Tames Joys, Fingesons Want Kingsborough Honors Journal Volume 10 Number 02 **10th ANNIVERSARY ISSUE**

DISTINCTIONS

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DISTINCTIONS, the journal of the Honors Program of Kingsborough Community College of the City University of New York, welcomes scholarly articles and creative works that explore important issues in all aspects of humanistic endeavor, not confined to a specific academic discipline. Our editorial staff is sympathetic to a broad range of theoretical and critical approaches; however, the views expressed in articles are solely those of the authors.

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EDITOR'S COLUMN

Decade

The 2014-15 academic year marks the tenth anniversary of Distinctions, the journal of the Kingsborough Community College Honors Program. What Professor Barbara Walters began in 2004 as "the pet project of one faculty member" has become institutionalized here at the College under the leadership of Honors Program Director Rachelle Goldsmith and Associate Provost Reza Fakhari.

Professor Walters served as editor for the first three years, handed the reins to me when I arrived at Kingsborough in 2008, and I have now been editor for the last seven, but I will be handing the reins to someone else shortly. It has been a great pleasure to be in charge of this publication. We have published pieces by over 250 students in the last ten years, including disciplines from fashion design and mathematics to philosophy and nursing. We have included a range of students, diverse in age and background, but with the common thread of outstanding academic achievement. The word "decade," meaning "ten parts," derives from the works of Roman historian Livy, and indeed the ten volumes of Distinctions serve as an intellectual history of most recent period in the College's ongoing story.

When the Fall-2104 issue of Distinctions went to press, I had written an editor's column dedicating that issue to my late father, Dick Cowan, an educator for over 35 years. But, by the time the issue was printed, my mother, Jeanne Feiman, had died as well. It is from her that got my own concern with issues of inequality and social justice, and it has been articles related to those issues that I have tended to favor in my tenure as editor of this publication. So, I would like to dedicate my last issue of Distinctions to the memory of my mother and to say thank you for all who have made this journal such an important component of life here at Kingsborough.

Robert Cowan, Ph.D. Associate Professor, Department of English

A Streetcar Named Desire Illustrated: Excerpts from Scene 3^t

Jezreel Agustin



THE POKER PLANERS STANLEY, PABLO, STEVE AND MITCH ..

¹ Completed under the mentorship of Prof. Robert Blaisdell for ENG 12: Freshman Composition I.



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MITCH OPENS THE DOUR AND COMES OUT, STILL WIPING HIS HANDS ON A TO WEL ...



MITCH RISES AS STANLEY RETURNS TO HIS SEAT. MITCH CONTINUES THROUGH THE PORTIERS. HE STOPS JUST INSIDE.



THE BATHROOM DOOK OPENS & STELLA COMES OUT. BLANCHE CONTINUES TALKING TO MITCH.



SHE TURNS THE KNOBS ON THE PADIO AND IT BEGINS TO PLAY "WIEN, WIEN, NUR DU ALLEIN." BLANCHE WALTZES TO THE MUSIC WITH ROMANTIC GESTURES. MITCH IS DELIGHTED AND MOVES IN AWKWARD IMITATION LIKE A DANCING BEAR.

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L-	K	CRACK	
		STANLEY STALKS FIEKCELY	
E		THE BEDZAOM. HE CROSSES TO THE SMALL WHITE RADIO AND SNATCHES IT OFF THE	TRASH
		HE TOSSES THE INSTRUMENT OUT THE WINDOW	

8



THEY LEAD HIM TO THE BATHROOM.

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10

Alphabet Book

Elena Archer



¹ Completed under the mentorship of Prof. Valerie Sokolova for Independant Study in Illustration.



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The Fading Dream of Global Justice

Candy-Lynn Best

he idea of successfully achieving global justice seems so far away from our current waking reality that it may as well be unreachable. In philosopher John Rawls' A Theory of Justice (1972), he invites us to imagine a scenario in which people adopt what he calls "a veil of ignorance (Cottingham 536)," wherein everyone involved is unknowing of their race, ability, religion, status, or gender. This scenario would invariably lead to 'justice as fairness' according to Rawls, and principles equally decided by all persons involved. It is an appealing idea, but could the people of the world really put aside their differences and actually come together to make regulations that would benefit all of mankind? Every day, it looks as if there are just a few winners in the world who are constantly exploiting vast multitudes of losers. One example is in Vandana Shiva's Making Peace with the Earth (2012), where she notes that though India as a whole is moving up the ladder developmentally, with over fifty billionaires in residence, its people are increasingly suffering from starvation and malnutrition (132-133). Developed countries like the United States seem to be faring little better. Sadly, it appears that Rawls' scenario is forced to remain a figment of the human imagination, and the Earth will forever stay in a state of disarray, dominated by the affluent, unless global changes are enacted to punish them for the abuses of their disproportionate social and economic power.

John Rawls theorized that, while adopting the veil of ignorance in the original position, which means that everyone in society is unaware of their comparative physical and mental attributes, human beings as a whole would come to a unanimous decision involving economics and power that would ultimately be fair and therefore just by default. In Rawls' conception of such a scenario, financial inequality would only be considered just if those who are affluent compensate the less fortunate (Cottingham 537). This is because while we are unknowing of our relative status, we would want to be certain that the disadvantaged were treated well, because for all we know we may be among the disadvantaged. A modern rendering of Rawls' idea that the affluent offer compensatory benefits to the

¹ Completed under the mentorship of Prof. Robert Cowan for ENG12: Freshman Composition I.

disadvantaged is the concept of trickle-down economics. According to trickle-down economics, governments should give preferential economic treatment to businesses and the wealthy in the hopes that they will spend money in a way that compensatory benefits will somehow "trickle down" to the lower classes (Arndt 1-2).

Trickle-down economic policy, emblemized by the Bush Tax Cuts of 2001, seems to have worked out quite well for the wealthy. According to data from the 2014 Global Wealth Report distributed by the Credit Suisse Research Institute, the United States houses 41% of the worlds millionaires. Given such a large concentration of wealth in this country, often said to be the richest in the world, are our disadvantaged fairly and justly compensated? Apparently not, because even though this country holds this vast amount of wealth within it, 14.6 million households are described as "food insecure" by a 2012 household food security report conducted by the U.S. Department of Agriculture, meaning that they do not have daily access to adequate food and nutrition. An increasingly large divide is appearing between the rich and everyone else according to 2013 data from economist Emmanuel Saez (1-2), and the once prolific middle class which drove past economic growth is disappearing.

Things appear to be no better in the developing world. India is a country populated by over one billion people according to provisional data from its 2011 census. The country was promised modernization and substantial growth according to Shiva, who is an Indian national; yet this prophesied trickle-down effect did not take hold (235). In fact, the modernization only seemed to benefit the already rich, who have tripled their wealth (Shiva 237). As of this writing, Forbes' list of The World's Billionaires names fifty three of India's people as being among the wealthiest in the world, which is an increase from the fifty Shiva states were present when she first wrote her book (238). Yet, over 40% of India's children are suffering from malnutrition according to the Naandi Foundation's 2011 HUNGaMA Survey Report, with "food is expensive" cited as the number one reason. As globalization affects India, it does not appear to be assisting their poor. The divide between the financial elite and the extremely impoverished deepens by the day. For instance, Lakshmi Mittal, owner of the steel company Arcelor Mittal, has become a dangerous oligopoly, both abusing poor labor standards and thus lower class Indians, and robbing the Earth of natural resources in mass quantities through excessive mining (Shiva 239). Mittal holds residence in a luxurious mansion in England, which he bought outright for over fifty seven million English pounds. Mukesh Ambani, India's richest man at a staggering personal wealth of almost 24 billion, owns a twenty-seven story residential complex in Mumbai, "the capital of slums (Shiva 255)." These two Indian billionaires, and the majority of billionaires in general, do not seem to show empathy for the less fortunate. The vastly wealthy almost appear to gloat, overspending on basic needs such as shelter, transportation, and nourishment that the people around them clearly lack. They are, in short, as far from Rawls' original position of being ignorant of their status as it is possible to be.

As we have so far seen, socioeconomic inequality affects people on all sides of the world usually for the collective worse. Is it possible to repair the societal damage that has befallen us? According to an article from the Center for Economic and Policy Research

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explaining the concept, a robust financial transaction tax could be part of stopping the runaway wealth accrual of large financial institutions. True to its name, such a tax only affects the finance industry, and not the average American citizen who is already burdened by sales taxes. Forty countries enforce this tax, but the United States and most of Western Europe do not. At present, eleven member countries in the European Union are proposing a tax of this type, but as it is now the tax is not going to affect investment banking. This is troubling, considering that the financial crisis of 2008 was due in large part to investment banks spending more money than they actually had, subsequently requesting bailouts from the government at a shocking total of over three trillion dollars in the United States alone (Simkovic 253). Yet, simply having such a tax on the books is not enough when no one wants to collect it due to fear of a financial exodus. As a November 2014 article by *Vox* writers Palladino and McElwee explains, there is a written law for a meager two cents per financial transaction tax in New York that is simply not collected. If New York were to collect this tax, it would not only amass millions of dollars annually for the city, but it might also set a standard for the rest of the world to follow.

Another proposed remedy for equalizing how much money the wealthy put back into their local economic system is progressive taxation. Progressive taxation is fairly simple, in that all it means is that the more money a person takes in, the higher a percentage of their income is paid back in tax. Such a tax is very reminiscent of Rawls' theory, for it eases the tax burden on those with less income, while the rich compensate society for their affluence with increasingly higher taxation, especially if that tax revenue goes to social programs. At face value, the federal tax system of the United States is progressive. However, it just so happens to be progressive in ways that barely affect the wealthy, such as in payroll taxes on salaried income. Much of the money that the wealthy accrue comes from the sale of stocks or other property, which falls under the lighter capital gains tax code (Rohaly 6).

On both the individual and corporate levels, the rich further dodge theoretically progressive taxation by using tax havens, which are offshore banks located in island nations with low tax rates (Fisher 344-345). The most distressing part is, the use of these tax havens is actually legal in the United States, home of most of the world's wealthy, because of how vague and poorly-written the tax code is. The rich, such as Google CEO Eric Schmidt, actually go so far as to celebrate their avoidance of giving back to the country that gave them the public resources that allowed them to get so rich in the first place (Fisher 349). Yet, despite the fact that it is virtually public knowledge that the individual rich and their corporations cheat on their taxes in ways that are simply not available to the common man, nothing substantive is done.

The lack of clarification of or even enforcement of already existing laws highlights what is arguably the real problem: there is simply no will in many governments to force the wealthy to pay their fair share or to punish them for their abuses of power. It would arguably be fair to say that as globalization affects more countries, governments increasingly give the impression that they exist to further the interests of the affluent and not the common man. The Supreme Court of India asked their government to dispense foodgrain to the needy that was uselessly rotting in warehouses, but the prime minister claimed that the action would destroy the market (Shiva 130). Portugal's head of immigration was approving "golden visas" for wealthy persons willing to invest over five hundred thousand euros in real estate, which led to money laundering and corruption ("Portugal Immigration Chief Arrested" n. pag.). Meanwhile in the New World, the monolithic Brazilian state-run oil company Petrobras doled out billions of dollars in bribes and kickbacks to politicians as they artificially raised the value of its contracts with construction companies, who also benefited. Yet, significant punishment for these moral lapses may not be forthcoming because of fears about the possible negative effects on Brazil's economy ("Brazil's Rousseff Struggling" n. pag.). These are just a few examples of government officials following the almighty dollar, and not taking into account those beneath who may be adversely affected by their decisions. Will the well-connected people involved in these scandals, both executives and politicians alike, be properly punished?

