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## IAARHIES INTERNATIONAL CONFERENCE - 2018 09-10 November, 2018 | New York, United States of America

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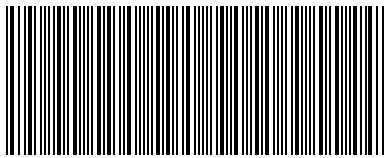
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The **IAARHIES** (The International Academic Association of Researchers in Humanities, IT, Engineering & Science) is an international non-profit forum and association of researchers in the field of Humanities, Information Technology, Engineering and Science. IAARHIES is the brand name of The Society for Academic Research (SAR), registered under the section 20 of Societies **Registration Act 1860**.

IAARHIES, under the aegis of The Society for Academic Research (Regd.) established in Jaipur, India is an international, independent, private, non-profit and chartered association founded in 2015 to support and encourage research work in the various subjects under Humanities, Information Technology, Engineering and Science. IAARHIES was established as an association of researchers, scholars, students and professors from different discipline with a mission to organize international conferences and workshops. Our conferences are aiming at bringing researchers from various fields to share their current research, ideas and experiences.

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## **EDITORIAL**

Greetings and a warm welcome from IAARHIES and the Conference Organizing Committee.

We would like to extend a warm welcome to all our distinguished guests, speakers, sponsors and participants, who have joined us during the 2018 IAARHIES International Conference in New York, USA.

We are delighted to have received such a vast body of work from all across the globe. Our International Reviewers and Advisory Committees have selected the best of these papers to be published. The current issue brings us a collection of work from such diverse disciplines as Business, Education, Management, Engineering, Technology, Science and Humanities.

IAARHIES conferences intent is to create a platform for researchers, educators and professionals to present their innovative thoughts and discoveries in their respective fields of expertise. Additionally, our conference provides a forum for dissemination of knowledge at both theoretical and applied research levels.

We are confident these contributions will enrich the research community at large. We are also thankful to our International advisory members and reviewers for making this event a successful one.

Once again, we extend our deepest thanks to all the delegates for their valuable collaboration and support in the 126th IAARHIES International Conference in New York, USA - 2018. We wish all of you a continued success.

**Dr. Hardev Sharma**  
(Gen. Secretary, SAR)

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# The Paradoxes of Persian Miniatures

Piruz Alemi<sup>1</sup>



Sani' Al-Molk (1268 Islamic Calendar = 1851)

Water Color on paper (18 x 11 cm)

One Thousand and One Nights in Vol 1/6.

Author's Photograph of the lower 1/3 of the 18 x 32 cm miniature folio.

Golestan Palace Library, Tehran, MS. No. 2240

IAARHIES 126th International Conference on Social Science & Humanities ICSC - 2018 New York, USA

Submitted Oct 25th, Presented Nov 9-10, 2018 New York, USA

**Abstract:** The application of Antonio Gramsci's thought and key political concepts to the history of Persia provides us with a dual perspective distinct from past works on the changing nature of Iran's State-Civil Society relations. In a sense, this paper attempts to unmask the logic of irrational, the sexually repressed, and the violence perpetuated under the U.S.- Iran international relations on its victims.

In particular, the paper through the drawings, paintings, miniatures, photographs, and semiotic lineages of Sani' Al-Molk (1814-1866), Kamal Al-Molk (1845-1940), Sadr Shayesteh Shirazi (1896-1983), Farrokh Shayesteh (1954b.), as well as the revolutionary satirical works of Charand-o Parand (1907-1909) through Ali-Akbar Dekhoda (1879-1956), satires of Ardeshir Mohasses (1938-2008), documentary photographs of Abbas Attar (1944-2018), and key political societies and characters, provides a free indirect discourse and point-of-view shots” on the paper's subject.

## 1.1 War & its Anti-Thesis: Persian Miniatures

I came to know the Iranian miniaturist Farrokh Shayesteh in 1979, during the revolution. The Iran-Iraq war (Sept 22, 1980 – Aug 20, 1988), which resulted in a million wounded and dead, was raging. I was in San Francisco, a sunny day, making a phone call to my mother in Tehran. She answered: “Hold on – I have to turn off the lights!”

Holding the line, I wondered, Turn off what? I could hear “Ta-Ta-Ta, Ta-Ta-Ta...” a steel, cold sound ricocheting through the phone line down into my gut. She finally came back. I asked, “Why are you turning off the lights?” She said, “It is the bombings.” I asked, “And that sound?” She answered, “It is the machine gun on our roof, shooting in the dark.” War was not just the six o'clock news.

A few days later, I attended an Iranian party in Berkley. I walked through the entrance; on the ground floor, a silent white grand piano sat dumb-founded facing Iranian pop-music blasting from different floors. Colorful lights were flashing in all directions.



Cat. 0: The Day After, 1894-5

Edward Munch

Oil on Canvas, 115 x 152 cm.

As I walked up the marble stairs, I passed by at least 500 Iranian men and women dancing on the different floors and in various rooms, including the corridors. This grand multiplex of a house over-looked the entire bay area of San Francisco. It looked as if the war in Iran had turned every Iranian in California into a dancing, twisted frenzy — perhaps to forget.

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The kind courtesy usage of visual material by numerous artists and organizations do not imply the knowledge or endorsement of any material content of this paper. Special thanks to two editors: Mina Matosi Nkamba and Ferreira Mackenzie, and all the reviewers and contributors to a larger draft of the current work.



In a crowded room on the top floor, a young golden girl with dark-red hair and an innocent smile had peacefully passed out on the couch; her narrow arm fallen, her wrist dangling from the edge of the couch, almost touching the ground. It reminded me of Munch's "The Day After"<sup>2</sup> (Cat. 0). Conversing men stood next to the couch, cracking pistachio nuts, oblivious to the girl.

As I passed closer to her, it seemed as if her hand was bleeding. Everything seemed twisted. Like a broken record, the "Ta-Ta-Ta" kept scratching my mind and would not let go. I decided to make a U-turn down the steps to where the white grand piano sat alone, silent. Perhaps I could play a different tune.

As I cautiously stepped down to the main floor, I noticed the only person at the party standing alone, attentively observing what I was focused on: two glittering Persian girls, dancing next to the piano, the Iranian pop song blasting from the loudspeaker. I approached him as if I had known him for years. With no introduction, I said, "No Hay hombre sin Patria ni Patria sin libertad."

He turned and asked, "What?" Now standing next to him, looking at the girls, I said, "Given our current reality, how do you explain it? - Iranian miniaturists always paint a girl pouring a glass of wine for a man sitting under a tree." He smiled.

Both of us were now staring back at the Persian girls disco-dancing next to the piano. It was good to see them dance freely without any cavaliers or chevaliers around.

I continued, "Tell me, why is it that the Persian Miniature has not broken from our past to speak to our present reality?"

Now he responded, "Of course it has." I said, "Like the works of Nima<sup>3</sup> and Forough<sup>4</sup>?" He said, "Of course." I did not know whether I should believe him.

Over the blast of the pop song, I raised my voice, "I have not seen one; by whom?" The man says, "By me!" I hesitated, "By you?" He confirmed, "Yes, by me."

I did not believe a word of it, but he spoke with such confidence. Perhaps I did not know much about my own history. What would such a painting look like? How would it challenge the current state of our sensibilities and affairs?

A miniature about the 1979 revolution? About the Islamic State? About the Iran-Iraq War? A mural that would fit in a book? Or, would it be men riding horses, playing polo? Maybe a Qajar girl painted in Andy Warhol's style? I needed fresh air, to get away from the music's "boom-boom-boom".

I walked to the car and turned on its headlights. The road opened through dark green trees and swaying electric poles. I was thinking of the smile of the passed-out girl on the sofa, and of the Persian miniature. A mystery began to unfold.

Over a month, I played with the idea: what Iranian painting can speak to revolution, war, and the girl both? To our context of misery and joy, or in the context of our shared history?

I had to find this man again, but who was he? A month had passed. I had no address, no name of the host, no name of the painter either. I was now blaming myself. What if he was true to his statement, and I had just left like that, without inquiring more?

Over the weekends, I drove back to Berkley, finding Iranians in various Kebab and coffee joints, and asking everyone about a month-old party. I knew I sounded nuts, asking complete strangers about a place where some 500 Iranians had been dancing frantically four weeks earlier.

Finally, I came across an Iranian named George, sitting in a coffee shop, who knew about the party! I gave George the man's description, "Dressed all in black!" George says, "Oh you are talking about the painter." I shot back, "You know him?", he smiled: "Of course; everyone knows him." I said, "What is his name?" George says, "Farrokh...Farrokh Shayesteh. Why?" I responded, "I need to look at his paintings."

\*\*\*

I drove to the house in Berkley with a wooden porch, where a baby's swing quietly hung. I looked up, and there, through the top window, Shayesteh waved back and rushed downstairs to open the door. He invited me up into a little room, its black iron-cast window opened to the small sunny garden adjacent to the street. The roses on a green bed had bloomed. I looked at my watch: 10:30 AM sharp, not a minute late.

He offered me tea, and left to fetch it. The room resembled nothing that I had expected: no sculptures,

2. Edward Munch, "The Day After", 1894-5. Oil on Canvas, 115 X 152 cm.

3. Nima Ushij, (1897-1963) started the new poetry of Iran, reformed the length of the line in poetry to be determined by the depth of the thought, rather than the conventional Persian meters embedded in the verse. Nima's poetry may be read as the dialogue of symbols. Nima's innovative literary approach had implications for Persian miniature paintings, including his collaboration with Sadegh Hedayat and his publications in the "Music" journal.

4. Forough Farrokhzad, (1934-1967) in her method, her poetry broke from tradition as in "Let Us Believe in the Beginning of the Cold Season". It countered the male dominant ideology and norms, with significant implications for future generations of Iranian women's sense of identity and liberation.

no paintings, quite barren. There was a small bed, covered with an old rag. A small, green couch, where I sat, next to a smaller glass table. A simple room, no pieces of art anywhere.

Waiting, I noticed a small plate, the size of a saucer, as the only item hanging on the wall. In the emptiness, I became curious. I walked towards the saucer; closer. Inside its inner circle, I remember its distinct Vermeer light. It was a portrait of a Persian girl, dressed in red and blue velvets, with two white pearls dangling from her seductive earlobes. As I looked closer, her smile reminded me of the innocent girl passed out on the couch. She was young and beautiful, a girl reminiscent of the Beloved in Hafiz's poetry.

The dark eyes, the black eyebrows, the powdered cheek bones, the finely chiseled nose, the rose-red lips, the black-wine hair, and the round chin: they all quietly came together, inviting you to come closer. It was an oil painting, fresh and moist in color, like a Titian masterpiece. Her hair was pulled back with an antique, engraved silver pin. I came even closer to admire the brilliance in its precision and clarity. In the silver engraving was a bird, singing to her. Standing in a willing suspense of disbelief, I did not know what to make of it.

Suddenly, I heard Shayesteh's footsteps walking towards me. Still with my eyes on the girl, I muttered, "Who is this?" You could sense the moisture in her eye and the dark ink of her mascara. Shayesteh said, "Who?"



Cat. 1. Farrokh Shayesteh,  
Water Color on glazed plain plate, 1977.  
Diameter of plate: 16 Cm (6.3"),  
Girl-Image inner-plate circle: 7 Cm (2.7")

Staring in disbelief, I say, "This girl!" Shayesteh says, "Oh that!" I insist, "Who is this?" He sets the tray with tea on the wooden and glass table, almost spilling it. I stand still, waiting.

He hesitates, "She was my fiancé." I ask, "How long ago?" "When I was in high school." I laugh, "What? You mean you did this painting in high school?" There is no response. Looking at the girl, I do not know whether to believe him. No high school kid could have created such a miniature masterpiece. Needing a second confirmation, I asked, "Is this the only work you have?"

Shayesteh excuses himself. A few minutes later, he walks back into the room with a small package -- the size of a book -- and hands it to me: "Echo!" The whole time we are of course speaking in Farsi. So he says:

تاجه قبول افتد و چه در نظر آید

"Let's see if it meets your eyes' expectations"



Cat. 2. Ketab (Book) – Nan (Bread),  
Farrokh Shayesteh  
Water Color 1978 3.5"x 4.5"  
Courtesy of Shayesteh

## 1.2 – Mutations of Military & Religion – (1925-79) Reflections on Persian Satires

Unconsciously, my "past" was about to clash with the content of the Bread-book. I want to be clear on what was this past, before I open the bread-book-box.

My historical context may best be expressed by one drawing by Ardeshir Mohassess (1938-2008) (Cat. 3). Mohassess, in a snapshot, gives us a panorama of the Pahlavi period (1925-1979) of Iran, which I was born into.

- Later I learnt George Charbak took the oldest epic poem from ancient Mesopotamia (2100 BC) in history of humanity, rewrote and directed it as *The Epic of Gilgamesh With a Long Prologue* for the 2007-08 season, nominated for original best play in the Bay area in San Francisco. In Charbak's version of Gilgamesh, Aristotle's principles of Drama find their roots in the 12 clay Tablets written in Summarian (2100 BC), reinforcing Gramsci and Machiavelli's concept of Cosmopolitan Intellectuals, rather than the dichotomy of East vs. West history of Intellectuals, where the origin of drama is solely located in Greek mythology. See (Charbak 2007).
- Vermeer as opposed to Rembrandt light.



Cat. 3. Ardeshir Mohassess – Ink on paper 1977  
Library of Congress - Motion Picture Division.  
Author's photograph

Mohassess notes: “In the new ceremony the king after passing the row of religious associations, the judge, the military generals and ambassadors of foreign countries, stopped in front of the representatives of political convicts and had a little talk with them / 1977”. (Cat 3. - Top right panel)

In 1977 - This was precisely what was happening in Iran. At center stage, the monarch is standing next to his religious subordinates, forming the famous propaganda trio of “God-Shah-Country”. Civil society's political prisoners are blindfolded, ready to be shot. I had detected my own uncle who was a political prisoner among them.

To the right of the Shah's courtiers, the secular-liberal class wearing ties; and the Shah's military henchmen looking on. On the left of the panel segregated, veiled women are covered from head to toe. The traditional sub-altern classes, consisting of notable religious leaders in beards and their followers, hold sway between the traditional women and the political prisoners.

This depiction of our state affairs reflects how Iranian society appeared to me when I was still in high school. I would take sections of Mohassess drawings and turn them, in the same way, into oil paintings. I loved his satirical approach. One did not need to have studied anatomy or perspective to paint a tragedy, which at that time its extent I did not fully comprehend. In 1978, this state suddenly began showing signs of major fissures.

On the history of sub-altern classes, Gramsci notes :

To become a State, they [subalterns] had to subordinate or eliminate the former [The Shah] and win the active or passive assent of the latter [The liberals]. A study of how these innovatory forces developed, from subaltern groups to hegemonic and dominant groups, must therefore seek out and identify the phases through which they acquired: 1. Autonomy

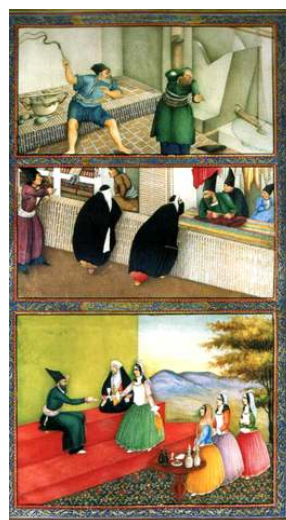
vis-à-vis the enemies they had to defeat, and 2. Support from the groups which actively or passively assisted them; for this entire process was historically necessary before they could unite in the form of a State.<sup>7</sup>

When I paused on Gramsci's passage, a few words stood out that I needed to figure out, such as “sub-altern”, “phases,” “autonomy”, “support”, “historically necessary”, and “unite in a state”, like the story board of a film. Mohassess had given me “What-is” and I wanted to know “How-it-came-to-be”. Then I began to trace his satirical drawings on “What-is”; and by chance, 30 years later, came across a revealing story board of Iranian state of affairs in Sani' Al-Molk's miniatures.

### 1.3 - State & Civil Society in Sani' Ol-Molk's Hegemonic illustrations. (1848-1855)

One Thousand and One Nights Stories

Significant in Sani' Al-Molk's miniatures is the depiction of Sheherzad's “A Thousand and One Nights”, stories from the 8th century, in his contemporary Qajar period (1848-1855).



Cat. 4a. Sani' Al-Molk (1851)  
Water Color on paper



Cat. 4b

One Thousand and One Nights in Vol 1/6.  
Author's Photographs of 18 x 32 cm miniature folios.  
Golestan Palace Library, Tehran, MS. No. 2240

Remarkable is his introduction of story boarding, forty years before the advent of projectors (1890) and cinema (1895), in book form.

Each illustration consists of three or six watercolors that tell a short-story, with a beginning, middle and final resolution of a protagonist or multiple characters in the story. Each character is localized in its real setting.

7. Antonio Gramsci, “Selections from Prison Note Books”. History of the Subaltern Classes: Methodological Criteria.



Cat. 4c. Sani' Al-Molk (1851)  
Water Color on paper  
One Thousand and One Nights in Vol 1/6.  
Author's Photographs of 18 x 32 cm miniature folios.  
Golestan Palace Library, Tehran, MS. No. 2240

Cat. 4d.

In Sani' al-Molk's miniatures<sup>8</sup>, the socio-cultural relations, realities, and hierarchies of civil society in the Nasser period are vividly localized.

In the lower third of Cat. 4b, Taj Al-Moluk<sup>9</sup> a princess and daughter of Nasser Al Din Shah, who is famous for her inner-court and Haram memoirs, evades the watchful eyes of her permanent courtier in the upper panels, and speaks to a young man [Old Zal!] at the bazaar.

The caption above the illustration states: "Old Zal<sup>10</sup> speaks with Taj- Al-Molok in Bazar". In the epic Shahnameh, the mythical Zal appears in the Qajar period of Sani' Al-Molk.

Cat. 4c captures the cycles of domestic violence, under the caption: "Darling feeds the Darling." In the mid-section of the illustration, she is subsequently "rewarded" with a violent kick in the face, almost dislocating her head, ultimately leading to "Boy murdering girl in bed," similar to many of the characters in Hedayat's (1903-1953)<sup>11</sup> short stories and novels (Haj Agha and the Blind Owl). Cat. 8d captures the Qajar court slave(s) under the caption: "Frying fish".

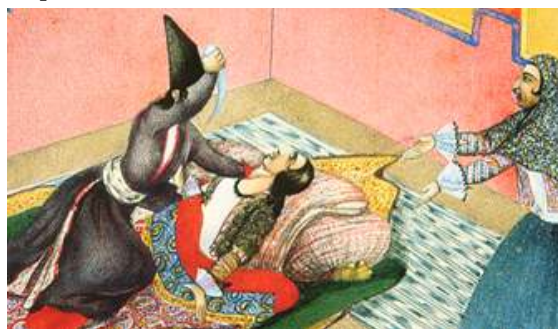
"The domestic slaves in Persian households were mostly East Africans brought through the island of Zanzibar (now part of Tanzania) by the slaves of

Mascut, who continued to operate in the Persian Gulf even after the ban on slavery was enforced by the British in the 1850s.<sup>12</sup>"



Cat. 5. Sani' Ol-Molk, Water Color – 1851-3  
(1268 Islamic Calendar = 1851)  
Author's photograph - Top 1/3 of one of the 1163 illustrations (18 x 32 cm) .  
Golestan Palace.

The Iranian past-present, like a hate story with Pirmardeh Khanzar Panzari (Sorcerer, Tradition) and the love-hate story with the girl in the Blind Owl (کور (بوف)<sup>13</sup>), stunned me: A traditional belief in faith and an organic real-imaginary love story, all on a story board, with catastrophic, bloody outcomes. [Cat. 5,6,7].



Cat 6. "Boy Murders Girl in Bed"  
Sani' Al-Molk, Water Color, 1851  
One Thousand and One Nights, Golestan Palace  
Author's Photograph of the lower 1/3 of the 18 x 32 cm of MS 9224

The hegemonic dyad of force and violence (military, police, law, murder) and consent (moral and intellectual legitimization) during the absolute monarchy of the Qajar period (1785-1925), the Pahlavi period (1925-1979) and the Islamic Republic (1979-Present) involved the past that is now the present, all in front of my eyes. Fashion and faces were different, but the Dyad seemed the same; but, granted, with variations on the same theme. Mass executions were a reality. In the words of Machiavelli's advice to the Prince, "It is better that you are feared than loved". In Gramsci, the Prince is the State and the people feared the State.

8. Sani' Ol-Molk's collection of One Thousand and One Nights, compiled under the order of Nasser Al-Din Shah (1831-1896) delves into real-politic of the Iranian society. Forty-two artists spent seven years writing and painting its 1136 illustrations.
9. Abbas Amanat 1993, Taj Al-Saltana, Crowning Anguish Memoirs of a Persian Princess, From the Harem to Modernity 1884-1914.
10. Zal, the father of Rostam, is recognized as the greatest warrior of the epic Shahnameh. Abandoned as a child, he [Zal] is saved by the mythical Simurgh. See Cat. 15. Where Zal is depicted in a 16<sup>th</sup> century manuscript of Shahnameh.
11. Hedayat's work critical of both the Monarchy and clergy, such as Haj Agha continues to be banned in book fairs of Iran, nevertheless his work is read widely. See Complete works of Sadeq Hedayat in 8 volumes, where the eighth may be linked to Mohasses' satirical drawings.
12. Abbas Amanat 1993, Taj-Saltana, Crowning Anguish p.34. See also Behnaz Mirzai (2017) on Iran & Slavery. Navigation laws were a series of Acts passed in England from 1381 onwards to protect English shipping against competition. See K. Marx, German Ideology. Such a law in the Nasser period implied search and seizure of Iranian vessels by British vessels, which may have nothing to do with British desire to end slavery, but to secure a monopoly of trade on any movable capital.
13. Mashaalla Ajoudani 1385, Hedayat, Blind Owl (Boofe Koor) and Nationalism, Forough publications.

