# The Egyptian Revolution 2011:
# The Fall of the Virtual Wall - The Revolution Systems Thinking Archetype

Khaled Wahba,
Assistant Professor, Systems and Biomedical Engineering Department
Cairo University, Faculty of Engineering

## Abstract

18 days, 850+ martyrs, 6500+ injured are all the quantitative facts of one side of the 25th January 2011 Revolution of Egypt which resulted in the fall and collapse of Mubarak's regime and his power. As for the other sides of the revolution, there are a lot of explanations about its birth and trigger and the dynamism of the pre-revolutionary period as well as during the revolution. Egypt revolution has its similarities to, and differences from all other revolutions that happened across the human history. Many researchers have invested all their efforts to explain and theorize the revolutions in many aspects. This paper is an attempt to apply systems theory on the dynamic parts of the revolution by developing a systems thinking model with the purpose to understand the dynamism of the causal and effects relations among all involved factors/variables in the pre-revolutionary and during-revolution periods till the collapse of the Regime.  The by-product of this work is to propose an initial trial to develop an archetype for a revolution.

## 1 INTRODUCTION

According to historians' literature, human beings have witnessed hundreds of revolutions, rebellions and social movements across all centuries allover all continents. Although many of them have seen glorious moments but many as well have not seen the light of glory. Nevertheless, their characterizations are more or less similar in their life-cyle's dynamism; starting from the deterioration of the socioeconomic, political and financial conditions during the pre-revolution period, to the way they are born, the reasons of its ignition and the motivations behind the revolutions, to the actions and reactions in the during-revolution period and to finally the development of the new era in the post-revolution time, Thermidorian (Brinton, C "The Anatomy of Revolution", 1938).

This paper will discuss and model the pre-revolution period, the tipping point of the revolution, and the dynamics during the revolution period till the collapse of the old regime. The dynamism of the Thermidorian (Convalescence) period will be out of the scope of this paper.

## 2 EGYPTIAN'S REVOLUTION: AN OVERVIEW

Egyptian Revolution of 25 January 2011, was triggered by many yet mixed reasons and causes which formed and prepared the necessary climate for a successful results by overthrowing the old regime of Mubarak on Friday, 11th of February 2011, after 18 days of unrest started by peaceful demonstration on Tuesday, 25th January and ended as well by peaceful and non-violence protest and going through several degrees of violent clashes from the side of Mubarak's Regime against the protesters across most of Egyptian cities, including Cairo, Alexandria, Suez, Ismailia and more, following the Tunisian Revolution that saw the overthrow of the long time Tunisian president.

It was the 30+ year tyrannical system of Mubarak, which has led to the resentments of Egyptian in general and the protesters in particular. Their grievances revolved around the deterioration of all kinds of legal and political conditions including police brutality, state of emergency laws, lack of free elections and freedom of speech, uncontrollable corruption. Moreover the protesters focused on economic issues including high unemployment, food price inflation, and low minimum wages. Although, permission for the 25 January demonstration was obviously not granted by the Egyptian authority, the protest started and supported by many political movements, opposition parties and public figures, including Youth for Justice and Freedom, Coalition of the Youth of the Revolution, the Popular Democratic Movement for Change and the National Association for Change along with the Ghad, Karama, Wafd, Democratic Front, and the Muslim Brotherhood, Egypt's largest opposition group. However, the Coptic Church urged Christians not to participate in the protests. The Facebook group set up specifically for the event attracted 80,000 attendees, (*wikipedia*).

Comparing the list of demands at the start of the uprising, to its ever-increasing list at the end, one can see how the demand's development has taken an epidemic behavior, which was the main feature of this revolution. The primary demands were the end of emergency law, freedom, justice, a responsive non-military government, and a say in the management of Egypt's resources.

International response to the unrest in Egypt was initially mixed and was changing with the non-stationary development of the uprising. Most international reactions aimed at peaceful actions and reactions on both sides and moves toward smooth and orderly reform. Many governments showed concerns and issued travel advisories and began making attempts at evacuating their citizens from the country.

In different attempts from Mubarak's side during his last days as a ruler, to suppress the dissent, he dissolved his government, appointed military figure and former head of the Egyptian General Intelligence Directorate as Vice-President, and called for constitution amendments in few articles which have been dissented by the protesters and viewed as cosmetic rather than fundamental reforms and hence have triggered new waves of increasing demands list and the protesters have imposed more pressure on Mubarak to step down as only and major demand.

As a result of all pressures, mostly internally and supported internationally, Mubarak has on Friday 11th February, stepped down as president and turning power over to the Supreme Council of the Armed Forces.

Appendix A, shows the time line of most important development and events of Egyptian Revolution since its start on Tuesday, 25 January till the step down of Mubarak on Friday, 11 February 2011.

## 3 LITERATURE REVIEW
### 3.1 Definition and Types of Revolutions
*Revolutio* means a turn-around in Latin, and it is the origin of the word Revolution which indicates a fundamental change in power or organizational structures that takes place in a relatively short period of time. Aristotle described two types of political revolution:
- Complete change from one constitution to another

- Modification of an existing constitution.

Egyptian Revolution, obviously started as a second type, nevertheless the ultimate objective was to move towards the first type, namely a complete change of constitution.

The very early political usage of the word revolution was at the time of United Kingdom civil war in 1688 to describe the replacement of James II with William III. The word 'revolution' is usually used to denote a change in socio-political institutions.

Jeff Goodwin gives two definitions of a revolution. A broad one, in which he defined revolution as *"any and all instances in which a state or a political regime is overthrown and thereby transformed by a popular movement in an irregular, extra-constitutional and/or violent fashion"*. Goodwin gives also a narrow definition, in which *"revolutions entail not only mass mobilization and regime change, but also more or less rapid and fundamental social, economic and/or cultural change, during or soon after the struggle for state power."* The narrow definition by Goodwin, matches more the Egyptian Revolution characteristic.

Jack Goldstone on other side, defines revolution as *"an effort to transform the political institutions and the justifications for political authority in society, accompanied by formal or informal mass mobilization and non-institutionalized actions that undermine authorities"*.

Also, Theda Skocpol defined revolution as *"rapid, basic transformations of society's state and class structures … accompanied and in part carried through by class-based revolts from below"*, attributing revolutions to a conjunction of multiple conflicts involving state, elites and the lower classes.

In social science and literature, scholars have classified revolutions into different types according to their degree of change and impacts. For example, Alexis de Tocqueville differentiated between 1) political revolutions 2) sudden but violent revolutions that seek not only to establish a new political system but to transform an entire society and 3) slow but total transformations of the entire society that take several generations. On other hand, Marxist divides revolutions into pre-capitalist, early bourgeois, bourgeois, bourgeois-democratic, early proletarian, and socialist revolutions.

As for Charles Tilly, he differentiated between a coup, a top-down seizure of power, a civil war, a revolt and a "great revolution" (revolutions that transform economic and social structures as well as political institutions, such as the French Revolution of 1789, Russian Revolution of 1917, or Islamic Revolution of Iran). Other types of revolutions, include the social revolutions; proletarian or communist revolutions, abortive revolutions, violent or nonviolent revolutions.

### 3.2 Schools of Thoughts and Researches on the Subject "Revolution"

Since the inception of human life and the attempts and demand for radical changes from an eroded to new better life never ended. This subject has across all eras attracted all kind of teams and groups of researchers and all kind of schools of thoughts to study and investigate, methods, duration, motivating ideology for a revolution to start as well as their results which include major changes in culture, economy, and socio-political institutions. All studies were revolving around several issues, related to

psychological perspective, sociology, socioeconomic causes and political science. As a result, many competing theories have evolved and generated, which have contributed much to the current understanding of this complex phenomenon. **Psychological Theories** were evolved and used to explain this complex phenomenon including; *The Frustration-Aggression Hypothesis, Collective Actions, Authoritarian Personality Theory (APT), Psychological Uncertainty and Anxiety Models, Value and Value Conflict Theories, and Social-Cognitive Approach to Stereotyping*. When the psychological theories were limited to explain different characteristics of the revolutions, researchers have relied on **Social-Psychological Theories**, they are: *Socialization and Social Learning Theories, Modern Racism Theories, Realistic Group Conflict Theory, and Social Identity Theory (SIT)*.  Moreover, other theories and models succeeded to explain part of the main features of revolution phenomenon, such as *Communication Theory of Terrorism, Conspiracy Theories of Terrorism, The Intergroup Theory of Social Hierarchy and Oppression, and Diffusion Models of Cycles of Protest*.

Table 1, shows an overview about the development of thoughts and hence related theories across the time, (*wikipedia*).

