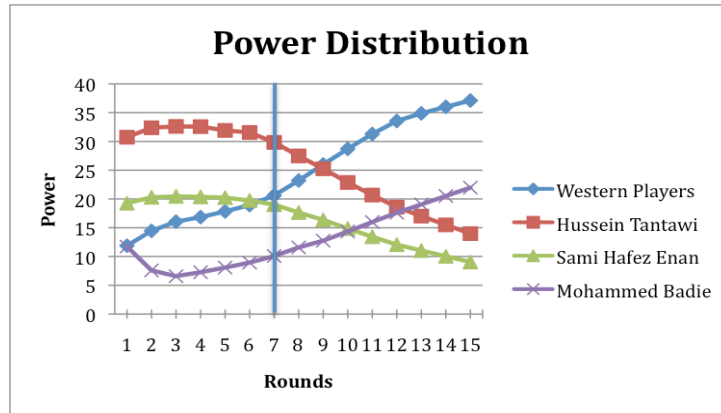
The moderate opposition groups are coded as promoting liberal democracy (40), including Abdel Nouri of the New Wafd party, and Islamic popular democracy (60), Ayman Nour of the El-Ghad party. The Muslim Brotherhood is coded for establishing an Islamic theocracy (100). The Muslim Brotherhood does not hold an interest in promoting democracy in Egypt. Using backward induction by means of Extended Nash Equilibria, the ends that Badie and the Muslim Brotherhood seek, such as initial participation in the democratic process, are within the Muslim Brotherhood's optimal equilibrium pathway to achieve a credible probability of running the Egyptian government and crafting it to its preferences. The overture of engaging in a democratic election is a guise to facilitate the Muslim Brotherhood's entrance to power in Egypt. This analysis later proved accurate during President Morsi's attempts to consolidate power in Egypt.

key players' power in Egypt jockeying over a 15 round game. The sum of the Western players influence displays the cumulative power of the West in the region.

Figure 1 displays the result of the

these are non-credible signals. The failure (or stifling actions) to promote Egyptian democracy in Egypt has not prompted Western leaders to take substantive actions measures Egypt to truly democratize. There have been no major votes at the UN General Assembly, UN Security Council, economic sanctions against Egypt or its leaders, substantive withdrawal of foreign aid, invoking the 'coup clause,' a provision to eliminate aid in the American foreign aid agreement with Egypt, has not been exercised, expelling Egyptian diplomats, pulling diplomats out of Egypt or any other substantive measure meant to provide a cost for the Egyptian government for not democratizing. The actions precipitated against countries like Libya, Syria or Iran have in no way been applied to Egypt. The rhetoric against Egypt is no more than cheap talk. What is substantive of the West's position is the lack of action. The Western stance on Egypt was placed largely on this consideration.

Figure 1

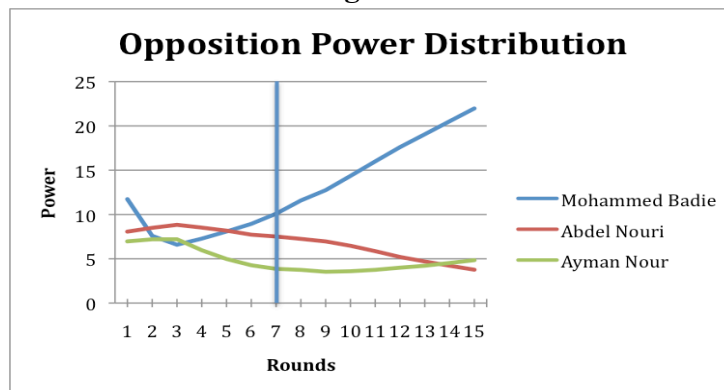


The initial increase in Western influence allows Tantawi and Enan to grow in power. This can be attributed to the influx of additional foreign aid receipts to the Egyptian regime. However, at round 7, Tantawi and Enan begin to decline in power, whereas Badie’s power continues to grow. The observation of substantial Western influence and the lack of democratization are effectively undermining the regime and moderate opposition groups. These factors are causing moderate followers to radicalize out of frustration. As a result, Badie gains more followers from within the opposition movement. The game shows the Egyptian

military as the most powerful player in the country, backed by foreign aid contributions. The West is second most powerful, largely as a result of foreign aid as well.