Whereas the State's authority has been enforced organically through different historical phases, its moral and intellectual legitimization was subject to dramatic conjectural upheavals and questioning.

Abol-Hassan Khan Ghaffari (1814-1866), better known as Sani' Al-Molk [Cat 7], and Ustad Mirza Muhammad Ghaffari, better known as Kamal Al-Molk [Cat 8.], introduce us to these dyads of force and consent at both levels of State and Civil Society.

In Sani' Al-molk's masterpiece, Nasser Din-Shah Qajar (1831-1896) is portrayed with supra-natural powers shown on top of the clouds, and appears to be above earthly events. An absolute monarch with super-natural powers.



Cat.7. Abol-Hassan Khan Ghaffari - Sani' Al-Molk  
Water Color on paper 24.3 x 32.8 cm. March 1854.  
Portrait of Nasser Al-Din Shah Qajar (1831-1896)  
Louvre Museum, Paris – Islamic Section MAO 777  
Author's Photograph

Upon the assassination of Nasser Al-Din Shah in 1896, members of the Adaymiyat (Humanist) association formed a counter hegemonic ideology against the now absolute power of Mozaffar Al-Din Shah Qajar (1896-1907), ultimately leading to Iran's 1905-06 constitutional revolution and the execution of Shaikh Fazlulh Nuri, the highest-ranking cleric of Tehran.<sup>14</sup>

Kamal Al-Molk (1848-1940), Nasser Al-Din Shah's court painter and teacher in painting, was also a member of the Adamiyat association. In the Mirror Hall [Cat. 8], Kamal Al-Molk captures the form of the Iranian State in more realistic earthly terms: The State is absolute Monarchy.

The Mirror Hall [Cat. 8], executed over five years<sup>15</sup>,

14. Afary Janet 1996

15. "Kamal Al-Molk continued to work on the 1896 Mirror Hall painting for 16 years at different intervals" as noted by his student Sadr Shirazi to Farrokh Shayesteh. This note captured in Cuba interview of 2018.

16. A fictional film depicting who is Kamal Al-Molk? was produced by Hussain Ghafuri, written and directed by Ali Hatami. Unfortunately the film is a miss-representation of Kamal Al-Molk's character.

17. Abbas Daneshvari 2013.

18. Ruyin Pakbaz 2006, Dariush Shayegan 2001. Hamid Keshmirshakan, 2013.

19. Documentary film of Mitra Farahani on B. Sadr.

20. Akbar Behkalam, Art in Exile. <https://www.youtube.com/watch?v=wV7M1wzpruc>

depicts Nasser Al-Din Shah (1831-1896) in his narcissistic grandeur. The Shah is reflected in the mirror images of himself and is propagated on each of the tulip-bulbs of the three grand chandeliers, refracted in all the surrounding mirrors a thousand-fold.<sup>16</sup>



Cat.8. Kamal al-Molk (1845-1940),  
Mirror Hall, 1890-1895. Oil Painting. 90 x 100 cm.  
Courtesy of Shayesteh Archives

## 2.1 The Ecclesiastic class in Civil Society

State in three branches of Contemporary Persian Art (1940-present)

Abbas Daneshvari<sup>17</sup> identifies three important transformations since the mid-1940s in Iranian contemporary art:

The first radical change took place in the 1940s with the birth of Iranian Modernism<sup>18</sup>, exemplified by the works of artists such as Manuchehr Yektai (b. 1920), Behjat Sadr<sup>19</sup> (1924-2009), Hossein Kazemi (1924-1993), Jalil Ziapour (1920-1999), Ahmad Esfandiari (b. 1922), Jazeh (Jahazeh) Tabatabai (1931-2008), Nasser Oveisi (b. 1934), Houshang Pezeshknia (1917-1972), and Marcos (Marco) Grigorian (1925-2007).

Daneshvari then identifies five of the leading members of this group as Hossein Zenderoudi (b. 1937), Parviz Tanavoli (b. 1937), Massoud Arabshahi (b. 1935), Mohammad Ehsai (b. 1939), and Faramarz Pilaram (1937-82).

A second branch identified by Daneshvari are painters such as Sohrab Sepehri (1928-80), Abbas Kiarostami (b. 1940), Parvaneh Etemadi (b. 1947), Akbar Behkalam (b. 1944), Siah Armajani (b. 1939) and Koorosh Shishegaran (b. 1945).

Finally, Daneshvari's third branch consists of "painters"/artists of a new generation (1979-present),

...whose critique of (one) Truth is implied in

practically every work of the new generation and this critique is brought forth through the opalescence and mystification of metaphysical principles. (ibid)

The third branch includes visual artists such as Sadegh Tirafkan (b.1965), Neda Razavipour (b. 1969), Samira Alikhanzadeh (b. 1967), Peyman Houshmanzadeh (b.1969), Shadafarin Ghadirian (b. 1974), Shirin Neshat (b. 1957), Mandana Moghadam (b. 1962), Parastou Forouhar (b. 1962), and Shirin Aliabadi (b. 1973). Interestingly Modern Persian Miniature seems absent in all the three branches.

Could it be possible that modern Persian miniature grew out of a different tree? where Daneshvari's "opalescence and mystification of metaphysical principles" may remain simply as a mystification? Is it possible that modern Persian miniature is the negation of all three of these branches? – if so? What is the state of our common sense? What constitutes "modern"?

Daneshvari concludes:

...the Iranian modernists were principally concerned with European styles, whereas the artists of the Saqqa-khaneh, through a juxtaposition of European styles and Perso-Islamic iconography, were almost wholly concerned with the metaphysical signs and symbols of civilization (often Eastern and occasionally Western) and the art of the new generation, however has shown itself preoccupied, either directly or obliquely, with the semiotics of society. (ibid)

But the question of what constitutes "modern"<sup>21</sup>, and which language of the "semiotics of society" speaks to which aspirations, remains wide open. If I may borrow from Pasolini: "Modern" must imply a transformation of the past, but not a complete isolation from the past. But as otherwise argued by the 3-branch "modernists", then a ghetto that is isolated may seem quite modern.

Touraj Atabaki writes that, "SE [Sur-e Esrafil] was the first Iranian newspaper to understand the dual meaning of modernity, 'self-determination of the individual and critical thinking'. Several critics have expressed the view that Dehkhoda's prose forms a bridge between journalism and the modern short story in Persia."<sup>22</sup>

Does such an approach hold true in Persian miniature

21. In contrast take as an example Sohrab Sepehri a graduate of Fine Arts, who was well versed in Buddhism and in 1960 travelled to Tokyo and learned Japanese wood carving. Is Sepehri vs. Shayesteh a modern painter? Who is a "modern" painter over a given tradition? Can one consider Sepehri's Zen paintings capturing high prices at Sothebys as the dawn of Modern Persian Miniatures? Modern must imply a transformation of a past and not a complete isolation from the past. Otherwise a Ghetto in its isolation is quite modern. There are fundamental differences between Forough Farrokhzad, Nima's modernism and S. Sepehri's Zenism. Unfortunately, S. Sepehri, S. Neshat and many others literally regress in establishing a new language, other than the dominant L.I.E.: language, Image and Example. There is nothing modern in a critical appraisal of the ruling ideas through reproducing the same forms, methods, images and examples of the same ruling ideas.
22. Ali-akbar Dehkhoda, Charand-o Parand. Revolutionary Satire from Iran, 1907-1909. Translated, with an introduction and notes by Janet Afary and John R. Perry. Page 6.
23. CCC-2500: Central Council of Celebration of 2500 years of Monarchy 1971 (1350 Iranian Calendar), Queques Chefs-D'Oeuvre De Kamal-ol-Moolk et de Behzad, A Few Masterpieces by Kamal-ol-Molk & Behzad, Published by Central Council, with no author specified.
24. As noted by Kamal Al-Molk's student, Sadr Shirazi. I am indebted to Farrokh Shayesteh for clarifying the historical closure and re-opening of Tehran's School of Fine Arts under its new name.
25. Kamal Al-Molk was Nasser Al-din's Shah painting teacher and directed the school from 1911-1926. After Nasser Al-din Shah's assassination, he neither followed the dictates of Mozafer Al-Din Shah or Reza Khan's requests. It is essential to understand the social function and struggles of the Traditional and Organic Intellectuals of Persian Miniature, as their language and works (de)legitimize certain critical norms and value systems. Kamal Al-Molk was not simply another subject of the Monarch, taking orders. On the contrary, the Monarch was Kamal Al-Molk's subject.

or visual arts of the three "modern" branches?

## 2.2 Master Pieces of Ghaffari Miniatures & Modernity

Consider for a moment, the significance of the founding of the School of Fine Arts [Cat. 9a] by Kamal Al-Molk, whose work and journey profoundly affected the trajectory of Persian miniatures via the works of those students who directly studied under him, among whom is Sadr Shayesteh.



Cat. 9a Kamal Al-molk and his admirers at Kamal Al-molk's own exhibition Photographed possibly at school of Sanayi' Mustazrafeh (Fine Arts) All the above paintings are Kamal Al'Molk's works or his studies. 1923-24. Photographer Unknown.

Based on the dated paintings [Cat 9a] adorned on the above-pictured wall, we understand that the school was formed in 1923 or prior to that date, at least two years before the 1925 military coup of Reza Khan. The school was founded in 1911, as the outgrowth of the 1905 constitutional revolution and its humanist movement, and not as the CCC-2500<sup>23</sup> claims that Reza Khan founded the school in 1925. Reza Khan closed it, reopened it and then renamed it. How do we rectify these historical discrepancies?



Cat. 10. Kamal Al-Molk, Oil Painting, 1891  
The Sorcerer / Fortune-Teller, with the Ramall on his desk.  
Courtesy of Sadr Shayesteh Archives

After the 1925 military coup, towards further legitimization of the new State, Reza Khan calls for

Kamal Al-Molk to paint his portrait. Kamal Al-Molk, on the basis of his own humanist principles, and as a leading critique of the state of affairs, be it State or Civil Society<sup>24</sup>, refuses<sup>25</sup> the monarch's call. This “violation” prompts the closure of the art school altogether.

The school reopens in 1926 under the new name of Fine Arts, under the new directorship of Ismail Ashtiani (1892-1971), a clergyman, whose father was also a clergyman. He is then allocated a new budget. Ashtiani travels to Europe and begins to produce works in the style of French impressionists, though with indoor or outdoor Iranian settings. Ironically, the military-coup settings of the State of Iran now reflects the outdoor idealistic-impressionist settings of the new-bourgeois of French society. Here political ideology and painting, state and civil society mutate.

Having forced Kamal Al-Molk's resignation, here the hegemonic concept of “High-Culture” in impressionist style, state policy, art education, and the mutation of the monarchy and the clergy form a particular artistic social order – which has absolutely nothing to do with Kamal Al-Molk's realism or the history of classic Persian miniature. Art is not – and cannot be – separated from Politics.



Cat. 11a.

کلاس فرسات الدوله: "Class of Forsat Al-Dowleh"  
 نشسته از سمت راست: سدر شایسته، پدر نگار سوراتگار (پسر نقاشی خان نقاش)، فرسات الدوله، آقا کاظم دستغیب  
 ایستاده از سمت چپ: روح اله شاهی، کریم خانی، سدر زاده، نگار سوراتگار، علی شایگان

- Front row, from right to left:  
 1.Sadr Shayesteh 2.Father of Dr. Souratgar (Son of painter Lutf-Ali Khan) 3.Forsat Douleh 4. ? 5. Kazem Dashtgheib  
 Standing from Left to Right:  
 6. Ruhallah Khaleghi, 7.Karim Khaleghi, 8.Sadr Zadeh, 9.Dr. Souratgar, 10. Ali Shayegan

In a separate school [Cat. 11a.] in Shiraz we find Forsat Dowleh and his students who study water color, among them Sadr Shirazi, who is the only one that continuous the art, and who, I believe is the most underestimated and prominent student of Forsat Dowleh, and later, Kamal Al-Molk.

The photograph captures the “who's-who” of Shiraz. They become the leading political and artistic

26. The class covered water color only, Philosophy and other subjects. School of Shiraz trajectory may be traced through the works of Lotf Ali Khan Shirazi Agha Sadegh Agha Mohammad Hassan Agha Mohammad Hussein branching later into a synthesis of Shiraz School + Kamal Al-Molks' realism as reflected in the pivotal works of Sadr Shayesteh (1896-1983).

27. Dr. Shayegan was the Leader of the National Front, minister of education and a close advisor to Prime Minister Dr. Muhammad Mossadegh.

28. Dr. Soratgar, was a writer, poet, translator, Professor of literature at Tehran University and head of Shiraz University. His 1939 PhD thesis at London university traced the influence of Persian literature on English literature in 15th and 16th century.

29. The position taken in this paper is neither in tandem with Iranica: <http://www.iranicaonline.org/articles/kamal-al-molk-mohammad-gaffari>, nor in tandem with “Maktab-e Kamal-Molk, with select works of Ashtiani, Heydarian, Olya, Yassami & Shahabi” published in 1364 (1985) by the library of the Islamic Council - Abgin Publisher. See Kashian Hussain 1985.

intellectuals of Iran: Dr. Ali Shayegan<sup>27</sup> (1903-1981) and Dr. Lotfali Soratgar<sup>28</sup> (1901-1970) in politics, S. Shayesteh (1896-1983) in painting and Ruhullah Khaleghi (1906-1965) in music.<sup>29</sup>

### 2.3 The Sub-Altern Ecclesiastics and the Formation of Boofe-Koor (Blind Owl)

Sani' Al-Molk and Kamal Al-Molks' works [Cat. 10. Sorcerer] appear as notes from a fragmented canto. “Who can determine when reason begins to sleep, or better to desire its own end?<sup>30</sup>” Why is the focus on this desire to end reason?



Cat. 11b. Kamal Al-Molk (1847-1940) center, seated & Sadr Shirazi (1896-1983) with glasses and a black turban standing next to Kamal Al-Molk – 1932  
 All are only Kamal Al-Molk's Students (Missing is Ashtiani, Tajvidi, Rokhsaz, Halati)  
 Courtesy of Sadr Shirazi Archives

Sixty years later, Sadr Shayesteh Shirazi (1896-1983), one of the most prominent students of Kamal Al-Molk, here standing to the left of Kamal Al-Molk, revisits “The Sorcerer” and reflects on this belief in supra-naturals [Cats. 11,12,13].



Cat. 12. Sadr Shayesteh Shirazi (1896-1983)  
 1957. Water Color.

Shiraz Style: Dorosht-Pardakht. (Dated 1336 on Iranian Calendar)  
 Courtesy of Sadr Shirazi Archives

The gripping hegemonic powers of the Sorcerer and critique of reason and its rituals within Iran's civil society seem to resurface now in Sadr Shirazi's work.

Sadr goes so far as to reveal the traditional woman's hands, adds a piece of carpet under her and a cushion

for the Sorcerer, converts his cane to a hookah-pipe (Ghalyan), removes the Ramall on the desk and breaks the three-dimensionality of the spatial wall. In Cat.12., the Dorosht Pardakht coloration bypasses and is a break from Sadr's own teachers, including Cat. 13. Painted two years earlier.

Sadr paints the second woman showing her hand in front of her opened veil. The second woman is not looking towards the Sorcerer, hence an open veil. To the casual reader, this matter may seem trivial. It was not until I wanted to say goodbye and shake hands with some traditional women, who refused my hand, did I ponder on the severity and perhaps discretion of our “customary” differences.

Perhaps the only matter Sadr keeps intact is the “normative gaze” of the Sorcerer [Khanzar Panzar] and the reciprocal gaze of one of the women, i.e., The belief in the supra-natural power of faith.

The woman with the opened veil, remains a witness to the outcome of the roll of Ramall (Chance, Faith). The third woman [Cat. 13] is of the interior. While traversing Sani' Al-Molk (1851), Kamal Al-Molk (1891) and Sadr's (1955,1957) works, all that is representable within the civil society, are notably not Virtú but Faith.

With the British-backed military coup of Reza Khan in 1925, we enter a new chapter in Iran's dark history, that covers the new monarchies of the Pahlavi dynasty (1925-1979).



Cat. 13. - Sadr Shayesteh (1896-1983), 1955 Oil Painting.  
An Adaptation of Kamal Al-Molk's Painting: The Sorcerer  
Courtesy of Sadr Shirazi Archives

The three paintings [Cat. 11, 12, 13], seen in their historical context, reflect on the hegemonic power of a political society [Khanzar Panzar], not just at the state level, but deep within civil society. In other words, the state has molecularly expanded deep inside all elements of the civil society: urban and rural.

Both of Sadr Shayesteh's studies, two and four years after the 1953 joint US-British military coup that toppled the duly elected government of prime minister Dr. Mohammad Mossadegh, reflects on the continuity of traditional-intellectuals as sub-altern Sorcerers.

Tradition and “organic structures” persist resiliently, during the time that conjectural events like Naser Al-din Shah's assassination (1896) or the military coups (1911, 1925, 1953) take effect. One may argue that the history of military coups and violence deeply reinforce traditions and faith as opposed to virtú, and, ultimately, past organic military structures and foreign forces.

Gramsci establishes a distinction between intellectuals who “know” and the people-nation that “feels”. This distinction is reflected in Persian miniatures and has come to haunt us.

Was this identity-kit of “spirituality” a historical seduction in the making, as if it never existed before and had no history? With the split in the National Front and the Liberation Front's move from Husseinieh Ershad to the offices of Human Rights, spirituality implied human rights and; as Gramsci notes, concerning the sub-altern class, a unifying secular-religious state within a state begins to coalesce and form, against the State super-structure and its complex of super-structures.<sup>34</sup>

The words of Pasolini<sup>35</sup> came to me: “Who can determine the circumstances in which reason begins to depart, or return to where reason was not, abandoning the road he had believed to be right for so many years, out of passion, ingenuity, conformism?”

Deep in the thoughts of my own identity in the middle of war, Farrokh's voice rang out: “Your tea is getting cold!”



Cat. 14A. Tea Series 1996- 4” x 4”  
Water Color  
Courtesy of Farrokh Shayesteh

30. P. Paolo Pasolini 2014, The Divine Mimesis.

31. Dorosht Pardakht style of water color in Shiraz has nothing to do with impressionism or pointalism. Dorosht-Pardakht is a Shiraz-style innovated by Sadr Sahyesteh, that stands close but free from Riz-Pardakht. It is unique in its technique of execution through which Sadr poses new theories of coloration of the subject. In its water color execution see Cat. 12. or Sadr's Slave market (Not shown).

32. A key character that appears in Sadegh Hedayat's Novel – Boof-e Koor (Blind Owl), symbolizing Gramsci's notion of Traditional-Intellectual.

33. On this critical note, I am in debt to Dr. Hamid Ahmadi- R.I.O.H. Library of Congress. See Ahmadi Hamid 2002.



### 3.0 – Formation of Modern Persian Miniature Self-Portraits and New Discoveries



Cat. 15. Farrokh Shayesteh – Ramsar,- Caspian Sea. Iran.  
Iran's High School Painting Competition. 1966 (Age 12)  
Courtesy of Shayesteh

The beginnings of this departure of reason are also captured in the modern miniatures of Farrokh Shayesteh, who started painting at age 4 and reflects on some of his early losses.

Shayesteh's self-portrait (Cat. 16.) between ages twelve and fourteen, with him dressed in the clothes of Zand Darvishes (1750-94), is a touching testimony to the death of his older brother in Kurdistan. The “self”-portrait is more about the “other”. There is no location, only a state of being. If there is any de-centering and localization, it is that Shayesteh, with long hair, may be present in the Zand period.

The founder of the Zand dynasty, Karim Khan Zand<sup>36</sup>, never assumed the title of King, but “wakil” (deputy). The dress of a Zand Darwish speaks of a founder that also rebuilt Shiraz as the capital of Iran.

Shayesteh, a young unknown miniaturist of the caliber of the best of the Persian court painters, who a decade after this self-portrait was painted, and who may be considered as the founder of “The Modern Miniature” of Persia, was breaking away from a past, while not making a ghetto of his past.

### 3.2 Past-Present – Myth vs. the Ideology of Mass Production

Simurgh vs. Capitalism

Shayesteh's initial contribution is his uncanny ability to transform his pre-revolutionary studies in the school of Shiraz painting addresses the subliminal contradictions of both Iranian and American societies.

He does so by maneuvering the dangerous trenches and traps of Orientalist<sup>37</sup> vs. Reverse-Orientalist views.

When I finally got the chance to open Shayesteh's gold leaf-plated bread-book, I was struck by the entirety of the clash of past and present, all present, in such a small book of Art (Cat. 17a). The works with which I was familiar were Mohassess' satires and some decorative miniatures. This was different.