**Table 1: Schools of Thoughts and the involve Theories to the Revolution Phenomenon**

| Generation | Researchers | Perspective | Theories | Discussion |
|---|---|---|---|---|
| **1st Gen.** | Gustave Le Bon, Charles A. Ellwood or Pitirim Sorokin | Social Psychology | Le Bon's Crowd Psychology Theory | Describing and Explaining the revolution phenomenon |
| **2nd Gen.** | | Social Behavior | | Studying the causes and the timing of a revolution |
| | **Category 1:** Ted Robert Gurr, Ivo K. Feierbrand, Rosalind L. Feierbrand, James A. Geschwender, David C. Schwartz and Denton E. Morrison | Socio-Political Science | Cognitive Psychology and Frustration-Aggression Theory | Primary cause for revolution was the widespread frustration with socio-political situation. Other causes could be due to modernization, recession or discrimination. |
| | **Category 2:** Chalmers Johnson, Neil Smelser, Bob Jessop, Mark Hart, Edward A. Tiryakian, Mark Hagopian | | Talcott Parsons and the structural-functionalist theory in sociology | Society as a system in equilibrium between various resources, demands and subsystems (political, cultural, etc.). A state of a severe disequilibrium that is responsible for revolutions. |
| | **Category 3:** Charles Tilly, Samuel P. Huntington, Peter Ammann and Arthur L. Stinchcombe | Political Sciences | Pluralist Theory and Interest Group Conflict Theory | Those theories see events as outcomes of a power struggle between competing interest groups.  Revolutions happen when two or more groups cannot come to terms within a normal decision making process traditional for a given political system, and simultaneously have enough resources to employ force in pursuing their goals. |
| | **Remarks:** Revolutions seen as a two-step process; first, some change results in the present situation being | | | |

| | | different from the past; second, the new situation creates an opportunity for a revolution to occur. In that situation, an event that in the past would not be sufficient to cause a revolution (ex. a war, a riot, a bad harvest), now is sufficient. If authorities are aware of the danger, they can still prevent a revolution (through reform or repression). | | |
|---|---|---|---|---|
| **3$^{rd}$ Gen.** | Theda Skocpol, Barrington Moore, Jeffrey Paige | States and Social Revolutions | Marxist Class Conflict Approach | Attributing revolutions to a conjunction of multiple conflicts involving state, elites and the lower classes. |
| **4$^{th}$ Gen.** | | Contentious Politics, and Structuralism, Social Movements | Structuralist Theories, Conscious Agency | Multi-Class coalitions topple seemingly powerful regimes amidst popular demonstrations and mass strikes in nonviolent revolutions. Ideology and culture shape revolutionary mobilization and objectives. |

*Source: www.wikipedia.org/revolution*

Clearly, studying the Egyptian Revolution will follow the 4$^{th}$ Generation of scholars' thoughts (table 1).

In his book, *The Anatomy of Revolution*, Brinton, has blue-printed the main characteristics of the pre-revolution period, and summarized them as follows:

- **Symptoms:** The middle class, as the driving force behind revolutions, loudly expresses its anger over certain economic restraints placed upon it by the government which eventually cause extreme anger. At this point, as Brinton indicated, the government is also incredibly inefficient and is unable to effectively manage the country. Brinton has pointed out, that this could be due to an inept leader like within the government. Finally, the ruling party suffers a withdrawal by the intellectuals as their refusal of unethical behavior of the government.
- **The Rising Fever:** The rising fever is the escalation of the anger felt by the middle class. The people rise up at this point. The uprising culminates in a climatic battle, and the current governmental structure collapses under popular uprising.

It is very clear that Egyptian revolution has possessed similar characteristics in its symptoms and rising fever as the classical revolutions mentioned in Brinton's work.

Although the work of Lawrence C. Hamilton, was mainly focusing on the possible causes which might lead to revolution from the perspective of political terrorism studies and researches, however in this paper, it is believed that the theories that Hamilton referred to, can also be used to explain the explosion of social-movement-based revolution like Egyptian Revolution 2011. Obviously, in order to understand the application of those theories in the context of Egyptian Revolution, in this paper the term *"terrorism"* has been replaced by the term *"social movement",* and the term *"rebels"* has been replaced by the term *"political activists"* or/and *"revolutionists"*.

In his work, Hamilton has referred to the possible underlying theories for the revolution' occurrence:

***Theory A:*** *Misery and Oppression inspire all types of civil unrest; insurgent terrorism is one of these.*

*Once terrorism occurs, the police are provoked to counterattacks. Under the pressure of these counterattacks, the terrorists cannot hold rallies, make speeches, print newspapers, or otherwise continue political agitation among the masses without exposing both themselves and their supporters to almost certain arrest. However, this is precisely the sort of political work that necessary to insure that the masses will support the rebels in their confrontations with the regime. Thus by increasing repression, which in turn precludes political agitation, terrorism makes a successful revolution less likely. This is the view of Mao, Lenin and Guevara on the subject of terrorism.*

Theory A is postulating the defensive mechanism (B1) from the side of Mubarak's regime through brutal abuse of power against activists who are inspired by the regime's oppression behavior to organize social movements against the current political, social and economic situation, accordingly. In Meanwhile Theory A, explains also how the activists in order to avoid the counterattacks from the side of Mubarak's regime, they practice conservatively and rather carefully political agitations among the masses to gain their support (R2). However, another reinforcing feedback loop (R1) is emerged as a result of the counterattacks from Mubarak's regime against activists, which consequently increases the sympathy of the masses' support toward the activists and hence encourages more social movements' occurrence till the desired reforms realized and achieved.

**Theory B:** *Terrorism is caused by misery and oppression, once it occurs, it provokes the regime to intensify oppression. The oppression alienates public support for the regime and increases sympathy for the rebels, who in turn are strengthened and encouraged to provoke the regime even further, and so on. Ultimately, the populace will side with the rebels and revolution will occur, supporter of this theory is Marighela.*

Theory B, in the Egyptian context, introduces two reinforcing feedback loops, namely (R3 and R4). On one side, R3 captures the vicious circle dynamics between the activists actions and Mubarak regime's oppression behavior. As a result of R3, the activists gain more support and encouragement from the masses to further strengthen the social movements' activities (R4).

Although, both theories A and B concentrate only on explaining the dynamism of the revolution life cycle during the pre-revolution periods, but both could not explain the main causes for the fall of Mubarak's regime, which is the role of Theory C.

**Theory C:** *Terrorism is caused by misery and oppression, once it occurs, however, the government is induced to make reforms that directly remove some of the causes of terrorism. In particular, there is a reduction in the extent of government oppression. A lower level of oppression will, then, cause a lower level of future oppression, which will reduce oppression even further, and so on. If for some reason initial terrorism failed to reduce oppression, then it might escalate until either reform occurred or the government was overthrown. This theory, holds that terrorism is self-reducing (Hyams).*

This theory C, does not explain only the reactions (reforms) that Mubarak's regime has put in place during the pre-revolution period as attempts to lower the pressure on the regime (hence reducing the possibility of future social movements' occurrence, B2), but also it explains how R3 can be flipped to act as virtuous circle and ultimately lowering oppression's level and hence reducing the occurrence of

future social movements again. However, theory C puts the first step of explaining the tipping point of a revolution to occur as one of the possible outcomes of theory C, in case of failure of the activists to get their desired reforms met. In meanwhile, theory C postulates the possibility of government overthrown as a result of social-movements escalation due to unmet reforms.

Although theory D below, focuses mainly on democratic and liberal government, which is obviously not the feature of Mubarak's regime, however, it can be still used in this paper to explain the involvement of elites in organizing and joining the social movements in pre- and during the revolution time, which confirms the multi-class coalitions proposition postulated by the 4th generation school of thoughts (see table 1), in which it attributes the role of multi-class coalitions in toppling powerful regimes, such as Mubarak's regime, amidst popular demonstrations and mass strikes in nonviolent revolutions. This leads, consequently to increasing oppression by the regime (R3). This theory just explains how the number of activists has proliferated so quickly during the 18-day uprising.

***Theory D:*** *In this view, terrorism is not typically the work of poor and exploited; it is the work of the idle elites, particularly students and the intelligentsia. It arises during periods of unparalleled affluence rather than desperate poverty. Furthermore, it is the most open, democratic and liberal governments that are most afflicted. Affluence and freedom encourage, allow or somehow produce terrorism. Once terrorism occurs, it leads to a decrease in freedom (increase in oppression). It also increases the probability of military coup. Oppression measures will eventually succeed in suppressing terrorism, thus decreasing the probability of revolution. Since the more oppressive society is relatively stable, prospects for moderate reform are also damaged. Moss, Clutterbuck and Laqueur are supporters for this Theory.*

Theory E below, however justifies the possible revolution occurrence as a consequence of violence's escalation between the activists and the regime, combined with frustration (caused by relative deprivation). However in Egyptian revolution, activists have been calling for nonviolent protests and hence nonviolent social movements. In this paper the positive feedback loop featuring the violence escalation, is represented by increasing resources on the side of activists/revolutionists (through civil mobilization, political agitation and hence increase number of protesters, R2) who went to the streets across all cities, and have increased the desired reforms (demands). All of these when combined with the masses' frustration have led to the revolution.