For further explication of the opposition’s radicalization, Nouri and Nour lose power after round 3 while Badie becomes stronger (See Figure 2). The moderate groups gain power as a result of the initial appearance of a democratizing Egypt. However, the presence of Western involvement and the conclusion that democratization will not come as expected causes large segments of the moderates to radicalize.

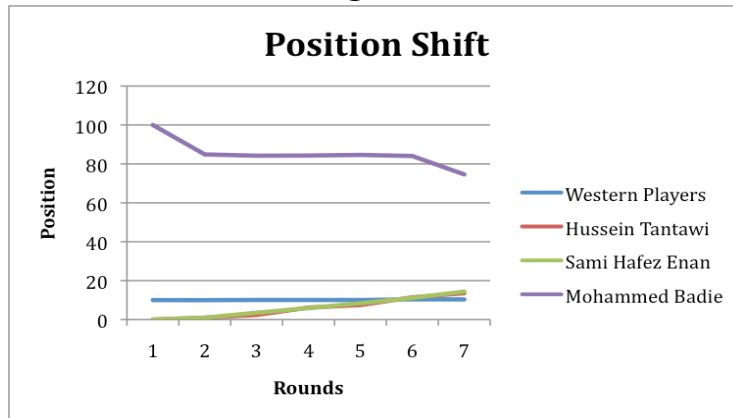
Figure 2



Based upon the shift of positions throughout the game, the Egyptian military acquiesces to Western preferences and opposition demands to allow some democratic reforms (See Figure 3). The military offers a small democratic

concession to the opposition to mitigate radicalization, which also engenders useful political rhetoric to Western leaders for their domestic audience. Badie’s position softens in order to capitalize on moderates in response to the lack of democratization.

Figure 3



At round 7, the game ends with some democratic reforms (24), but these measures are piecemeal; the current power structure remains largely intact. The game ends at round 7 because observing that their power will substantially diminish, enabling Badie to overtake them, incentivizes the Egyptian military players electing to end the game

before it can progress further. The model indicates that the combined power of the West and military leadership will dominate the politics in Egypt. This influence will dictate the desired structure of government, which will be a military junta with the trappings of a democratic country.

Egypt’s Future Relations and Policies with the West

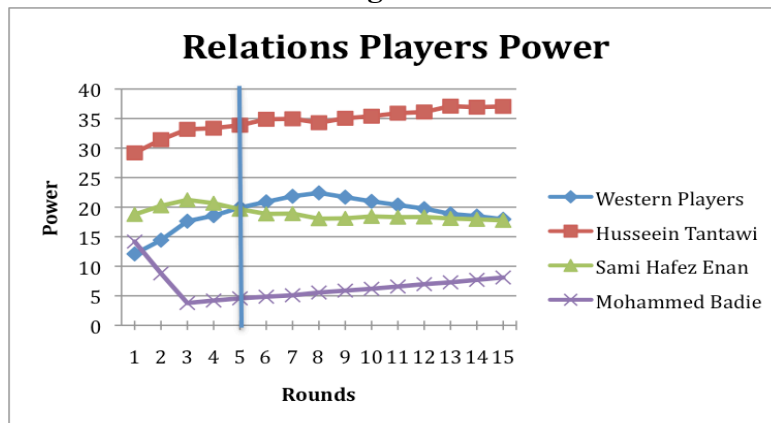
Form of Relations Scale

(0) Maintain relations; with Increased foreign aid receipts	(40) Neutral stance in region	(60) Improved relations with regional adversaries	(100) Stronger partnerships regional adversaries i.e. Iran
Egyptian Military	Abdel Nouri	Ayman Nour	Mohammed Badie
Western Players Muslim Brotherhood	New Wafd Party	El-Ghad Party	Muslim Brotherhood