Cat. 16 Farrokh Shayesteh, Water Color  
Self-Portrait – Age 12-14. Circa 1966-68  
Courtesy of Shayesteh



Cat. 17a. Farrokh Shayesteh, Water Color,  
Circa 1980-81. 3.5” x 4.5” Untitled.  
Courtesy of Shayesteh

The semiotic rectangle<sup>38</sup>, or elementary structure of signification, of Simurgh (30 birds, Cat. 17a) is the representation of a binary opposition, or of two contraries (+S and –S), along with the simple negations of both terms (the so called subcontraries, –sBAR and +sBAR). We may take +S to represent Simurgh, signifying its opposite, –S to represent Dragon, as an astro-cosmological symbolism, extant on numerous blades of fifteenth century Timurid or Safavid blades, as well as mystical miniatures.<sup>39</sup>

34. See Research on Iranian Oral History (R.I.O.H.), Library of Congress, Motion Picture Division. This point is established through a set of 4 separate interviews, with active members of the Human Rights commission in Iran – 1978. which included representatives of National front, Liberation Front, Bazaar and Religious Right. See Dr. Hamid Ahmadi's critical interviews with Dr. Abdolkarim Lahiji president of International Human Rights, Dr. Hassan Shariatmadari (Son of Ayatollah Shariatmadari), former president Abolhassan Bani Sadr and others, among over one hundred interviews in Library of Congress, Motion Picture Div. R.I.O.H.

35. P. Pasolini 2014, The Divine Mimesis, Contra Mundum Press

36. On Zand Dynasty see: <http://www.iranicaonline.org/articles/zand-dynasty>

37. Edward Said 1978, Orientalism, Vintage Books, See also Philippe Julian 1977, The Orientalists, Phaidon Oxford. Originally published as Les Orientalistes

38. On the semiotic rectangle of signification, see “A.J. Greimas and Francois Rastier, “The Interaction of Semiotic Constraints,” Yale French Studies, No. 41 (1968), pp. 86-105, also noted in Fredrick Jameson 1981, The Political Unconscious, Narrative as A Socially Symbolic Act., Cornell University Press.

39. Abbas Daneshvari 2011, Of Serpents and Dragons in Islamic Art, An Iconographical Study, Mazda Publishers

The myths of Simurgh are inextricable from their remoteness and invisibility. Simurgh is also identified with justice, enlightenment, a tree of light, and life. Its antithesis can be a dragon or death. The -S and the +S also refer to the concepts of death (-S) and renewal (+S).<sup>40</sup>

Two paintings in the masterpieces of the Chester Beatty Library, from Shah-Nameh (The Book of Kings) of the epic poet Ferdowsi, reflect on Simurgh.



Cat. 18. Simurgh Rescues the infant Zal  
Shah-Nameh Ferdowsi  
16th Century  
Ms 277; Fol 12r. 45 x 26 cm  
Painter: Perhaps, Muhammad Zaman



Cat. 19. Simurgh Flies down to assist  
at the birth of Rustam.  
Shah-Nameh Ferdowsi. 1675-6  
Ms. 246: 5; 34 x 24 cm.  
Painter: Muhammad Zaman

Instead of Simurgh's antithesis (death), Shayesteh confronts us with a portable grill (Cat. 17a). This move operates on the element of time (mythical past and material present); its composition and multiplicity of meanings act as a montage of attractions, or the anxieties it encodes.<sup>41</sup>

Again, in the words of Pasolini, "We would always prefer something external, like an earthquake, for example, a bombardment, a revolution, to break the habits of the millions of petite bourgeois that surround us." (ibid)

Here, Shayesteh presents us with the habit of grilling: an outdoor recreation, suspended and displaced in our sense of location and common sense. But which common sense? That of the grill or of the myth? The myth of Simurgh, or the myth of Islam? The myth of a revolutionary class, or the myth of Mahdi's army?

Simurgh is the severance with our present common sense; while for some, it is their common sense: myth vs. reality. Here Shayesteh gives us the lexicon of a culture industry<sup>42</sup>. He does not resolve it, but only poses it and decenters our common sense.

The Grill symbolizes the fetishism and reification of a consumer society that dominates and normalizes material needs and our common sense, against our curiosity and attraction towards Simurgh's mythical meanings.

40. Ibid, p. 166.

41. See the Kuleshev effect and S. Eisenstein 1975 in Film Sense, where he speaks of metric, rhythmic, tonal and over tonal and Intellectual Montage. See also Rocchio 1999, who combines Lacanian Psychoanalysis with a Marxist critical theory, in decoding our anxieties. In the sentence "He has a heart of stone" the simile "Stone" acts as a montage on "Heart".

42. Horkheimer Max & Adorno Theodor 2002. See "Enlightenment as mass deception". 43. Moallem Mino 2005, Morgan Robin 1996

It follows that +S, representing Simurgh, finds its contrary, -S, representing an ideology that dominates, forms, and normalizes as the most significant ideological element of conformism to material life. Which life do we live in? Which one will we conform to? Where are the boundaries of myth and reality? Which desires for commodities form part of our body language and identity? Do seculars believe in myth, and if so, where are the boundaries of secular and religion?

In contrast, the sub-contraries of +S (Simurgh) and -S (Fetishism and Reification), namely +SBAR and -SBAR, are left open to the historical context and creative aspects of the viewer, lending itself to a multiplicity of meanings. But to what end?

It is tempting, though erroneous, to consider these works as East-West dichotomies, for the boundaries of what is East and what is West, unlike many contemporary Iranian painters, photographers (e.g. Shirin Neshat), and writers (e.g. Jala Al-Ahmad), in Shayesteh's work, is always contested.

The dissent is not that the West is the grill and the East is symbolized by Simurgh or that the grill (representing foreign products) has invaded the Persian markets of "spirituality", as Jalal Al-Ahmad, Foucault, Shariati, or so many others would have it.



Cat 20. Shady Ghadirian  
Qajar series 1998 - #1,  
Digital Print 60 x 90 cm  
Courtesy of Ghadirian

The dissent is rather a critical evaluation of our common senses that we, the liberal as well as the conservative traditional, have long normalized, as expressed in the 1978-79 Islamic revolution. For without this critical thought on what is being "normalized," what rituals are normal? Who defines and sets the norm? How else is one to explain the overnight morphing of liberals into creatures beating their daughters, wives and sisters<sup>43</sup>? By historical self-seduction? An error? A misunderstanding?

Sani' Al Molk's miniature storyboards and Shayesteh's nomenclature-content have their counterparts in life; they are not figments of the imagination, independent of hierarchical structures of civil society. As has been noted, one of the protagonists in Sani Al-molk is Taj-Al-Saltana.

### 3.3 Law & Common Sense in State-Civil Society

Can one wake others up when one is asleep?

Destabilizing the norm within the subject has the potential of setting a new norm. Traditionally, norms are attributed to religion and belief systems. But where do we place virtú or destiny<sup>44</sup>, and where do we set or dissolve boundaries between certain realities and fantasies<sup>45</sup>, especially as it relates to our past-present “norms”?



Cat. 21. IRAN. Tehran. Sacrifice of cow in an Ashura ritual. 1997.  
Courtesy of Abbas Attar

These boundaries can and do exist, not only overtly or subliminally, in Persian visual arts, but also at the level of State/Civil-Society, where an expansive<sup>46</sup> State permeates the Civil Society at its molecular levels. It is a strategic-tactical cultural war-of-position and war-of-movement, fought at personal and collective historical junctures.

A key recurring motif of Shayesteh's movement in Persian miniatures is “past-present”. But what has been our past? And who decides what should be revealed in our present?

Our history of struggle is one of hegemony of the conflicting norms, feelings, understandings and episteme<sup>47</sup>, as well as our sense of identity in our localities.

The most fundamental of these hegemonic forms is presented either through force (military and police), consent (custom and civil law, rhetoric, moral persuasion, education, and semiotics) or through authority/tradition-hegemony or agitation-propaganda.

For brevity, just to borrow its “legal” formation from Gramsci:

44. Parel Anthony 1972, Fontana Benedetto 1993

45. Baldwin James 2017, I Am Not Your Negro. A journey in Black History that connects Civil Rights Movement to Black Lives Matters

46. Buci-Glucksmann Christine 1980, Gramsci et L'Etat/ Gramsci And the State, Translated by David Fernbach, Lawrence and Wishart, London

47. Daryush Shaygan speaks of the fear of losing identity, where reality is always somewhere else, and where consciousness

48. trails behind the idea. Ultimately he locates the social foundation of distortions in Intellectuals, Ideologues, technocrats

This problem contains in a nutshell the entire 'Juridical problem,' i.e., the problem of assimilating the entire grouping of its most advanced fraction; it is a problem of education of the masses [Cat. 23.], of their 'adaptation' in accordance with the requirements of the goal to be achieved.

This is precisely the function of the law in the State and in society; through 'law' the State renders the ruling group 'homogeneous' and tends to create a social conformism which is useful to the ruling group's line of development.<sup>48</sup>



Cat. 22. Farrokh Shayesteh - Water Color  
Circa 1980-81 – Untitled A. 3.5” x 4.5”  
Courtesy of Shayesteh



Cat. 23. IRAN. Qom. June 1980. Under a ventilator, mullahs attend a class  
in one of the Qoranic schools run by ayatollahs.  
Courtesy of Abbas Attar

In general, it may be said that the distinction between ordinary men and others, who are more specifically legislators, is provided by the fact that this second group not only formulates directives which will become a norm of conduct for others, but at the same time creates the instruments by means of which it will verify their execution.

Of this second group, the greatest legislative power

belongs to the State personnel (elected and career officials), who have at their disposal the legal coercive powers of the State. But this does not mean that the leaders of 'private' organisms and organizations do not have coercive sanctions at their disposal too, ranging even up to the death penalty.



Cat. 24. Caption on top of the manuscript (Not shown):  
 "Woman Stoned by Her Brother-in-law"  
 Abu'l Hassan Ghaffari - Sani' Al-Molk, Water Color  
 Illustration of a manuscript of the One Thousand and One Nights  
 Ca. 1269/1852-53. Gulistan Palace Library, no. 2240.

The maximum of legislative capacity can be inferred when a perfect formulation of directives is matched by a perfect arrangement of the organisms of execution and verification, and by a perfect preparation of the 'spontaneous' consent of the masses who must 'live' those directives, modifying their own habits, their own wills, their own convictions to conform with those directives and with the objectives which they propose to achieve.<sup>49</sup>

Characteristic of Sani' Al-Molk's stories of maximum legislatives are historical icons and themes of conflict within. These icons reflect our collective thoughts and experiences.

In Sani' Al-Molk's works, all the hierarchical structures in the State [court] and associations within civil society [family, bazaar, mosque, schools, etc.] are colorfully and carefully identified and illustrated. All that is needed is the acumen to read the captions, the subtitles of the illustrations that act as a storyboard of a historical film, and notice the characters of Taj Al-Saltana or other prototypes.

In Shayesteh's works, we are faced not with fundamental social characters, but their concepts, that cut across our way of normalizing. The work in its localities, therefore, is highly destabilizing our basic common sense of norms. For a liberal can easily become a fascist, and the question is Why? How come?

It is through Sani' Al-Molk's miniatures that we learn that "segregation was enforced through a series of spatial, sartorial, and dietary rules and regulations"<sup>50</sup>. In Shayesteh's works, we are not told of these segregations, we are positioned to sense and interpret the underlying elements of structural conflicts.

Afary states that "Qajar monarchs continued the

Safavid policy of intolerance towards Sunni Muslims, and non-Muslims. Babi and Baha'i minorities, who often lived within Muslim communities and intermarried with Muslims, were denied the customary protection of the recognized religious minorities under Islam" (Ibid).



Cat. 25. Sani' Ol-Molk, Water Color – 1851-3  
 (1268 Islamic Calendar = 1851)  
 Author's photograph - Top 1/3 of one of the 1163 illustrations (18 x 32 cm) .  
 Golestan Palace.

Most of these conflicts have been historically repressed and have regressed in our unconscious minds and its violent impact is reflected in the sexual and psychological frame of the youth of Bazaars, or the harsh peasantry life of the Khanzar Panzaris of rural and urban areas, or deep in the repressed and regressed memories of the secular or liberal, who has a psycho-sexual-superiority complex.

Revealing, unmasking, self-censoring, or creating new prototypes where such proto-types were absent, is a political art, a cultural war, subject to strict (self) censorship or repression. It is no different than the cultural war between master and slave. All "norms" are challenged and will be challenged. All destabilizing counter-hegemonic norms are censored or self-censored. Nevertheless, while the language of the slave is strategic silence, in the case of the African-American experience it is also vividly expressed in spirituals, blues, and jazz<sup>51</sup>. Such is the case in the silence of Modern Persian miniatures: During times of repression, they become brilliant, sumptuous and most colorful.

We may perhaps trace Shayesteh's work to Sani' Al-Molk (1814-1866), under the guise of One Thousand and One Nights, who captures and reveals contemporaneously dark structures and the complexity of super structures. The fact that he accomplishes such a feat is truly extraordinary.

The cause and effective methods of combating the hegemony of the traditional patriarchy and formation of its common sense aptly is set as a dilemma in Farrokh Shayesteh's miniatures

[Cat. 26].

خفته را خفته کی کند بیدار Moving the red needle of the tuner

49. Gramsci Antonio 1933, Selections from Prison Note Books, p. 266

50. Afary 2015, p.63.

51. Davis Angela 1999.

slightly to the left, we read the inscription: broadcast on the top panel of the miniature: “Can one wake others, when one is asleep?”

The tone-deaf response is captured in the volume needle to the right of the miniature: it is turned off! Very much like Jazz chords, the question posed [last chord] is not resolved. We are left in a perpetual suspense of when and how to resolve the dilemmas; there is no revolutionary class to wait for; there is no Mahdi army appears.



Cat. 26. Farrokh Shayesteh.  
Circa 1980-81 Water Color. 3.5" x 4.5" Untitled  
"Can one wake others, when one is asleep?"  
خفته را خفته کی کند بیدار  
باب دوم گلستان : در اخلاق درویشان.  
Courtesy of Shayesteh

"Hear what by Learned men is wisely taught,  
With little wisdom though their lives be fraught.  
Think not that idle argument goes deep,  
'Can one wake others, when one is asleep?'  
Drink wisdom in by eyes, ears – one and all  
Though it be wisdom scrawled upon a wall."

(Saadi)

### 3.4 Pirmardeh Khanzar Panzari & Bazaar

2012 - I left New York for Tehran and took the newly constructed subway to Tehran's central bazaar, the representatives of which are now members of parliament. Packed and segregated by gender, the subway with its low ceilinged corridor was filled with the odor and stench of men.

I entered the packed men's section of the car, where not a single soul uttered a word. Everyone seemed tired and shell shocked. The neon light shined over the passengers white, dusty shoes. It was as if the wagon had gone through a coal mine of white powder. Not a single woman in sight. No laughter. Not one smile. No children. No books being read. Only loud speakers broke the silence to announce the stations. Doors shut, opened, shut. Under the bright neon lights, each man staring out into the infinity of their own reflections through passing windows.

I got off at the station for Tehran's central Bazaar. The crowd surged towards and nearly blocked the exit. Once up the stairs, I gasped for air. After a few steps, I

entered the main entrance of the bazaar. After following a few alleys inside, in a safe corner, I mounted my camera on the tripod, set to take automatic pictures every three-seconds. I took a few steps away, into the camera's depth of field. We were all there! All the passerby's moving like an old Charlie Chaplin film, me included. "Click! Click! Click!" Looking up, I discovered the powers of heavenly sunbeams shining through the open-air brick domes. I walked into the natural spotlight – under a shower of sun-light against all that is dark.

Suddenly out of the crowd, the old Khanzar Panzari man crossed in front of me. He slid by like a sleazy lizard, moving fast. I ran back, grabbed the whole tripod, the camera still clicking, and ran after him. Almost losing him in the crowd, I brought the legs of the tripod together and quickly paced him every step through those narrow dungeons some of which I had never entered before. Where was he going so fast?

I held the tripod upright. Up there, the camera kept blinking. I could not understand where this creature of a man had come from and what he really wanted? But, I knew I had seen him before. I kept pace behind his long dark brown gown, his moving sandals. His dirty, heavy turban was neither white in the tradition of a low ranking Hojat al' Islam, nor black in the style of high ranking Ayatollahs. Who was this Pirmardeh Khanzar Panzari? Neither white nor black, and why had he kept gazing at that woman in the painting, and now shown up at the Bazaar?

I needed to capture his face. I wanted to see if his face matched the image in the miniature, but I could not risk running in front of him. As he took a turn into a new alley, I had a quick glimpse of his face: A half brown-reddish beard, soaked in henna, with a thick eyebrow painted across his face. I could not believe my eyes! It was exactly the same damning old man that figured so prominently in Sadr's work entitled the "Slave-market"; except this time he was for real. The feeling I experienced was very unsettling. So, I asked myself: "Why am I running behind this fool?"

Am I a fool?"

I took a sharp turn into the first open space I could find, and let the Panzari go his way. I was glad to find myself in the inner court of a small, tranquil, hidden mosque. On the right, a small office with its doors open. I turned my camera off, shortened the tripod, took a breath, and walked in.

A gentleman with a black coat, white shirt, white socks, and half shaven face sat behind a desk. Next to him, another man occupied a seat in a row of empty chairs surrounding the remaining three walls. Some Arabic verses on a green cloth covered with black ribbons spoke of a past or future ritual, perhaps a funeral.



Cat. 27. Farrokh Shayesteh,  
Study for the Tea Series. 1996  
Chaco and Pastel 4" x 4"

His company, like him, was having tea. This reminded me of the kind of tea in Shayesteh's study (Cat. 27). The man behind the desk studied me and the tripod in one stroke of the eye,

"What can I do for you?" he said.

"I wanted to find out if I need a permit to shoot inside the courtyard", I asked.

"Of course you do", he said. "what are you shooting for?"

"I have a permit from the ministry of cultural and Islamic Guidance - Ershad,"

I pulled the permit out of my jacket pocket. He glimpsed at it.

"This is no good — are you a reporter?"

I said, "No; why? Why is the permit no good? I went to the cultural ministry and then the police station, finger printed and signed the letter stating I will never take any picture from military installations. The permit has the police station's stamp on it. Look!

That's not good enough for you?"

He said, "Well, this is a mosque, you have to wait for Haj-Agha to arrive to get your permission."

"Can I take photos outside of the mosque?" I interjected to free myself from the impasse.

A bit irritated, he scoffed, "Absolutely not!"

I said, "Really?"

Pointing to the door I had walked through, he said, "See, there is an office straight across. When you go out, right across the way, that's for foreign visitors.

Why don't you go there and ask them? Maybe they will give you a permit for the bazaar."

Now he was politely testing and insulting. I said, "I am

not a foreigner; I am speaking to you in Farsi."

He started to laugh, "You sure look like a foreigner, you don't know any of our rules."

I replied, "Forgive me for intruding; your tea is getting cold." I bowed slightly towards each man, then took a step forward. I needed my permit back. I stretched my arm and grabbed the paper. "Thank you." I took a few steps and I walked out.



Cat. 28. Tea Series. Untitled  
Water Color - 4" x 4" - 1996  
Courtesy of Shayesteh

With a sigh of relief and the camera off, I could now walk home safely. Few alleys on the way back, a police officer spotted me and quickly approached. Sizing the camera, he said: "You have a permit?" I said, "Yes." Now my hand was shaking. Didn't I just go through this voluntarily? But this was a Pasdar.

He looked at the permit: "This is no good. Come with me".

I said, "You are kidding. It is stamped...to where?" He signaled to follow him. I had arrived in Tehran as then the only caretaker of my father for a few months. He had full Alzheimers, and here I was chasing a Khanzar Panzar. For What? I had no one to blame. It took some time. Seconds were becoming minutes to get out of the distorted maze of the bazaar. Colors had turned black and white.

Finally, in the open blinding sun, I was surrounded by ten or twelve officers in black boots, green-khaki camouflages and metallic guns. The Pasdar handed the permit to his superior. He read the permit, took a good look at me and said, "Let him go," and handed the paper back.

#### 4.1 - Iran-Iraq War, Shayesteh's Chess Series and Eternal Secrets.

With the start of the Iran-Iraq war (Sept 20, 1980), the Chess Series of Shayesteh remained a contemplative body of work, against death and carnage in the real

52. Murell Denise 2018, Posing Modernity. On Chaco and Crayon studies, see Edgar Degas, Miss Lala at the Fernando Circus, 1879, P. 18. In contrast F. Shayesteh's study is Chaco and Pastel: Crayon vs. Pastel.

chessboard of life. Striking is Shayesteh's portrait of solitude, desolation, light, passage of time, and self-reflection.



Cat. 29., Farrokh Shayesteh – Chess Series 1981.  
Hand Print 2/5. Untitled (3.5" X 4.5").  
Courtesy of Shayesteh

We are cut in the middle of a game of life, whose beginning or end, we cannot foresee.

اسرار ازل را نه تو دانی و نه من  
وین حل معما نه تو دانی و نه من  
هست از پس پرده گفتگوی من و تو  
چون پرده بر افتد نه تو مانی و نه من

*The secrets of eternity neither you know nor I  
Answers to this riddle neither you know nor I  
Behind this act [painting], much discussion, you and I  
When the curtain falls, neither you remain nor I.*  
(Khayam, Author's translation)

Thirty years later, in retrospect, I realized the black-and-white chess pieces we worked with, in Shayesteh's miniatures, were transformed into colored pieces. One of the central pieces of Iranian women's struggle against fanatical anxieties has been the introduction of primary colors. Color breaks the edifice of black-and-white rituals.