It seems that when punishment for malfeasance on the part of the wealthy does come down, it is usually a comparatively paltry fine. General Motors, a United States car manufacturer, was fined a meager thirty-five million dollars after they intentionally failed to report on a defect in their automobiles that amounted to sixteen deaths over five years. The average person would likely be put behind bars for life from multiple manslaughter charges if they had taken that many lives over that period of time. Even more astoundingly, this is after the United States government had already spent almost fifty billion dollars in a bailout for the company ("G.M. Fined Over Safety" n. pag.). Sadly, the fine was the maximum allowed at the time, but for a company that hosts its current net income at over one billion, it is an insignificant amount. It seems a politically easy task to update sentencing guidelines for white-collar crime, but it seems that few steps have been taken to do so.

The simple reality is that the penalties for committing crimes while you are wealthy are pitifully lax, and the rich know it. In a February 2014 interview, Jordan Belfort of *Wolf of Wall Street* fame, described his twenty-two month stint in a California facility as "completely mellow". Rich people like Belfort go to what essentially amounts as posh resorts where they can play tennis three times a day, while everyone else gets crammed into an increasingly overcrowded prison system. If Rawls is correct in his theory of "justice as fairness (Cottingham 536)", then the world and especially the United States have a long way to go.

One step towards achieving justice could be impartiality, with whoever doles out the punishment adopting Rawls' "veil of ignorance" about the convicted's social standing without ignoring extenuating circumstances. If someone steals money belonging to hundreds of people, there is no compelling reason for the punishment to not be the same as if they had robbed each of those people in turn, which would most likely add up to astronomical prison time. Ironically, the world could learn from China's example: Chinese authorities grimly sentenced the head of their Food and Drug Administration to death in 2007 after he was found taking eight hundred and fifty thousand dollars in bribes, bribes which were directly linked to multiple food-related deaths ("China Safety Food Head Executed", n. pag). Given that this person's corruption cost lives, it seems just that they were punished as if they had personally killed those people, since in terms of utility there would be no difference. This may seem extreme, but can we impose any other sort of retribution

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that a wealthy person would find compelling enough to strike fear and responsibility into their hearts? Why can they not be punished by residing in the same prisons at the same rates as everyone else, or with wholesale seizure of the ill-gotten assets they love so much?

It is in our global interest to not only reassess how to prosecute these affluent individuals, but to make certain that economic equality can be reached. However, this is easier said than done, because as Rawls states, "people have much less assurance as to what is the correct distribution of wealth and authority (Cottingham 539)." This is why some major power, such as the United States or the European Union, needs to unilater-ally implement policies such as the financial transaction tax alongside massive sanctions for large-scale tax evasion. If such a major power brought equalized taxes and financial policies to fruition and their economies do not go down in flames as predicted by the rich with a vested interest in the status quo, it would pressure the rest of the world to follow suit. As things stand now, any corporation or extremely affluent individual can escape proper taxation and punishment for many crimes, simply because they have the money to pick themselves up and move anywhere they wish. Only by making the costs of non-compliance exorbitant and as inescapable as possible will such people be made to comply. Slowly, but hopefully surely, the rest of the world would fall into line with the major power.

Billions of dollars come and go on the global stock exchanges each and every day. To some, even a billion is negligible. In comparison, the common man will only make one million dollars or less over his entire lifetime. If the United States does not make the first step towards advancements in taxation, the Earth will fall further towards a global collapse, where the wealthy stay aloft in their unreachable castles, and the rest of us are only to be seen as stepping stones in their quest to achieve more capital.

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Western Control of Egypt and Iran in the Late Nineteenth Century

Gulmira Boltaeva

Abstract

In this paper I focus on how Middle Eastern kingdoms Egypt and Iran were corrupted by western powers including Britain and France during the late nineteenth century. Western countries showed interest in Egypt and Iran because of the important geographical positions that both countries held. In addition, I discuss how Britain's occupation influenced these countries' economic, political and social development.

hen we talk about the Middle East, the picture of ancient pyramids in Egypt, and the luxury of Persia (modern Iran), always pop into our minds. Most of us have no idea how these Middle Eastern Kingdoms evolved into modern nation states. Because of the important geographical position both Egypt and Persia had, they were always prized by foreign powers who vied for control over these lands. During the nineteenth century, the influence of the major European powers spread throughout the Middle East. Most powerful European countries including Britain and France occupied and colonized less powerful Middle Eastern countries. Among those countries were Egypt and Iran, who at the time suffered from Western occupation, which brought tremendous changes to these countries' social and economic development. The British occupation of Egypt was one of the most significant factors that shaped the modern Middle East. It especially shaped Egypt's economic, political, and social development. In contrast, European colonial influences had less impact in Iran. Nevertheless, it still influenced Iran's political and social development.

The reason for the British occupation of Egypt was to gain control over the Suez Canal that would give Britain unprecedented power and influence. This power would restore Egypt's political and financial stability. In 1859, France started building the Suez Canal. Later on, France ran out of money, and had to borrow money from Britain. As a

¹ Completed under the mentorship of Prof. Abraham Edelheit for HIS 37: The Modern Middle East.

result, Britain took the Suez Canal under control. In 1869, the British completed the Suez Canal giving them the ability to move goods and commodities, from the Mediterranean to the Indian Ocean and back. At that time, India was the most important part of Britain's Empire, thus the Suez Canal was critical to British control over India and its resources. Most European countries were interested in the Suez Canal because it cut the travel time from Europe to India (Tucker 91). Great Britain also showed pronounced interest in Egypt, because of its strategic importance in the Eastern Mediterranean, and the Middle East. Another reason for the British occupation of Egypt was the imperial competition of the era. Britain had a fear of France occupying Egypt first; therefore Britain occupied Egypt before France did. However, Great Britain did not want to govern Egyptians; they just wanted control over Egypt. Although Britain occupied Egypt, they left the King of Egypt rule his people. At that time in 1882, Tawfiq Pasha, from the dynasty of Muhammad Ali, ruled the country (Tucker 91). The status of Egypt in the British Empire was undefined until World War I, despite Britain's extensive involvement in Egypt's political and economic affairs. After WWI, Britain declared Egypt a "Veiled Protectorate," which allowed Britain to rule the country behind the scenes, but left Egyptian rulers responsible for the people of Egypt.

Lord Cromer was one of the British diplomats and colonial administrators, who presided over the occupation of Egypt with absolute authority. He believed that countries like Egypt would never improve until and unless they learn all modern political and economic strategies from Great Britain. As Bunton and Cleveland state, "Cromer disparaged Egyptian demands for independence and assured his superiors in London that direct British guidance was necessary for years to come" (Bunton and Cleveland 104). When Britain occupied Egypt in 1882, Egypt totally lost its autonomy. Cromer manipulated Egyptians by telling them that Britain was there to help improve Egypt's political and social development, but instead he fulfilled Britain's own missions; safeguard the Suez Canal and invade Sudan.

During the nineteenth century, most European countries also prized Sudan because of its geographical position and valuable resources. Thus foreign powers also vied for control over Sudan. Britain wanted to invade Sudan through Egypt to show its power to other European countries. As Sanderson states, "European complication did not arise until, between 1881 and 1885, the political status of the Nile Valley was transformed by the success of the Mahdi and the British occupation of Egypt" (Sanderson 79). Muhammad Ahmad was a Muslim leader, who declared himself as Mahdi or "Islamic Messiah" (Tucker 93). At that time Mahdi was controlling southern Sudan, and he did not want to see other powers, especially European powers, in his territory. So when Britain attempted to occupy Sudan, Mahdi established a rebellion in Sudan against the Egyptian occupation in 1881 that resulted in Britain's defeat. This is because Britain sent a group of ill prepared soldiers into the Mahdi's territory, and as a result, all of them were slaughtered by Mahdi's troops. Most of Britain's ill prepared expeditionary force were actually Egyptian soldiers who were cruelly massacred By Mahdi. As Bunton and Cleveland argue, "In 1885 Sudan was abounded by Mehdi and it prolonged ten years" (Bunton and Cleveland 104). After that unfortunate event, Britain didn't want to get involved in an expensive war again,

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which would harm both Egypt and Britain financially and economically.

During Lord Cromer's colonial administration, Egypt's economic status drastically changed. Cromer's main goal was to maintain domestic tranquility, and not to improve the local industrial base, because he didn't want Egypt to compete with the British textile industry. According to Bunton and Cleveland, "Cromer sought to increase Egypt's revenue by expanding its agricultural production, and to improve the Nile-based irrigation system" (Bunton and Cleveland 104). Even though Cromer's priority was to serve British financial interests, later on his efforts showed positive results for Egypt's revenue, especially in the cotton industry. Cotton was one of Egypt's main commodities that resulted in a large profits, which drastically improved Egypt's economic status. However, only landholders benefitted from the revenue system. In addition, engineers, teachers, and other professionals from Britain got paid a much higher salary than their Egyptian counterparts (Bunton and Cleveland 105). Even though the country's financial interest was improving, Egypt became more dependent on Britain in terms of crop export, and debt payment.

In terms of social development, Cromer was very cruel to Egyptians. He reduced the budget for education and closed many Islamic primary and secondary schools. As Tucker states, "This is particularly noticeable in the way that education was systematically neglected by the British, hindering the development of a literate and knowledgeable group of Egyptians to run the country" (Tucker 92). Behind his decision to reduce the budget for education was financial and political strategy. When Cromer started his administration in Egypt, the country was facing financial problems. Therefore he believed that eliminating the educational budget would improve the country's financial status. Although by the mid 1880s Egypt's budget showed surplus, Cromer provided limited funding to the Department of Education. The political aspect of his work was shaped by his preventing Egyptians from becoming intellectuals, who would later on want to govern Egypt themselves.

In the 1890s, the British cabinet decided to reappraise its position over Sudan (Bunton and Cleveland 105). Their plan was to send the Anglo - Egyptian expedition to Sudan, which would be under the control of General Herbert Kitchener, and take control over Sudan. As Bunton and Cleveland state "Kitchener's difficult reconquest of the Sudan began in 1896, and it was not until 1898 that his forces were able to enter Khartoum and restore what the Egyptian government believed would be Egyptian control over Sudan" (Bunton and Cleveland 106). In fact, Cromer and the British government believed that it would be more effective for the British to rule over Sudan than the Egyptian government, leaving Egyptians outraged over Britain's decision, and resulting in anti-Britain sentiments.

Egyptians anti - British feelings were strengthened after the Dinshaway Incident in June of 1906. The Dinshaway was an incident in which five British officers went pigeon shooting in the Delta village of Dinshaway. The villagers protested against the officers, and as a result two officers were shot. Later on, one of them died. After that incident, British authorities decided to punish inhabitants of Dinshaway to set an example for the rest of the villages. According to Bunton and Cleveland, "A special tribunal was set up, and fifty - two of the villages were charged with the unlikely crime of premeditated murder" (Bunton, Cleveland108). After this, Egyptians understood that Britain was not a friend of Egypt, who wanted to help the country's development, but a big enemy instead.

Egypt's opposition against the British was presented by three main organizations during 1907; the Constitutional Reform Party, the People's Party and the National party. Shaykh Ali Yusuf formed a group named the Constitutional Reform Party, who urged Egyptians to have independence within the Islamic religion. The People's party focused on secular liberalism in which Egyptian people run the government. Its important spokesman was a Lutfi al-Sayyid. The third group, the National Party was led by Mustafa Kamil. Even though Mustafa Kamil received his degree at the University of Toulouse in France, his main goal was to end western pressure over Egypt. He was the publisher of Egyptian protest in al-Liwa newspaper (Fahmy 100). These three organizations main goal was to establish a self-government in which Egypt has to be ruled by Egyptians, not by western countries. Unfortunately the public debate on this issue stopped with the presence of World War I. Britain declared Egypt a protectorate, and deposed Abbas II in favor of his uncle, Husayn Kamil (Bunton, Cleveland109).