A second study was conducted to predict what the relationship between Egypt and the West would look like following the revolution. The implication of what such a relationship would look like, along with the structure of government, determines how salient particular issues for the West will be to the Egyptian government. The relations positions were again scaled relative to each player's position. Within this game, the positions range from maintaining Egyptian-Western relations to stronger Egyptian-Western adversary relations, an alternative to the status quo. A converging position develops between the West and

military to maintain current relations with more aid (0). Moderate Abdel Nouri's New Wafd party prefers Egyptian neutrality (40) and less moderate Ayman Nour's El-Ghad Party prefers an improvement in relations with Western adversaries in the Middle East, i.e. Iran. The Brotherhood seeks to develop a greater partnership and ties between Egypt and Iran. Prima facie, the Brotherhood and Iran are strange bedfellows, having opposing worldviews of Islam, though sharing stronger preference orderings in opposition to the current Western influence in the Middle East.

Figure 4



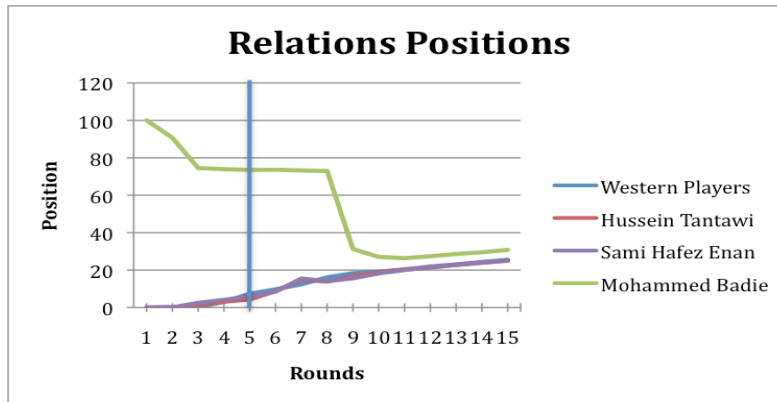
Previous to round 5 when the deal is made, Enan loses power and eventually the West follows suit (See Figure 4). The West and Egyptian military players capitalize at this point in time to secure the optimal outcome. The West and military could continue the game to have Badie come closer to their preferred lexical preferences, however the model indicates they do not (See figure 5). Why? Badie's rise in power

coincides with a radicalization of the opposition. The costs associated with the government structure and its policies become increasingly difficult. The West and military would rather end the game earlier before this can occur. By shifting his position closer to better relations with the West, Badie is effectively undermining the current Egyptian regime. He is becoming more powerful as a result of offering the

most viably distant choice from the military. His popularity rises again in this case as the Egyptian opposition is frustrated with the lack of substantive democratization. The everyday Egyptian essentially wants a voice distant in position from the military to express his/her anger and frustration over

the government. Badie and the Muslim Brotherhood become the preferred candidates for such a role. Radicalization occurs in the opposition as the game continues.

Figure 5



The game ends with the military and the West agreeing to maintain current policies by increasing aid (15), an estimate later proved accurate by increased foreign aid receipts in the subsequent months and years following the revolution with Western friendly policies continuing. The cost is increasing because of the growing domestic costs associated with increasingly unpopular Egyptian domestic policies and severe civil unrest. A moderate increase in ties translates to an increase in foreign aid receipts to offset higher costs. Remember the military relies on foreign aid receipts to maintain incumbency. Regardless of attempts to stymie radicalization of the opposition, the observation of the status quo with the West, with respect to substantive policies, as well as a largely status quo government, will

generate more radical followers for the Muslim Brotherhood. Combining this study with the first one, Egypt is predicted to maintain peace with Israel and continue aiding in counter-terrorism intelligence gathering and operations with the United States and other Western powers. These policies are not without costs, however. The costs of a nascent robust radicalized opposition, inflaming the region and engendering a potential breeding ground for radicalized sympathizers antithetical to Western consideration are particularly worrisome prospects given that Egyptians are rather educated for global standards.