Cat. 30., Farrokh Shayesteh – Chess Series 1981.  
Water Color. Untitled (3.5" X 4.5").  
Courtesy of Shayesteh

Here, on the treacherous bloody chess board of life, the desert sun has turned the soldier blue. A contemplation of Blue in Red reveals a melancholic palm, reminiscent of Miles Davis' modal composition in 1955, "Blue in Green"<sup>54</sup>, and the jazz standard, "Alone-Together."

Twenty-five years later, this historical fight against the black veil of mourning was captured by Shady Ghadirian's subliminal work, with the female subject smashed into a glass barrier, entitled: "Be Colorful".

54. In modal system, the piece is in depth to Miles Davis, as a piano composition it carries a Bill Evans signature.  
55. Ernst Cassirer 1974, The Myth of the State. "The moral Problem in Machiavelli" p. 143.  
56. Shirin Neshat 2005.



Cat. 31. Shadi Ghadirian  
Be Colorful #2, 2002 60 x 90 cm  
Courtesy of Ghadirian

Shayesteh's chess series grew out of one the darkest historical tragedies in Iran. At the time, he never uttered a word to anyone that he was painting chess moves, nor that his younger 17-year-old brother, against the wishes of his mother, volunteered for the Iran-Iraq war. I personally remember this period, as our friendship grew out of the treachery of this very war.

Machiavelli looked at political combats as if they were a game of chess. He had studied the rules of the game very thoroughly. But he had not the slightest intention of changing or criticizing these rules. His political experience had taught him that the political game never had been played without fraud, deception, treachery, and felony. He neither blamed nor recommended these things. His only concern was to find the best move: the move that wins the game.<sup>55</sup>

In Shayesteh's historical context, color (life) dominates against the black coverage of Iranian women, marking their mourning and imprisonment. It is fair to say that Shayesteh's colors stand completely opposite of Shirin Neshat's<sup>56</sup> work, covering the same history. In methods of approach, they are fundamentally opposites.

Shayesteh's approach of de-centering also differs and defers Ghadirian (Cat. 20.) and her series of Miss Butterfly (Not shown), capturing the "As-is". In Persia or Iran, we never had a black mosque. Even in darkness, color and light permeate our history. In the case of Ghadirian, after her "Qajar" and "Out-of-Focus" series, finally in 2002 she opens her exhibit with a celebration of "Color", that forms the basis of her series in "Be Colorful".

Shayesteh's work speaks of "what-ought-to-be," and not simply "what-is". The "what-is" is the dominant

ideology of any ruling ideas.

Perhaps, what we may call the modern era in Persian miniature is this struggle between “what-is” and “what-ought-to-be”. Beginning with the world of imagination, from Machiavelli's position: what-ought-to-be must win. Life and color must win.

The tragedy of “what-is” also exists in the works of Ardeshir Mohassess (1989, 2008). Here, the tragedy is partly comic. Mohassess, at times, gives us the fanatics, at times the fundamental classes as “As-is”, as socio-cultural (dis)functionaries.



Cat. 32a. The Convict's execution coincides with the King's birthdate ceremony 1978  
Library of Congress, Prints and Photographic Division  
Courtesy of Mohassess Trust

In contrast, in modern miniatures of Shayesteh, we are faced with cultural issues that cannot be reduced to a fundamental class analysis of the society.

We are placed (positioned) within “concepts”, “nomenclatures” and “common sense” that make sense in one context (locality) and not in another context (locality), i.e., fixed sociological categories do not hold, since all categorizations are political acts. Thus, the real question is how or why we categorize and so often miss-identify functional categories with class analysis? Confusing reality with fantasy, as if fantasy can be independent of reality. As if i-rationality has no emotional basis. As if doubt cannot exist.

In Shayesteh work, central is the de-centering of our [opponent's] common sense - a fundamental principal in chess. Furthering the viewers' position in a Machiavelli and Gramscian war-of-position and war-of-maneuver, in cultural wars, away from mechanical slogans. The War-of-position is as much local as is global, as much individual as is collective.

Globally, strategies and tactics are fought locally. Furthermore, in Shayesteh's work, the historical sediments of traditional hierarchies mutate over a longer horizon – be it through the mosque or the “secular” state; for these are matters of the degrees of freedom and separation. Not that rational class

analysis should not be considered. It is, rather, that there should exist “passion” in understanding.



Cat. 32b. Ardeshir Mohassess, Ink on paper -1978  
Author's partial photograph of a much larger drawing  
Library of Congress, Prints and Photographs Division  
Courtesy of Mohassess Trust

It is against such a dark age, away from slogans or single “charismatic” leaders or their expositions of veiled women, that the modern miniatures of Shayesteh needs to be weighed. In these colorful miniatures, what comes across as natural is a historical event and context that cannot be told, but secretly revealed, almost whispered. In this sense, these works, these modern miniatures, are absolutely Machiavellian in nature.



Cat. 33. Farrokh Shayesteh. Pop Corn Series (Berkley)  
Water Color. Untitled. 1981-84. (4.5 x 3.5 inch)  
Courtesy of Shayesteh



Cat. 34. Farrokh Shayesteh  
Pop Corn Series. (Kansas)  
Water Color on Paper. Untitled. 1981-84. (3.5” x 4.5”)  
[Textured background: Native American Design, Arizona]  
Courtesy of Shayesteh

It is against the backdrop of Iran-Iraq war (1980-88) that a Machiavellian world of animation, music, and dance is set against Dante's inferno<sup>57</sup>. In these modern

57. Dante Alighieri (1265-1321) 2017, Dante's Inferno, edited by Daniel Halpern, Amazon Classics.



miniatures, watercolor escapes its own time, condition, context and medium. In Cat. 34. The work is Shayesteh's signature: The medium escapes itself. There is no date, name or signature on the work.

These works challenge our existing order, our existing common sense, and conformities. But most of all they are full of energy and life in the middle of Iran-Iraq war, full of creatures and tragic deformities. Because of these simultaneous polarities, the world we experience (are given) is not “as-is”.

Finally, Shayesteh's modern miniature is a genre of its own. As a class-in-itself, it challenges the existing order. At the cost of repeating myself: It does not make a ghetto of its past: “what-is” is not “what-is,” it is “what-ought-to-be”.



Cat. 35. Farrokh Shayesteh, Pop Corn Series  
Water Color. Untitled. 1981-84. (3.5" x 4.5")  
Courtesy of Shayesteh



Cat. 36. Farrokh Shayesteh, 2/5 hand print. 3.5" x 4.5"  
Fruit Series I (Pomegranate, Iran)]. (2004-Present)  
Courtesy of Shayesteh Archives

Like Billy Strayhorn and Duke Ellington, who composed “Isfahan” in the U.S. (1967), Shayesteh similarly revisits the atrocities of the Iran-Iraq war two decades later, this time in a new light.<sup>58</sup>

The Iran Pomegranate series (2004-Present) that runs parallel with the Japanese Flower series (2004-Present) is nothing but a reflection on a devastating,

bloody war. So tempting, so delicious, so shattering, so violent, so wasted, rotten and confusing, so present with us.



Cat. 37. Farrokh Shayesteh, Water Color, 3.5" x 4.5"  
SAKURA (Cherry Blossom) Japan  
Flower Series I (2004-present)  
Courtesy of Shayesteh Archives

It takes twenty years to revisit a collective trauma of one million wounded and dead, and even then, one has to maintain his/her psychological balance by heavily relying on the Flower series, on Sakuras - war and peace as the fruits and flowers of war.

### 5.1 - Self-Deception or Poverty of Philosophy?

Let us recall what Foucault in 1978 wrote on the Iranian revolution: “This movement has no counterpart and no political order...The paradox, however, is that it constitutes a perfectly unified collective will...demonstrating an extraordinary unity...something like the European students in the 1960s” (Ibid).

### 5.2 Attousa's Letter – An Iranian Woman Writes

On Nov 6, 1978 I came across a letter in *Le Nouvel Observateur*, the simplicity and directness of which captured me. Attousa's letter read:

Living in Paris, I am profoundly upset by the untroubled attitude of French leftists toward the possibility of an 'Islamic government' that might replace the bloody tyranny of the Shah. Michel Foucault, for example, seems moved by the 'Muslim spirituality' that would advantageously replace, according to him, the ferocious capitalist dictatorship that is tottering today. After twenty years of silence and oppression, do the Iranian people have no other choice than between the SAVAK and religious fanaticism?<sup>59</sup>

On the concept of “self-deception” Gramsci, like Attousa, gives us a historic lesson, that neither Mr. Foucault, nor the more liberal moderate man gave it any consideration, because none were challenging their own common sense.

Foucault (1926-1984), a leading intellectual of his

58. Iran-Iraq war has been subject in Amir Naderi's documentary film on war, where he lost two members of his crew while shooting the film. See Naderi Amir 1980, “Josteju Yek”, Search One. The film was banned and by mistake sent to Naderi's film festival in NYC. Author's interview with Amir Naderi – Lincoln Center Film Festival 2001, New York.

59. Affary J. 2005 p. 209 *Le Nouvel Obs.*, Nov 6, 1978 “An Iranian Woman Writes”

time, knew nothing about Iran and its history, but had written books on power and the history of sexuality. He was under the impression that the 1978-79 Iranian revolution was similar to the student movement of 1968 in Paris.

The tragedy was that he was not alone in his way of thinking. Was this an error, a misjudgment, or a seduction of masses as so many seculars in retrospect claim?

## 5.2 Antonio Gramsci & Malfede

How is this choice made? Is it not frequently the case that there is a contradiction between one's intellectual choice and one's mode of conduct? Which therefore would be the real conception of the world: that logically affirmed as an intellectual choice? - or that which emerges from the real activity of each man? And since all action is political, can one not say that real philosophy of each man is contained in its entirety in his political action?

This contrast between thought and action, i.e. the co-existence of the two conceptions of the world, one affirmed in words [spirituality] and the other displayed in effective action, is not simply a product of self-deception [Malfede].

Self-deception can be an adequate explanation for a few individuals taken separately, or even for groups of a certain size, but it is not adequate when the contrast occurs in life of great masses. In these cases the contrast between thought and action cannot be but the expression of profounder contrasts of a social historical order.

It signifies that the social group in question may indeed have its own conception of the world, even if only embryonic; a conception which manifests itself in action, but occasionally and in flashes-when, that is, the group is acting as an organic totality. But this same group has, for reasons of submission and intellectual subordination, adopted a conception which is not its own but is borrowed from another group; and it affirms this conception verbally and believes itself to be following it, because this is the conception which it follows in 'normal times'-that is when its conduct is not independent and autonomous, but submissive and subordinate.<sup>60</sup>

It follows that this historical submission and subordination to the Sorcerer, while revolting against the dominant, remains subservient to the sub-dominant ideology. Does it not?

Subservience to Pirmardeh Khanzar Panzari occurs in peace time and it is in peace time that men plan for war. Do they not?

The implications are severe. We may trace the history of submission not simply of the ecclesiastics to the Monarch, but also to civil-society's "customs" that are secreted into the liberal and the left. These customs of segregation, dominance, and subordination permeate all its members, independent of their plans of actions and slogans, especially as it relates to their superiority complex over gender, which cuts across fundamental classes.

The technocratic Iranian organic intellectuals, like the "entrepreneurs" were, and continue to be, trained to deal and think scientifically in relation to machines and labor, and not to deal "spiritually" with machines. The function of the technocrat in the society is not "spirituality".

In contrast, the traditional intellectuals, the clergy through the religious schools and the mosque and their hierarchic networks in rural and urban areas function as propagators of norms of virtù and destiny through tradition, authority, rituals, and law.

In short, they have long been civil society's ideologues, producing and reproducing ideologies not machines. The left or what is left of it, in its mechanical economic approach to State-Civil society relations, has often considered the clergy as an unproductive class of parasites; part of a vast bureaucracy of unproductive labor.

The Clergy, however, is quite productive. It has always played a significant role in establishing "norms," not just for itself as specialists in supra-natural forces by interpreting God's word on earth, but also "norms" for the conduct of "Seculars", especially as it relates to property ownership, taxation, finance and distribution (charity), leadership in bazaar guilds, and mass mobilization in rituals.

Thus, we always have had a State within a State. A State deep within Civil Society, not of a military nature, but of an ideological-financial nature, in schools, in mosques, and beyond; more powerful than any guns.

Attousa's letter warns us, and not Mr. Foucault, of this mass-collective historical hysteria of self-deception, replacing a dominant form that is hated with another deeply seated sub-dominant form of Spiritual (e)State that is loved.

In the words of Giovanni Gentile<sup>61</sup>, "This State cannot be irreligious, because the absolute value and authority it confers on itself would be incomprehensible without a relationship to a divine Absolute" (Gentile Spectre 3, Nov 1928 pp. 36-37).

60. Gramsci Antonio 1991, Selections from Prison Note Books p. 32.

61. Giovanni Gentile (1875-1944), was the philosopher of fascism and ghostwrote the doctrine of fascism with Benito Mussolini. Gentile was minister of education under Mussolini and was assassinated in 1944.



Cat 38. The Royal Court's greatest Painter  
Accomplishing the most important assignment among his artistic activities. 1976  
Library of Congress, Prints and Photographic Division  
Courtesy of Mohassess Trust

Naturally “Modern Persian Miniatures” with its belief in the ability of the creative human mind, free from the State, fundamentally stands against Gentile's concept of the individual, where the individual is in the service of the State, where the ethical conception of State has an autonomous personality, where the individual's interest is the realization of the personality of the State, as consciousness and as will.

### 5.3 Pasolini's Observations on Iran

According to Pasolini who visited Esfahan before 1978-79, this new power, is caused by a “mutation” of the ruling class, in reality, if we want to keep the old terminology, a “total” form of fascism. Pasolini is accurate on “mutations”. On the Ashes of Gramsci, he writes:

Di Chi Soltanto nella storia ha vita,  
Potro mai pou con pura passione operare,

Se so che la nostra storia e finite?  
Of one who can live only in history,  
Will I ever again be able to act with pure passion  
When I know our history is over?<sup>62</sup>

Thus, we understand Pasolini's painful realization, “that the radical sentence that they pronounced against their fathers - who were of the preceding culture - by raising against them an insurmountable barrier, ended up isolating them, preventing them from a dialectical relationship with their own past.”<sup>63</sup>

### Conclusion.

#### 15.0 At the Exhibition - 1987: The paradoxes of Persian Miniatures

– Fiction & Reality.

Winter of 1987- while attending one of Shayesteh's group exhibitions with his classmates at Berkley, to my surprise I learned that Shayesteh never attended his openings. At the center of exhibition there stood a

grand bouquet of flowers. I had already seen most of the paintings in the privacy of Shayesteh's home. But here, in this golden-lit exhibition with its parquet floors and white walls, they were neatly framed and arranged by time sequence of execution. It was a group exhibition, yet the crowd had gravitated to the central hall where only Shayesteh's works hung. His sequenced series like film would fade-in and fade-out.

Soon, not the miniatures but the reaction of the viewers, their faces, pauses, figures and latest fashions, cut my attention. Leaning against the wall, motionless, I took a rest, contemplating. I did not know any of the other young artists.

Suddenly, an old Khanzar Panzari man in yellow slippers and a silver ring with large agate stones approached me:

“How much?” he asked.

“How much what?” I said.

“What is the price on these?”

“I am not the painter,” I replied.

“You know him?” he asked

“Everyone knows him - just ask anyone here.”

Under his elegant, cream-colored robe, he pulled out a dirty blood-stained handkerchief, and then to my surprise, a white silver engraved card: “This is my card, please ask him to call me,” he started to laugh, causing his shoulders to shake, revealing his age-yellowed teeth.

I was terrified. There was nothing to laugh at. This was the same old man who had seemingly popped out of Sadr Shairzi's work: The Slave Market. Had he popped right into the middle of the “Popcorn” exhibition? This sleaze was now dressed in golden striped and cream-colored robe, alive?

Before I could utter a word, he turned around, and walked out, his shrieking laughter making my hair stand up the entire time. His cheap rose water perfume lingering.

Then suddenly, I noticed a girl in a tight orange colored shirt, standing in front of the Popcorn works. Under the golden light, the curves and black-red colors of her hair caught my attention. she was standing motionless. I wanted to see her face. Who is she? I thought

Slim, she had a narrow waist, long arms and slender wrists — a striking little pearl earring and matching necklace adorned her presence. Her hair flowed like

62. Pier Pasolini 1957, *Le Ceneri di Gramsci - The Ashes of Gramsci*.

63. *Ibid*

one of Shayesteh's Japanese nude brush strokes: free and spontaneous.

To see her face fully, as if I was going to study the "Popcorn", I took a step closer; when suddenly, she broke her solitude. Those same eyebrows; the same eyes; unmistakably it was her. I said to myself, it cannot be! She stepped back, smiled, and gracefully walked into the next hall.

She left me stunned. All the colors of the plate, like a wave, were rushing towards me. Albeit missing her crowning glory, she otherwise matched the image on the plate perfectly.



The crowd had suddenly swelled, and was now blocking my view of her. A young girl approached me. "Are you the painter?"

I smiled, "Me?"

She said, "Are you?"

"No!", I said in frustration.

Disappointed, she asked, "You know where I can find him?"

Knowing I was running out of time, I said, "Just a minute please!" and pushed my way through the crowd, into the seemingly empty hall, where other students' works hung. I checked the pathetic empty space: The girl was gone. I looked across; there hung only the exit sign. I pressed my way through all the drinks and chatting, and pushed the door outward. A cold breeze hit me in the face. She must have just walked out. In the wide-open space, it was drizzling; heavy fog creeping in. As far as I could see, there was no trace of her, only a white mist rolling on the ground.

Raindrops were making their points. Slowly, the sound of multiplying popcorns occupied my mind; and in the solitude of their depth of field, there it was: the carnival of imagination, popping between my reality and her fantasy: This solitude of longing.

With a smile, she had just walked out of my life – without a word. The only proof I had of actually seeing her were my muddied shoes and Pirmardeh Khanzar Panzari's business card in my hand. For the more I desired the girl, the more I despised this old

man and his yellow laughter.

I tried to temper my sorrow. Or was it my frustration? Each popcorn, slowly popped a space of hidden conformities, into bloody pomegranate deformities. These anthropomorphic forms, simply burnt and popped! Here again, the centuries-old yellow teeth and laughter popping.

Reminiscent of Dante Alighieri's underworld of hell, the old Khanzar Panzar was quietly munching his own hand. No wonder his dirty handkerchief was bloodied. We are all conformists of one form or another; the only question is what form this conformity takes, and whose interest does it serve?

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# **An Examination of the impact of Technology on the Accounting Profession and Traditional White-Collar Jobs in the 21st Century**

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**Abstract:** The objective of this research is to address a growing concern within the United States over the proliferation of AI and information systems which have increasingly altered standard business processes. The prevailing notion of maximizing productivity stands as both an immediate threat to professionals in all industries and resides as a hindrance to the prosperity of the middle class. Analysis upon a particular industry, such as the accounting profession, serves as an effective starting point for identifying microeconomic disparities associated with technological growth. Research will further enable a broader investigative report to be conducted identifying a possible correlation between disruptions in the accounting industry and transformations in geopolitical, social, and cultural landscapes. It is with economic data, objective analysis, and a sound theoretical framework that a better understanding will be reached on the subject and that improvements will be made.

Keywords: Technology, Accounting, Information system, Expert Systems, Artificial Intelligence, Income Inequality

## **Introduction**

An unprecedented force capable of disrupting global economies now dwells at the forefront of a new chapter in American history. In the late 18th century, acclaimed author Charles Dickens described the developments of the French Revolution as the best of times and the worst of times. More than two centuries later, this indelible phrase refers not to an unstable European sovereignty, but instead captures the turmoil of a modern democracy depredated by continued class struggle and the divided elements of transformative technologies. Upheavals of every caliber manifest in the dichotomy of a technological revolution which creates immeasurable opportunities for some while initiating an endless cycle of poverty and wage stagnation for others. The Accounting industry encompasses but one facet of this new affliction, forming a subject of analysis advantageous towards studying the greater effects of technology on the society of the 21st Century.

## **Identification of Problem**

Since the dawn of intelligent life-form, technology has existed in a manner of sustaining growing populations while augmenting the number of possibilities available during the era. The term "Technology" is often associated with (IT), but its denotative form simply represents a method for improving a process or objective. Homo Habilis's capacity to complete difficult tasks with the utilization of stone tools represents one of the earliest forms of a technological advancement (Hart-Davis, 2007). Invariably, such benefits derived from external assistance of homo sapiens mental and physical capacity transitioned into later advancements such as the printing press, electricity, and the splitting of the atom. Dissemination of these rare luxuries across a vast majority of society

inculcated individuals of lower social status with the desire to attain greater information about the world and how to satisfy their needs.

In rapid succession, these advancements were inscribed in the pages of history, soon leading to the Industrial Revolution which symbolized a permanent shift from archaic manual labor processes. It was at this point that technology could be fully identified as having an inexorable journey in the course of human history. Little could be done to control technological disruptions, as millions of workers across Europe toiled in extreme poverty. Technological advances brought about the rise of doomsday economists such as David Ricardo, Thomas Malthus, and Karl Marx . (Piketty, 2013). In the United States, Robber Barons, such as Cornelius Vanderbilt, Andrew Carnegie, John. D Rockefeller, J. P. Morgan, knowledgeable of the impact of new technologies on the economy, began to undermine the working class in order to augment their own wealth. Inequalities, forming an almost ubiquitous presence across every international market, signifies the first example of the pernicious effects of technology.