***Theory E:*** *Frustration (caused by relative deprivation), in combination with utilitarian justifications for violence (such as the relative strength of regime and rebel forces, degrees of external support for each, and historical successes of past insurgencies) and normative justifications (violence as learned, cultural response) stand at the basis of insurgent violence as well as conservative violence (vigilantism, punitive oppression by the government), the two of which are linked, indirectly, in a positive-feedback relationship. Unlike Theory B, there is no assumption that escalating violence will lead to revolution. This theory is based on some of the views expressed by Gurr.*

### 3.3 A List of Across Human History Revolutions: Short List
Since B.C. and the human being races across all time, have been struggling against the unsatisfactory situations for better life in different forms and shapes of rebellions, uprisings, revolts etc. Appendix B

shows a subset of those struggles and resistances across the history.

## 4 SYSTEMS THINKING PERSPECTIVE: ON THE COMPLEX PHENOMENON REVOLUTION

Although this paper can be categorized under a political science subject, however, a lot of managerial and organizational theories and practices can be applied to explain the revolution as a complex phenomenon. Next sections will feature some of the classical works by the great system thinkers such as Russell Ackoff, Peter Senge and others with the purpose of building a systems thinking model to explain the uprising in Egypt during the Egyptian Revolution 2011 as well as the collapse of Mubarak's regime on 11th February 2011.

### 4.1 Systems Thinking and the Learning Organization's Disciplines: Regime's Collapsing was Logical

In his book the Fifth Discipline: the Art & Practice of the Learning Organization, Peter Senge has educated us not only how organization can be transformed to be a learning organization and hence innovative and sustainable, but also has educated us about how organization can be illiterate organization and hence plots its death and collapse. In this paper, it is believed that a lot of what said on organizational learning can be applied in politics and utilized to explain how a tyrannical regime like Mubaraks can collapse and overthrown.

### 4.1.1 Learning Disabilities

Senge, has explained in his book, 7 learning disabilities that, globally normal organization might practice and hence lead to failure of the organization or/and it management team to survive. However, below only 3 learning disabilities will be discussed as a belief that they played fundamental roles in the collapse of Mubarak's regime, namely; the Parable of the Boiled Frog, The Fixation on Events and the Myth of the Management Team.

### a) The Parable of the Boiled Frog – The Fall of Mubarak's Regime

In the story of the boiled frog, Senge was explaining how normally many organizations (regimes) can react to sudden event but not to slow and gradual changes. This fact was fundamental characteristic which featured Mubarak's regime during his ruling time. The regime was very responsive and reactive in its behavior when it senses threats to its survival. However, it was very surprising that the regime who could survive for 30 years long, has fallen and collapsed in 18 days. It was very obvious that, the regime's internal apparatus could not be geared to the slow and gradual development of the heating-up among, and the frustration of the population as well as of the activities of the activists. At the time the uprising occurred, it was not possible for the regime to react except for few reform actions in an attempt to reduce the pressure on the regime.

### b) The Fixation on Events – Development of Political Agitations

Senge emphasized as Ackoff did, that the primary threats to the survival of our organizations comes not from sudden events but from slow, and gradual processes. Mubarak' Regime was busy during last period of time, with fixing events (falsifying elections, fighting political activists, preparation of his son to be his successor, gaining more power through corruption, etc.). This kind of fixations has distracted Mubarak's Regime from seeing the longer-term patterns of change that lie behind the events and from understanding the causes of those patterns, such as proliferation of political agitations among the population. This overlooking of the slow gradual process has led to the overthrow of the regime.

***c) The Myth of the Management Team – Pressure that led to the Regime Breakdown***
In his book, Senge has referred to Chris Argyris in order to shed the light on the evidence that most management teams break down when they confront complex issues, and hence become under pressure, while they may function quite well with routine issues. Mubarak's regime has been functioning very organized and seemed to have control on country affairs during the 30 years of ruling the nation, in the context of routine issues. Although the country went through few political unrest, yet not adequate enough to trigger revolution, nevertheless, Mubarak's regime was successful to suppress all attempts for civil mobilization and protests. In meanwhile the regime could not stand against the rapid proliferation of the social movements and hence against the huge resulted pressure to the extent led to withdrawal of the police services from the battle on Friday, 28 January in all cities. This has contributed later in the breakdown of the whole regime.

In addition to the 3 learning disabilities discussed above in an attempt to explain their contribution into the collapse of Mubarak's regime, Senge has also referred to the works of prominent authors like Barbara Tuchman and Jared Diamond, in explaining that the *stubbornness* of leaders can lead to the collapse of their time. Barbara Tuchman, on one side, has explained that leaders could not see the consequences of their own policies, even when they warned in advance that their own survival was at stake. Mubaraks as leader is known of his stubbornness and he is monopolistic in his decision and view and in many occasions does not listen to his advisory team's advices. On other side, the historian Jared Diamond mentioned in his books, why great societies and powerful dominant empires collapse in remarkably short periods of time as a result of the *arrogance* and *blindness* of its leader which leading to demise.  Mubarak was not an exception, he followed the same pattern.

Senge in his Book, the fifth discipline, has introduced 5 main disciplines which are essential for building a learning organization. In this paper, Personal Mastery, and Shared Vision will be explained in the context of Egyptian Revolution to interpret their possible contribution in the success of the revolution.

Personal Mastery – Egyptians challenged their Structural Conflict by Creative Tension
Things must get bad enough or people will not change in any fundamental ways. As a reflection on this, Peter Senge has defined *"Creative Tension"* as the gap between what is "current reality" and what we want to be "vision". Same time, Senge has defined *"Structural conflict"* as the combination of two contradictory beliefs: (1) Belief of Powerlessness – inability to bring into being all the things we really care about, and (2) Belief of Unworthiness – we do not deserve to have what we truly desire. In this context, Egyptians were trapped for the last 30 years in these contradictory beliefs of structural conflict, and have been passive in their attitudes and behaviors towards all aspects of life. The regime has strongly strengthened those beliefs as a way to control the masses. Only Egyptians appreciated the necessity of revolution to occur, not only to prove, on one side, that they have been wrong for the last 30 years about the image they plotted for them, but also to aim at a new better life. This could not have happened without boosting their creative tension as an attempt to offset the negative impacts of the powerlessness and unworthiness beliefs. Egyptians have not compromised on their vision and have revolutionized on their current reality, which led to the success of the uprising.
Shared Vision – Revolution was not Possible till Egyptians Shared their Vision

Shared vision, according to Senge, is the force of the impressive power inside people's hearts. When it gets enough supporters, people start to see it as if it exists and then they defend it till they achieve it. This definition goes in line with the Egyptians' behavior and actions during the 18 days of the uprising. When they realized that they posses this impressive power inside their hearts and that they are really close to achieve their desired demands, they persistently pushed further and stronger as if it was the only alternative and no return. This shared vision i.e. the power inside their hearts, according to Senge, was the answer of the question "what do we want to create". Egyptians realized that it is the time that they can create the image for, or redesign their future by themselves without shifting this task on others shoulders as they used to do for the last 30 years. Moreover, Senge explained how people, when have the same shared visions, they bound together by a common aspiration. During the 18 days of the uprising, Egyptians agreed without pre-agreement on same vision of creating new future coupled by the common aspiration which was developed naturally and logically in similar manner as of self-created and self-organizing community or society as per Ackoff, Vulpian, Maturana and Varela. Shared visions, due to Senge's explanation, compel courage so naturally that people do not even realize the extent of their courage. Courage is simply doing whatever is needed in pursuit of the vision. Strangely enough for all Egyptians, that they realized the large extent of their courage, which stimulated all those social movements and protests.

Peter Senge has also classified people according to their attitudes toward a vision: (a) Commitment, (b) Enrollment, (c) Compliance, and more. By commitment he meant those who want the vision, will make it happen, create whatever laws or structure needed, bring energy, passion and excitement. As for Enrollment, he meant, those who want the vision, will do whatever can be done within the spirit of the law. Finally he defined Compliance as those who see the benefits of the vision, do everything expected and more. In the framework of Egyptian Revolution, this structure can easily be revealed. Activists and part of the protesters have shown commitment attitudes towards the main vision of the revolution. But without the support of the rest of the masses who showed enrollment as well as compliance attitudes, the revolution would not seem to have continued or even to occurred.