Unlike Egypt, Iran managed to avoid most imperialists during the nineteenth century. The first reason that Western countries did not show as much interest in Iran as they did in Egypt was its location. Iran was far away from the Suez Canal, a location which every Western country favored. The second reason was it held a very old tradition based on religion during the Safavids and Qajar dynasty. The Qajar shahs were never able to create a centralized country. Bunton and Cleveland argue that, "In part this was because powerful forces of decentralization had taken root in Iran during the chaotic period between the fall of the Safavids in 1722 and the consolidation of the Qajar dynasty in 1794" (Bunton, Cleveland110). One of the main reasons for the decentralization of the state was the Shi'a religion. The interpretation of law and religion was under the control of the Shia Ulama. The Shia Ulama was in charge of governing the Iranian government and had the right to exercise Shi'a religious authority. During this period the Iranians were not interested in Western countries, and Western countries did not show as much interest in Iran as they did in Egypt.

The relationship between the West and Iran strengthened in many ways after Nasir al-Din Shah's visit to Europe in 1873. Nasir al-Din Shah started governing Iran in 1831, marking the beginning of the monarchial absolutism of the modern era (Amanat14). During his Administration, the army only had 300 troops, and they were not strong. Nasir al-Din Shah therefore depended on tribal forces, but most of the time tribal armies became un-unified because of the low salary. The only military that lasted long during Nasir al Din's rule was the Cossack Brigade, created in 1879. However, the disadvantage of the Cossack Brigade for Iran was that it was commanded and ruled by Russian officers. As Bunton and Cleveland state, "The Cossack Brigade commanded and supplied with Russian arms, and it was the most effective military arm of the government" (Bunton, Cleveland112). Even though it was the Russians ruled it.

Later on, Nasir al-Din decided to make another attempt to improve both his military and his bureaucracy by opening a new institution called Dar al-Funun. The institution

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was staffed by European instructors and offered European language. According to *Pivot of the Universe*, "Nasir al-Din lived in the age of Europe's advances, its growing technological edge, and it's penetrating profusion of new ideas and institutions" (Amanat15). Nasir al-Din tried, but failed, to westernize educational institutions. Unlike Nasir, Shi'a Ulama was successful in incorporating religion with political views and was able to make more connections with citizens. In addition, Dar al-Funun, the only westernized institution in the country, and all other institutions of education were under control of Ulama. Therefore, people preferred institutions based on religion over the westernized education.

Bringing European style to Iran did not work well for the Iranians. However, it did not mean that Iran escaped Western influences. As Bunton and Cleveland argue, "During the first half of the nineteenth century, Russia occupied territories traditionally claimed Iran in Turkestan and in the Caucasus region along the Caspian Sea, including portion of the important province Azerbaijan" (Bunton, Cleveland 113). Russia had control over ethnically diverse faiths, including Christian, Sunni, and Shi'a Muslim regions. The British thought Russia's presence in Iran was to get India under control and compete with them: This awakened a fear of Russia for the British. As Bunton and Cleveland state, "The commercial challenge was met by a treaty signed in 1857 in which the shah granted British merchants the same law advantages and exterritorial privileges previously accorded Russians" (Bunton, Cleveland 114). Iran's international commercial exchange was improving between these two countries and Iran's traditional carpet textile industry became popular in Europe. As Iranian carpets became famous all around the West, Iran's economic status improved. In 1907 the borders of Iran were established, and the country was temporarily divided between Britain and Russia. However, neither Britain nor Russia had total control of the country and Nasir al-Din shah eventually gained success through making Russia and Britain enemies.

The disorganization and inefficiency of Nasir al-Din's government made the country susceptible to foreign economic exploitation. In 1891, the shah permitted an English company to produce and export Iran's tobacco crops (Keddie 1). This led to a series of protests against the Iranian rulers who granted the tobacco exportation in Iran. The protests were organized by Shi'a Ulama, who was the head of the Islamic religion in Iran. According to Keddie, "The movement involved first successful alliance between the Ulama, modernizing reformers, and the discontented population of Iran, particularly the merchants - an alliance which was to reappear in later protests and to come to fruition in the Constitutional Revolution" (Keddie 1). Protestors believed that exporting tobacco from Iran was against religious law, and that the rulers were insulting the dignity of Islam. It was stated by Ulama that any kind of tobacco use was an offence to the Hidden Imam. Throughout 1891, protesters spread all over Tehran, the capital of Iran, and to other major cities. It was useless for the Shah to enforce his will on a public which was ruled by religious leaders, and in 1892 he cancelled the concession (Keddie 2). The tobacco protest was the Iranians' first successful movement which led to the defeat of the government, and the victory of the protestors. After that incident Iranians gained confidence that they could weaken the government even in the presence of a Western power. The protest against concession created financial problems for the shah, who was forced to take a loan from

Russia. After that, Iran became a debtor state, like Egypt.

Throughout the nineteenth century, Middle Eastern economies were reorganized by the propagation of the European countries. At first the British involvement in Egypt was to control the Suez Canal, but later on, the tertiary colony became a primary colony as a result. The British occupation of Egypt improved the country's economic status. Agricultural production was drastically improved, and cotton became one of the main profits for Egypt. Even though, Egypt experienced the economical improvement through Britain, it depended on Britain in terms of debt payment. The British presence in Egypt did not result in social development, as Britain reduced the budget for education, because they did not want Egyptians to become educated individuals who want to govern the country. When Egypt's three main organizations stood against Britain, Britain found a new way to colonize the country, which declared the Egypt protectorate. By declaring the country a protectorate they eliminated the power of three main organizations to fight against them. In contrast to Egypt, Iran was able to remain independent. The reason for that its independence was that it was far away from the Suez Canal and its old tradition based on Shi'a Muslim religion. Even a Europeanized institution did not attract the Iranians; instead they preferred tradition. Qajar shahs granted economic concessions to Britain and Russia, and as a result, Iran fell between these two countries. However, Britain and Russia never colonized the country. The tobacco protest showed how Iranians could resist against European power, unlike Egypt. We can see how history is reflected in the foreign policy of Western countries toward Egypt and Iran today. Even today, we can see how the foreign polices of Western Countries, especially the US, to Egypt and Iran are merely a reflection of past history.

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Two-Dimensional Textiles Versus Three-Dimensional Textiles¹

Billie Jean Delpy

Abstract

This is a research paper on the properties and uses of two dimensional and three dimensional textiles. Based on my research I have found that two dimensional textiles are better used for apparel and three dimensional textiles are of better use for industrial products. Although the three dimensional printing of apparel will revolutionize the manufacturing of clothing in the future, as of yet, it is best serviced with two dimensional textiles. This is primarily because three dimensional textiles are denser and thicker than two dimensional textiles.

his paper explores the differences between two dimensional and three dimensional textiles. This paper also answers questions regarding what these different textiles are and what they are used for. It will also weigh the pros and cons of 2D

versus 3D fabric and explore what purpose each of these two categories of fabric is best suited for.

Of all the different sorts of textiles, 2D woven textiles are the most frequently used in the manufacturing of apparel. A 2D textile is manufactured in the form of 2D braids. These braids of threads are then interlaced according to orthogonal warp and weft directions. The lines of these threads are coordinated and defined on a 2D grid. You can visualize this process by thinking of an old fashion loom where threads are woven together to create a flat piece of fabric. The textile reinforcement is done by cutting and stacking the plies. The flat pieces of woven fabric must then be cut and sewn together to create a garment in three dimensions. Stitching is then



Egyptian woman weaving cloth using a basic upright loom and simple method where a yarn is placed over and under a warp thread, the threads that hang down which are weighted with stones.

¹ Completed under the mentorship of Prof. Theresa Mastrianni for FM 35: Textiles.

needed to complete the final textile.

The cons of this process are that these secondary operations such as textile reinforcement, cutting, sewing and stitching are expensive and could be eliminated with the use of 3D textiles. 2D braiders, machines that braid yarns into fabrics, are highly efficient but also highly inflexible. They can only create a limited number of braid geometries and architectures. 3D braiders allow for a larger number of braid geometries and architectures, creating more flexibility in textile structure.

Some examples of 2D weaving patterns:



3D weaving is a relatively new weaving development. It is characterized by the incorporation of a dual directional shedding operation. This shedding system enables the warp yarns to interlace with the horizontal and the vertical sets of weft yarns. The process can be defined as the action of interlacing a grid-like multiple-layer warp with sets of vertical and horizontal wefts. The interweaving of the warp yarns with the horizontal and vertical sets of weft yarns are mutually perpendicular to each other. A 3D textile can be simplistically visualized by imagining someone knitting a bonnet. In creating a bonnet, the yarns are transformed from being individual yarns directly to forming the bonnet's 3D shape when knit together.



3D –rotary braiding is an automated production method that can be used for the manufacture of net shaped 3D-textiles by the weaving of textiles into 3D forms. 3D-rotary braiding allows bobbins to be independently and selectively moved over a base plate so that each individual yarn may be individually placed and 3D textile interlaced. This allows 3D textiles to be produced with yarn architecture specific to a design criterion.



3D printing, or stereolithography, uses additive fabrication to create objects. In order to print, a CAD file is sent to the printer. The printer then reads the file and starts by laying down layers of material: Most commonly a slightly flexible nylon through a nozzle into cross sections. Depending on the file size or depth, this process ranges from a few hours to a few days for larger more complicated products. A print could even be designed to fold up within the CAD file so a piece larger than the 3D printer's size could be produced.



The designer and manufacturer's way of working can be seen as a 3D to 2D to 3D process. The process starts with a creative design in 3D shape from which 2D construction information is extracted. This 2D construction information is seen in forms such as patterns and fabric layers. The final 3D garment is created by assembling the 2D pieces with seams, darts, overlapped layers, buttons, zippers and other closures. If the 2D fabrics are meant to have pleats or other 3D elements they must be chemically treated to shape or deform them. The final goal is to get a 3D garment shape as close as possible to the original design idea. The main idea and benefit behind using 3D textile assembly in creating
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ready to wear clothing is to be able to skip the process of assembling the 2D pieces. If a garment could be designed and its measurements entered into a textile weaving or printing machine it could then be directly woven or printed into its final and actual 3D shape and the entire elaborate, expensive and time consuming 2D process could be ultimately eliminated.

There is no doubt that 3D textile and the 3D printing of textiles would bring immense change to the traditional 2D textile manufacturing techniques of spinning and weaving as well as the coloration and production industry. There is much less waste involved and much easier customization abilities with 3D textile printing and weaving. Many designers are currently toying with and exploring the ideas behind these new technologically advanced techniques.

3D printing has been a dream in the world of technology and for industries that make use of a diversity of textiles since the 1970's. This dream is fueled by the idea that 3D printing can simplify the production of items made of textiles in a multitude of fields. Within the past few years printer technologies have been developed far enough to achieve what was once inconceivable. 3D printing can be used to design and manufacture products in a very wide range of consumption including the medical field, fashion, engineering, automobiles and jewelry.

Designers such as Jiri Evenhuis, Philip Delamore and the brand Freedom of Creation were the first to explore the idea of using 3D printers to create textiles. These designers believe that the 3D printing of textiles has the ability to make the needle and thread almost obsolete. In their respective but similar ways, these designers are experimenting with 3D printing by creating seamless, flexible textile structures using software that converts three-dimensional body data into skin-conforming fabric structures. A few examples of such work are outlined below.

The N12 bikini by the company Continuum is the world's first ready-to-wear, completely 3D-printed article of clothing. All of the bathing suit's pieces, closures included, are made directly by 3D printing and snap together without any sewing. The N12 bikini represents the beginning of a productive relationship between the apparel industry and 3D printing. It gives us a glance at what advancements in both design and production this relationship can make possible in the hopefully near future. The bikini is made out of Nylon 12. This solid yet ultra thin and bendable nylon which is .7 mm thick is created by the SLS 3D printing process. For a bikini, the nylon is highly functional because it is waterproof and very comfortable when wet. The N12 bikini is an idyllic representation of what every fashion designer experimenting with 3D printing is aiming for: A wearable and comfortable 3D printed garment.

There has been extensive use of 3D



textile printing in Haute Couture, or one of a kind areas of Fashion. Recently, during this past New York Fashion Week the 3D printer company Maker Bot sponsored designer Francis Bitoni to create a dress using its Flexible Filament. Flexible Filament is a biode-gradable plant based fiber that remains pliable even after it is extruded from the printing machine. At the latest Paris Fashion Week, Dutch designer Iris van Herpen used 3D printing to create a strapless, translucent dress inspired by and resembling icicles. The dress was fabricated in two pieces using a liquid polymer cured in sequential layers with ultraviolet light.