The economy of the 21st century warrants for greater concern into the almost autonomous existence of technology. Competition between powerful entities soon ameliorated the worries of the 1800's and early 1900's, eventually creating an almost antithetical framework for judging the development of capital markets. The first half of the 20th century experienced massive stagnation in the wake of the great depression, however technology soon reappeared at the forefront of emerging markets allowing coexistence between skilled workers and machinery. Advancements proceeded into greater efficiencies forming the atmosphere from which IT has emerged. A new era in history commenced,

witnessing deterioration in the coexistence between Man and Robot. At the heart of this issue arises the greatest threat posed against global prosperity and preservation of the working class.

### **Significance of the Problem**

One of the main issues associated with IT, is its inability to be classified into orthodox economics (Ford, 2016). Upon collection of research material, it was quickly discovered that traditional economic approaches failed to identify the ramifications of establishing an economy reliant on the developments of information technology. An outdated framework has mistakenly encapsulated almost every economic theory in which the detrimental impacts of technology on society are rarely ever identified. The term “creative destruction” has become a cliché phrase creating a false sense of illusion in that whatever technology delivers it is somehow beneficial to the general welfare of society. In many cases however, the underlying issues of technology remain undetected, being acknowledged only when climactic social and economic issues appear. A consumer buying the latest iPhone only recognizes the acquisition of a new and improved mobile device. He or she does not comprehend the complexities of the artificial intelligence (AI) included in the hardware such as Wolfram Alpha, capable of displacing white collar workers in almost every industry. Such flawed way of thinking reflects not only the general consumer market but is reciprocated by economists depicting IT as a negligible phenomenon in the course of capital growth. The simple truth is that technology still remains an enigma for most economists and theorists.

The opinion of one entrepreneur in Northwest Indiana (NWI) captures the unease associated with technological growth, “You cannot stop the growth of technology, you can only deal with its repercussions” (Bush, 2017). Democracy, the enduring heart of America, rests on the brink of complete irrelevance as capitalism now entirely functions in its own separate domain. Innovation sometimes driven by avarice on the part of entrepreneurs and sometimes guided by the motivation of visionaries, has contributed to the technological atmosphere of the late 20th and early 21st century. However, the research included in this investigation will demonstrate that markets, left to their own devices, will eliminate the possibility of accomplishing the American Dream such that upward social mobility is impossible, the pursuit of happiness is no longer an obtainable goal, an inimical cycle of drudgery and hopelessness is delivered to those unfortunate of having been born into a wealthy family.

### **Employment Outlook**

An in-depth focus was adopted in this research project into the employment outlook of the Accounting Profession with correlation to technological advancements. This initial facet of research exploration forms a microeconomic lens by which to analyze the research question.

Serving as an ideal example into a “traditional” profession that is faced with disruptive forces, the accounting profession symbolizes the heart of business operations both nationally and internationally. Procurement of AI systems threatens not only the livelihood of individuals with minimal training in the accounting profession, but also those who have acquired more advanced skill sets.

Identification of growing job opportunities completely unrelated to technological influence may be effective in correctly discussing all variables of the accounting profession. One of the most important shifts within the accounting profession in the near future is the growing retirement of certified public accountants (CPAs) in the United States over the next fifteen years (Timm, 2008). Not only is there a national shortage of CPAs, but this shortage is almost equally spread across every geographic region of the country. As prescribed by the basic laws of supply and demand, market efficiency may only occur in the event that consumer purchasing power equalizes with the input of suppliers. Despite an overall decrease in the household expenditures of accounting services (Scarborough, 2017), the demand of these adroit financial examiners still remains high as companies need more accounting services than ever before. Opportunities rest not only in addressing the growing complexities of the American tax code, but also in developing solutions to meet the unique financial challenges of the century. The term “silver tide” which refers to the growing retirement of baby boomers will encompass not only manufacturing jobs, from which the term original stemmed, but will also include many accounting jobs. The information provided within this paragraph establishes a foundational argument that supply is a crucial point of examination, as the growing retirement of workers will either be filled by younger workers or by sophisticated Artificial Intelligence (AI) systems.

Contrary to the opinion of individuals employed within this industry, the eradication of lower level accounting jobs is almost inevitable as technology approaches heights of colossal stature. While the demand of nearly every accounting service remains intact, the important question to consider is the direction in which supply will meet these needs. Entrance into professional services by advanced

technology has often occurred in the form of automation of the most basic job titles of a company (Ford, 2016). In relationship to accounting, the most redundant tasks occur in journal entries and the repetitious process of preparing financial statements. Even constructing a corporation's tax report may become a task executed by even the cheapest AI system. While QuickBooks and a variety of other software programs simplify the process of filing a tax return, the assistance of CPAs has historically been necessary in ensuring that it is filed correctly. On a corporate level and even for medium sized businesses, CPA firms have been indispensable tools in maximizing tax returns, proving to be an almost annual expense on behalf of the client company. However, the proliferation of technology may soon obstruct a large portion of income received from performing taxes simply because of the redundancy that leads way to greater automation.

In the coming decades it will become harder for bookkeepers to maintain a role in the economy. Individuals looking to enter the accounting industry, will not find solace in simply obtaining an entry level accounting job doing journal entries or invoices. Critical thinking, capable of pushing financial limits will be the only way of thriving in an industry in which millions of workers will be displaced. According to an extensive analysis conducted by National Public Radio, Inc., bookkeepers have a 97.6% chance of being automated in the future. This percentage is based on a variety of data subsets such as the need to come up with clever solutions, requirement to personally help others, tendency to squeeze into confined spaces, and the need to negotiate on the job. In appendices A and B, supporting evidence in this matter is shown.

Similar examination of accountants and auditors using the identical metrics yields nearly the same results. See appendices C and D. According to NPR.org, accountants and auditors have a 93.5% chance of being automated in the future. Analysis of cleverness, negotiation and ability to help others was measured to provide a possible overview of the long term developments within this field. These findings can be used as one parameter by which to analyze the subject.

At the forefront of this research examination rests a need to identify a correlation between revenue generated within the industry and the number of accounting professionals who are employed. Improved innovation often leads to increased productivity in the workplace, contributing to greater output and revenue with less workers being used. To further understand this principle, graphical analysis

will be used starting with figure E9.

According to the evidence presented in appendices E-M, despite the decrease in household expenditures on accounting services, the overall revenue of the industry has increased in recent years, by approximately 14.8% between 2009 and 2014. As a measure of determining human capital efficiency gains, the relationship between revenue and employee count will be examined. To provide a more complete analysis of this concept, three different measures will be used by which to analyze these patterns: Revenue and Employee count by Service Line and Region, and a separate analysis of employee growth by position. The Tables located in appendices N-P, summarizes this analysis.

The trends expressed by the tables in appendices N through P demonstrates two key factors. First, the percent change of employee count has been greater than the percent change in revenue when looking at individual service lines of Ernst and Young between 2009 and 2016. What appears to be an optimistic data pattern quickly shifts when narrowing down the scope of analysis from seven years to a one-year time period between 2015 and 2016 and looking at region rather than service line. Between 2015 and 2016, recent data supports the conclusion that revenue is actually starting to accelerate faster than increases in employee count. This pattern holds true in America, but is especially concerning in Japan where revenue increases were 23.76 times larger than employee increases. Such concept reiterates the principle that a greater return is being earned on capital with an unequal increase in inputs needed. Most likely, this may be directly attributed to technological advancements within accounting firms or indirectly as technological diffusion through related markets impacts consumer demand for accounting services.

An anomaly however exists when applying this previous concept to the idea of tax services. As will be described more in detail, tax services at least for ordinary Americans is most susceptible to automation by advanced AI systems. Between 2015 and 2016, revenue acquired from tax services by Ernst and Young actually increased by 3.47%. Employees who were needed to perform these services increased by a total of 7.03% during the same time period. So despite rapid technological advancements detrimental to the outlook of tax accountants, revenue increased in this division with contribution from an even greater increase in the number of tax accountants. In explaining this pattern, it is probably beneficial to identify the clientele of Ernst and Young. Unlike many commercial businesses such as H&R Block who perform taxes for

ordinary Americans, Ernst and Young and the other three biggest accounting firms perform taxes for large corporations and government institutions. They are essentially dealing with millions of dollars and must abide by the highest federal regulations. The evidence presented by a 2015/2016 analysis of employment and revenue patterns primarily focuses on the more skillful execution of tax services, demonstrating that there are still plenty of opportunities in the higher echelons of tax accounting despite the growth of technology.

In separate fashion, concern with upward social mobility also guides this research project.

The ability to change one's social status predominately results from improvements in professional outlook and annual salary. Analysis of KPMG, another influential accounting firm, may be used to analyze how mobility is occurring within the accounting profession and how these trends could potentially represent the overall macroeconomy of the United States. Resembling the nature of social hierarchy where a majority of the population is located on the lowest rung of the ladder, growth by position was largest amongst lower level job titles. What proves to be interesting however, is the rate at which each position is growing. While growth of normal professionals at KPMG increased by 39.83% between 2010 and 2016, and 9.67% between 2015 and 2016, the growth of administration and partnership roles also rose substantially. The difference between administration and partnership growth was very minimal indicating that opportunities resided in two divisions of upper management in the firm. Data concerning external and internal hiring and the overall average salary growth are not provided, but the statistical evidence that has been described still adds value to this exploratory analysis.

Evidence from the Bureau of Labor Statistics (BLS) may further be used to provide another viewpoint on the market trend of the accounting industry. In 2015, the unemployment rate for accountants was 2.5% ("Accounting Ranks", 2017) far lower than the national average of 5.26% (Databases, 2017). Growth lingered at 11% and the number of jobs the previous year was 1,332,700. Accountant and auditor roles are typically divided into two categories one of which are clerical positions and the rest being more senior level positions. Data provided on BLS.gov directly supports the belief that lower level accounting positions such as clerical roles will encounter a significant reduction in growth as many AI and computer systems perform the repetitive processes associated with these jobs. Evidence to

support this claim rests on the precipitous decline in salaries for accounting, book-keeping, and auditing clerks as well as a decline in the number of these jobs from 2014 to 2024.

In addition to transformations in the Accounting Industry, a variety of other white collar professions such as the legal field have fallen victim to the threats posed by enhanced IT. Articles published by Law Technology Today and Law Practice Today provide greater insight into the impact that AI is already having on Law firms. With uncanny resemblance to the accounting industry, technology has infiltrated the legal field by first automating the most substratal aspects of the profession. Paralegal jobs and assistant roles all face extinction in the proliferation of advanced computer systems (Hussain, 2017). What becomes more alarming, is the threat posed against even the most adept attorneys with extensive experience in handling legal disputes. Increasingly, AI is now being used not only as an influential tool in the litigation process, but in some cases is working just as hard as the attorney in arriving to solutions. Experts studying this phenomenon envision the law firms of the future relying almost entirely on AI for the critical reasoning and research process of litigious work, and using humans only to verbally communicate the findings to clients. In the wake of continual improvements of IBM Watson's speech capabilities, even this later role faces the risk of automation.

Greater occurrences of jobless recoveries now pose added challenges to those who are struggling to remain in the middle class. The great recession was the initial spark in creation of a jobless recovery, eliminating many jobs which have typically formed the foundation of middle class economic growth (Ford, 2016). Employers, opposed to hiring in the midst of a recession, began searching for other avenues to fulfill their business needs while saving on expenses. Information technology and a variety of other interrelated innovations appeared so that even when the recovery process began, millions of people across the country failed to secure a steady source of income. What has resulted is either the complete obsolescence for labor in certain industries, or more typically underemployment encapsulating reduced pay and reduction in the amount of full time jobs. A new economic situation has spread throughout the United States, notably called "Job Market Polarization." With attack upon these middle class jobs, remaining opportunities reside in higher paying positions requiring extensive training, unobtainable by most of the population, or in complete reversal, menial jobs which are unable to provide the pay essentials in avoiding severe impoverishment.

Discouragement in the job market reflects not only the dire conditions of the recession, but has continued even into the recovery period. As displayed in Figure Q18, the labor force participation has been long in decline even before the 2008 Great Recession.

Macroeconomic examination of developing trends proves to be relevant in the discussion of economic growth of the accounting profession, as these variables are parallel to many other industries in the 21st century. A topic of important consideration rests in analysis upon the markets which generate the largest amounts of revenue in today's economy. In fact, it is not so much, which industries fall susceptible to automation but rather who is in control of these transformations. "Who" being a specific company rather than an individual person. To understand this concept, one should refer to Figure R19.

As demonstrated by the model in Appendix R, the key to thriving in the changing markets of the 21st century is to conduct business operations either along the head of the graph or along a majority of the points on the right tail. Such theory is evident in the financial success experienced by companies such as Google, Microsoft and Apple. Not only are these companies able to drive consumer demand in an orientation of mass marketing, but they are able to further satiate consumer tastes with niche programs, applications, and customizable software. While the finance sector represents one of the greatest industries in which wealth has been aggrandized over the years, competing against large technology corporations who yield vast market share, signifies an alarming disequilibrium. Individuals who are displaced by automation encounter significantly fewer opportunities to harvest the resources of the Long Tail graph. For the preservation of the working class, this winner takes all theory equates to greater inequality in the economy.

The employment outlook of white collar jobs may eventually depend almost entirely on the "human touch" involved in a service transaction. As discussed in the next category, AI systems are approaching a new level of nearly equal human intelligence and oratory skills, however soft skills, such as empathy, compassion, and moral direction, required in many professions today leave a degree of safety in the amount of automation which may occur.

Effectively presenting quantitate evidence derived from an information system in a personable manner, places greater value on the employee and allows such person to apply dynamic approaches to coming up with better solutions. The accounting industry alone has seen the sheer importance of communication

skills as even the personality makeup of may accounting firms has changed over the past twenty years. Both accounting students and professionals working in the field express more outgoing personalities essential towards group collaboration and diffusion of ideas across the company. The outdated stereotype of accountants being isolated socially introverted individuals no longer holds true in the 21st Century as technology reshapes the work environment and places greater emphasis on interpersonal communication.

### **Analysis of Information Technologies being used**

It would not be appropriate to discuss the negative externalities of technology without identifying the nature of the specific hardware and software being used. Technological propagation infringes upon nearly every job in the modern economy warranting for a greater need in identifying its threats on both a macro and microeconomic level. The following section will be used to bridge the gap between the microeconomic examination of the previous section and the macroeconomic examination of the next section.

When thinking of the usefulness of technology, an almost immediate response is that technology performs advanced calculations that would usually prove to be arduous for a human being. Calculators are one of the greatest examples of technology performing sophisticated computations and algebraic processes. The process of learning trigonometry often simplifies to just learning when to apply Sin, Cosine, or Tangent to a problem and then reaching the solution with the assistance of a calculator. However, technological evolution has propelled these feats into uncharted territories, forming the basis for an array of technological transformations in the twenty first century.

The advantage human beings possessed in being able to process information from a practical standpoint quickly dissipated in 2010 when Watson took to stage for a game of Jeopardy against the reigning champion. Years earlier, Deep Blue mastered the science of winning chess in 1997, proving to the world that a computer was better adapted towards completing activities which required logical and strategic thinking. Years of work by talented

IBM programmers produced an AI system poised to disrupt nearly every profession in the world.

Medicine, Education, Fashion, and even preparing taxes all fall into the cognitive abilities of Watson. Learning approaches forming the basis of many law school, medical, and even advanced business programs prove obsolete when paired against the

capabilities of Watson who will never forget a court case, a particular surgical procedure, or economic model. Not only is this information available at all times, but it can quickly be gathered and applied to any problem that is presented.

Focus on replicating the human brain forms the latest initiative in pursuit of greater advancements in information technology. Artificial neural networks encompass a massive project aimed at recreating the neural networks of the human brain. From this initiative stems the subjects of machine learning, deep learning, and genetic programming signifying promising efforts at cloning the rationale and creative processes of Homo Sapiens. Additional endeavors of this nature center on improving the verbal capabilities of AI systems which are able to interact with human beings with minimal error. These efforts have all been undertaken by growing technology companies such as Google, IBM, WorkFusion, Momentum Machines Inc. and a variety of other discrete companies focused on continually enhancing the sophisticated capabilities of AI. Predicative surmises contribute to the somewhat alarming possibility that AI improvements over the next ten years are likely to replace more white than blue collar jobs, a theory based on the fact that IT is now better trained for higher order thinking than physical labor. A slight impediment to manufacturing automation is the keen visual perception and dexterity needed that has not been fully imitated by Robots.

Technological presence in the modern age equally presents the concern tied to its ability to adapt to nearly any scenario. Massive sharing of software programs and cloud computing form the start of a new trend across the domestic economy in which many companies flock towards a standardized Enterprise Resource Planning (ERP) system and then proceed to modify its components in order to meet individual needs and objectives. The abundance of proprietary software makes the execution of business services both cheaper and more labor efficient. Software customizability combined with cloud robotics enables a company to terminate skilled workers who are incapable of competing with the effective and efficient performance of information technology. While mainly relegated to medium sized manufacturing businesses, this inimical process is set to impregnate the operations of millions of enterprises across the United States, including that of the accounting profession.

Optimism may lie in the specific direction that accounting IT is beginning to take. Rather than narrowing accounting tasks down to a specific

science, an idea typically associated with ERP systems, accounting information systems appeals to an unstructured body of knowledge

(Hall, 2008). During the initial implementation of ERP systems in the late 1990's and early 2000's, information systems served as guidance in the accumulation and refinement of structured data. This allowed harmonious existence between employees and technology. Employees used efficiency garnered by the ERP systems to more effectively fulfill their job responsibility and to improve the financial success of the company. Many of these legacy systems are still in place, however innovation has created a new generation of ERP systems capable of analyzing both unstructured and structured data. These systems have almost completely eliminated data silos and integrated every division of corporate operations. Asking the question of whether a company could ever become an entirely autonomous entity twenty years ago would have produced almost comical feedback. Asking the same question today would warrant for serious examination into the marvelous improvements of IT over the past two decades. A system which can automatically match supply and demand, avoid errors in the collaboration between various departments, and even develop guidelines for handling unorthodox challenges, stands firm in being able to automate many jobs.

What differentiates accounting information systems from the general prospectus is a core focus on ethical responsibilities and internal control. Following the collapse of Arthur Anderson and Enron in the early 2000's, the accounting industry adopted new standards for enforcing ethical behavior. Adaptation of stringent internal controls rested partially on the efforts of legislative reform, culminating in the passage of the Sarbanes Oxley Act, and partially on the concern of investors looking to protect their assets. While many ERP systems primarily cater towards simply maintaining efficiency, accounting ERP systems are largely concerned with improving financial transparency both internally and externally. Even in the midst of massive technological innovation, auditors still maintain sound job security as compliance with federal laws and regulations requires the efforts of both machine and human.

### **Social Disruptions**

At the core of this research investigation are the effects that technology will have on the general public, establishing a broader macroeconomic examination. Growing disparities marking the period of English mechanical innovation during the 19th century serves as an underlying example of the

potentially disastrous effects if livelihoods are thrown into jeopardy (Bloy, 2005).

During upheavals of the European Industrial Revolution, a group of individuals known as the Luddites came to prominence. Resistant to mechanical automation, these Englishmen vandalized factory machines in the hope that pervasive industrialization would decline, allowing for workers to retain their jobs. Upheavals ended only when brutal military intervention was enforced. A similar movement followed, coined the “Captain Swing” posing social disruptions of similar gravity, aimed at addressing the mass hysteria over factory mechanization. Although appearing to simply be the events of historical ferment, the issues leading to these revolts rekindle in the computer era, guided by growing concern over the threats of automation of both low skilled jobs and increasingly that of white collar jobs. With respect to historical chronology, mechanical innovation allowed workers to veer into more skilled jobs increasing wages and standard of living. Innovation derived from information technology, however, thwarts the possibility of obtaining better jobs as AI is becoming exponentially proficient in replicating the entire framework of the human rationale process.

Based on evidence presented in this investigation, a hypothetical timeline may be constructed outlining possible social developments set to occur over the next half century:

1. Technology improving standard of living and financial well-being
2. Worker migration to fewer industries, increasing the level of competition for select jobs. This period will be characterized by the need to reevaluate career goals and to redefine the skillsets of the American Workforce.
3. Unemployment reaches an all-time high. Social unrest and the demise of governments and traditional forms of leadership begin to take place. While technology will basically be a universal tool, the foundational strength of sovereign nations will ultimately determine who dominates foreign policy matters. The division of financial capital will become more important and may result in greater inequalities amongst nations.
4. Corrective measures are taken, attributed to greater intervention of governments and legislative reform. The market will attempt to correct itself naturally, but more than any other financial crisis in history, success will depend on

the policies put into place by the government.

5. Extreme regulation of technology including regulation of certain algorithms. AI systems may be banned in certain industries and will be implemented in a quantifiable capacity depending on the size of the business and its operational goals.

While appearing to be an almost dystopian portrayal of the future of the United States, this model has grounding in the shifts of economic uncertainty increasingly prevalent in the modern economy and the socio-cultural issues dominating national affairs. One point of examination to refer to again is the analysis of jobless recoveries. As described previously, jobless recoveries not only eliminate many jobs forming the employment opportunities of the middle class, but more importantly divides society into a type of pyramid where the top becomes relegated to only a small portion of the population. A common theme associated with the “American Dream”, is the concept of Upward Social Mobility: the enduring ideal that despite ones origins, fluidity into a higher socio-economic status is made available to all. Wage stagnation at the hands of technological threats in nearly all industries has hindered the possibility of obtaining upward social mobility despite the acquisition of higher education. Even if this concept were not alarming enough, the ability to even match income of the previous generation has declined as many college graduates are left doing menial blue class work (Kafkas, 2017).