With this prediction in mind, it is worthwhile to note some, prima facie, overtures towards democratization following the Egyptian revolution. Formalized

relations with Iran and a brokered reconciliation between Fatah and Hamas are worthwhile examples. While these instances of departure from the status quo of Egyptian affairs may seem troubling for the Western observer, yet promising for an Egyptian tired of the policies from the Mubarak era, they are examples of cheap talk signals. The actions are piecemeal democratic concessions giving the Egyptian people the appearance Egypt is democratizing; essentially they are attempts to mitigate domestic political costs. The relations enjoyed by Egypt with Iran were friendly during Mubarak's tenure without de jure representation in Tehran. Recognition of relations with Iran is only dressing in this case. Furthermore, the brokered reconciliation was offered in 2009 only left out Hamas at the negotiating table. This instance was during the Mubarak regime as well. Consistent with the analysis, the democratic concessions observed are only minor and piecemeal. What is a costly signal is the Egyptian military's entrenched position against true democratization in Egypt, i.e. freedom of speech, assembly and press. These necessary conditions to establishing democracy are not being met and their absence is signaling how far democracy will take hold in Egypt.

Solving Egypt's Political Problem

In light of Egypt's inability to democratize, the question was raised

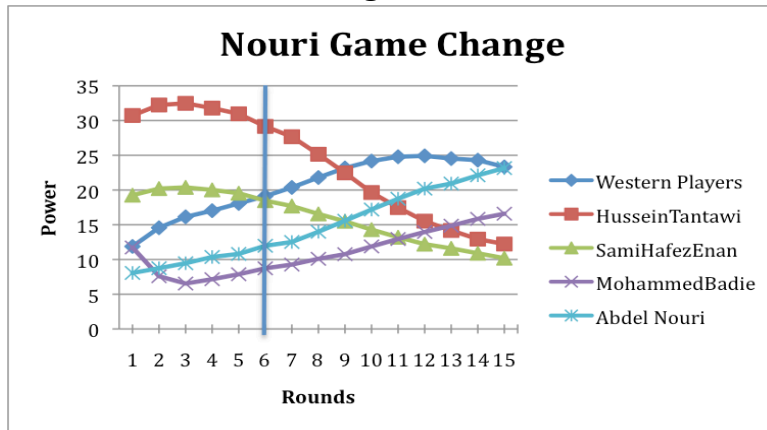
whether or not there was a possible solution that would allow Egypt to democratize. However, this solution would require the West to receive desired policy extractions and continued military incumbency because of the inherent structural effects in the game that preclude democratic growth without these assenting players. The policy needed to achieve this optimal balance hinged on supporting moderate opposition groups and compelling them to adjust their positions closer with the military. Surely this was not ideal, however its outcome is better than a country of voiceless millions and violent mass outbursts observed today. The model offered a beneficially constructive alternative. The model indicated that moderate opposition groups who shift their position closer to the military would be able to have a relevant say in Egyptian politics, rather than become marginalized.

The game was modified by shifting Nouri's position from supporting a liberal democracy (40) to supporting minor democratic concessions (20). This can be done because it is within his resolve range, since he has acquiesced to demands made by the government in the past. His New Wafd party aided Hosni Mubarak's NDP party appear as legitimate by participating in fixed elections without boycott. His resolve is also shifted to become firm to reflect the position shift and coded (2). Observe the shifting relations between the major power holders in Egypt.