There has been a lot of use of 3D textiles and 3D printing in the shoes and accessories department of the fashion industry. World renowned designer Vivienne Westwood recently collaborated with shoe brand Melissa to create a sustainable eco-friendly and vegan shoe collection made of ju-ju plastic, created entirely in 3D. Similarly to the Melissa shoes the brand STRVCT has come up with their own 3D printed shoe collection. Their shoes are made with 3D printed nylon to create delicate pumps and wedges that are both amazingly lightweight and strong. The shoes are lined with a patent leather inner sole for the sake of tradition, and coated with a synthetic rubber on the bottom to provide traction. Also in the shoe industry there are more 3D textile innovations taking place. Anoth-



er weaving technique which can be done on jacquard looms to create 3D textile is being used. Nike recently explored this technique and created the Air Jordan XX9. The 3D surface of the shoe is achieved in one textile layer by tuning and adjusting the warp and weft during the weaving process as opposed to gluing multiple 2D fabrics together to create the shape of the sneaker. This is amazing because it creates an extremely comfortable shoe¬¬ with zero waste.

For mainstream textiles there are still many limitations. Realistically 3D printed

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clothing appears to be years from entering the mainstream apparel industry. One reason for the delay is that the fashion and apparel industry has drastically lowered the cost of clothing manufacturing. Whether ethical or not, today's all time low manufacturing costs are hard to compete with. The extremely low cost of manufacturing apparel overseas despite unethical working conditions is keeping production and manufacturing out of America. 3D printing is not currently being developed on a global scale and is not in use in apparel factories. A 3D printed clothing article is still much more expensive than one that has been made conventionally.

The presently available materials used for the 3D printing of apparel are also somewhat limited to synthetics although natural fibers are being tested. This is because the 3D printing process involves melting at high temperatures and laser sintering: These high temperatures would in fact decompose most natural fibers. The most common materials used are; ABS plastic, PLA, nylon, glass filled polyamide, epoxy resins, metals, wax, photopolymers and polycarbonate.

On the other hand, a major advantage of 3D printed textiles is that they can be made to perfectly fit to the consumer's body, especially for shoes, underwear and tight body-wear. The customization options with 3D are much higher and may include a consumer's measurements, 3D body scanning data, style, color, design, and decoration preferences. 3D printing also eliminates the entire sewing process, which is great for designers but would create chaos in the garment construction industry. It would mainly create chaos because it would illuminate the need of employees for their sewing abilities. The entire manufacturing process of garments would have to be re-invented to have tech savvy employees running highly advanced computerized machines instead of seamstresses. Sewing and hand assembling skills would no longer be useful.

In Industrial product production, particularly in the medical field, 3D printing promises to be extremely relevant. Replacement teeth, hip joints and replacement knees -as well as skin and organs can all be created with 3D printing. These parts are created by nozzles laying down fine sedimentary layers of material to build the final product. Furthermore, 3D bioprinting technology is optimized to be able to print skin tissue, heart tissue, and blood vessels among other basic tissues that could be suitable for surgical therapy and transplantation. When 3D bio-printing becomes widely available for commercial use, scientists hope it will allow transplants and skin grafts to be conducted much more rapidly and easily. The technology for the printing of complete organs for transplants is still being developed. 3D printers have been used by the medical industry to create a jaw, a pelvis and several customized hip replacements from metal. The measures for the 3D printing of the body parts is set via information from CT scans of the patient and stem cell grafts. Although 3D bioprinting is still in its experimental stage, it has already been used for the generation and transplantation of several tissues, including multilayered skin, bone, vascular grafts, tracheal splints, heart tissue and cartilaginous structures. Other applications include developing high-throughput 3D-bioprinted tissue models for research, drug discovery and toxicology. The most important challenge is to adapt technologies designed to print molten plastics and metals to the printing of sensitive, living biological materials. If there is hope that a 3D printer can eventually print human tissue models, I have no doubt it can someday print natural fibers for apparel.

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At present, 3D printers are most widely used in industrial products such as those for the automotive industry where they help produce prototypes for new cars or car parts. The next biggest market is aerospace, where manufacturers are using the technology to make lighter versions of complex parts for airplanes and satellites. Because it is currently extremely expensive and time consuming to create parts for aerospace, machines 3D printing could actually bring down the cost and time needed to create these parts. Hopefully this is a reflection of what could be taking place in the garment industry as well. Currently, government agencies are very open to experimentation with these 3D printing advancements. President Obama even started the National Additive and Manufacturing Innovation Institute, known as "America Makes," in 2012 to promote research and standards in the field of 3D printing. Major companies such as General Electric and United Technologies both have divisions that produce jet engines, and are currently 3D printing in their production processes. Both companies have been using 3D printing for prototyping for many years. I'm sure that if the 3D printing of apparel could bring its manufacturing back to the U.S.A at a comparable price to what it costs now to produce overseas, many large fashion corporations such as H&M, American Eagle, or Victoria's Secret, to name a few, would produce locally.

There are currently many 3D printers created for at-home use. These can only really be used to create small household appliances or gadgets. Amazon recently created a new shopping sector dedicated entirely to 3D printed objects. An at-home 3D printer can be purchased for only a few hundred dollars. Large-scale 3D printer on the other hand can cost hundred of thousands of dollars. Some inventors are currently researching home 3D printers with the ability to recycle plastic bottles and directly transform them into printed knitwear items from the innovative machine owner's own design.



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Enormous hype surrounds 3D printing. Scientists predict that it will spur a manufacturing renaissance in the United States. Less than a hundred years ago, tailors were sewing tailor-made garments. These were made to order according to the specifics of each customer's exact measurements. Since then, we have adapted into mass production and done everything possible to keep costs low and merchandise available to all income levels. With 3D printing it is possible that one day we can go back to creating custom-made designs or even self-made ones in an environmentally friendly way as well as at a friendly cost.

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Chai Boys'

Daniel Ioannou

he unofficial region of the Pashtun people stretches from Southeastern Afghanistan to Western Pakistan. Within this region, a practice known as "bacha bazi" or loosely translated "playing with kids" is a common occurrence. In short, bacha bazi is child molestation. The majority of these children are young boys and the nickname "Chai boy" is given to them. Chai boys accompany older men who have power and are used for entertainment purposes. Entertainment includes serving tea to guests (where the nickname is derived from); dressing up and often times dawning mascara, dancing while the older men ogle, and sexual satisfaction. The deconstruction of this practice can be broken down and tied to Hegel's Master-Slave dialect by direct observations I made during my yearlong tour of Afghanistan from December 2011 through November 2012.

Kandahar is Afghanistan's second largest city and is home to the Taliban movement. The majority of my tour was spent 10 miles north of this city and where most of my observations occurred. Its common practice to see adult men holding hands throughout the city and was taken as a sign of affection without any sexual meaning. It is important to note that affection within this culture should be separated from bacha bazi and that gender roles typical of the western world are not the same roles in Afghanistan. My squad and I witnessed much affection within the entire Afghani culture during our tour and we soon realized that this affection was separate from the practice of bacha bazi.

Our squad's mission for the year was to insure security of our area of operations, conduct small diplomatic relations at the local district level, train the local afghan police and win the population over through their hearts and minds. On our second day we met with Rafi who was a national police officer and a checkpoint commander. Rafi was very welcoming and offered us Chai tea as we entered his checkpoint. Upon scanning his checkpoint, one of his men stood out. He didn't look like a man at all, he looked about 13 years of age; the national police uniform was two sizes too big, his loaded Kalashnikov variant riffle looked rather large compared to his small frame and he was wearing mascara. As we sat with Rafi and discussed issues within his jurisdiction, the boy served us chai.

¹ Completed under the mentorship of Prof. Katia Perea.

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After serving us chai, he immediately took a seat right next to Rafi.

Our time spent at the checkpoint was fairly brief. While brief, observations kept coming in. Rafi kept making eye contact with a specific solider who was not engaging him. That soldier was Jese. Jese, like myself, was 19 at the time. What separated myself from Jese is that Jese could not grow facial hair and I had a beard. He had dark blondie hair and I had black hair. Jese had a smaller frame than I did. Jese had blue eyes and I had brown eyes. Jese was pale skinned and I was almost the same skin tone as Rafi. It became clear the Jese was Rafi's eye candy. Jese's physical characteristics were childlike and extremely rare for Afghanistan. Rafi paid no attention to our informal meeting about security within his jurisdiction. Rafi instead daydreamed of having a new exotic chai boy.

Observations were made much more directly due to the length of our mission. Engaging in local villages with ease was made possible by walking through villages, socializing, drinking tea and having a more relaxed posture. Observations can be misread if the observer is taking on an aggressive role or is overly focused on security. Current reporting made by the military in Afghanistan can have misinterpretations or can just be plain wrong. Traveling through Afghanistan in huge mine-resistant vehicles and then popping out is not the best way to engage a local population and then write a report. Our mission was much different and was labeled as "Village Stability Operations". This had great emphasis on linking isolated villages with the Karzai led government. We were able to travel freely in all terrain vehicles, spend nights in different villages, and walk about with local leadership. Conducting operations like this from a military perspective, the whole squad and I were able to see the culture of the Pashtun people as opposed to people who spend the majority of their days enclosed on a base. Another objective we had was to have the local population take care of the local population. Establishing a local police force was detrimental for the area, but the best way to handle problems that were brought to us by the local population would be to have them solved by local government and not coalition forces. We were part of a bigger picture in an attempt to make Afghanistan self-efficient.

Within three weeks of being in Afghanistan, we gained enough recruits from a specific village to start a class and train them to become local police. Training was not difficult in comparison to American military training, and anyone willing would be able to tryout. After some vetting of recruits we had 15 in the class. Training a local police class seems fairly easy to some but problems can occur. Instructors had to rely on translators to give commands so responses were delayed, education in rural Kandahar is almost nonexistent and recruits had short attention spans. Many insider attacks happened in Afghanistan with Taliban fighters posing as recruits and then attacking trainers and recruits, so high security was a must. The biggest challenge to our class was the recruits eyeing Jese. They would not pay attention. I became frustrated at this and called one of the interrupters over. "AB" was my favorite translator because he would translate word for word what the individual said without adding his own opinion. I asked AB to ask the recruit why he kept looking at Jese. The recruit said Jese was cute. I then asked what made Jese cute? The recruit listed all of Jese's physical attributes. I then asked AB to ask him if he was homosexual, the recruit replied no. I asked him would he want to have sexual intercourse with Jese. The recruits eyes lit up, he began to blush, he shook his head yes, and said it would

be for pleasure not marrying because he was not homosexual. I then asked why he was attracted to men. His reply was that he was able to tell which boys were cute because he could see their faces. It was an intriguing reply.

In Kandahar the strictest dress code was in place for women. The women of Afghanistan wore burkas. Burkas show nothing, not even the eyes as they are covered with a veil. The burka can be found in various colors, however the most dominate color based on observations I made was black. A woman must always be accompanied by their husband or an immediate male relative. Perhaps this is what the recruit meant by being able to tell who is cute and who isn't. The burka in appearance, is a social construct used to keep males in power. This strict form of dress code was not always in place in Kandahar's history. During the late 1950's thru 1960's, Kandahar was more liberal due to Soviet influence. Past photos show women walking down the street alone or with female friends sporting jeans and sometimes not even wearing a hijab! This is extremely scandalous compared to the Taliban's interpretation of what women should wear. However, minute attempts made by the former Karzai led government made an effort to liberate women in Afghanistan. Examples included women participating in government positions and even having female pilots in its small air force. Although a break-through for women rights is taking place, much more effort must be placed to continue and insure the growth of equal rights for women.