Competition on an international scale may further be used to support the five step timeline. Labor arbitrage, also known as outsourcing, poses one of the greatest threats to many Americans and those who will enter the workforce in coming years. China and Japan, competitors to American hegemony, extend the negative externalities which are produced by technological innovation. For years, the concept of outsourcing jobs has mainly described the reduction of manufacturing jobs within the United States, saving many companies millions of dollars annually. Progressively, countries such as China, Japan, and many other Asian countries have based a large percentage of their economies on the influx of outsourced jobs subsequently stabilizing their continued economic growth on the national stage. However, an inimical cycle is such initiated when automation begins to infringe on these manufacturing jobs which have historically been performed by cheap labor. Growing wages within these countries have resulted in the decision of many American companies to replace cheap labor with that of advanced robotics capable of performing the same



work quicker and more accurately. Foreign countries almost entirely dependent on these manufacturing jobs experience significant economic instability as workers are put out of work either permanently or for extended periods of time. Faced with massive unemployment and an inability to support their families, these individuals have sought higher education, however in countries like China where higher education is one of the most competitive in the world, a very small percentage of graduates are granted decent paying jobs. The market has become saturated leaving these individuals with no other choice but to flock to the United States to seek better employment opportunities. What results is an interconnected economy in which only the brightest and most adroit individuals are capable of securing middle class jobs, with the possibility of rising to a higher socio-economic status remaining statistically low. Those with the highest intelligence succeed while people labeled as “average” suffer in economic turmoil and poverty. The advantages associated with the division of labor, as proposed by Adam Smith, in which everyone, even those who are less talented, contribute to the macroeconomy will no longer be a practical theory in the 21st Century.

Study into suicide rates serves as another lens by which to view the subject. Once again, China, may be used to analyze how shifting economic tides affect societal welfare. The theory that average people will not survive already holds true in a country like China, where educational accomplishments almost entirely determine the likelihood of being able to enjoy a comfortable life. More than any other country in the world, competition is extremely fierce amongst students who are aware that jobs are provided to only the top percentile, leaving the rest with daunting uncertainty as to their future livelihoods. Suicides have often resulted from these pressures, but what proves to be important in this examination are not the challenges posed by a cutthroat competitive environment, but rather the long term ramifications when people realize that their opportunities in life are severely limited. This theme may be reflected in the study of suicides as it relates to fluctuations in the business cycle. It has been documented by (Luo, Florence, QuispeAgnoli, Ouyang, & Crosby, 2011) that suicide rates often increase during times of economic downturns. It is not just because jobs are unavailable in the current period, but the possibility of not being able to find a job six months, a year or even two years down the line, proves to be as equally terrifying. However, this later statement forms almost the exact definition of jobless recoveries and decreased labor force participation rates that have been described earlier. Suicides stemming from

pecuniary obstacles would not form a huge topic of discussion if it did not have some correlation to some of the other major causes of suicide. Refer to Table S4.

During economic downturns and climactic social inequalities, all fifteen of the issues shown in Table S4 may diffuse across society as self-confidence is shattered, optimism transmutes into extreme pessimism, and the bonds unifying a nation are severed. Historically, people have either fallen victim to these impediments, initiated violent upheavals, or have flocked to charismatic leaders, often with malicious intent. The Great Depression of the 1930's allowed people like Al Capone and John Dillinger to become revered public figures. In Germany, Adolf Hitler rose to power, culminating in the destructive forces of the Nazi regime and the death of six million Jews, seven million Soviet civilians, three million Soviet prisoners of war (POW) and 196,000 Roma people.

Explanation of the social disruptions described above, have roots in the basic psychologically of human motivation. One of the most comprehensive works on the subject, Theory of Human Motivation by psychologist Abraham Maslow, describes the in-depth hierarchal order of human impetus. Physiological needs, safety needs, belongingness and love needs, esteem needs, and self-actualization divides human motivation into five categories allowing for meticulous examination into each individual subset. What lies at the bottom of Maslow's pyramid are physiological and safety needs prescribing Homo sapiens urgency in acquiring necessities such as food, water, warmth, rest and security. As quality of life improves and these prepotent needs are satiated, other needs appear, eventually constructing the pyramid that is shown in Figure T20.

According to Maslow and a majority of other psychologists today, a satisfied need is no longer a relevant need, however in biological terms it still is. A person earning \$50 million a year desires food, nourishment, and shelter just as much as a person who earns minimum wage. What technological innovation has essentially done is to mask the enduring prerequisite in satisfying the most basic needs such as physiological and safety motivations. A computer programmer designing the latest AI system, focused on “improving” standard business processes, only thinks about his or her self-actualization and esteem needs resulting from the creation of such a sophisticated software system. He or she does not consider the long term ramifications in the event that such system will put millions of

people out of work, including the programmer whose skills can be matched by the AI system. Ultimately this results in an inability for a large portion of Americans to provide for their families and to earn a living wage. In such wake of flawed reasoning, even the United States of America, one of the greatest nations on Earth, may fall victim to moral depravity and violent rebellions.

### **Solutions and Future Outlook**

In pursuit of a national agenda aimed at reducing the negative effects of technological advancements, a balance must be reached in preserving the principles of democracy while producing solutions capable of mitigating the challenges posed against the middle class. An array of solutions have been proposed as a means of addressing technological upheavals, many of which concern social welfare programs such as a basic income, greater taxes imposed directly against the use of information technology, and even curtailing the distribution of AI systems. While laissez faire capitalism has contributed to some of the greatest advancements in history, its purpose today primarily serves the aim of wealthy entrepreneurs ignorant to the concerns of the general public. Democracy, in stronger force, must be used as a tool to balance out the creative design of free markets, while insuring that a “big brother” regime is not created in the process.

The principle question with regard to ecumenical automation simply is: What will human beings do if they do not have to work all day? The answer to this question lies in the theoretical framework of Maslow's hierarchy of needs, in that one when need disappears a new one fills its place. AI systems capable of sustaining financial markets and performing cognitive work of the most complicated nature, leaves humans no longer with the burden of having to complete meaningless tasks. Either the system is drastically reinvented in which human beings can still function as participants in the economy, or greater focus is placed on achieving higher order needs derived from self-actualization fulfillment. One book entitled “The Industries of the Future” by Alec Ross thoroughly discusses this topic. Instead of focusing on well-defined subject areas such as law, finance, medicine, or accounting, a new generation of Americans may emerge in which focus is placed on abstract reasoning such as creativity, religion, happiness, and the meaning of life.

Analysis into the historical development of work encapsulates another realm of study in which to view this subject. During the dawn of human civilization, work evolved in a manner of simply sustaining the population in an unknown and dangerous world.

Over the centuries, guided by the birth of capitalism, work became but a way to keep economies functioning. Increasingly, given the number of hours spent at work and heightened cognizance into organizational behavior, a pervasive ideology has disseminated across the nation advocating that occupation should be chosen on the degree of happiness it provides rather than just the salary it entails. The issue with this motto in direct relationship to the problems described in this paper, is that a decline in upward social mobility, stagnated wages, and jobless recoveries, almost always require individuals to select work based on pay rather than the amount of satisfaction derived from job responsibilities. A focus on happiness rather than pay, may encompass the next stage of work evolution capable of being fully realized in the future. As technological automation leaves people with a greater amount of free time, the opportunity to focus on mental health and happiness is expanded.

In continuation of this solution overture, The Triple Revolution was one of the first reports produced in this nation which defined the problems discussed in this very paper. Even in 1964, the indelible letter sent to President Johnson on behalf of the Ad Hoc committee served as a stern warning that if left untreated, the transformations of human rights, weaponry, and cybernation would destroy the fabric of democracy. Human rights were addressed during the tumultuous period of the Civil Rights movement. The end of the Cold War later settled the fear of a possible nuclear holocaust, however issues stemming from technological growth have not only gone untreated but has in fact become more alarming. Concern with intruding upon free markets often provides a common reason for leaving technological growth to its own devices, but it must always be remembered that the system of Democracy and Capitalism are in place to benefit the people, not the other way around. If the system is not working, as described in the 1964 Triple Revolution Report, then greater initiatives must be enacted until the key issues are resolved. The members of the Ad Hoc committee proposed a number of solutions such as lowcost housing, collective bargaining, education reform, and public works, to remedy the issues described in their report. To some extent, the implementation of these policies did ameliorate many of the social disparities plaguing the nation at the time, however a new century requires a different set of tools needed to correct the problems of cybernation that were identified nearly fifty-three years ago.

It is mistakenly believed that the market will simply balance out the pernicious effects of technology, a theory that is discussed in the book “Economic Crisis

& Solutions: Unemployment Bubble, Technology, Federal Reserve and Government” by Theodore Kafkas. Based on simple economic reasoning, it is assumed that if consumer spending declines as a result of growing unemployment, the entire economy will slow down and will negatively impact the wealth of even those who are located at the top, and that eventually measures will be taken to correct the underlying issues. Historically, this approach has worked, but if a recession of this nature commences on behalf of technological automation, even the most radical political agendas may prove futile against a system that has been established on the nature of perpetual advancements encompassing disruptive capabilities. In simpler terms, in order to combat the doomsday clock and the five step timeline, remedies must be presented before the climax occurs, not after.

A final consideration must be given to the specific way in which democratic nation states might address the issues likely to occur over the next century. While the implementation of a basic income serves as a direct tool of balancing out income inequality, it simultaneously adopts almost an eerie replica of socialism and communism. One of the reasons why socialism and communism never succeeded for extended periods of time is because it gave way to a system where people were rewarded for essentially not doing anything. Creativity, work ethic, and every other variable characterizing the prosperity of democratic nations, ceased to exist in Marxist nations. Despite the inefficiencies of communism, its acknowledgment of problems in the capitalistic system must always be observed. In the Communist Manifesto, Karl Marx was quick to identify the exact problems concerning capitalism, however his solution, as taught by history, has proven to be ineffective. Many Americans in the 21st Century are flawed in their reasoning in dismissing all of Marx's ideas as delusory whimsical theory. The truth however is that Marx and the sovereignties of socialism, communism, Bolsheviks, and Mensheviks, were the first major initiatives in history to remedy the problems of democracy and create an egalitarian society. Unfortunately, its theoretical framework and execution was ill-fitted to the functioning operations of global powers.

Till this day, democracy remains one of the greatest examples of bureaucratic authority on Earth. It is for this reason why democracy should not be overthrown, as prescribed by radical anarchists, but should instead be dramatically reshaped to meet the challenges of the 21st Century. In an attempt to solve growing automation, another common solution has been to simply improve the education system. Every American President since John F. Kennedy has

proposed this solution and almost every year since then the value of a college degree has not resolved some of the major issues faced by the middle class such as income and wealth inequality, threats from globalization and more recently, mass automation. More people than ever are attending college, however the opportunity cost associated with incurring student debt is not nearly enough reflected in the wages that follow post-graduation. Much of the market value in obtaining a college degree results more so from the obstacles posed from only having a high school diploma rather than the actual worth it has in its own subjectivity (“Wage earned, by years of education”, 2017). The information presented in appendices U-W provides some supporting evidence.

In the coming years and decades, universities must be held to a higher standard in disclosing that college is not a means to an end in improving one's employment status. Instead, college has simply become an extended learning environment from high school where young adults can discover themselves and learn more about the world. Many Americans have associated college with a ticket into the middle class, and for nearly the past sixty years this has been mostly true. But increasingly, this concept does not have merit as students investing four or more years into professional training are sometimes doing menial low-quality work completely unrelated to their fields of study. One reason for this is phenomenon is a growing asymmetry between skilled labor supply and demand (Ford, 2016). Unfortunately, there are far more college graduates in supply than needed, despite emerging markets and industries. Many of these new industries are guided by technological innovation, rather than the hard work and talent of bright college graduates who are eager to enter the workplace. Success based on a college education will need to be a complete reversal from the credential inflation epidemic that has spread across the country and a greater need for an ambitious generation to be more selective in targeting institutions based on reputation and academic rigor. Individuals matriculating into business programs, particularly graduate schools with reputable names, are likely to be far more successful than those who receive degrees from generic institutions. Majoring in areas requiring higher critical thinking skills and strategy will prove paramount in securing a good paying job and being able to comingle with information technology. Refer to appendices X-Z for data pertaining to salaries by major and institution.

The terrifying prophecies of doomsday economists during the 18th Century never materialized as workers using the resources of the time excelled into a brighter future. The law of scarcity exists as a

timeless economic concept even more applicable to today's issues than ever before. Thomas Malthus, was one of the first economists to address this law of scarcity in attempting to identify a correlation between population size and agricultural produce. Constrained by an inaccurate predicative model, the anticipation that population size would eventually exceed food sources proved to be incorrect as mechanical innovation aggrandized food sources worldwide (Piketty, 2013). In the 21st Century, the question no longer exists of whether there will be enough food to sustain the population. It is now, will there be enough jobs to keep up with rising population numbers. Appendices AA-AE illustrate the rise in population numbers both within the United States, worldwide, and in China.

The answer to combating technological threats, as explained by research, lies not in educational reconstruction nor in simply giving out free money to the poor. The answer to the challenges threatening democracy rests firmly in the permutation of legislative reforms catered towards sustenance of the middle class. The first proposal rests in the reaffirmation of a system in which job security supersedes all other political agendas. The belief that technology cannot be controlled is in fact a correct observation, however the pace at which it accelerates can be. A major initiative must include guarantying the steady employment of an individual who is threatened by job automation. The concept of Moore's Law details that although IT is accelerating at an exponential rate, in many cases the hardware necessary to compliment the software does not. In such case, automation may be slightly anticipated, providing employers with the chance to inform their workers of the risk of automation. Government policy should mandate that before a company terminates an employee as a result of automation, another job should already be set up for the individual. Hefty taxes, lawsuits, and even public takeover, should occur if the company is found to be in violation of this law.

In the longer time frame however, this policy will prove futile as nearly every job will be automated, eliminating the possibility of reassigning individuals to different positions. Additional solutions may surface in addressing population numbers with connection to job opportunities, and also redefining how capital gains diffuse across society. Similar to the concern expressed by Thomas Malthus during the 1800's, the 21st Century poses new challenges as population numbers fail to move in tandem with job growth. According to Martin Ford, in order to even keep up with rising population numbers the, the United States economy needs to generate between

75,000 and 150,000 jobs per month or an estimate of around 1,000,000 per year (Ford, 2016). Strict policy specifying the number of children allowed per couple must either ensue or college enrollment must significantly decline, sparing Americans the hassle of incurring burdensome student debt, unlikely to ever be repaid, and the time sacrificed. Individuals seeking to pursue higher education simply as a means of expanding personal knowledge, which is the truly intrinsic worth of a college degree, would be allowed to go to college, however a large percentage of those purely using higher education as a way to obtain a better job should be forbidden from entering any university in the country. College would become a focus on skills and personal achievements rather than a focus on a financial return from an intangible asset. A more viable endeavor would be a combination of both policies over both the long and short term economic cycles.

Greater focus on the fulfillment of higher order needs such as self-actualization will eventually create a gateway into a future where many individuals either do not have the means or the desire to work in the traditional sense. Abstract thinking, as the type described earlier, would be an ineffective way of sustaining markets in an archaic fashion, however with progressive reform new capital markets may emerge where emphasis on humanity's existence proves paramount in the nature of operations. An equally viable plan is annual public investment into AI, essentially allowing IT and finance to provide returns rather than the physical or cognitive efforts of a human being. Passive income would now become the greatest way to earn a living. These markets will be a simple extension of the way in which a landlord or a casino owner earns a living. The product or the service generates revenue rather than actual input on behalf of the owner. This process would still rely on a degree of intelligence, aptitude, and work ethic, as individuals must have the drive and a unique strategic approach to invest in capital markets, emerging industries, and top performing AI systems. Transformation of this nature would reshape society more so from a pyramid of billowing inequalities to more equilateral dimensions.

## Conclusion

Despite the challenges which currently appear on the horizon of the 21st Century, a future filled with hope, prosperity, and growth still lies ahead. As supported by a mixed combination of quantifiable research, economic theory, and evidence derived from a multitude of sources, the expanded propagation of IT serves not only as a harbinger in a dramatic transformation in the American way of life but

collectivizes an ever growing need to match adversity with optimism. Faced with challenges of historical proportion, identification of a shared goal will prove indispensable towards unifying the United States of America and avoiding prejudicial and antidemocratic exertions. Regardless of era, shifts in political power, or adoption of new societal values, opportunities must always be created even during the darkest times and must be fought for if necessary through blood, sweat, and tears.

While major disruptions will be occurring throughout the macroeconomy in the coming decades, the accounting profession will be less volatile than many other industries in the market. This conclusion does not mean that the accounting industry will be immune to automation, as many accounting jobs are set to disappear, but simply means that if the accounting industry collapses under technological growth, then nearly every other industry in the modern economy will follow suite. Concern with moral responsibility and the ability to dramatically redefine the nature of business operations makes the role of an Accountant entirely unique, making it less prone to automation. Despite this theory, patterns in the overall macroeconomy cannot be ignored. Bowley's Law, a theory dictating that the percentage of national income going to labor and capital respectively, has remained relatively constant over long periods of time and continues to threaten financial prosperity (Ford, 2016). Aims at reducing income inequality and improving upward social mobility are hindered as a result of this concept and is a concern pertinent to every American.

It is extremely important to mention that the research presented in this paper has used more scientific and theoretical reasoning rather than explaining lags and inefficiencies most likely to occur in the market. The slow implementation of technological advancements may be used to highlight this concept. An article published by KPMG (Justice, 2017) describes how financial institutions such as investment firms would benefit substantially from the influx of automation into their daily processes. What proves to be interesting, however, is the fact that many of these businesses have been reluctant to implement the latest and greatest systems, choosing instead to remain with legacy systems which are sometimes a decade or older. Reasons for this include the cost associated with migrating from one system to the next, difficulties in training upper management in the new software, and making sure that the new software aligns with the organizational goals of the company. With resemblance to the overall economy of the United States, an idea may be developed, but very often there will be an extended period of time before

it actually diffuses across a majority of the market. The law of diffusion of innovation is germane not only to consumer products but also to business practices and methodologies.

A final consideration must be taken into the false sense of illusion that is currently misleading many academia and seasoned professionals into thinking that automation of white collar jobs is not a major concern. Many individuals who have been in an industry for an extended period of time begin to develop the ill-conceived notion that no robot or computer can ever do the job exactly how they can; regardless of how adept the software's programmers are, there cannot be an algorithm in existence that can precisely mimic the way that a human being can approach a problem. Such flawed way of thinking reflects the definition of the AI Fallacy, in which successful execution of a work-related task by AI must be performed in the exact way that a human being would (Ford, 2016). The simple fact is that IT may use an entirely different rationale process to arrive to the same solution which may be just as good if not better than that contrived by a human being. Differentiation of the rationale process between man and robot may be used in examining how each would approach a moral obligation. Technology would not be able to imitate a sense of moral obligation in the same manner that a human being can, as the human brain has stimuli and chemicals guiding emotional responses such as empathy, guilt, sadness, shame, and anger. A computers arrival to moral obligation would always be based on the execution of specific algorithms and logical operations and never on a sheer "gut feeling."

Going forward there will certainly be challenges in the future, capable of either bolstering the power of democracy or tearing down a depleted commonwealth, however with greater national effort there will equally be matched opportunities for growth and the advancement towards new possibilities. It is with the greatest hope and optimism of the future, that Americans, despite growing threats, will experience an era of prosperity and success unlike anything in the history of this nation. As President Ronald Reagan once stated, "There are no great limits to growth because there are no limits of human intelligence, imagination, and wonder." The citizens of America will always arrive to the distant shores of hope and prosperity as long as the obstacles of today are surmounted and the resiliency of the mind is unyielding.

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**Appendix A**

Do you need to come up with clever solutions?

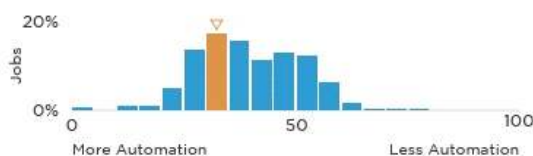


Figure A1. Bookkeepers: Do you need to come up with clever solutions? Y axis indicates the likelihood of automation. X axis indicates the percentage of jobs which will be affected with respect to the examined trait. Reprinted from Bui, Q. (2015, May

21). Will Your Job Be Done By A Machine? Retrieved January 02, 2018, from <https://www.npr.org/sections/money/2015/05/21/408234543/will-your-job-be-done-by-amachine>. Copyright 2015 National Public Radio, Inc.

Are you required to personally help others?

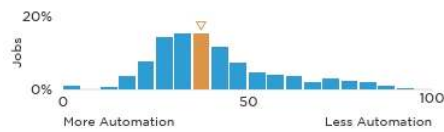


Figure A2. Bookkeepers: Are you required to personally help others? Y axis indicates the likelihood of automation. X axis indicates the percentage of jobs which will be affected with respect to the trait that is being analyzed. Reprinted from Bui, Q. (2015, May 21). Will Your Job Be Done By A Machine? Retrieved January 02, 2018, from <https://www.npr.org/sections/money/2015/05/21/408234543/will-your-job-be-done-by-amachine>. Copyright 2015 National Public Radio, Inc.

**Appendix B**

Does your job require you to squeeze into small spaces?