Abdel Nouri’s Position Shift Form of Government Scale

(0) Military Junta	(10) Some concessions	(20) Moderate democratic concessions	(60) Islamic popular democracy	(100) Islamic Theocracy
(Status Quo)	Power structure remains	Abdel Nouri	Ayman Nour	Mohammed Badie
Tantawi, Enan etc.	Western players	New Wafd Party	El-Ghad Party	Muslim Brotherhood

Figure 6



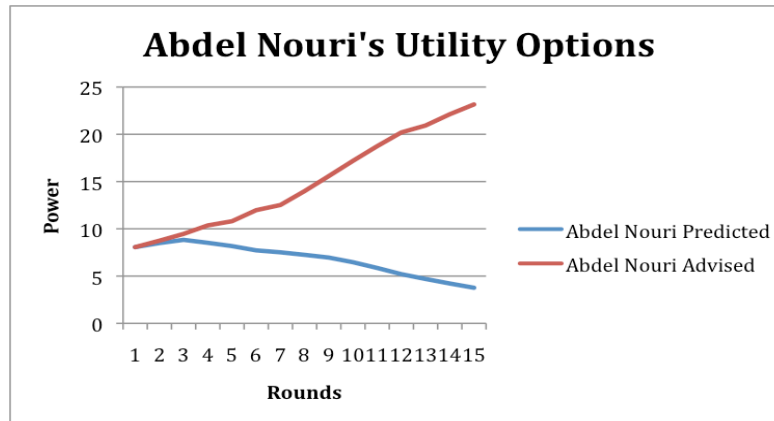
By supporting minor democratic concessions along the lines of the West and Egyptian government positions, giving political cover to the West and Egyptian government, Nouri undermines Badie’s radical stance. The end result is the game ending at round 6 with more democratic concessions than the predicted outcome (26). The game ends when the Egyptian military players begin to lose power similar to the predicted outcome. The military would still be the dominant force within the government, and its policies continue, however the added democratic concessions would not be possible without Nouri’s shift.

The outcome of having the military grant more democratic concessions (26) with a strong moderate opposition maintains the possibility of a more democratic country in the future. Coupling Badie’s loss of power and the rise of the moderates like Nouri with a more democratic government structure creates a scenario where the West and military would be willing to continue ceding more democratic concessions. There is a very doubtful outlook of a democratic Egypt without this shift.

To further explicate the difference for Nouri between the predicted outcome and the engineered one, observe the

following chart representing the amount of power he holds in each scenario (See Figure 7).

Figure 7



Nouri is far better off adopting this policy than staying the course with the predicted one. Indeed, the engineered outcome offers a very visible shift in power for the opposition movement. This offer incentivizes Nouri to accept the deal, making him a relevant figure in Egyptian politics, rather than becoming marginalized.

A scenario develops that could credibly improve the everyday Egyptian's wellbeing; the leadership has the incentive to shift the proportion of public to private good allocative spending towards a higher proportion of public good allocations. With the exception of the Muslim Brotherhood in the engineered outcome, all the players improve, further stymieing opposition radicalization in Egypt. The result supports fledgling democratic reforms and the hope for further democratization remains a credible prospect. A more democratic government can be hoped for. Security

concerns in Egypt and the greater Middle East are abated because the potential for a radicalized Egyptian opposition is eviscerated in the given scenario. The human and economic costs associated with Egypt's political turmoil are being substantially mitigated.

Practical Assessments and Future Implications

The model paints a bleak picture of Egypt's future. There will be observations of the military dominating the country's politics on one end of the political spectrum and a robust, radicalized opposition on the other end. The model predicts that the international policies from the Mubarak regime should continue for the foreseeable future. The 1979 Camp David Peace Accord should remain. The Egyptian government should also be responsive to Western security concerns in the region. The public

responses from the Egyptian government, though, should be carefully analyzed because Egypt is engaging in policies making it appear less responsive to Western consideration to mitigate an antagonized opposition. However, stifling democratization and continuing policies conducive to Western consideration are signaling of its actual position. The military's reliance on foreign aid receipts is paramount to maintain incumbency. The option to elect for continued foreign aid receipts are through continuing Western friendly policies. As a result, the politics of Egypt will be extremely sensitive, to say the least.