Days were numbered and Soviet influence did not last. War took the soviet friendly cabinet out of office and later a civil war erupted. The results of the civil war led to a geographical dominant Taliban. The Taliban became the internationally non-recognized government of Afghanistan. Their harsh interruptions of Islam were enforced on the streets. Due to the numerous deaths imposed by cruel enforcement, women began to dawn burkas, music for everyone was banned and even kite flying was illegal. One of the reasons the Taliban gained much influence and support with the local populace during the civil war was due to their strict stance against bacha bazi, which was even taking place then. However, there has been evidence that the 'righteous' Taliban had Chai boys, as depicted in the movie *The Kite Runner*.

The squad's overall stance was that child molestation must be part of the complex culture of Afghanistan. We had other things to think about and further examination on the subject really wasn't a priority, for we could not intervene except to send a report to the local government, and we knew nothing would be enforced. We never witnessed physical contact between a chai boy and adult man and, we agreed that if we did, we would have stopped it without any hesitation. We told Rafi that any persons other than National Police cannot be at a checkpoint overnight and that the boy could not have a firearm or a uniform. If this continued we would be forced to report the infractions and one of the consequences he would face could be being relieved of his command. Trying to explain the law to a checkpoint commander who was likely under the influence of an opiate and even had a marijuana plant growing within his checkpoint might not have come across clearly. A report did get sent up but due to the logistics of the Afghan government, Rafi remained in power.

One evening we heard traffic on the radio that a shooting was taking place at a

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separate National Police checkpoint. However, it was resolved very quickly and American assistance was not needed. The shooting was between two Afghan National Police checkpoint commanders. We were in shock. Another checkpoint commander won over Rafi's chai boy and persuaded the chai boy to leave Rafi's checkpoint to go to the other commanders. Rafi lost his dominancy over the chai boy and he felt extremely disrespected. He loaded up some of his armed men in his official national police pickup truck and drove to the other checkpoint. Upon arrival to the other checkpoint Rafi reportedly began firing in the air, as well as towards the checkpoint and demanded his chai boy be released to him. The other checkpoint commander convinced Rafi to lay down his arms and to duke it out in the street. Rafi lost the fist fight and drove back in defeat. We stormed Rafi's checkpoint the next day and spoke to him about the incident. Rafi had a massive black eye and had no idea what we were talking about and we asked where his chai boys was, Rafi looked down at the ground in embarrassment. This incident became a climax of my observations of bacha bazi. The question I asked myself at the time was why and how could this have happened.

As we start to deconstruct bacha bazi we need to interpret a few observations in able for us to tie it into the master-slave dialectic. The first being that, in Afghanistan no one questions the higher-class status of a man. If someone were to dare to speak out against this notion in present time, retribution would immediately follow. One would either be killed or publically humiliated by the Taliban, or the current government would issue a vague statement and not enforce going against the "men of being a higher class status" notion: All of course to keep the elite few in power. "Foucault identified a historical shift or turning point in the way society punishes people from what he called a culture of spectacle to a carceral culture". (Ferrante, 159) This transition is currently happening in Afghanistan. The first stage of the shift or "culture of spectacle" is much like how the Taliban would enforce its ideology with public hangings, mass stoning and other types of fear. The aftermath of the shift or the "carceral culture" is much like the current government's stance. The current government may not be publically hanging people in the streets but they have subtle means to control the population to enforce their ideas and keep the elite status.

A man in Afghanistan cannot flaunt his elite status and surplus as easily as Americans do. In America, we can go about buying a Rolex watch and a luxury limousine to flaunt our elite status. In Afghanistan, access to luxury isn't as easy. The Rolex watch of Afghanistan is a chai boy. If a man were to be able to have a chai boy it means multiple things: Wealth and surplus. Men who have chai boys are often married and have children. Caring for a family in Afghanistan is a difficult task on its own and having access to money is an even more difficult task. So if one could care for both a family and a chai boy on the side, it means you're doing well financially. The second is power. If a man in Afghanistan can have a chai boy and go unchallenged, it's clear he has some form of power. Take Rafi for example, he was a national police checkpoint commander and had a chai boy. Who would challenge the man with the guns and means, especially if he is a "man of the law"? Many in the population were against bacha bazi and spoke out, but concerns were easily suppressed by those who possessed power. The only other person who did challenge Rafi was the other police commander who exhorted more power and stole/won over his chai boy. The master-slave dialectic is present here. The slave is represented by the oppressed chai boy who has nothing to loose and the master is represented by the man (Rafi) who claims ownership over him. The master is only master for a duration of time. His elite status rests in the chai boy and vanishes once his chai boy is gone. Once Rafi's chai boy was gone, Rafi felt weak as a person and his elite status fell.

Although the majority of the time chai boys are left without a choice and are forced into bacha bazi, sometimes it appears to be a mutual relationship. In a country ripe with war and economic struggles, some may not mind being someone's chai boy. Basic human needs are obstructed or come with great challenge in Afghanistan. Being someone's chai boy gives one access to food, security, shelter and other opportunities. Often times those who have ownership over the chai boy provide additional services to family members of the chai boy and basic human needs are extended to them as well. In return, the boy must conduct sexual acts to whom has ownership over him. As we look at Rafi's chai boy in particular, the two had a strong bond of trust. Rafi (being a National Police check point commander) gave the chai boy a riffle and a uniform: Rafi included the boy into his group. An overall assumption is that if the chai boy really was in dismay, the chai boy could have injured or killed his captor. We also realized Rafi had ultimate trust in the chai boy. If Rafi suspected the chai boy to turn on him, we can assume he would not have given him a riffle. With this notion now in mind, was Rafi upset that another checkpoint commander challenged his authority, or was he heartbroken that he can no longer trust the chai boy he trusted? In my opinion it was a combination of both.

The deconstruction of bacha bazi using sociological theories, aids us in understanding and linking concepts to why this practice is continuing. Once understanding the roots of the issue, the community of the Pashtun people can begin to work at finding possible solutions of eradicating this practice. The debate as to whether or not to end bacha bazi is not for the global community to decide, but for the Pashtun people. Liberation of all people in Afghanistan from the Taliban and corrupt people in power has allowed for discussion of the issue amoungst the population. Continuing efforts from the global community to give Afghanistan a chance at democracy can lead to further discussions regarding bacha bazi. If Afghanistan as a whole decides to end this practice and take on an aggressive role in enforcing laws against bacha bazi, they will then intern end the enslavement and rape of young Afghan boys.

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CHAI BOYS



Photo 1- Rafi's Chai boy, Jese and Myself



Photo 2- Jese poses with local children in a village.



Photo 3- Joey and Jese, A comparison of soldiers.



Photo 4. Our open all terrain vehicles made engagement more open as opposed to sheltered, heavy armored vehicles.



Photo 5- Children posing for the camera.



Photo 6- Joey and Jese, A comparison of soldiers.



Photo 7- Afghan Local Police recruits training with AK variant rifles.



Photo 8- Ruins in a desert with breathtaking mountains in the background.

Oxidation of Red Cabbage Anthocyanin¹

Yesica A. Leguizamon

Abstract

There is an increasing interest in anthocyanins as natural food colorants in food products and also in pharmaceutical products, due to their antioxidant potential. The present study deals with extraction and oxidation studies of anthocyanins from red cabbage. Conventional extraction methods of anthocyanin from plant material are non-selective and yield pigment solutions with large amounts of byproducts such as sugars, organic acids and proteins. Some of these impurities may accelerate anthocyanin degradation.4 Degradation kinetics of anthocyanins was studied for red cabbage at high and low hydrogen peroxide (H2O2) concentrations. Degradation of anthocyanins was followed kinetically using spectrophotometry.



Figure 1 - Red Cabbage leaves

¹ Completed under the mentorship of Prof. Homar Barcena for CHM 32: Organic Chemistry II.

Introduction

A nthocyanins (from the Greek anthos, a flower; and kyanos, dark blue), best known of their natural pigment, are responsible for the blue, purple, violet, magenta, red and orange colors of a majority of plant species and their products.3 Color is an important attribute related to the visual appeal and the quality of food products. Due to increasing concerns about the safety of synthetic colorants, the use of natural sources of colorants has been considered. The health benefits of anthocyanins are well known due to their antioxidant properties. The antioxidant and antihyperglycemic properties of red cabbage extract may offer a potential therapeutic source for the treatment of diabetes.8 In contrast, some artificial colorants used in food processing have been shown to have adverse health effects. For these reasons, consumer demand for natural colorants has been on the increase.8 Thus, the study of natural colorants is an extensive and active area of research due to the growing interest of substituting synthetic colorants that could have toxic effects in humans. Carotenoids and anthocyanins are amongst the most utilized vegetable colorants in the food industry.¹

Another significant property of anthocyanins is their antioxidant activity, which plays a vital role in their prevention of neuronal and cardiovascular illnesses, cancer and diabetes, among others.1 There are several reports focused on the effect of anthocyanins in cancer treatments, human nutrition and its biological activity.¹

Red cabbage (Figure 1) is one of the sources of anthocyanins for coloration of food since its anthocyanins are unique, exhibiting color over a very broad pH range. The color of anthocyanins from red cabbage vary from red at low pH to blue and green pH and their use is therefore not limited to acidic foodstuffs but can be extended to neutral products as well. Red cabbage anthocyanins are currently used to color various beverages, candies, dry mixed concentrates, chewing gums, yoghurts, and sauces.⁴

Anthocyanins, are made up of at least three aromatic rings, shown in figure 2 as A, B, and C. There is an oxonium ion within the molecule, which is stabilized by electronrich oxygen substituents. Natural anthocyanins almost always contain sugar molecules or glycosides, shown in figure 2 as "glc". These sugar molecules could aid in the anthocyanin's stability and play a role in their metabolism.¹

The pigments of red cabbage consist primarily of cyanidin 3-sophoroside-5-glucoside and cyanidin 3-sophoroside 5-glucoside acylated with sinapic, ferulic, p-coumaric and malonic acids.⁴ These anthocyanins are almost entirely acylated, have a high pKa value and high value of tinctorial strength.⁴ The unusual pH stability of the color of red cabbage anthocyanins is thought to be due to the presence of these acyl groups which hinder the hydrolysis of the red flavylium cationic form to the colorless carbinol base, allowing preferential formation of the blue quinoidal bases.⁶ Glycosylation at positions 3 and 5 shifts the color towards blue and the stability of color may also be influenced by intramolecular co-pigmentation.⁶ Because of these special characteristics, which give more stability to anthocyanins, red cabbage was selected for the present study.⁴



Figure 2 - Anthocyanin

Results and Discussion

Red cabbage was extracted using deionized water. Red cabbage leaves were cut into small pieces. Extraction was carried by taking 25 g of these leaves and 50 mL of deionized water while providing thorough contact in a mixing unit. The anthocyanin extracted was filtered through filter paper to removed coarse particles. In order to improve the efficiency of the extraction, 1mL of hydrochloric acid was added, which stabilizes the pigments and lowers a pH to a level where the absorbance of the anthocyanins is at their maximum. The anthocyanin content in extract increased with an increase in the percentage of acid in the water.⁶

Purple and red-flesh red cabbage blanched for 15 min showed decreased activity of red cabbage extraction by 90%. Aqueous extracts prepared from red cabbage and citric acid buffer and blanched up to 10 min turned colorless (light yellow) a few minutes after extraction, while extracts blanched from 2 to 5 min shows a faster absorbance. Therefore, a blanching time of 15 min was used for all experiments.

The antioxidant properties of anthocyanin may be examined by monitoring the color change upon reacting with an oxidizing agent. In our experiment, we used hydrogen peroxide. Hydrogen peroxide is cheap, readily available, and produces only water as a by-product, making it a green oxidizing agent. Figure 3 shows duplicated samples with same concentration that were prepared on the same day. Sample 1 (10 mL of Red Cabbage Extraction, 1mL of H_2O and 1 mL of H_2O_2) shows slower change in absorbance than sample 2 (10 mL of Red Cabbage Extraction and 2 mL of H_2O_2), which has twice the amount of oxidizing agent.