### 4.2 Systems Thinking: Practical Perspectives and Reflections on Egyptian Revolution
As researcher, consultant and educator, Russell Ackoff influenced and impacted more than 350 corporations and 75 government agencies in USA and around the globe and in return, his experience has been shaped and documented in his 29 books and more than 200 publications in books and Journals, (Jamshid Gharajedaghi). Some of his works, which are related to social systems science and systems thinking approach, will be summarized. (System Thinking for Curious Managers, Russ Ackoff)

### 4.2.1 Purposeful Sociocultural Systems Redesign (Russell Ackoff) – The Motive to Revolt
Ackoff has indicated that self-organizing purposeful sociocultural systems are self-evolving. Guided by an implicit shared image, they tend to reproduce a familiar pattern of existence. To change them then the shared image must be changed by relevant actors and participants. Changing this implicit shared image is a complicated design process. Through the redesign process, the desired future of the system can be realized by successive approximation. This discussion goes in line with the shared vision discipline mentioned in Senge's work.

*In the context of Egyptian Revolution, this proposition by Ackoff explains the causes which motivated*

*Egyptians to start the revolution. Egyptians obviously were not satisfied with their prevailing pattern of existence reproduced by their sociocultural system and guided by the shared image of hopelessness and powerlessness attitude to beat the powerful regime. Egyptians felt oppressed by Mubarak's regime during the last 30 years, which has deprived them from trying to change their vision towards the regime and hence their future. The beauty of Ackoff's proposition is that it was applied in the pre-revolution period to explain the eruption of the revolution on 25th January when Egyptians changed their shared image positively and believed that they have the power and enough inspiration to change their future. Meanwhile, Ackoff's concept was also applied during the 18-day revolution to explain the persistence of protesters to getting their demands met, and hence the collapse of Mubarak's regime. Without changing their shared image towards their future featured by the end of emergency law, freedom, justice, a responsive non-military government, and a say in the management of Egypt's resources, Egyptian could not have had the necessary justification to change their current reality.*

### 4.2.2 The Feedback Loop (Jack Harich) – Corruption Dynamics

According to Jack Harich, there are two races in politics: race to the bottom and race to the top. The race to the bottom is characterized by the use of falsehood and favoritism (both are called corruption). When this strategy prevails, politicians make false and/or unfeasible promises. They campaign using half-truths and generalities and they rely on support that is bought or rewarded with political favors. These falsehoods act as memes, and quickly the population gets infected and accept them and hence become part of the system. Mass media plays a fundamental role in shifting the mass's opinion towards the acceptance of the falsehoods as part of normal life. Consequently, the falsehoods get more credibility and so forth.

*This vicious feedback loop is the base of explaining the corruption dynamics during a tyrannical regime like Mubaraks. Many ministers and senior officials have been active actors in the race to the bottom feedback loop. Political environment in Egypt during Mubarak's regime has culminated the necessary climate for maintaining this feedback loop and hence encouraging corruptions.*

### 4.2.3 Self-Organization (Alain de Vulpian and Russell Ackoff) – Tahrir Square Community

Alain de Vulpian has spoken about the fact that more or less loosely structured grouping or association often coming together in response to a perceived injustice or problem, usually structured on heterarchical principles and deliberately avoiding the formal rules, regulations and chains of command to be found in the conventional organizations. Now the Internet and social networks have facilitated it. Similar view has been shared by Maturana and Varela who introduced the concept of Autopoiesis (self-creation, and self-organizing). The theory proposes that the system not only organizes itself but literally makes itself.

*It is clearly obvious that this principle explains how a revolution starts without real and apparent owner or leader. Egyptian revolution has followed the same pattern of self-organization, where the activists came together in response of many political, social and economic deterioration. They formed structured network on heterarchical principles using mainly internet based social networks (e.g. Facebook, twitter) as means for communication and civil mobilization as well as to call for nonviolent civil movements and protests which have taken place at different incidents and particularly on Tuesday, 25 and Friday, 28 January 2011, in different locations across Egypt. On other side, the*

*Autopoiesis theory, explains the self-created community in Tahrir square during the 18 days before the step-down of Mubarak and the removal of his regime. At the Tahrir square, activists, protesters, and revolutionists have formed their own life during this period of time, which has been expanded and played a pivotal role in applying substantial pressure on Mubarak.*

Building on Vulpian's concept of self-making or self-organization, Ackoff has been indicating that we as managers, leaders and planners are making things worse by our interventions and has given few examples: (a) Greed at senior levels results in inequities and inefficiencies throughout an organization; (b) Internal monopolies result in distortion, incompetence and further inefficiencies.

*The above proposition by Ackoff, does clarify the impact of ever-intervening actions from the Egyptian government's side in all kinds of political and economic life in Egypt during the 30 year Mubarak's Regime. Moreover, the internal monopolies from the side of the ruling party (NDP) has led to wide range of corruption, deterioration of political, social and economic status, and increase of incompetent officials within government critical positions and hence inefficiencies in all sectors, and low quality of services and productivity.*

### 4.2.4 Interconnectedness – The Fall of Police Hierarchy as First Sign for Regime's Collapse
The Interconnectedness and Heterarchical principles have attracted not only Russel Ackoff attention, but also Alain de Vulpian and Gerard Fairthlough. They agreed that political and organizational leaders are probably less in control of things than they imagine. And since things self-organize, then what happens next in any system is an emergent property of everything that has gone before. This conclusion was considered a bad news for both conspiracy theorists as well as for those who are supporting the use of a hierarchy as the most efficient way to getting things done. According to them, Hierarchies are vulnerable to breaks in communication and the chain of command, to attack, to subversion (corruption, malicious elements within the hierarchy), to stupidity (someone unthinkingly just obeys orders), to creativity. Heterarchical networks on the other hand, are much more resilient, instructions can get through via multiple channels, they are based on good will rather than fear, they set out to foster creativity. The move from hierarchy to Heterarchy (cooperative) network is the arrival of trust.

*It is very obvious that the above principles are the bases of the collapse of Mubarak's regime. Two different structures were basically maneuvering each other, on one hand Mubarak's regime was adopting the Hierarchical style against Heterarchical style adopted by the Activists and Revolutionists, on the other hand. The tyrannical administration of Mubarak's assumed mistrust and everyone had to be traced and tracked as a belief of imposing control on the country. This led him to rely across his 30 year ruling time on hierarchical management structure as the most efficient way to get things done. Despite his success to apply such style during his time, but it was the same structure which led to his collapse. Before the uprising on Tuesday, 25 January, he through the State Security and Intelligent Service's reports believed to have had control on the situations. During the uprising, the police service has lost communication horizontally and vertically, all chains of command have been broken and the whole system suffered from the stupidity of its members by their violence actions against the protesters. On other side, activists have relied on their cooperative-in-nature heterarchical network, in boosting the political agitation among the masses before and during the uprising. Due to longevity of*

*the regime and due to the fact that living things get old and die, the regime was suffering from outdated practice and obsolescence of skills among its members, beside the hierarchical structure of the regime, it was obvious that the collapse will happen. According to Ackoff and his view about, why few organization (Mubarak's regime) takes so long (30 years) to collapse, his argument was built on the fact that the inertia plays a fundamental role in such difficulty of getting old system to collapse.*

### 4.2.5 Events vs. Systems – Shifting the Burdens and the Blindness of the Regime
According to Ackoff, usually politicians tend to react to events rather than to Systems. In solving the crime problems, they suggest solutions of such sorts: hardening and sharpen prison sentences, hiring more police-forces, or since young criminals do not have enough hobbies, then open more youth clubs, and so forth of short-term and superficial solutions which mainly deal with incidences rather than fundamental causes.

*Mubarak's regime was not an exception in his administration of the country during his 30 year period of ruling. Instead of investing the effort to investigate long lasting solutions and to find the root causes of the fundamental problems, his regime was preoccupied by dealing with the symptoms of the problems which eventually led to deterioration of political, economic and social life of Egypt. On one hand the regime's actors under the blessing of Mubarak, were boosting the race to the bottom in order to get issues resolved in short time. And on other hand, the regime consciously and not unintentionally overlooked and left critical and crucial social, political as well as economic issues unsolved.*

### 4.2.6 Parts vs. the Whole and The Whole in Context – The Side Effects and the Revolution Trigger
Other very critical principles of systems thinking that Ackoff has emphasized upon and relevant to the Egyptians' Revolution development, are, *"Parts vs. the Whole"* as well as *"The Whole in Context"* principles. Both principles according to Ackoff are explaining the ignorance of many leaders about the fact that different effects manifest themselves over different lengths of time and produce unwanted and unexpected side effects. Moreover, leaders ignore the very fundamental fact which has been pinpointed by Gregory Bateson in his quote "the major problems in the world are the result of the difference between how nature works and the way people think".