The average Egyptian is facing economic hardship and holds the hope Egypt would democratize. A democratic Egypt would be more responsive to the welfare of its citizens than the autocratic Mubarak regime. Unfortunately, the model suggests the autocratic government structure from the Mubarak regime will continue into the new government. This, in turn, suggests the economic prospects for the average Egyptian may not improve anytime soon, since Egypt's autocratic leaders are not structurally incentivized to promote a high proportion of public goods for the general populace. The bleak future for the average Egyptian will help fuel discontent against the military, radicalize the opposition, and

aid the Muslim Brotherhood against the military. The radicalization of the opposition and its discontent with the government may prove to become a potential future breeding ground for radical extremists. It becomes a potentially dangerous situation, since Egyptians are rather wealthy and educated for global standards.

New challenges lie ahead for policy in the Middle East. This model demonstrated that democracy could indeed be promoted in Egypt while balancing policies salient to Western concerns. Yes, the range in democracy is not ideal, however maintaining a credible hope for democracy is better than nothing. The economic and human costs being observed in Egypt could have been greatly mitigated if the solution provided by the model guided policymakers. The costs of radicalization abroad are salient because they can return back home. Applications in game theoretic modeling in the future can provide possible avenues to promoting democracy while taking into better account internal and external political concerns in other countries. The use of game theoretic modeling indicates a more positive and pragmatic direction can be taken in Middle Eastern politics. This, I believe, should be highlighted and implemented, since we have the tools to do so available for our use.

Appendix

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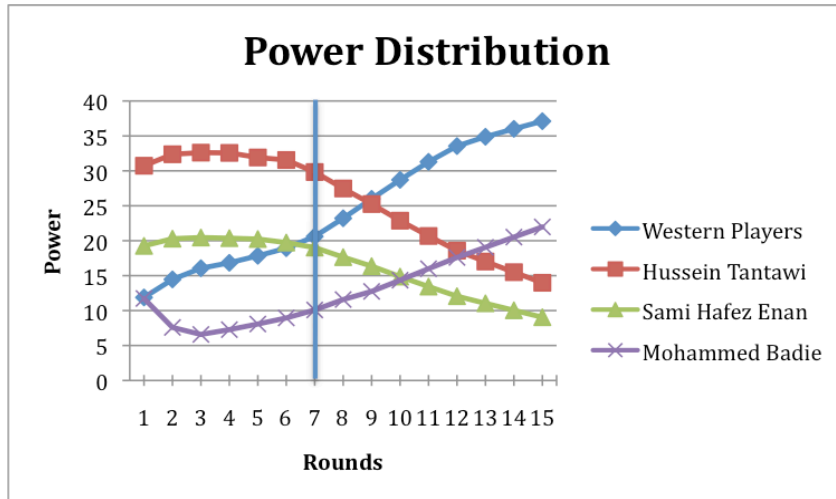