Figure 3 - Two different concentrations of duplicated red cabbage extraction sample were prepared on the same experiment day, Sample 1 (10mL of red cabbage + 1mL H₂O₂), sample 2 (10mL of red cabbage + 2mL H₂O₂). The decrease in absorbance of red cabbage anthocyanin samples after peroxide addition demonstrates non-zero order kinetics of the reactions.

The anthocyanin reaction with H2O2 was performed on the same day. The anthocyanin absorbance decreases when it reacts with the oxidizing agent. Data was obtained by monitoring the absorbance maxima (522 nm) over a 20-minute period. The plotted data (fig 3) shows a non-linear decay of absorbance, indicative of bleaching of the dye. Thus, fitting the data gives the logarithm equation, which is the rate of oxidation.



Sample 1 (10mL of red cabbage + 1mL H₂O + 1mL H₂O₂). With a time lapse of every 2 minutes.



Sample 1 (10mL of red cabbage + 2mL H₂O₂).

Figure 4 - Picture of aqueous anthocyanin extracts at different amount of hydrogen peroxide (bleaching agent) and distilled water. Sample 1 de-colorization is slower than sample 2 because the concentration of peroxide is lower than sample 2.

The degradation of anthocyanins by H_2O_2 was fitted to a first-order kinetic model (Fig. 5). The reaction rate constant (k) and half-life (t1/2), the time needed for 80 % degradation of anthocyanins at a given H_2O_2 concentration, were calculated by the following equation:

$$\ln (A_{l}/A_{0}) = -k \times t$$
(1)

$$t_{l/2} = -\ln 0.5/k$$
(2)

where A₀ is the initial absorbance of anthocyanin solution and A_t is the absorbance value after time t min incubation at a given temperature.⁷



Figure 5 - Degradation of red cabbage juice anthocyanin with different amounts of hydrogen peroxide. Sample 1 (10mL of red cabbage + 1mL H_2O + 1mL H_2O_2), sample 2 (10mL of red cabbage + 2mL H_2O_2).

Data fitting for the first order reaction gave acceptable R^2 values, verifying our hypothesis that the reaction rate may be determined from our experimental conditions. The more concentrated H_2O_2 gave a steeper slope and a lower R^2 value, and seemed to look like a curve. To test if a different order of reaction may be happening, the data was fitted to a second order rate equation.

The degradation of anthocyanins by H_2O_2 was fitted to a second-order kinetic model (Fig. 6). The reaction rate constant (k) and half-life ($t_{1/2}$), the time needed for 50 % degradation of anthocyanins at a given H_2O_2 concentration, were calculated by the following equation:

$$\frac{1}{(At)} = \frac{kt + 1}{(A0)}$$
(3)
$$\frac{t_{1/2}}{(A0)}$$
(4)

where A_0 is the initial absorbance anthocyanin solution, and At is the absorbance value after time t min incubation at a given temperature.¹⁰



Sample 1, Sample 2 (Second order)

Figure 6 - Degradation of red cabbage juice anthocyanin with different amounts of hydrogen peroxide. Sample 1 (10mL of red cabbage + 1mL H_2O + 1mL H_2O_2), sample 2 (10mL of red cabbage + 2mL H_2O_2).

According to the second order fits, the R² values are also good. Although it has been reported in literature that the peroxide reaction with anthocyanins is first order,⁷ we show here that the kinetics may not be as straightforward. Previous studies have shown first order rate fits, but no second order fits were reported. Thus, our studies are the first to show that the kinetics of anthocyanin degradation may be more complicated than previously reported. This could have implications on the use of anthocyanins, particularly in foodstuffs, where degradation of food components could have large economical and health repercussions.

Applications to Green Chemistry

Kingsborough Community College is one if the first signers of the Green Chemistry Commitment in the nation. As a contribution to this commitment, we are adopting greener chemistry practices for our students' laboratory experiments. The oxidation rate of anthocyanin in this study is designed for green chemistry. The twelve principles of green chemistry, such as atom economy, less hazardous chemical syntheses, safer solvents, design for energy efficiency, use a renewable feedstock are applied in the experiment design:

- *Prevention.* This experiment is designed to replaced synthetic colorants with toxic effects in humans.
- Energy Efficiency. Experiments are performed at ambient temperature and pressure.
- Benign solvents and auxiliaries. Hydrogen Peroxide and water are used in the reaction.
- Renewable feed stocks. Red cabbage is a natural product
- Design for degradation. Red cabbage is biodegradable
- Inherently benign for accident prevention.

During the lab, students will not only learn about the concept of oxidation rate,

but they will also observe that the reaction is happening because of the chromogenic reagent. They will be able to observe, and extract natural anthocyanins such as those found in red cabbage.

Conclusion

A spectrophotometric titration is applied to measure the change in the absorbance for the reaction rate of red cabbage anthocyanin and an oxidizing agent. Results show that the degradation of red cabbage anthocyanin follows a non-zero order reaction kinetics. The data fits well with first and second-order kinetics, but more studies need to be performed to verify which of the two gives a better fit. Literature precedent indicates that peroxide reaction with anthocyanins follow first-order kinetics, however our studies show that these conclusions may be too simplistic. This is reasonable because the red cabbage extract may have components other than the anthocyanins.

In the future, experiments will be designed to allow students in the General Chemistry lab to use the UV-Vis spectrophotometer, calculate the concentration of solutions, tabulate data, formulated graph, and understand the activity of anthocyanin compounds. Through experimentation, students will also learn the principles of green chemistry, such as the use of renewable chemicals and natural products.

Chemicals and Instrument

Hydrogen Peroxide 30% (H_2O_2) from Fischer Red Cabbage from Joe's market Distilled water (H_2O) BLACK-Comet UV-VIS Spectrophotometer from StellarNet INC. UV-VIS-NIR Sources – Low Output Power SL5 from StellarNet INC. GENESYS 20 Spectrophotometer (student UV-Vis spectrophotometer) from Thermo Scientific.

The following procedure was determined to be the best conditions of Oxidation of Red Cabbage Anthocyanin

Materials and methods

1. Red Cabbage Extraction with deionized water²

- Chop some fresh red cabbage leaves into tiny pieces. Place them in a beaker and cover them with distilled water, amounting about 1½ times their volume.
- Slowly heat the beaker to 50C and maintain for 15-20 minutes. Until red cabbage leaves are completely decolorized.
- When the colored liquid is cool, strain it through filter paper and save it. Discard the chopper cabbage and the filter paper.

2. Solution Preparation

10mM pH 3.0 citric acid buffer in deionized water: dissolve 1.643g citric acid, 0.426g sodium citrate to 1 L deionized water.

3mL H₂O₂ 30%: mix 2mL deionized water and 1mL H₂O₂ 16%.

The juice sample were diluted with citric acid buffer to give an absorbance reading between 0.6 and 0.8 units and filtered again prior to degradation studies.

3. Oxidation rate

The absorption spectra were scanned from 360 to 790 nm with a BLACK-Comet UV-VIS Spectrophotometer, using 1-cm quartz cuvettes. The wavelengths of maxima absorptions were 520 nm and 522 nm. All absorbance readings were made against 20mM pH 3.0 citric-acid buffer in deionized water as a blank.

Process the data into an **Absorbance** versus **Time** (seconds) graph, and obtain the logarithm equation and regression coefficient for each experiment. Again, in the same table find the inverse (reciprocal) of each absorbance value. Plot a graph of ln[Abs] versus **Time**. As well, plot a graph of **1/[Abs]** versus **Time**.

Acknowledges

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Probability in Real Life

Anna Makogon

Abstract

In this paper, I evaluate the connection between underlying probability and observed results. I argue that making large numbers of observations, false positives and positive fallacies reflect results of underlying probabilities. I examine the book *The Drunkard's Walk: How Randomness Rules Our Lives* by Leonard Mlodinow, which introduced different mathematicians such as Benford, Bayes and Bernoulli and their theorems. Also I reviewed different scholarly research conducted that explains probability, its interpretations, false positives, different laws and how they can be used in answering different sorts of questions. I show that all of these theorems work best for certain times. For example, Benford's law works well in stock markets and with financial records, Bayes's theory is great use in computer programs, sciences, industry and marketing, while Bernoulli's theorem sums up all of them and is great use in any kind of situation or problem. I conclude that false-positives, positive fallacies and large numbers of observations play a significant role in results of underlying probabilities.

e use phrases like "the probability of this coin coming up tails is 1/2", or "the odds on Giants winning their home game are 2 to 1", or "the chance of dying of lung cancer is 15%". How do we arrive at these numbers and what do they really mean? There are many tools, theorems and formulas in the mathematical world to use in order to find answers to various questions like these. The key to understanding randomness is to use such tools to figure out the answers to problems, rather than trying to find answers immediately. The book *The Drunkard's Walk: How Randomness Rules Our Lives* by Leonard Mlodinow, provides many examples and introduces different mathematicians such as Benford, Bayes and Bernoulli and their theorems. It stresses the strong connection between underlying probabilities of an event and its observed results. By studying their theorems and observing different scholarly research conducted, we can clearly explain false positives, positive fallacies and large numbers of observations on results of underly-

¹ Completed under the mentorship of Prof. Ronald Forman for MTH 20.

ing probabilities.

What is probability?

Probability is defined as the branch of mathematics that deals with the study of chance. Probability deals with data collection and it's analysis as well as the study of experiments and their outcomes. Probability measures how likely an event will occur. Mathematicians also say that the language and mathematics of probability is the natural language for representing uncertainty. Since the word "probability" was first used in relation to games of chance, it has been used in a variety of ways. Statistically, there are different views on probability and therefore, many ways to interpret and deal with unpredictability. In statistics, the probability of event A is represented by the symbol P(A), the probability of B event is P(B) and so on. The sum of all the probabilities of all possible outcomes has to equal one. In mathematical form it would be expressed as P(A)+P(B)+P(C)=1

Development of probability

Unlike the study of probabilities, which started only 350 years ago, mathematical ideas became known a very long time before that. Philosophers and mathematicians started to show interest in probability very recently, and as one of the last fields of mathematics. The reason for this is still up for debate, but could possibly be that the probabilities' underlying concepts are not straightforward.

Another possible explanation for why medieval mathematicians and philosophers hadn't developed a probability theory earlier may be that in that period of time, the ideas of uncertainty or risk had a different meaning than it does today. Today, there is no more strong belief that gods rule the universe on a whim and people no longer see things such as war as a work of karma, fate or the gods. Instead people view them as risks that may be managed through right actions. Around medieval times, probability theory started to become a very dominant world view: The idea of fate and gods was no longer convincing.

Interpretations of probabilities

Ideas of probability theory came from gambling and were interpreted in many different ways. We face different kinds of probabilities every day and often we rely on multiple kinds of interpretation of probability. The answers often depend on the circumstances and individual interpretation of probability. Some of the probabilities include questions like: "Does the patient have cancer? Which numbers should I choose for the lottery? Will I have a heart attack in 10 years?" These kinds of probabilities are affected by the way we interpret them, as well our insufficient knowledge of the situation. Interpretation of a probability theory might seem easy at first. However, it does get more complicated. Three of the most useful and famous interpretations are classical approach, frequency and subjective interpretations of probabilities, also known as randomness.

Classical Approach of randomness

Classical interpretation or classical approach of probability is also called the assumption of equal likely cases. It is the most basic of the underlying approaches. This approach was defined by mathematician Laplace as such: The probability of an outcome is the ration of the favorable cases in the number of equally possible cases. Probability was viewed as consequence of peoples' ignorance about the world. The classical approach states that, if we have no reason to prefer one outcome to another, then these outcomes are equally possible. Let's consider an example of a coin that we flip to better understand the classical interpretation. If we flip a coin an infinite amount of times, the probability of achieving a tail on the coin is ½. So we would see tails 50% of the time. Laplace interpreted this as a measure of people's ignorance (The Classical Approach, UnderstandingUncertainty.org), which is often present before any experiment is conducted. There were a few philosophers that experimented with this and tried to develop probability as a classical approach and were not successful. Therefore, they concluded that the theory was not quite valid.