*Mubarak's regime never saw revolution and his overthrown coming, simply he never believed that things are connected and comprising a whole and not just isolated parts. The regime was dealing with all aspects in the country as they are in parts without seeing the long term impacts of their actions and never imagined their manifestation on building up the anger and frustration of the population. Another very fundamental cause of the regime's collapse was manifested in the fact that the regime has undermined the distance between how the regime thinks about the Egyptian youth, and how the youth really think. This gap was taken as advantage on the side of activists where, the regime never thought that the Egyptians will really revolt.*

## 5 REVOLUTION'S ARCHETYPE: SYSTEMS THINKING MODEL
As mentioned in the introduction of this paper, one of the objectives of this study is to propose an initial attempt to develop revolution archetype as a result of studying the practice and theories exist in the revolution-focused literature as well as of studying the Egyptian's Revolution.

In above sections, an overview about selected political science, psychological, and sociocultural theories and practice, along with overview about Egyptian Revolution, as well as an overview about managerial theories and practice from the field of systems thinking and organizational learning have been introduced to serve as kernels for building the revolution archetype.

In the next section 5.1, casual loop diagrams will be sketched to first demonstrate selected theories and practice explained in section 4. Then section 5.2 will integrate the CLD developed in section 5.1 into the overall CLD of Egyptian Revolution.

**5.1 CLD of Revolution as per Literature: Theory and Practice**
Building on the discussions in section 3.2, Brinton has highlighted on the main characteristics of the symptoms of a revolution to occur, such as, _the anger of middle class_ over _economic restraints_, _the presence of inept members in the regime_ who poorly manage the country affairs in different sectors before and during the revolution. Moreover, Brinton has indicated that one of the main symptoms of a revolution is _the withdrawal of intellectuals_ from the ruling party as a response of the mismanagement. Those are some of the causes that lead to increase the _anger of middle class_, which when reaches certain limit, _the uprising starts_ and the anger of people gets escalated which exercises pressure on the governmental structure, and leads to regime collapse.

As also discussed before, Hamilton has introduced Theories A, B, C, D and E in order to explain the dynamics of terrorism as a results of masses frustration and regime's oppression. As also indicated before, that terms like terrorism and rebels have been replaced by social movement and political activists (revolutionists) respectively.

Figure 1 shows CLD which reflects the postulations proposed by the theories mentioned above along with Brinton's views.

**Figure 1: CLD of a Revolution – Archetype**

As shown figure 1, one can notice that Theory A can be reflected by the balancing feedback loop B1, and the two reinforcing feedback loops R1 and R2. On other side, Theory B has been translated in the CLD into two reinforcing feedback loops, R3 and R4. However, the balancing feedback loop B2 and the reinforcing feedback loop R3 are the main features of Theory C. Finally, the reinforcing feedback loop R3 emerged from Theory D, while R2, emerged from Theory E.

**5.2 The Virtual Wall: Confrontation between Hierarchical and Heterarchical Structures**
Across the history, all revolutions occurred due to a straight and pure fact; the revolutionists in particular and the masses in general are not satisfied with their current reality and hence having a strong belief that a better new social-setup and reality could be realized. Losing this belief and hence the hope, are the main characteristics of a weak and powerless masses, where the frustration is the only feeling they can show. Hence, the overthrow of the tyrannical regime is nothing but a means or first step to achieve the ultimate goal of creating better future. Barrington Moore, in his book, The Social Bases of Obedience and Revolt, has indicated that, revolts generally become revolutions when they are unified nation-wide.

Egyptians have been in this mode of powerlessness and unworthiness beliefs (Structural Conflict, Senge) during the 30+ years, which has given the tyrannical regime of Mubarak all opportunities to build up, virtually a Wall that looks impenetrable to all Egyptians, as was the case with the bricks-based Wall of Berlin.

In this paper, this will be labeled by the Virtual Wall, which has been built up since more than 30 years by the tyrannical regime using all legal and illegal ways. Its illusive height was viewed by the masses as a physically impenetrable height. There have been, nevertheless, several attempts from the side of masses, to lower the Virtual Wall, through unsuccessful activities in form nonviolent strikes, demonstrations, or protests over the past 30+ years. It was this moment, when the 25 January revolution went successful, only by the quick falling rate of the Virtual Wall and hence the collapse of Mubarak's regime and the overthrowing of his power.

The model will hypothesize the dynamism of the confrontation between two structures. The tyrannical and totalitarian regime of Mubarak represented by Hierarchical structure and the Egyptian population represented by Heterarchical. The model will show how the Virtual Wall has been built-up and how it fell so quickly during the 18 day revolution.

For this purpose, the model development will follow three main phases. Phase 1, will focus on the Virtual Wall built-up during 30 years of oppression of the tyrannical Mubarak's regime. On other side, Phase 2, will concentrate on how the Heterarchical structure was established and finally phase 3, will highlight on the integration of both previous developed sub-models into overall model to explain the collapse of the regime and the declaration of the success of the Egyptian revolution.

**Phase 1: Building-Up the Virtual Wall as the Carrying Capacity for Regime's Survival**
Main objective of Mubarak himself was to stay as a single ruler as long as he is alive. Even, if he had the intention to step down, he was preparing his son to be his successor. As any active system, gaining power is not an inexpensive task. Resources will be used and consumed. Dynamics systems, either social, political, economic, or ecologic, do collapse if their carrying capacity gets eroded. Failure to replenish the carrying capacity, leads very quickly to collapse. How long or how short, a system would survive, it depends on how high the level of the carrying capacity. In this model, the height of the Virtual Wall represents the carrying capacity level, which Mubarak used to plan for long term regime.

The Virtual Wall for Mubarak was not only his reserve for his long term plan to stay in power, but also was a protective mechanism for his regime during his time. To build up and maintain a high level of the Virtual Wall, Mubarak Regime had a mission to crush freedom, to crush the individual, to establish oppression on a legal basis, to create monopolists, to lead minds astray by accustoming them to servitude. According to Eugene V. Walter, Totalitarianism state like Egypt, *rule by terror, regime of terror* used to overcome the threat of resistance and secure cooperation from the public. Also, Abram de Swaan, in his work "Terror as a Government Service" has indicated that torture is being practiced by a totalitarian regime, like Mubaraks, on a large scale and over a period of time which lead to external effects, to spread an ever-present fear of arrest, of ill-treatment, of mutilation, of betrayal, of death. The purpose of all this is that masses would think twice before taking part in any political

agitations or insurgences and to impose so much fear in people. To realize the above mission, the regime has adopted and implements direct as well as indirect strategies.

For the direct strategies, the regime used its power to; (1) strengthen the capacity of State Security & Investigation Service (SSIS ) for terrorizing the masses through brutal abuse of power (called also Coercive Power, according to Dallin and Breslauer), censorship, and imprisonment of political activists without trials, (2) tailor the constitution by changing many articles in the favor of Mubarak's regime power, (3) enact emergency law (Law No. 162 of 1958) under which  police powers are extended, constitutional rights suspended, censorship is legalized, and the government may imprison individuals indefinitely and without reason or trials, any non-governmental political activity is limited, including street demonstrations, non-approved political organizations, and unregistered financial donations, (4) exercise dictatorship and applying tyrannical actions in many government organizations and institutions and suppressing the operations and activities of some oppositions group like Muslim Brotherhood, (5) intervene in (and limit) the selection of managerial and administrative staff of all professional syndicates, such as Journalists, Jurists, Engineers, Medical doctors, Labor, as well as universities, mosque, newspaper, (6) strengthen the capacity of National Democratic Party (NDP) by falsifying the elections of people assembly (parliamentary elections), advisory council, and most of syndicates.

As for the indirect strategies, the regime has, (1) encouraged and boosted corruption across all sectors, (2) led the minds of masses astray from practicing political life, by making them suffer from social, economic, health, educational challenges, and making them preoccupied with their own personal and families affairs, (3) manipulated the truth about current and historical realities via controlling State-owned Media (TV, Radio, Newspapers) through fabricated news, broadcasting a lot of entertainment programs, (4) organized continuously sport events specially soccer, with the purpose to shift the minds of masses to other daily challenges and issues rather than discussing politics and religious subjects.

Figure 2, presents part of the overall model, which focuses on the build-up of the Virtual Wall. As shown in figure 2, Mubarak Regime Power (MRP), and the Virtual Wall are the main key variables in this part of the model. All direct and indirect strategies, discussed above, can be clearly depicted in the CLD which comprises of several reinforcing feedback loops that contributed in strengthening and extending Mubarak Regime Power and building up the Virtual Wall during the 30 years of his time.

### Figure 2: Building-Up the Virtual Wall as the Carrying Capacity for Regime's Survival

All feedback loops are representing several mechanisms that Mubarak regime has adopted, such as, Protective Mechanism, Preventive Mechanism, and Growing Mechanism.

Although all of above strategies have really contributed in the Virtual Wall-Buildup, nevertheless in meanwhile with considerable delay, have as well negatively affected the speed of the buildup (which will be explained below in phase 3) and also helped to lower its level with considerable amount to its lowest level that led to the success of the revolution and hence collapse of Mubarak Regime Power.