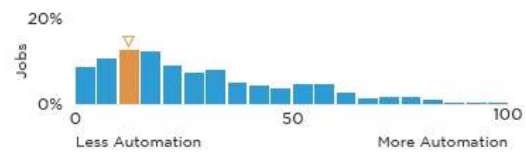


Figure B3. Bookkeepers: Does your job require you to squeeze into small spaces? Y axis indicates the likelihood of automation. X axis indicates the percentage of jobs which will be affected with respect to the trait that is being analyzed. Reprinted from Bui, Q. (2015, May 21). Will Your Job Be Done By A Machine? Retrieved January 02, 2018, from <https://www.npr.org/sections/money/2015/05/21/408234543/will-your-job-be-done-by-amachine>. Copyright 2015 National Public Radio, Inc.

Does your job require negotiation?

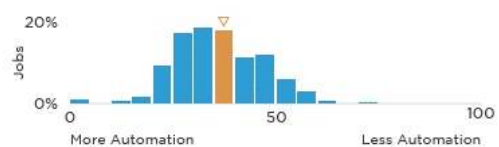


Figure B4. Bookkeepers: Does your job require negotiation? Y axis indicates the likelihood of automation. X axis indicates the percentage of jobs which will be affected with respect to the trait that is being analyzed. Reprinted from Bui, Q. (2015, May 21). Will Your Job Be Done By A Machine? Retrieved January 02, 2018, from <https://www.npr.org/sections/money/2015/05/21/408234543/will-your-job-be-done-by-amachine>. Copyright 2015 National Public Radio, Inc.

**Appendix C**

Do you need to come up with clever solutions?

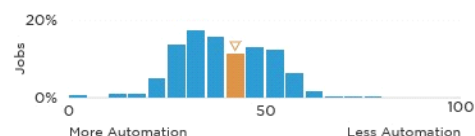


Figure C5. Bookkeepers: Do you need to come up with clever solutions? Y axis indicates the likelihood of automation. X axis indicates the percentage of jobs which will be affected with respect to the trait that is being analyzed. Reprinted from Bui, Q. (2015, May 21). Will Your Job Be Done By A Machine? Retrieved January 02, 2018, from <https://www.npr.org/sections/money/2015/05/21/408234543/will-your-job-be-done-by-amachine>. Copyright 2015 National Public Radio, Inc.

Are you required to personally help others?

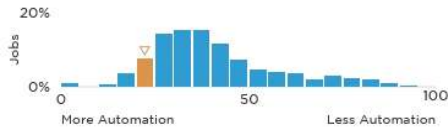


Figure C6. Bookkeepers: Are you required to personally help others? Y axis indicates the likelihood of automation. X axis indicates the percentage of jobs which will be affected with respect to the trait that is being analyzed. Reprinted from Bui, Q. (2015, May 21). Will Your Job Be Done By A Machine? Retrieved January 02, 2018, from <https://www.npr.org/sections/money/2015/05/21/408234543/will-your-job-be-done-by-amachine>. Copyright 2015 National Public Radio, Inc.

Appendix D

Does your job require you to squeeze into small spaces?

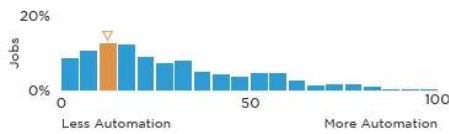


Figure D7. Bookkeepers: Does your job require you to squeeze into small spaces? Y axis indicates the likelihood of automation. X axis indicates the percentage of jobs which will be affected with respect to the trait that is being analyzed. Reprinted from Bui, Q. (2015, May 21). Will Your Job Be Done By A Machine? Retrieved January 02, 2018, from <https://www.npr.org/sections/money/2015/05/21/408234543/will-your-job-be-done-by-amachine>. Copyright 2015 National Public Radio, Inc.

Does your job require negotiation?

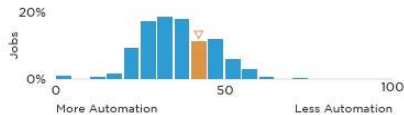


Figure D8. Bookkeepers: Does your job require negotiation? Y axis indicates the likelihood of automation. X axis indicates the percentage of jobs which will be affected with respect to the trait that is being analyzed. Reprinted from Bui, Q. (2015, May 21). Will Your Job Be Done By A Machine? Retrieved January 02, 2018, from <https://www.npr.org/sections/money/2015/05/21/408234543/will-your-job-be-done-by-amachine>. Copyright 2015 National Public Radio, Inc.

Appendix E

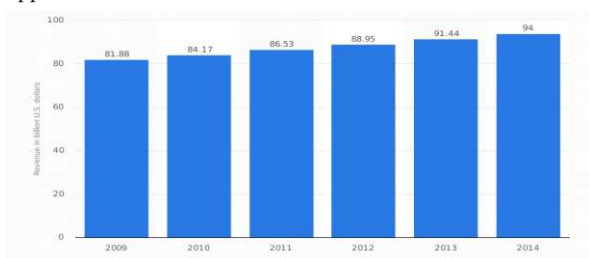


Figure E9. Revenue of accounting services (NAICS 54121c) in the United States from 2009 to 2014 (in billion U.S. dollars). Reprinted from Statista. (n.d.). Revenue of accounting services (NAICS 54121c) in the United States from 2009 to 2014 (in billion U.S. dollars). In Statista - The Statistics Portal. Retrieved July 28, 2017, from <https://www-statista.com.pnw.idm.oclc.org/statistics/293673/revenue-of-accounting-services-in-the-us/>. Copyright 2017 by Statista.

Appendix F



Figure F10. Number of employees of EY worldwide 2009 to 2016, by service line. Reprinted from EY. (n.d.). Number of employees of EY worldwide 2009 to 2016, by service line. In Statista - The Statistics Portal. Retrieved July 29, 2017, from <https://www-statista.com.pnw.idm.oclc.org/statistics/189255/number-of-employees-of-ernst-young-by-service-line2010/>. Copyright 2017 by Statista.

Appendix G

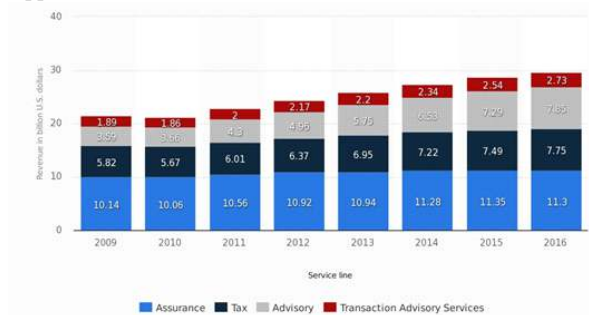


Figure G11. Combined revenue of EY worldwide from 2009 to 2016, by service line (in billion U.S. dollars). Reprinted from EY. (n.d.). Combined revenue of EY worldwide from 2009 to 2016, by service line (in billion U.S. dollars). In Statista - The Statistics Portal. Retrieved July 29, 2017, from <https://www-statista.com.pnw.idm.oclc.org/statistics/189232/global-revenues-of-ernst-young-by-service-line-2010/>. Copyright 2017 by Statista.

Appendix H

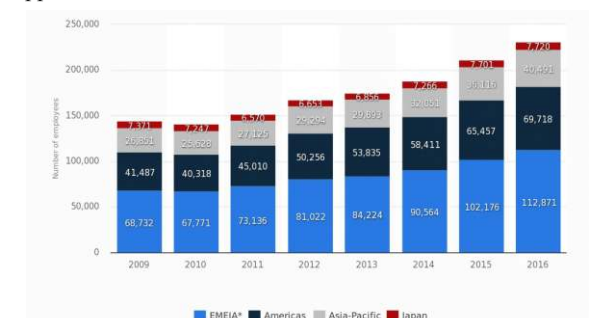


Figure H12. Number of employees of EY worldwide from 2009 to 2016, by region. Reprinted from EY. (n.d.). Number of



employees of EY worldwide from 2009 to 2016, by region. In Statista - The Statistics Portal. Retrieved July 29, 2017, from <https://www-statista-com.pnw.idm.oclc.org/statistics/189247/number-of-employees-of-ernst-young-by-area/>.

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Appendix I

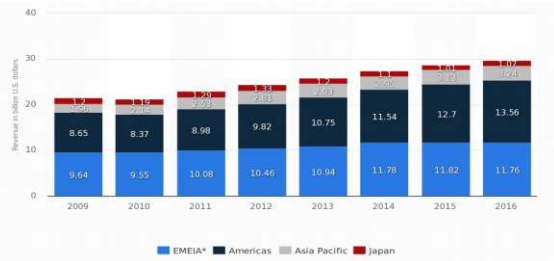


Figure I13. Combined revenue of EY worldwide from 2009 to 2016, by region (in billion U.S. dollars). Reprinted from EY. (n.d.). Combined revenue of EY worldwide from 2009 to 2016, by region (in billion U.S. dollars). In Statista - The Statistics Portal. Retrieved July 29, 2017, from <https://www-statista-com.pnw.idm.oclc.org/statistics/189213/global-revenues-of-ernst-young-byarea/>. Copyright 2017 by Statista.

Appendix J

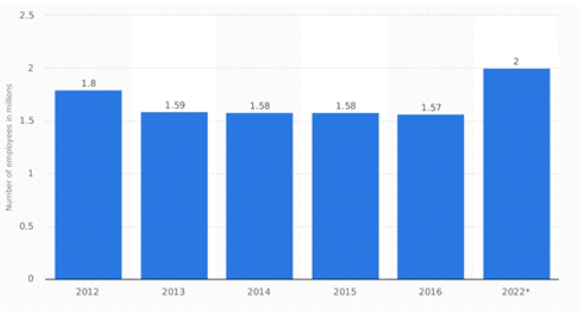


Figure J14. Number of bookkeeping, accounting and auditing clerks employed in the United States from 2012 to 2022 (in millions)\*. Reprinted from Bureau of Labor Statistics. (n.d.).

Number of bookkeeping, accounting and auditing clerks employed in the United States from 2012 to 2022 (in millions)\*. In Statista - The Statistics Portal. Retrieved July 28, 2017, from <https://www-statista-com.pnw.idm.oclc.org/statistics/317598/number-of-bookkeeping-accounting-and-auditing-clerks-employed-us/>. Copyright 2017 by Statista.

Appendix K

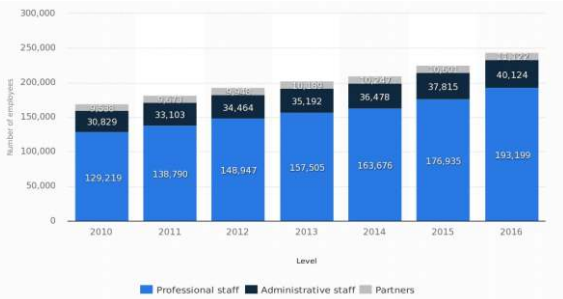


Figure K15. Number of Deloitte employees worldwide from 2010 to 2016, by level. Reprinted from Deloitte. (n.d.). Number of Deloitte employees worldwide from 2010 to 2016, by level. In Statista - The Statistics Portal. Retrieved January 2, 2018, from

<https://www-statista-com.pnw.idm.oclc.org/statistics/189036/people-of-deloitte-member-firms-since-2010-by-level/>. Copyright 2017 Statista.

Appendix L

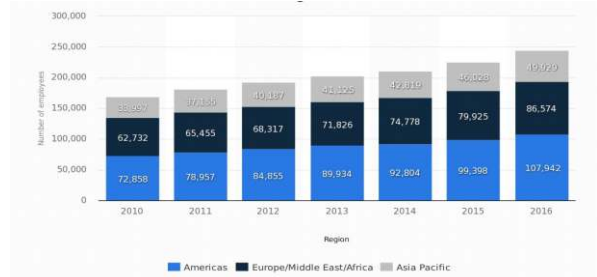


Figure L16. Number of Deloitte employees worldwide from 2010 to 2016, by region. Reprinted from Deloitte. (n.d.). Number of Deloitte employees worldwide from 2010 to 2016, by region. In Statista - The Statistics Portal. Retrieved January 2, 2018, from <https://www-statista-com.pnw.idm.oclc.org/statistics/189032/people-of-deloitte-member-firms-since-2010-by-region/>. Copyright 2017 Statista.

Appendix M

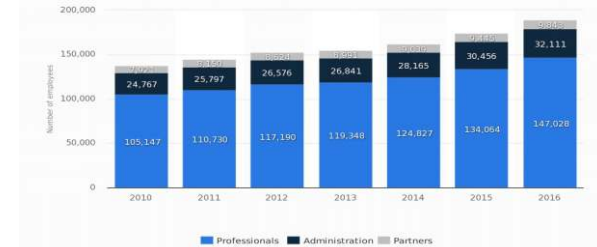


Figure M17. Number of employees of KPMG worldwide from 2010 to 2016, by position. Reprinted from KPMG. (n.d.). Number of employees of KPMG worldwide from 2010 to 2016, by position. In Statista - The Statistics Portal. Retrieved July 29, 2017, from <https://www-statista-com.pnw.idm.oclc.org/statistics/189506/number-of-employees-of-kpmg-by-position-2010/>. Copyright 2017 Statista.

Appendix N

Table N1

Analysis of Ernst and Young Relationship between employee count and revenue by service line 2009-2016

Service Line	Revenue Increase	% Δ	Employee Increase	% Δ
Assurance	\$1.16 Billion	11.44%	21,617	35.47%
Tax	\$1.93 Billion	33.16%	18,770	68.39%
Advisory	\$4.26 Billion	118.66%	29,828	163.21%
Transaction Advisory	\$0.84 Billion	44.44%	4,360	55.35%

Note. % Δ = Percent Change in Delta

Appendix O Table O2

Analysis of Ernst and Young relationship between employee count and revenue by region 2015-2016

Region	Revenue % Δ	Employee % Δ
America's	6.77%	6.51%
Asia-Pacific	3.51%	12.11%
Japan	5.94%	0.25%

Note. % Δ = Percent Change in Delta

Appendix P

Table P3

Analysis of Number of Employees of KPMG worldwide from 2010 to 2016, by position

Analysis of Number of Employees of KPMG worldwide from 2010 to 2016, by position				
Position	'10-'16 Increase	% Δ	'15-'16 Increase	% Δ
Professionals	41,881	39.83%	12,964	9.67%
Administration	7,344	29.65%	1,655	5.43%
Partners	1,922	24.26%	398	4.21%

Note. % Δ = Percent Change in Delta

Appendix Q



Figure Q18. Civilian labor force participation rate in the United States from 1990 to 2016.

Reprinted from Bureau of Labor Statistics. (n.d.). Civilian labor force participation rate in the United States from 1990 to 2016. In Statista - The Statistics Portal. Retrieved July 31, 2017, from <https://www-statista-com.pnw.idm.oclc.org/statistics/191734/us-civilian-labor-forceparticipation-rate-since-1990/>. Copyright 2017 Statista.

Appendix R



Figure R19. The New Marketplace. The Diagram, typically referred to as the “Long Tail” graph, depicts profit segments of the consumer market. The section color coded in red indicates high competition, high revenue industries. In comparison, the orange section illustrates various niche markets usually characterized by smaller streams of revenue. Reprinted from Anderson, C. (n.d.).

The Long Tail, in a nutshell. Retrieved January 02, 2018, from <http://www.longtail.com/about.html>.

Appendix S Table S4

Suicide Reasons

Reason and the Rank by Number of Papers	# of Papers	# of Suicides	% of Suicides
1. Family disputes (including couple disputes)	(73)	12,204	24.0%
2. Chronic illness	(60)	4,170	8.2%
3. Marriage (including love affairs)	(47)	19,694	38.7%
4. Relationships with neighbors and colleagues	(47)	3,117	6.1%
5. Unclassified others	(43)	1,650	3.2%
6. Psychiatric diseases	(42)	1,971	3.9%

7. Love affairs (without marriage)	(30)	1,885	3.7%
8. Poverty or losing money	(27)	1,371	2.7%
9. Life events	(24)	837	1.6%
10. Failing an exam or poor school scores	(24)	598	1.2%
11. Psychological problems	(15)	927	1.8%
12. Committing crimes	(15)	187	0.4%
13. Parental discipline	(8)	158	0.3%
14. Being elderly and lack of caring	(7)	1,034	2.0%
15. Losing money from gambling	(5)	1,123	2.2%
Total	(467)	50,926	100%

W. F. (2002). An Overview of Suicide Research in China. Archives Of Suicide Research, 6(2), 167-184.

Appendix T

Figure T20. Maslow's Hierarchy of Needs. The pyramid separates Human motivation into five categories as described by American psychologist Abraham Maslow. Adapted from Maslow,

Abraham. (2013). A Theory of Human Motivation. Martino Fine Books.

Appendix U

Figure U21. Changes in real wage levels of full-time U.S. workers by sex and education, 1963-2012. Reprinted from Autor, D. H. (2014, May 23). Skills, education, and the rise of earnings inequality among the “other 99 percent”. Retrieved January 02, 2018, from <http://science.sciencemag.org/content/344/6186/843.full>. Copyright 2017 AAAS.

Appendix V

Figure V22. Percentage increase in median hourly wage earned,

by years of education in the United States, 1973, 1989 and 2007. Reprinted from College Board. (n.d.). Percentage increase in median hourly wage earned, by years of education in the United States, 1973, 1989 and 2007. In Statista - The Statistics Portal. Retrieved July 30, 2017, from <https://www-statistacom.pnw.idm.oclc.org/statistics/234520/median-hourly-wage-by-years-of-education-in-the-us/>. Copyright 2017 Statista. Copyright 2017 Statista.

Appendix W

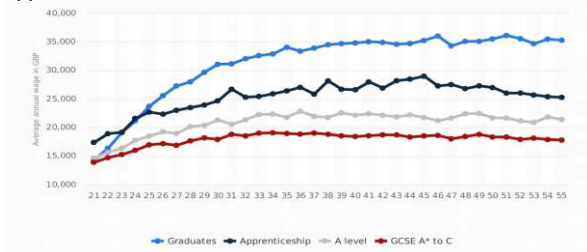


Figure W23. Average annual gross wage in the United Kingdom (UK) from April-June 2003 to April-June 2013\*\*, by highest level of qualification and age (in GBP). Reprinted from Office for National Statistics (UK). (n.d.). Average annual gross wage\* in the United Kingdom (UK) from

April-June 2003 to April-June 2013\*\*, by highest level of qualification and age (in GBP). In Statista - The Statistics Portal. Retrieved July 30, 2017, from <https://www-statistacom.pnw.idm.oclc.org/statistics/281936/average-salary-by-education-level-in-the-unitedkingdom-uk/>. Copyright 2017 Statista.

Appendix X

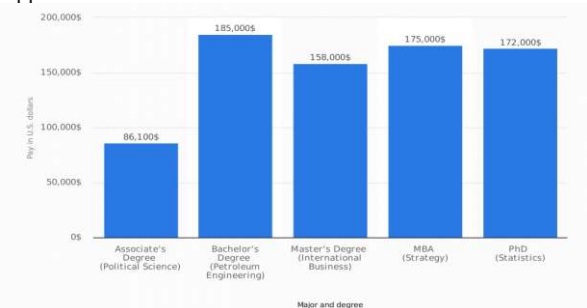


Figure X24. Top paying majors in the United States in 2016/17, by degree level. Reprinted from PayScale. (n.d.). Top paying majors in the United States in 2016/17, by degree level. In Statista - The Statistics Portal. Retrieved January 2, 2018, from <https://www-statistacom.pnw.idm.oclc.org/statistics/633823/top-paying-majors-in-the-us-by-degree/>. Copyright 2017 Statista.

Appendix Y

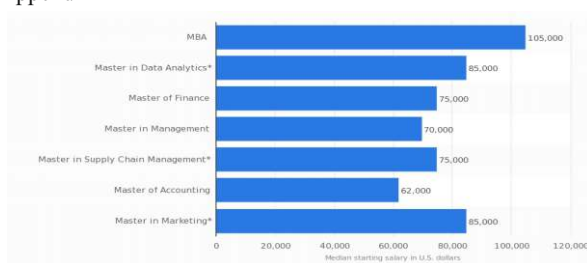


Figure Y25. Median starting salary offered by U.S. companies to business school graduates in 2016, by degree type (in U.S. dollars). Reprinted from Graduate Management Admission

Council. (n.d.). Median starting salary offered by U.S. companies to business school graduates in 2016, by degree type (in U.S. dollars). In Statista - The Statistics Portal. Retrieved July 29, 2017, from <https://www-statistacom.pnw.idm.oclc.org/statistics/233224/business-school-graduatestarting-salaries-by-degree/>. Copyright 2017 Statista.

Appendix Z

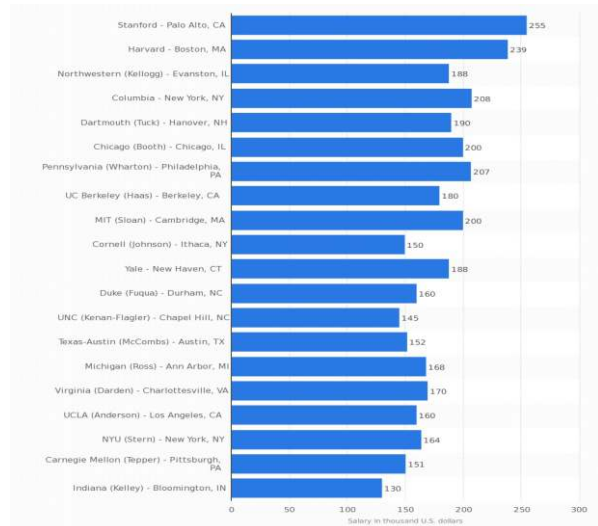


Figure Z26. Ranking of the best business schools in the United States in 2015, showing graduate salaries\* (in thousand U.S. dollars). Reprinted from Forbes. (n.d.). Ranking of the best business schools in the United States in 2015, showing graduate salaries\* (in thousand U.S. dollars). In Statista - The Statistics Portal. Retrieved July 29, 2017, from <https://www-statistacom.pnw.idm.oclc.org/statistics/239788/forbes-ranking-of-the-best-us-business-schools/>. Copyright 2017 Statista.