Frequency interpretation of randomness

Because of the criticism many writers and scientists had about the classical approach, another useful interpretation developed: The frequency interpretation of probability. It defines a probability as limiting frequency in a large number of trials and is associated with random physical systems. For example, rolling a fair dice or roulette wheel. Frequency interpretation is not a concept that could be assigned to an individual experiment, but rather it is assigned to a long sequence of repeated experiments (Szabo, 4). In these physical systems, any given type of event occurs at a persevering rate in a long run of trials. However, physical probabilities and random experiments work well only if their details are well defined. Experiments show that if we throw a fair die several times, eventually, each number comes up about a sixth of the total time. The longer the die will be thrown, the nearer the result will come to the ideal value of 1/6 for each number. As the throws continue to infinity, the probability of an event is defined by the relative frequency. We can see that frequency interpretation judges a sample by the way it turns out and the number of trials conducted.

Subjective interpretation of randomness

Another broad category of probability interpretation is evidential, also called subjective probability. Unlike frequency interpretation of randomness, subjective interpretation judges a sample by the way it is produced. This means that set of numbers are considered random only if we cannot predict how the results will turn out. People that use subjective interpretation give the notion of probability a subjective status by regarding it as a measure of the "degree of belief" of the individual assessing the uncertainty of a particular situation. As mentioned before with the example of the coin, in subjective interpretation,

uncertainty about the event plays the biggest role. This means that when flipping a coin, it has to be detailed, that the coin is fair and in prior experiences, heads occurred 50% of the time. Subjective interpretation applies probability theory to real world situations and is considered to be the most realistic way of interpreting probability. This is a way of representing private evaluation based on given evidence of how likely an event will happen. However, it can be applied only to a very restricted part of reality, it talks about a real person's degree of belief, which is not yet empirically defined (Szabo, 7).

Misconception of interpretation of randomness

One misconception of interpretation of probabilities is that they can occur only once. For example: the probability Michael Jackson is still alive, or that the war in Ukraine will end. Many think that there are only two possible answers- yes or no. This means that the answer could be only ½. Some scholars argue that it "excludes too many interesting cases from probabilistic analysis" (Understanding Uncertainty.org). This misconception is also debatable because many other cases of probability also exist, such as "What is the probability of rain today?" or "How likely is it that I will be on time for school?" Probabilities like these can't be answered with a ½ answer, they have to be statistically interpreted. Also, in nature, events rarely occur with perfectly equal frequency. Many people tend to think that numbers are "cursed" or "blessed", because some of them come up more often than others and vice versa. This can happen only if the event is biased, like loaded dice, for example. However, if it's a fair die, then the previous rolls give no indication of the future events. This is why every event has to be clearly defined.

Benford's Law and where it came from?

According to the Oxford dictionary, Benford's law is the principle that in any large, randomly produced set of natural numbers, such as tables of logarithms or corporate sales statistics, around 30 percent will begin with the digit 1, 18 percent with 2, and so on, with the smallest percentage beginning with 9. The law is applied in analyzing the validity of statistics and financial records. He even applied it to stock market data and certain accounting data (Bendord's Law, oxforddictionaries.com).

Benford's law is a mathematical theory of leading digits that was discovered by American astronomer Simon Newcomb. In 1881, he noticed that the pages of logarithms book beginning with number 1 were more worn than pages dealing with higher digits: In comparison to pages starting with 1, they looked more clean and new. He calculated that the probability that a number has a particular non-zero first digit by using this formula:

> P(d)=Log10(1+1/d)Where: d is a number 1,2,3,4,5,6,7,8 or 9 And P is the probability.

As he solved this, he concluded that all digits don't appear with equal frequency, but the number 1 appears as the first digit about 30 % of the time, as supposed to digit 9

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that appear less than 5 % of the time. However, he didn't provide any theoretical explanation for the phenomena he described and it was soon forgotten. In 1938, Frank Benford, a physicist, also noticed this non-uniform way of digital distribution. He attempted to test his hypothesis by collecting and analyzing his data. After having over 20,000 observations, he noticed that the numbers fell into a pattern with low digits occurring more frequently in the first position than larger numbers. His theory wasn't published or noticed until 1995, when Ted Hill, a mathematician at Georgia Institute of Technology studied his experiments and observations. He was able to provide enough evidence and proof that Benford was correct to make the law valid and useful in real-life sources of data (Understanding and Applying Bendord's Law, isaca.org).

Where is it most and least useful?

The theory's probability is based on the logarithm of occurrence of digits in randomly generated numbers in a large data set. It is best applied to data sets that go across multiple orders of magnitude like income distributions or populations of cities or towns. Since theory is more accurate when values are distributed across multiple orders of magnitude, other examples would include; street addresses, electricity bills, credit card transactions, stock prices, customer refunds, purchase orders, journal orders, loan data, inventory prices, death rates, length of rivers or lakes.

Even though, it has been shown to apply in a variety of data sets, not all data sets follow this theory. Data sets like human heights or weights, in which digits begin with a limited set of digits, do not follow the theory. The theory also won't work for a data set that covers on only one or two orders of magnitude, for example small insurance claims. Other data sets that are less likely to be accurate are telephone numbers, data generated by formulas, data that is restricted by minimum or maximum number, airline passenger counts per plane (Number's Game, news.bbc.co.uk).

Benford's Law and auditors Research

Bendord's law is very effective for detection of fraud for auditors because the law is based on peculiar observations that some digits appear more frequently than others when using large data sets. However, for the results to be more accurate, the auditor needs to make sure that mathematical assumptions of the theory are compatible with the data set to be tested. Cindy Durtschi and William Hillison conducted research that demonstrated the effective use of digital analysis for fraud detection based on Benford's law. If used properly, digital analysis can increase an auditor's ability to detect fraud. Digital analysis could also analyze their data in depth after identifying specific accounts in which fraud

Why is it beneficial?

There is already enough information that promotes the use of this law as a simple but effective way for auditors to identify operational discrepancies and to uncover fraud in

accounting numbers. However, further study provided complete guidance to auditors for distinguishing between circumstances in which digital analysis might be useful in detecting fraud and those circumstances where digital analysis cannot detect fraud. It also showed how using Benford's law can interpret the results of the tests so auditors can better access the amount of reliance they should place in digital analysis as a way to detect fraud. The law looks at an entire account rather than parts, to establish if the numbers fall into the expected distribution.

Things to keep in mind about the auditor's field

When performing analytical procedures, auditors apply various forms of digital analysis in an attempt to detect fraud. For example, they use it to search for missing invoices or payment amounts to test for duplicate payments. However, several matters should be contemplated. One of them is to make sure to choose appropriate data sets for the analysis and size: The larger the number, the more accurate the analysis. Therefore, it is beneficial when the entire account is analyzed rather than just sampled. There are special tests that can predict whether or not Bendord's law applies to a particular data set. The larger the ratio of the mean divided by the median, the more closely the set will follow Benford's law. On the other hand, groups of accounting-related data, like assigning numbers, such as purchase order numbers, ATM withdrawals or check numbers, even with large digits, do not follow the Benford distribution. They are assigned to follow a uniform distribution and won't conform to Benford distribution. Also, things like duplicate addresses, bank accounts, duplicate purchase orders or involved numbers cannot be detected. This is because the data sets under examination are not appropriate for such analysis. The article suggests that rather than using Benford's law as a primary tool, the auditors should add other tools. Some of them can be personal observations of assets or an awareness of corporate culture. Another point to keep in mind is to consider two underlying concepts when deciding how effective digital analysis is based on the law as not all accounts that contain fraud contain a large number of fraudulent transactions and the effectiveness of digital analysis can therefore decline.

In conclusion, the goal of Cindy Durtschi, William Hillison and Carl Pacini was to help auditors use Benford's law more appropriately to increase their ability to detect fraud. Through their studies and observations they concluded that if used correctly it is a very useful tool for identifying suspects' accounts for further analysis. They showed that certain limitations must be considered when applying the law, because the potential cost of undetected fraud is high. To review their points: 1) Care must be exercised in interpreting the statistical result of the test, 2) Benford analysis should only be applied to accounts which conform to be Benford distribution, and 3) The auditor must be cognizant of the fact that certain types of frauds will not be found with this analysis.

Bernoulli's Theorem

Bernoulli trials were named after Daniel Bernoulli in the 18th century. He was

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a Swiss mathematician inspired by mathematician and scientist, Christiaan Huygens who developed the theory of light as well as improvements of the telescope and the mathematical primer on probability. However Huygens' theory presented severe limitations and Bernoulli questioned aspects of life that were more subjective. "Bernoulli believed that for rational decision making to be possible, there must be a reliable and mathematical way to determine probabilities" (Mlodinow, 90). His interpretation was that instead of depending on probabilities being handed to us, we should perceive them through a series of observations. The observed frequencies will reflect more and more accurately their underlying probabilities as we increase the number of trials. He certainly wasn't the first one to believe this, but he was the one to give the first formal experiment and proof that described any random event that has exactly two outcomes. He came up with "the Law of Large Numbers, and the weak law of large numbers" (Mlodinow, 95). It is called the "Law of Large Numbers" because his theorem involves the way results reflect basic probabilities when a large number of observations is taking place. Jacob Bernoulli had shown that it is possible to learn how the inner hidden probabilities that underlie natural systems are reflected in the data those systems produce through statistical analysis.

Law of Large Numbers

The most famous proof with repeated observations was made with a coin. Bernoulli's explanation states that if we toss a "fair" coin 10 times and we might observe 7 tails, which is more than 50 % of the time, but if we toss it 1 billion times, we are most likely to only get close to 50 %.

The law of large numbers is considered to be the easiest, yet the most important of all processes of probabilities. It is important to understand that this theory doesn't say that it's impossible to accomplish the goal of the task with fewer trials, even though the theorem specifies a number of trials. However, we can't assume that a small sample will accurately tell us the correct answer. Simply think of an example, if somebody says, "the chances are 2 in 3" versus "9 in 10". Which one would you think is more accurate? Well, I think I would believe 9 in 10, just because it was a larger sample and 9 in 10 sounds more accurate to me than 2 in just 3 trials. That is the misconception of the law: A small number of trials do not meticulously reflect underlying probabilities. Mathematicians even gave it a sarcastic name: the law of small numbers, which describes the misconceived attempt to apply the law of large numbers when the number isn't even large. Another factor has to be mentioned in order to apply Bernoulli's theorem is that the tolerance of error has to be specified because nothing is ever 100 % accurate.

Usually, people have another misconception about the law of large numbers : This is "the idea that an event is more or less likely to occur because it has or has not happened recently" (Mlodinow, 101). Here is where the gambler's fallacy plays its role-the odds of an event decrease or increase depending on a recent occurrence. However, the gambler's fallacy is just a powerful illusion.

Gambler's fallacy

Gambler's fallacy is when a person believes that a departure from what occurs is on average is "due" to what had previously happened instead of what would be expected on average or over the long term. "Gambler's fallacy involves beliefs about sequences of independent events. By definition, if two events are independent, the occurrence of one event does not affect the occurrence of the second. For example, if a fair coin is flipped twice, the occurrence of a head on the first flip does not affect the outcome of the second flip" ("Gambler's Fallacy Demonstration", onlinestatbook.com). Meaning, that chance of getting a heads is 50 %, or 1/2. Suppose that we toss the coin 6 times and get heads each time and believe that next toss will be heads again, because it's "due", then we would commit Gambler's fallacy.