**Phase 2: Establishing Heterarchical Structure among Frustrated Masses**

Figure 3, shows how the dynamics of collective action and hence social movements could be developed and formed. The same factors that imposed positive effects on building up the Virtual Wall (phase 1), have reciprocally contributed in establishing the Heterarchical structure of the frustrated activists and hence later the revolutionists. The main key variable in this sub-model, is the number of activists and protesters as a measure of the dynamics of the collective action as well as the social movement. Obviously, the main communication platform among the activists and to masses, in the pre-revolution time, was through Internet-based Social Networks such as Facebook, and Twitter, instead of holding rallies, making speeches, or printing newspapers, in order to avoid certain arrest. Through Social Networks, activists were able to boost civil mobilization and practice political agitations.

**Figure 3: Establishing Heterarchical Structure among Masses**

*The Main Causes for the Masses Frustration and the Uprising*

Deterioration of political and economic situation in Egypt during the last few years, have imposed high influence on the occurrence of the uprising of January 25. Below is, a brief highlight on the prevailing status in Egypt.

**Political Challenges**
- *Inheritance of power to Mubarak's Son*
- *Enacting and Extending Emergency Law*
- *Suspending constitutional rights*
- *Practicing censorship*
- *Limiting any non-governmental political activity, including street demonstrations, non-approved political organizations, and unregistered financial donations*
- *Forgoing and suppressing opposition groups like the Muslim Brotherhood from parliamentary elections participation*
- *Rejecting university, mosque, and newspaper staff members based on their political inclination*
- *Falsifying the parliamentary election*
- *Police brutality and Rule By Terror (Regime of Terror)*

**Economic challenges**
- *Vast majority of Egyptians live in the limited spaces near the banks of the Nile River*
- *Around 40% of Egypt's population lived on the fiscal income equivalent of roughly US$2 per day with a large part of the population relying on subsidized goods (2010)*
- *The unemployment in Egypt is almost 10 times as high for college graduates as it is for people who have gone through elementary school, particularly educated urban youth*
- *Egypt's GDP growth slowed down to 4.5% in 2009*
- *Despite high levels of national economic growth over the past few years, living conditions for the average Egyptian remained poor*

**Corruption**

According to Rassell Ackoff (f-law book, no. 85), "*Greed at the top is the fuel used to increase the maldistribution of wealth within and between societies*", this clearly explain the corruption as a phenomenon happens during Mubarak's time. Also as indicated by Jack Harich, corruption is a result of the race to the bottom, which exercised by politicians. Below are some facts about the corruption status in Egypt during Mubarak's Time.

- *Political corruption has risen dramatically due to the increased power over the institutional system necessary to prolong the presidency*
- *The rise to power of powerful business men in the NDP, in the government and the People's Assembly*
- *The perceptions of corruption and its beneficiaries being limited to businessmen with ties to the National Democratic Party have created a picture "where wealth fuels political power and political power buys wealth*
- During the Egyptian parliamentary election, 2010, opposition groups complained of harassment and fraud perpetrated by the government
- *In 2010, Transparency International's Corruption Perceptions Index report assessed Egypt with a CPI score of 3.1, (with 10 being clean and 0 being totally corrupt)*
- *Corruption has led to hiring incompetent people in government and also in ruling regime*

**Phase 3: The Fall of the Virtual Wall: Overall Model**
By integrating the two sub-models developed in phase 1 and 2, the overall model has emerged as shown in figure 4. Obviously, the integration has created new feedback loops, which have contributed in the degradation of the Virtual Wall further and in quicker pace than the regime has anticipated, and hence led to the collapse of Mubarak Regime.

**Figure 4:  The Overall Model**

This overall model will be used to explain many theories and practices which have been discussed throughout the paper.

*a) Revolution Tuesday 25 January 2011: Trigger and Catalysts for Success*
A mixed of endogenous as well as exogenous factors and variables have played significant roles in, not only triggering the uprising, but also in supporting, proliferating, gaining momentum and precipitating the overthrow of the regime. This happened when the level of Virtual Wall has extravagant lowered to a level that made the process of collapsing irreversible.

Clearly no one can deny the significant and influential impact of the external factors on the success of the Egyptian revolution. Figure 5 shows the insertion of new external factors that contributed in the increase rate of the Fall of the Virtual Wall, and hence the collapse of Mubarak Regime Power.

**Figure 5:  The Fall of the Virtual Wall: Overall Model**

All theorists of revolution (Arjomand, 1988, Goldstone 1991, Skocpol 1979) attribute the development of a true revolutionary situation to the destabilizing effects of precisely the kinds of broad change

processes during the uprising. For Goldstone, the key precipitant is population pressure (notice Pressure on Mubarak Regime in figure 5) and the constraints it places on the regime's ability to distribute the material benefits (resources) on which its ruling coalition rests. This resulting pressures dramatically weaken the regime, and encourages collective action by all groups sufficiently well organized (activists, revolutionists, protesters) to contest the structuring of a new political order (desired reforms), as shown in figure 5.

A list of more key external factors (causes) that contributed significantly in triggering the revolution and hence the fall of the Virtual Wall are as follows:

**Tunisian Revolution**
The start of the uprising on Tuesday, 25 January 2011, was by all means inspired by the success of The Tunisian Revolution or "The Jasmine Revolution" to overthrow the Old regime.

**Mubarak's Regime Reaction and Domestic Pressure**
During the Uprising, Mubarak spoke to the population 3 times, on Friday, 28 January, on Tuesday 1 February and finally on Thursday 10 February. In the first speech, he announced his intention not to go for presidency again and he will do all political and economic reforms during his remaining time till next presidency election (was projected to be in September 2011). Although a lot of Egyptians did not welcome the outcomes, nevertheless the impact of second speech has positively attracted the sympathy of a lot of Egyptians. In fact on 28th of January the Demands of the Revolutionists have started to increase as a belief that Mubarak's regime is about to fall and collapse. Wednesday, 2 February, has seen thugs attacks by camels, horses and stones into Tahrir square with the purpose to evacuating it and inhibit the revolution. This Camel Battle as people labeled it is believed to be organized and planned by businessmen who are members in the NDP. At this point Mubarak has lost most of the sympathy he gained the day before and the Tahrir square started to be filled up by more and more protesters and the protesters have raised their demand list day after day, which exercised a huge pressure on Mubarak's regime. Not only in Cairo, but also in other major cities such as Alexandria, Suez, Mansoura and Ismalia have the protesters marched on the streets and imposed more and more pressure on the new government and hence Mubarak.

In Meanwhile, Strikes by labor unions added to the pressure on government officials. Egyptian and foreign equity and commodity markets also reacted negatively to the increasing instability and hence more pressure.

**The Role of Egyptian Army and its Relationship to Protesters**
The Engagement of the Egyptian Army on the evening of 28th January, has been welcome by all Egyptians. From this point the army was seen by Egyptians as the hero and the rescuer of the revolution. Day after day, the Army has been called by the masses and all oppositions group, such as the Muslim Brotherhood, the *April 6 Youth Movement*, "*We Are All Khaled Said" Movement*, National Association for Change, 2*5 January Movement*, *Kefaya,* to take action against Mubarak's regime, till it happened on Friday, the 11 February.

**International Reactions and more Pressure on Mubarak's Regime**

International reactions have varied with most Western states saying peaceful protests should continue but also expressing concern for the stability of the country and the region. Many states in the region expressed concern and supported Mubarak. No one can deny the position of USA and its support, not only to the social movement, but also to the overthrow of Mubarak's regime.

**Aljazeera News Channel, and other News Media Channels**
The Egyptian state cracked down on the media, and shut down internet access, a primary means of communication for the opposition. Journalists were also harassed by the regime's supporters, eliciting condemnation from the Committee to Protect Journalists, European countries and the United States. At the time where the Internet and Mobile service have blocked, all news channels, specially Aljazeera News Channel, have played fundamental and significant role to broadcast updates to Egyptians, despite all attempts from the side of police service to ban their operations on ground, and most of their offices have been closed and their staff have been arrested. Moreover, Human Rights Organizations have been watching and reporting to the world about he current status, which consequently applied more pressure on Mubarak's regime.

**Online Activism**
The usage of social media has been extensive. As one Egyptian activist succinctly tweeted during the protests, "We use Facebook to schedule the protests, Twitter to coordinate, and YouTube to tell the world". Internet censorship has also been extensive, and in some cases comprehensive to the extent of taking entire nation-states practically off-line.

*b) Collapse of Mubarak Regime and the Parable of the Boiled Frog*
After all this kind of pressures discussed above, it was obvious that Mubarak's Regime has not been in a position to react anymore and found itself imitate the boiled frog reaction, who died slowly.