Figure 2

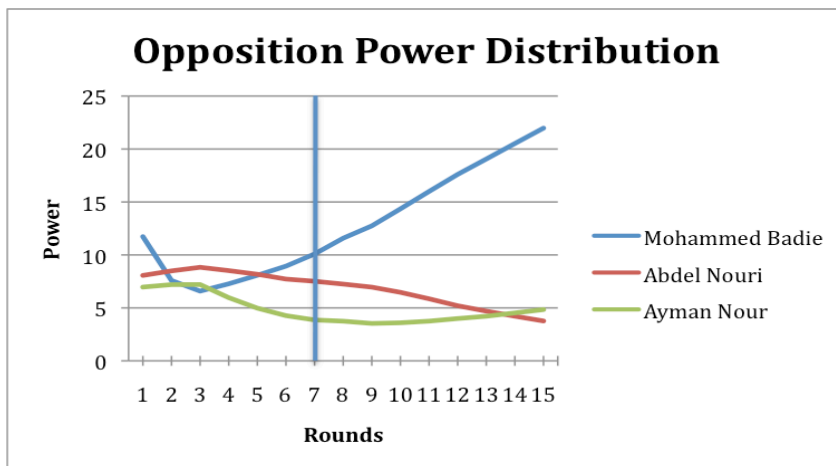


Figure 3

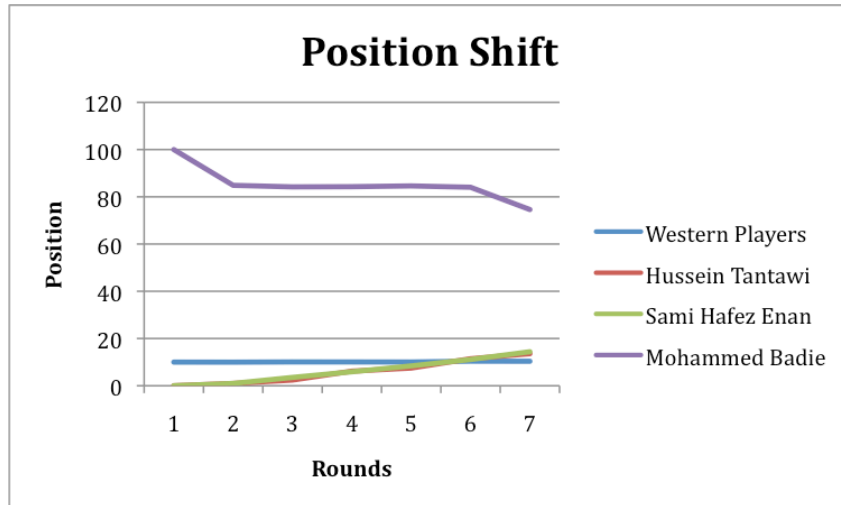


Figure 4

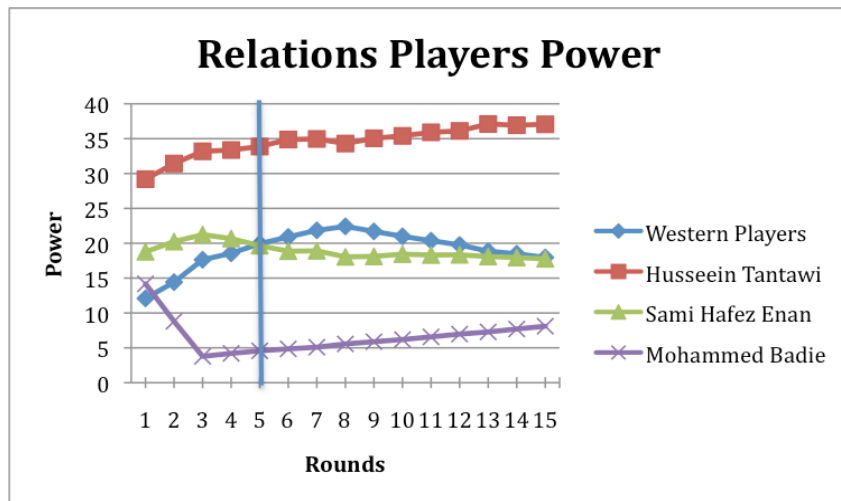


Figure 5