Appendix AA

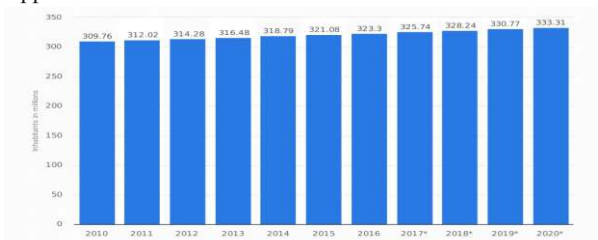


Figure AA27. Total population in the United States from 2010 to 2020 (in millions). Reprinted from IMF. (n.d.). Total population in the United States from 2010 to 2020 (in millions). In Statista - The Statistics Portal. Retrieved August 2, 2017, from <https://www-statistacom.pnw.idm.oclc.org/statistics/263762/total-population-of-the-united-states/>. Copyright 2017 Statista.

Appendix AB

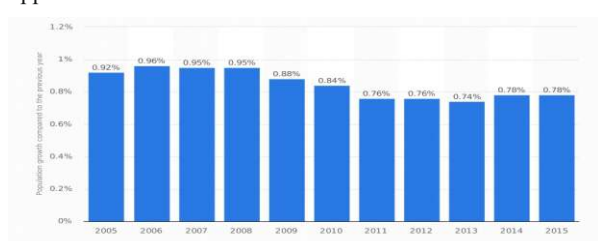


Figure AB28. United States: Population growth from 2005 to

2015 (compared to the previous year). Reprinted from World Bank. (n.d.). United States: Population growth from 2005 to 2015 (compared to the previous year). In Statista - The Statistics Portal. Retrieved August 2, 2017, from <https://www-statista-com.pnw.idm.oclc.org/statistics/269940/population-growth-in-theusa/>. Copyright 2017 Statista.

[.pnw.idm .oclc.org/statistics/263765/total-population-of-china/](https://www-statista-com.pnw.idm.oclc.org/statistics/263765/total-population-of-china/). Copyright 2017 Statista.

Appendix AC

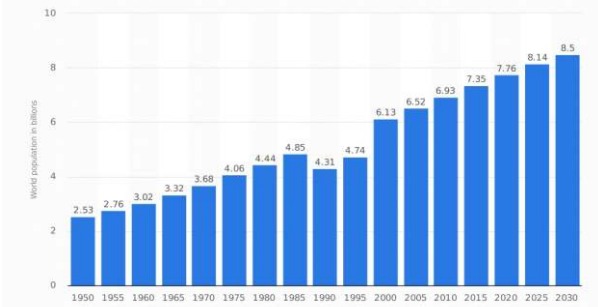


Figure AC29. Development of the world population from 1950 to 2030 (in billions). Reprinted from United Nations. (n.d.). Development of the world population from 1950 to 2030 (in billions). In Statista - The Statistics Portal. Retrieved August 2, 2017, from <https://www-statistacom.pnw.idm.oclc.org/statistics/262875/development-of-the-world-population/>. Copyright 2017 Statista.

Appendix AD

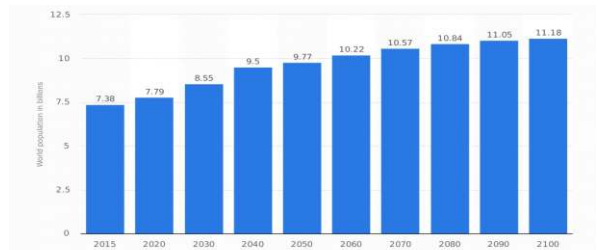


Figure AD30. Forecast about the development of the world population from 2015 to 2100 (in billions). Reprinted from UN DESA. (n.d.). Forecast about the development of the world population from 2015 to 2100 (in billions). In Statista - The Statistics Portal. Retrieved August 2, 2017, from <https://www-statista-com.pnw.idm.oclc.org/statistics/262618/forecast-about-the-development-of-the-world-population/>. Copyright 2017 Statista.

Appendix AE

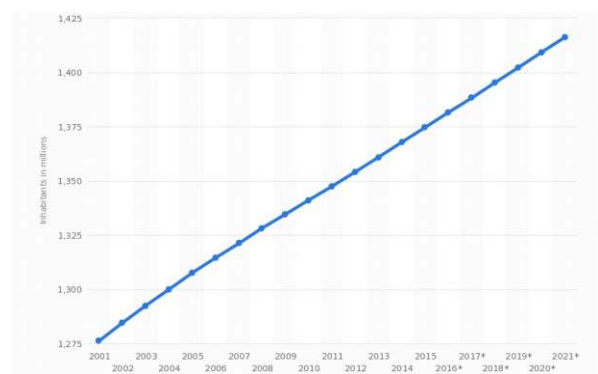


Figure AE31. China: Total population from 2001 to 2021 (in millions). Reprinted from IMF. (n.d.). China: Total population from 2001 to 2021 (in millions). In Statista - The Statistics Portal. Retrieved August 2, 2017, from <https://www-statistacom>

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## **Technology, Innovation and Higher Education – Disruption, Decentralization and Digital Transformation**

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Abstract: This poster session will explain and present in easy to understand non-technical language and infographics: 1. Cryptocurrencies like Bitcoin, which represent much more than digital economic innovations. 2. The blockchain and blockchain principles. 3. Potential applications to the Internet of Things (IoT) and Smart Systems for educators and academic institutions.

Blockchain can be implemented within individual educational institutions, groups of educational institutions, and both national and international educational bodies. This technology makes it possible to securely store badges, credits, and qualifications through a decentralized system. Blockchain has the potential to morph into a massive open, online, secure database used for certification and achievement repositories with payment in cryptocurrencies. Blockchain can be implemented within individual educational institutions, groups of educational institutions, and both national and international educational bodies. As education becomes more diversified, democratized, decentralized and disintermediated, it still needs to maintain reputation, trust in certification, and proof of learning. The increased focus on relevance and employability may also push us in this direction, as more transparency is needed. Blockchain could provide just such a system: a massive open, online, secure, immutable database embedded in the IoT and Smart Systems.

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**Key-words:** Teacher Education, Technology, Higher Education etc

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## Phytochemical Screening, Cytotoxicity and Antioxidant Activities of Leaves Extracts of *Eucalyptus citriodora*

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**Abstract:** The genus *Eucalyptus* has been used in African traditional medicine for the treatment of cardiovascular diseases and diabetes. In this work, chloroform and methanol extracts from the leaves of *Eucalyptus citriodora* was investigated for their phytochemicals, cytotoxicity and antioxidant potentials. Phytochemical screening of the extracts showed the presence of alkaloid, flavonoid, phenols, reducing sugar and steroids in the methanol extract. IR absorptions of the extract supported the presence of the phytochemicals by revealing the bands 3335 cm<sup>-1</sup> (O-H), 1613, 1480cm<sup>-1</sup> (C=C) and 1721cm<sup>-1</sup> (C=O). Evaluation of the cytotoxicity of the methanol extract using brine shrimp assay, suggested that, the extract was not toxic with LC50 value of 1.64 mg/mL. Antioxidant potentials of the extracts were determined using phenolic content quantification and 2,2-diphenyl-1-picrylhydrazyl (DPPH) radical scavenging. Methanol extract (37.32 µg TAE/mg) had higher phenolic content than the chloroform extract (12.09 µg TAE/mg), while, the radical scavenging potentials of the extracts recorded inhibitory activities of IC50 values of 892.7 µg/mL (chloroform extract) and 8.3 µg/mL (methanol extracts) relative to the positive control values of 31.1 µg/mL (butylatedhydroxytoluene) and 3.5 µg/mL (ascorbic acid). These results showed that *E. citriodora* could be a promising antioxidant agent.

**Keywords:** *Eucalyptus*, phytochemicals, brine shrimp, antioxidant

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# **The Dynamics of Sustainable Urban Development in The Organization of Future Cities**

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**Abstract:** The dynamics of development in metropolitan areas now face challenges in their ability to influence positively in Neighboring areas, the idea of providing research to highlight the concept of development dynamics and its ability to organize cities and the role of geotechnical programmers' in designing digital maps for new future cities, to provide a geo-vision of the importance of organizing smart cities and their futures and giving a clear picture of what are these programs and their tools, explores the search for challenges facing the development process and the ways in which intelligent cities experience and designs Its digital maps, it also offers a search for programs, maps and designs of intelligent cities, and perhaps provides a broader scope for research in this area.

Most modern research and scientific studies are directed towards the topics of sustainable development with their dimensions and strategies for applying them to cities, especially those related to industrial architecture and related to the sustainable development of cities and the proposed programs for sustainable cities. It has become clear that most of these cities started with the dimensions of economic development from the environmental and social aspects.

Before the decision-makers, so the search turned to address the subject from a geographic perspective Cartography in order to dive deeper than the concepts of sustainable urban development and its relationship with human resources and updates that face ways to develop and implement Asima in terms of programs and geographical techniques in the manufacture of maps and coding or to produce maps with a vision of a triangular or quadrilateral or perhaps from the angle of eight dimensions to bring the picture of reality and simulated closely and displayed on the computer screen and then transferred by the output of technology (HD).

The research came to examine the concept of development dynamics, trends and challenges faced by the first topic (the dynamics of sustainable urban development between concept and practice), the second topic (trends and development of sustainable development), and the third topic (role of information technology in achieving sustainable development) The fourth is a sample of experiments.

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## Synthesis and Characterization Of Mn(II), Cu(II) And Zn(II) Complexes with Schiff Base Derived from P- Aminophenol and Benzaldehyde

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**Abstract:** Complexes of Mn(II), Cu(II) and Zn(II) and Schiff base derived from p-aminophenol and benzaldehyde have been synthesized and investigated by different physiochemical techniques. The complexes were synthesized by refluxing the ethanolic solution of the Schiff base and the respective metal (II) chlorides. The resulting complexes were partially characterized by solubility test, decomposition temperature, molar conductance, Infra red spectroscopy, and elemental analysis. The melting point of Schiff base was found to be 197-198oC and decomposition temperature of the complexes were found to be 286oC, 294oC and 280oC for Mn(II), Cu(II) and Zn(II) complexes respectively. The Schiff base is soluble in Dimethylsulphoxide (DMSO) but slightly soluble in some of the organic solvents and insoluble in some. The metal - Schiff base complexes are insoluble in water and most common organic solvent but soluble in DMSO. The IR spectral analysis of the Schiff base shows a band at 1604 cm<sup>-1</sup>, which is assigned to  $\nu(\text{C}=\text{N})$  stretching vibration. This band is observed in the complexes but at lower and higher frequencies, indicating coordination of the Schiff base to the metal ion through azomethine group.

**Keywords:** Schiff base, Metal, Complexes, Refluxing

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## **Status of Work Immersion Program in Selected Senior High Schools in Cavite: Basis for the Development Plan**

**Crescencia Tarinay Canubas**

Tanza National Trade School, Philippines

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The study “Status of the Work Immersion Program in Selected Schools of Cavite: Basis for the Development Plan” was conducted by Crescencia Tarinay Canubas, researcher with the guidance of her adviser, Dr. Fruit G. Baisa in November 2017. The Amore Academy and the Tanza National Trade School served as the respondent schools.

Two groups of respondents in terms of tracks that were pursued were utilized namely the academic and the technical vocational and livelihood classifications in both schools. Likewise, two groups of teachers of the Amore Academy(AA) and the Tanza National Trade School (TNTS) served also as respondents. There were five parts of the questionnaire as follows: Profile; Status of Work Immersion Program; Level of Skills, Level of Abilities and the general WIP. Respondents however did not tick that of the general WIP. Means were computed for the status and levels. An Enhanced WIP Development Plan was the output of the study in spite of the fact that no constraint emerged.

In terms of profile, a total of 1,191 student respondents belonged to both tracks, the academic and technical vocational and livelihood in the selected schools, Amore Academy and Tanza National Trade School, Division of Cavite, Cavite Province. For AA, there were 246 for the academic and 340 for the TVL. For TNTS, there were 127 for the academic while 478 were for the TVL.

For the teacher respondents, AA was a female dominated group as against the TNTS which was male dominated. Most of the latter’s teachers were married. In terms of age, AA teachers were of comparable ages with the TNTS teachers with the youngest on the 20-30 years range and the oldest within the 42-50 years range. For years of teaching experience, AA teachers were into teaching within the 1st ten years while the TNTS teachers were within the 25-year range. The TNTS teachers were older in the service than their counterparts at the AA.

On the whole, the Work Immersion Program was very satisfactorily conducted at the AA and TNTS, the selected schools of Cavite. Teachers had higher numerical ratings than the students.

The overall level of knowledge was at a satisfactory level this being on the 86-90% range of the previous grades of the student respondents.

The overall level of skills was also at a highly skillful level in the AA and the TNTS. The teachers had higher numerical ratings than the students. Still the overall rating was on the 2nd range from the highest. The overall level of abilities was at a much able level at the AA and the TNTS Again teachers had higher numerical ratings than the students. But this was on a consistent range described on the 2nd range from the highest of very much able level. No constraint was found however, an Enhanced Development Plan was formulated.

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## The Role of motivations in the Small Business Success

Abdalmenem A Y Shaheen

Student, PCDCR, Gaza

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**Abstract:** Palestine depends largely on projects. The small business play an important role in the development process, especially in light of sector's suffering from the economic and political siege, continuous closure of crossings, and high unemployment rate. Many of small business were not successful as much as needed; perhaps one of the most important reason for the project's failure is misunderstanding of motivations. The success of projects and the achievement of its goals are closely linked to make decisions and push through challenges.

The motivations play an important role in the management of projects, and the project manager is the backbone of projects' success in terms of his ability to monitor all the project activities. He/she is the focal point of the project and his role in the form of project team, clarify their roles and responsibilities, make the appropriate decisions, speed the completion of the work, and the development of budgets and influence the behavior of others to achieve project's objectives (Aldeerawi, 2012). Motivation refers to "the reasons underlying behavior" (Guay et al., 2010, p. 712). Paraphrasing Gredler, Broussard and Garrison (2004) broadly define motivation as "the attribute that moves us to do or not to do something" (p. 106).

### **Problem statement:**

In recent studies that have been conducted by the Ministry of the Palestinian Economy found that the number of permanent jobs provided by small businesses is greater four times than the number of jobs that are provided the temporary operating system in the same period by the same amount. So it emerged the importance of taking care of the small business, developing them and provision of sufficient outcomes from the administrative skills and abilities in the administrative area, which enables project managers to manage their projects successfully and to overcome the problems they face and enable them to optimize the use of available resources.

Many small businesses in Palestine have failed because there is misunderstanding of motivations of the project managers "owner". However, the small enterprises are essential sector in Palestinian economy, so this thesis explores the significant of possible motivations and determine what has the biggest impact on project manager and his/her desire to succeed. The researcher has conducted an interview with several project managers and they have assured that they did not through about their motives before implementing of their small business. So the problem could be formulated in the following question: "What is the role of motivations in the small business success?"

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# **Evaluation of Performance of Decision Tree, Support Vector Machine And Probabilistic Neural Network Classifiers in a Mobile Based Diabetes Retinopathy Detection System**

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Corresponding Authors email: {odfenwa/ faajala/ oalo}@lautech.edu.ng

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Abstract: Diabetic Retinopathy (DR) is a medical condition where the retina is damaged because fluid leaks from blood vessels into the retina. Ophthalmologists recognize diabetic retinopathy based on features, such as blood vessel area, exudes, hemorrhages, microaneurysms and texture. The focus of this paper is to evaluate the performance of Decision Tree (DT), Support Vector Machine (SVM) and Probabilistic Neural Network (PNN) Classifiers in Diabetes Retinopathy Detection. Also, in this paper a Mobile based Diabetes Retinopathy Detection System was developed to make it available for the masses for early detection of the disease.

Keywords: Support Vector Machine, Decision Tree, Classifier, Diabetic Retinopathy (DR), Fundus, Diabetes Retinopathy Detector, Exudates, Retinal Images.

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# The Role of Governments in Enhancing Social Accountability (Analytical Study – The Palestinian Government)

Abeer H. Alkafarna

PCDCR, Gaza

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**Abstract:** Social Accountability focuses on the involvement of both civil society and citizens in monitoring and oversighting of the government's performance, especially in providing feedback and improving service delivery aiming to achieve an effective development. Social accountability is defined as the obligation tool of those power holders to take any real responsibility for their actions in social issues that affect varied segments of citizens to define rights and responsibilities between governmental system and the most active organizations. As social accountability focuses on the importance of change to achieve better decisions from power holders and better response from citizens. 4 keys elements of social accountability represents on: Transparency, by making information available to the public and clarifying government rules, regulations and decisions. Participation, citizens are able to influence decisions, policies and budgeting cycles and all government activities affecting their interest. Responsiveness, the government ability and willingness to respond to citizens' needs and demands. Finally, Monitoring where the citizen is enabled to follow up the conformity of decisions, provide services to the laws, regulations, and guide for services (World Bank, Nov2011. pp12-13). It is universally agreed that transparency not only serve economic purposes but also increase the opportunity of hold government to account. It is considered one of the necessary element that enable the legislative council and the civil society to both monitor and hold government to account. Achieving elements of social accountability requires the provision of some indicators that help to follow policies and decisions with the need to disseminate information on what has been implemented and approved. Hence, it is important to assess the Government ability and the legislative framework in the area in which it works, to understand how could social accountability elements, principles and mechanisms affect the government's ability to respond to the results of its initiatives, which is a prerequisite for its success. Government lates rapid responsiveness to the consequences of social accountability and step back from participation, considering social accountability an ineffective process. Therefore, the research focuses on reviewing the reality of applying social accountability elements on the government decisions and policies, and the Palestinian government's role in enhancing the social accountability that positively affect in achieving indicators of good governance and transparency in Palestine.

The research aims to analyze, evaluate, and review national, international legislation and laws related to social accountability, transparency and participation that oblige Palestine and to be transparent and access to information through applying of content analysis methodology based on reports and information available by government institutions. In addition, to measure the level of the Palestinian government's commitment to implementing the elements of social accountability and to identify the most important obstacles that limit its application in government institutions.

The research results reveal that the government have made such a significant progress in applying social accountability in governmental institutions and local bodies, but within certain limits. Not recognizing the Freedom Access to Information is considered as an obstacle and a big deficit in the effectiveness of civil society in reviewing or amending any obsolete legislation that may explicitly require them to participate in policy and decision-making.

The research recommended the necessity of providing a strong political will from the governments to involve civil society to ensure achieving accountability and transparency. In addition to, the necessity of enacting and implementing the Freedom of Access to Information Act to include legislation and articles related to social accountability. Moreover, Formation of an independent entity composed of civil society organizations, media institutions, governmental institutions and members of the Legislative Council to be an independent observer of all policies and decisions.

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**Key words:** Social Accountability – transparency – decision-making – participation in policy - Civil society - Freedom of Access to Information – transparency

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# **Development of an Online Collaboration Tool for Research and Innovation in the University**

**Samuel O. Oladimeji**

University of Calabar, Cross River, Nigeria

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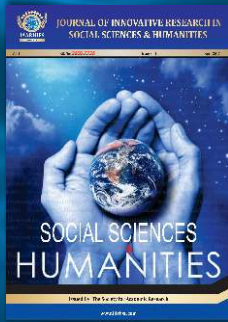
**Abstract:** Increasing demands for national and global innovation requires that Nigerian Universities begin to consider collaborative and multidisciplinary research on a much larger scale. This paper focuses on the development of an online collaboration tool for research and innovation in the University. Students and lecturers are the user groups for the platform. Each student on the platform is a part of a research project team with a lecturer selected as the supervisor. The Adaptive Software Development model was adopted for the study. A Joint Application Design-Requirement (JAD-R) gathering session was conducted in the University of Calabar, Nigeria, to determine the requirements for the application and a database was designed for the information system. The Model View Controller (MVC) programming technique and the CodeIgniter (CI) programming framework were employed for this study to enhance continuous development and maintenance of the software. Students from several faculties of the University of Calabar evaluated the online platform, after development. Respondents were required to register their accounts, open or request to join a research project, invite or accept new team members, and fill questionnaires to express their assessment of the online collaboration platform in line with the purpose for its creation. Eighty-eight percent (88%) of the respondents were satisfied with the overview of the application. Eighty percent (80%) of the respondents saw the user interface as user friendly, and sixty five (65%) were satisfied with the functionality of the application.

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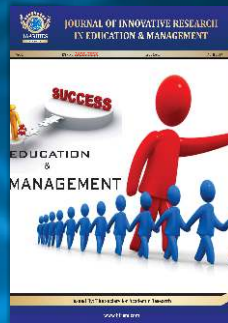
This book will be available online on  
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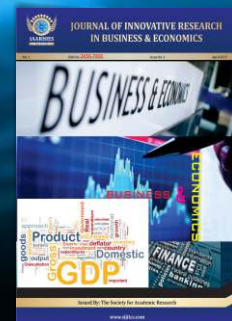
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