## 6 CONCLUSION
Revolutions generally are not born as revolutions, rather it is the void created by the collapse of the old regime that transforms collective action into revolutionary action. Egyptian Revolution started on Tuesday, 25 January 2011, as peaceful and nonviolent social movement with very simple list of demands, such as freedom and social justice, and during the 18 days has raised the ceiling of demand to include the removal of Mubarak and his regime. In his work, C. Brinton, indicated that, revolutions are born of hope, rather than misery and contrary to the belief that revolutionaries are disproportionately poor, "revolutionists are more or less a cross section of common humanity. Millions of Egyptian protestors from multi-class coalitions and variety of socio-economic and religious background have participated in the revolution. Mixed of factors on both sides, of the revolutionists and the old regime, play significant roles in making the revolution successful. It is according to Brinton, the right circumstances and active agitation are necessary for the revolution to succeed. Egyptians wanted to develop a new life, to found freedom and equality on economic bases, the destruction of monopolies, the awakening of society and towards the achievement of a future of freedom and equality.

According to Ernest Mandel in his book, "The Marxist Case for Revolution Today", he indicated that when the majority of the people refuse to be fooled and intimidated any longer; when they refuse to

stay on their knees; when they recognize the fundamental weakness of their oppressors, they can become transformed overnight from seemingly meek, subdued and helpless sheep into mighty lions. Such saying goes in line with what Senge indicated in his explanation about the structural conflict.

Egyptians on 25 January have realized the above fact and they did strike, congregate, organize and especially demonstrate in the streets in increasing numbers, even in the face of massive, gruesome, bloody repression by the rulers and his regime, who still had a powerful armed apparatus at their disposal. And as Mandel indicated, they showed unheard of forms of heroism, self-sacrifice, obstinate endurance, which ended in their getting the better of the repressive apparatus which starts to disintegrate, as it was the case on Friday, 28 January, the first victory was precisely such a disintegration.

In this work, an overview of relevant theories and practices on the subject revolution has been summarized and coupled with the works done in the Systems Thinking fields by Russel Ackoff and Peter Senge, in an attempt to build a systems thinking model for the Egyptian Revolution and come up with a proposal for Revolution Archetype

Several theories, from the field political science have been used to explain the phenomenon revolution. Those theories suggest, it is not the ineptness of the rulers which produces the pre-revolutionary crisis, it is the paralysis engendered by an underlying social-structural crisis which makes rulers increasingly inept. In that sense Trotsky was absolutely right when he stressed that "revolutions are nothing but the final blow and coup de grâce given to a paralytic."

In many practical studies, authors claim that the sudden overthrow of ruling structures is, however, only one key characteristic of that social phenomenon. The other one is their overthrow through huge popular mobilization, through the sudden massive active intervention of large masses of ordinary people in political life and political struggle.

The developed systems thinking model in this work has explained, how the revolution started, how it succeeded to reach its ultimate goal by overthrowing Mubarak's regime, what are the mix of the fundamental and significant factors behind the collapse of the Regime, and more questions could be answered by the model in the framework of political science theories beside the areas of knowledge in the systems thinking field.

No two countries in the world are exactly alike, if only because their basic social classes and the major fractions of these classes are products of the specific history of each of these countries. Hence the character of each revolution reflects a unique combination of the general and the specific.

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**Appendix A: Timeline (source:** http://en.wikipedia.org/wiki/Egyptian_Revolution_of_2011**)**

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|---|---|
| **25 January 2011**: | The **"Day of Revolt"**, protests erupted throughout Egypt, with tens of thousands of protestors gathered in Cairo and thousands more in cities throughout Egypt. The protests targeted President Hosni Mubarak's government, and mostly adhered to non-violence. Nonetheless reports emerged of civilian and police casualties. |
| **26 January 2011**: | "Shutting down The Internet": After several Facebook groups were created and so-called tweets (from Twitter) facilitated mass demonstrations, the Egyptian government decided to shut down internet access for most of the Egyptian people. This was done to impede protestors communicate. |
| **28 January 2011**: | The **"Friday of Anger"** protests began. Hundreds of thousands demonstrated in Cairo (which also saw the arrival of opposition leader Mohamed ElBaradei) and other Egyptian cities after Friday Prayers. There were reports of looting, and prisons were opened and burned down on orders from then-Minister of the Interior Habib El Adly, causing prison inmates to escape en-masse, in what was believed to an attempt to terrorize protesters. The prison breaks were coupled with the complete withdrawal of police forces from the streets. The military was ordered to deploy to assist the police. International fears of violence grew, but no major casualties were reported. President Hosni Mubarak made his first address to the nation, after 4 days of ongoing protests and pledged to form a new government. |
| **29 January 2011**: | The military presence in Cairo increased, and a curfew was declared, but protests increased and even continued throughout the night. The military reportedly refused to follow orders to fire live ammunition, and exercised restraint overall. There were no reports of major casualties. |
| **1 February 2011**: | Mubarak made a televised address once again after unceasing protests, and offered several concessions. He pledged he would not run for another term in elections planned for September, and pledged political reforms. He stated he would stay in office to oversee a peaceful transition. Small but violent clashes began that night between pro-Mubarak and anti-Mubarak groups. |
| **2 February 2011**: | **"Battle of the Camel"**. Violence escalated as waves of Mubarak supporters met anti-government protesters, and some Mubarak supporters rode on camels and horses into Tahrir Square. The clashes were believed to have been orchestrated by Habib El Adly, and there were hundreds of casualties. The military tried to limit the violence, repeatedly separating anti-Mubarak and pro-Mubarak groups. President Mubarak reiterated his refusal to step down in interviews with several news agencies. Incidents of violence toward journalists and reporters escalated amid speculation that the violence was being actively aggravated by Mubarak as a way to end the protests. |
| **6 February 2011**: | Egyptian Christians held Sunday Mass in Tahrir Square, protected by a ring of Muslims. Negotiations involving Egyptian Vice President Omar Suleiman and representatives of the opposition commenced amid continuing protests throughout the nation. The Egyptian army assumed greater security responsibilities, maintaining order and guarding Egypt's museums. Suleiman offered reforms, while others of Mubarak's regime accused foreign nations, including the US, of interfering in Egypt's affairs. |
| **10 February 2011**: | Mubarak formally addressed Egypt amid speculation of a military coup, but rather than resigning (as was widely expected), he simply stated he would delegate some of his |

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|---|---|
| | powers to Vice President Suleiman, while continuing as Egypt's head of state. Reactions to Mubarak's statement were marked by anger, frustration and disappointment, and throughout various cities there was an escalation of the number and intensity of demonstrations. |
| **11 February 2011**: | The **"Friday of Departure"**: Massive protests continued in many cities as Egyptians refused the concessions announced by Mubarak. Finally, at 6:00 p.m. local time, Suleiman announced Mubarak's resignation, entrusting the Supreme Council of Egyptian Armed Forces with the leadership of the country. |

**Appendix B: Subset of Rebellions and Revolutions across the Human History (BC – 1799)**, for complete list refer to Wikipedia Revolution-List

# BC

615 BC: The Babylonians revolt against rule from the Assyrian empire.

570 BC: A revolt broke out among native Egyptian soldiers, giving Amasis II opportunity to seize the throne.

460 BC: The Inarus revolted against the Persians in Egypt with the help of his Athenian allies.

73–71 BC: The failed Roman slave rebellion, led by the gladiator Spartacus.

# 1–999 AD

20: The Green Forest Rebellion in China.

817–837: The revolution of the Iranian Khurramites led by Babak Khorramdin.

824–836: The revolt of Arab troops in Tunisia against Aghlabids was only put down with the help of the Berbers.

982: The great revolt of the pagan Polabian Slavs of the lower Elbe against the Holy Roman Empire.

# 1000–1499

1242–1249: The First Prussian Uprising against the Teutonic Knights, which took place during the Northern Crusades.

1356–1358: Jacquerie: a peasant revolt in northern France, during the Hundred Years' War.

1381: The Peasants' Revolt, or the Great Rising of 1381, in England.

1497: The Cornish Rebellion of 1497 in England.

# 1500–1699

1519–1610: The Jelali revolts in Anatolia against the authority of the Ottoman Empire.

1640: The Portuguese Revolt against Spanish Empire.

1642–1653: The English Revolution, commencing as a civil war between Parliament and the King, and culminating in the execution of Charles I and the establishment of a republican Commonwealth, which was succeeded several years later by the Protectorate of Oliver Cromwell.

1688: The Glorious Revolution in England overthrew King James II and established a Whig-dominated Protestant constitutional monarchy.

# 1700–1799

1702–1715: The Camisard Rebellion in France.

1775–1783: The American Revolution establishes independence of the thirteen North American colonies from Great Britain, creating the republic of theUnited States of America.