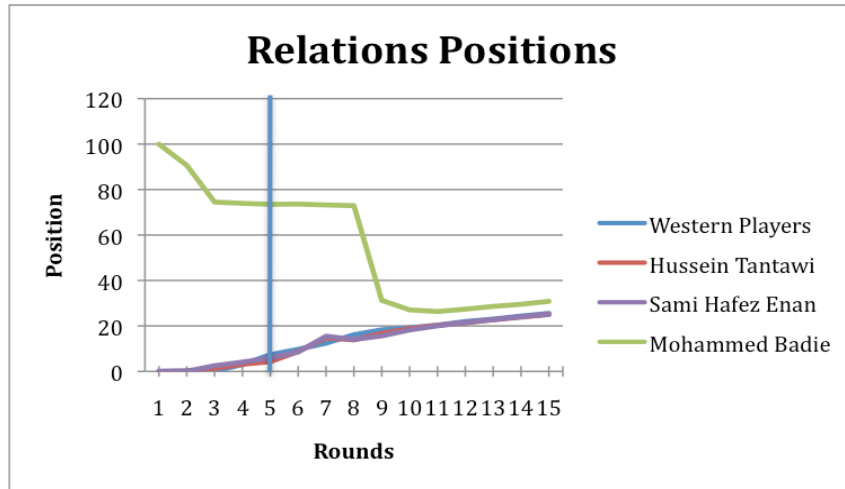


Figure 6

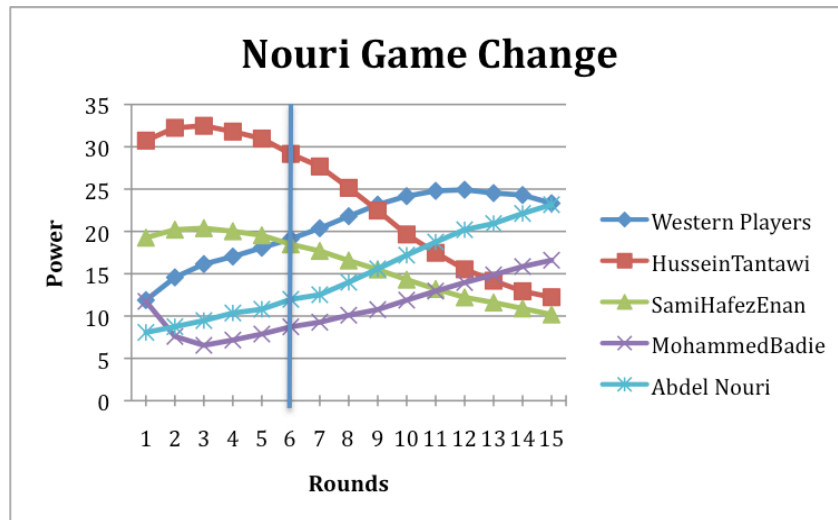
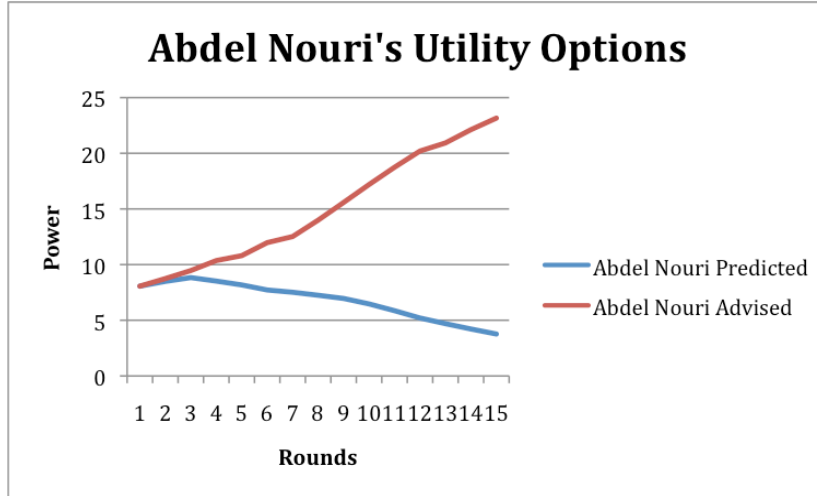


Figure 7



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