1791–1804: The Haitian Revolution: A successful slave rebellion, led by Toussaint Louverture, establishes Haiti as the first free, black republic.

1795–1796: French rebels in Grenada led by Julien Fédon held Governor Ninian Home, Alexander Campbell, and 43 to 53 hostage at his Belvidere Estate. The French rebels wrested control of most of the Grenada from Britain, which retained a stronghold in St. George's, the capital. The goal was to incorporate Grenada into revolutionary France. After Fédon's brother was killed, Julien executed approximately 50 hostages[7] and his forces were defeated the next day on the steep hills and ridges near Mt Qua Qua. The few surviving rebels flung themselves down the mountain and it's not known if Fedon survived the retreat or died while fleeing the island.
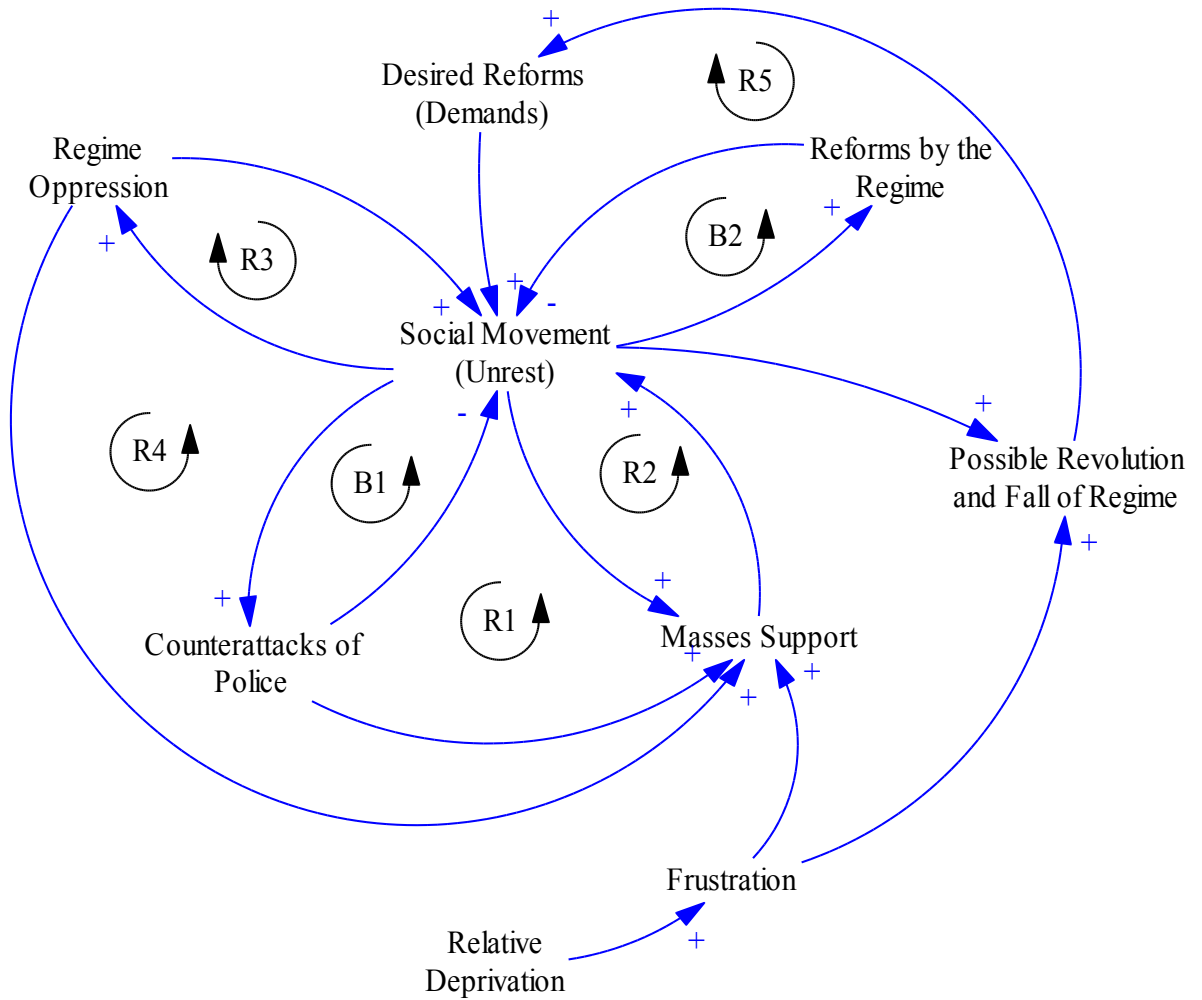
**Figure 1: CLD of a Revolution – Archetype**

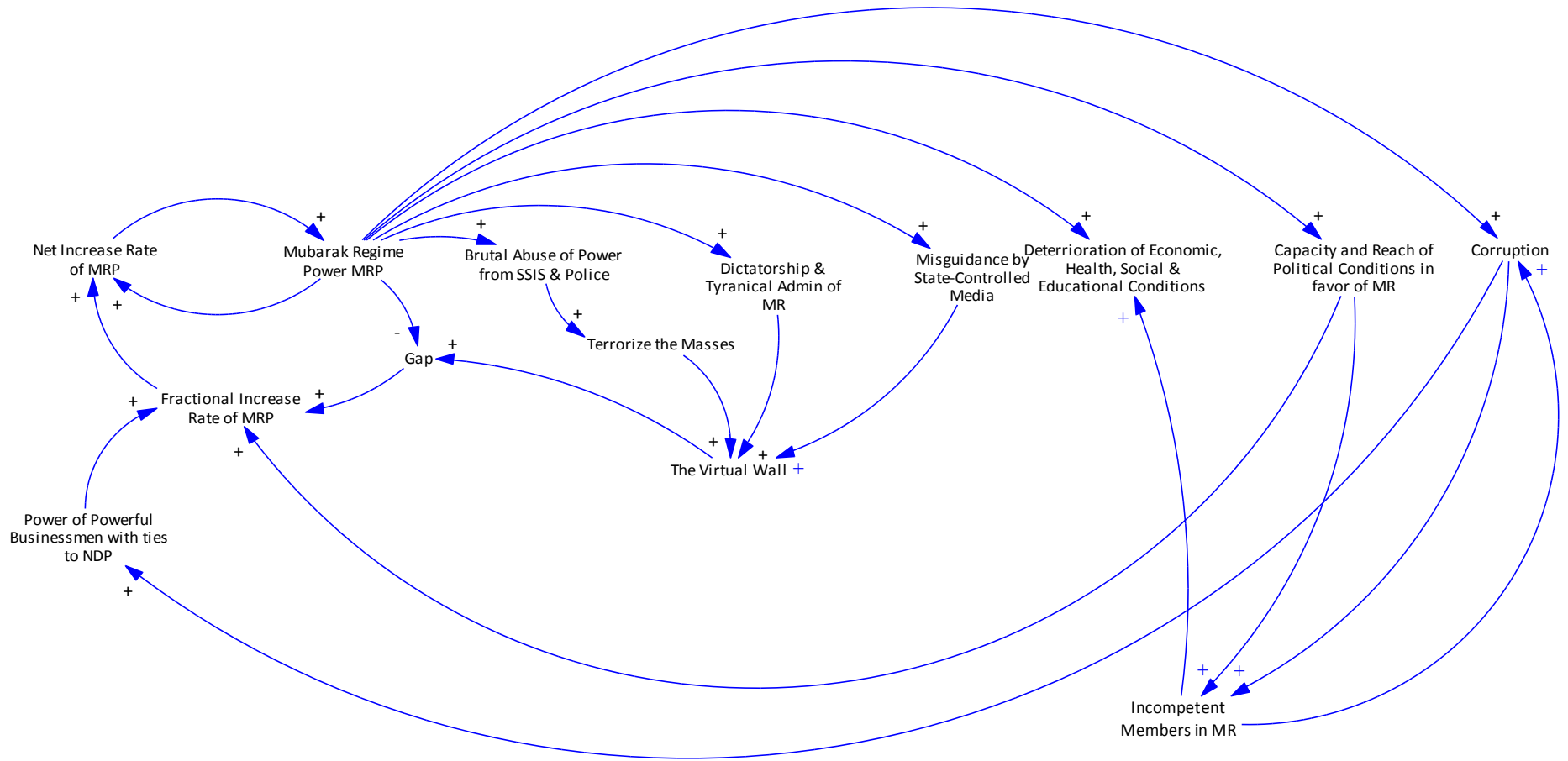**Figure 2: Building-Up the Virtual Wall as the Carrying Capacity for Regime's Survival**

**Figure 3: Establishing Heterarchical Structure among Masses**

**Figure 4:  The Overall Model**

**Figure 5: The Fall of the Virtual Wall: Overall Model**