Gambler's fallacy research

Peter Ayton and Ilan Fischer said in their research that gamblers fallacy, also known as negative recency, is "the belief that, for random events, a run of particular outcome" (1369) will be balanced by a tendency for the opposite outcomes. For example, tails of the toss of a coin will be balanced tendency for heads of the next toss. Gambler's Fallacy can occur in expectation for statistically indistinguishable random sequences - at the same time the same means is required to determine which expectations occur when. (Ayton and Fischer 1371)

Numerous studies that were conducted at earlier times confirmed, that recency effects extinguished with experiments with 1,000 or more trials. So where can we see and learn Gambler's Fallacy in everyday life? In general, clearly it is an unsuitable response to situations "where there is conditional independence between successive outcomes of a random process" (1369). In addition, there are only a few circumstances where one can safely assume conditional independence of a succession of events, rather than only in gambling casinos or psychology laboratories. One obvious candidate is when a finite population of outcomes is sampled without replacement, the Gamblers Fallacy reflects adaptation to uncertain situations where negative recency is indicated. "Under these circumstances, expectations with negative recency have some validity because observing a particular outcome lower the chance of observing that outcome the next time" (1370).

Peter Ayton and Ilan Fischer conducted an experiment where they aimed to investigate the possibility that incorrect expectations of positive and negative recency in random sequences ensue as a function of the category of event that subjects experienced. They hypothesized that sequences with positive recency will be attributed to human skill performance, whereas those with Gambler's Fallacy or negative recency will be attributed to insentient chance mechanisms. They asked samples of people to predict the next outcome in a random series and then they measured if a sequential dependent was present in their responses. After they collected all the data and examined it, the result was that responses in choosing next outcomes were sequentially dependent on precious outcomes. The results of the experiment confirm their hypotheses and resulted in subjects' predic-

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tions showing negative recency or Gambler's Fallacy with respect to the sequence of the outcomes.

They also examined collected data on the effects of confidence in predictions as a function of runs of failure. Their graphs confirmed that the effect of indirection between task and run length were statistically significant. Their analysis of the connection between runs of success and failure and confidence unveil "that subjects increase their prospective confidence in their choices as a function of runs of successful prediction and decrease confidence as a function of failed predictions" (1373).

For the second experiment, they used three sets of 28 binary sequences varying in recency. The sampled people were told that each sequence showed output from one of two pacified processes. One pacified process was representing human's skilled performance and another represented chance performance. The task was to identify which of the names sources were more likely to be responsible for in each sequence provided. After data collection, they analyzed how subjects' judgments of the source of sequence varied with alternation. It confirmed a significant effect of alternation rate on the probability of choosing skilled performance for all sets that were provided.

Summary of Gambler's Fallacy research's experiments

In both experiments, subjects rejected the random sequences they saw as being unrepresentative on their faulty conception of statistical randomness. Without clarifying a mechanism to identify which of the two distinct and opposing prior expectations arises, there's an incomplete explanation of Gambler's Fallacy. Experiments also slow that people can learn about statistical randomness by observing it. They suggest that "a biased concept of 'pure' statistical randomness is not primarily responsible but separate" (1376) and validated the concept of Gambler's Fallacy that cued when subjects decided which sort of previous experience the data are most likely to resemble. In addition, there are many other studies that show that people have an erroneous concept of randomness. These studies suggest a basis for representativeness, but yet "do not address the issue of which completing hypotheses people may invoke when judging that a sequence is not random" (1376).

An Introduction to Bayes' Theorem

Bayes' Theorem is a theorem of probability that was named after Reverend Thomas Bayes. The theorem shows how the probability that a theory is true is affected by a new piece of evidence. It has been used in a wide variety of different contexts, like science, computer programs, marketing and many more. His theorem was formulated to define how supporting evidence is in terms of absolute probability, rather than conditional. P(A|B) = P(A and B) / P(B), that is, the probability that A and B are both true divided by the probability that B is true. Bayes theory shows that the probability that A will occur if B occurs will generally differ from the probability that B will occur if A occurs and it is a very important factor in daily life as well. His theory represents how the world of the probabilities that underlies real world situations could be inferred from the outcomes we observe.

Book, The Drunkard's Walk: How Randomness Rules Our Lives by Leonard Mlodinow, tells a story introducing a reader to Bayes theorem, how it works and why is it helpful in math and the real world. In 1970, a psychology professor at Harvard was confused by one of his students who said that the reason he was taking that course was because strange things were happening to him in sequence. He also formed a mental model to reconcile the events with the way the world behaved. He believed that one day he would lead his experiment by famous psychologist B.F. Skinner and become known for his yet unproven theorem. He wanted to learn how to test the hypothesis he came up with and how to do his experiment. Months later, he discovered that he didn't need a psychology class to learn that, but Thomas Bayes theory of probability answered all his questions. Bayes theory illustrated how to estimate the chances that some event would occur if some other event also occurred. Bayes theorem showed the student how one should adjust initial estimations in light of the new evidence. Using formulas, calculating hypothesis of the experiment and adding additional evidence meant that the probability was 999,999 in 1 million. The professor from Harvard didn't believe it until that student proved that using Bayes theory and the theory of conditional probability can answer almost all types of questions related to the occurrence of events.

What is conditional probability?

The conditional probability of an event is the probability that the event will happen given that some other event has already occurred. It represents a revolution in ideas about randomness. In addition, it shows "how the theory of probability can be extended from independent events to events whose outcomes are connected" (Mlodinow,106). It is widely used in most types of statistics and is a basic tool for many. However, it requires careful interpretation in some cases. It is expressed as P (A|B) is read "the probability of A given B" and means the probability of event A once event B has already happened. (Bayes' Theorem, trinity.edu)

How to use Bayes' theorem?

To apply Bayes's analysis, first we need to find out the sample space, then classify the members of the space, for example "true - positive" and "false- positive". Lastly, we need to find out how many people were there in each of these classes. For example, if taking a study from 1989 by the Centers for Disease Control and Prevention, 1 in 10,000 individuals of white male Americans that got tested for HIV received positive results. Therefore, let's assume, the population was 10,000. Calculating, we will assume that false-negative rate is near 0, which means that about 1 person out of all samples will test positive due to the presence of the infection. Comparing this to a different sample, let's assume the population was 1,000, then there will be 10 people out of this 1,000 to test positive, though not infected. Being aware of that, now let's cut off the sample space to include those who tested positive. After doing so, at the end there are 10 people with false positives and only 1 person with true positive. This means that only 1 in 11 people who were tested positive are really infected with HIV. This shows that the false positive rate is not sufficient to explain the usefulness of a test because it is possible to know the false positive rate compared with the true prevalence of the disease (Mlodinow, 116).

Bayes theory in real life.

We often use Bayesian theory in our daily life. However, we often confuse the probability of events happening if the events were the product of a huge conspiracy with the probability that it exists if a series of events. For example, one man has a loving wife and daughter, but falls in love with dancing. He tells his wife that he has extra work to do and that he will be late. She doesn't believe him and thinks he is cheating. She later figures out the chances of his lying. These chances are even greater if he is really having an affair than if he isn't, and so she concludes that he is. But she was mistaken not just in her conclusion, but in her reasoning. Meaning, she confused the probability that her husband would sneak out if he was having an affair with the probability that he was having an affair if he was sneaking around.

The biggest mistake and confusion happens in the medical field: Most doubt or uncertainty comes when testing for HIV. The answer to an HIV test can be HIV positive or HIV negative. The doctors often confuse the chances that someone will test positive if that individual was not HIV positive with the chances that someone would not be HIV positive if individual tested positive.

To summarize, the easiest way to understand this theory and ideas is to first write down the sample space which is the list of all the possibilities. Second, cross off the possibilities that the condition eliminates: The remaining possibilities and their relative probability will be left.

False Positive Report Probability Research

Sholom Wacholder, Stephen Chanock, Nathaniel Rothman, Montserrat Garcia-Closas and Laure El ghormli conducted a study that argued that the false positive report probability or FPRP depends on prior probability, disease and observed probability value and that this can help editors and investigators. The study showed how to assess the false positive report probability and how to use it in concluding whether a finding deserves attention or not. It also shows how their approach can improve analysis, design and interpretation of molecular epidemiology studies.

Determination of FPRP is based on sample size, frequency and specified odds ratio. They used it to develop a criterion based on the FPRP for evaluating whether a study finding is noteworthy (Wacholder, et al, 434). Unlike the Bayesian approaches, FPRP approach required specification of a prior probability distribution for the odds ratio. FPRP also combined the evidence for each hypothesis individually without being influenced. In addition, calculation of the data and FPRP was specified on the alternative hypothesis. Another difference is that FPRP directly addresses the concern in the literature over too many false-positive reports. That is why prior probability, statistical power and P value determine the genetic variant and a diseases' probability.

First molecular study and advanced technology

The very first molecular epidemiology studies were done only to test hypotheses. All of the hypotheses they had were relatively small but with extremely strong biological evidence of the gene importance, for example in DNA. Now, with improved technology and relevantly low cost, it is possible for investigators to move beyond regular testing of different hypothesis, but also to test single nucleotide polymorphism or SNPs and thousands of genes together with it. Even though it seemed to have more criteria to work with, they still faced many challenges. One of them was a question on how to take advantage of technical opportunities in order to accelerate the confirmation of genetic causes of cancer and, at the same time, minimize the number of false - positive findings as well as their consequences.

The frequency of genetic variation can change statistical power as well as FPRP. They took 1,500 patients and 1,500 control subjects over a range of factors frequencies for three prior probabilities when the observed probability value was 0.5. Statistical power against an odds ratio was 1.5, therefore lower statistical power when studying less common genetic variants resulting in higher FPRP. The same study showed that since it used 1,500 case patients, it had much more statistical power compared to a sample of 200 case patient studies to achieve an FPRP below 0.5.

The conclusion of this study was that a small study has less statistical power than a large study to achieve the FPRP required to declare a noteworthy finding. Using the classical theory, the truth of the null hypothesis and alternative hypothesis is considered random or unknown. Therefore, they used the frequentist concept of the statistical size so that null and alternative hypothesis can be probabilistic.

Benefits of Bayesian approach.

Their reason behind creating this approach was that using it is simpler to understand than Bayesian approach because it requires fewer assumptions and less technical proficiency investigators. Using it, investigators should be able to better determine a prior probability. Their approach allows for a false-positive decision, probability value and the prior probability of the hypothesis to play a role in deciding whether a finding is noteworthy. It can lead to more cautious interpretation of surprising findings, which is helpful for hypothesis with low prior probability.

In a summary, this approach offered guidelines for interpretation and publication of study results such as a guide on investigators' decisions about where to attempt to replicate molecular epidemiology studies or to increase their understanding of the disease mechanism. It helps to formalize what investigators have always done informally - tempering enthusiasm for surprising study findings with consideration of plausibility.

Differences between Bayesian and Bernoulli theorems

Bayes embraced the study of theology and showed no interest in fame. One big difference between Bayesian and Bernoulli is that Bernoulli focused on the quantity of an event happening, for example, how many heads would come up in many tosses of a fair coin. On the other hand, Bayes focused on how certain one can be that that coin is balanced if you observe a certain number of heads.

Bayes theorem wasn't published until 1764. Today, Bayesian analysis is widely used in industry and science (Bayes' Theorem, trinity.edu).

Conclusion

My research shows that different theorems could be applied to different life situations. To specify, Benford's law works well in stock markets and with financial records. Bayes is of great use in computer programs, sciences, industry and marketing. On the other hand, Bernoulli trials sum up all of them and is useful in any kind of situation or problem. Each of the mathematicians calculated certain problems using their theories, large numbers of observations, as well as specific and detailed materials. As it was stated, the interpretation of certain probabilities plays a role when solving for an answer. Bernoulli's theorem stresses, more than any other, that making large numbers of observations can reveal numerous and varied underlying probabilities. In addition, Bayes proved that false-positives and positive fallacies play a big role in the results of underlying probabilities. When searching for answers of underlying probabilities, it is essential to make a large numbers of observations, be detailed and specific in interpreting them, and to keep falsepositive results in mind.

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Ebola Virus in Africa and the United States'

Safinaz Mashali

Abstract

Ebola is a lethal virus that has been afflicting Africa since its first outbreak in 1976. It has been difficult to deal with the virus in Africa, but significant progress has been made in this regard since 1976, despite the increasing frequency and severity of the outbreaks. In the United States, however, the Ebola virus has amounted to one death, the total of four patients, and a lot of scare by the government.

bola virus originates in Africa. In the past, the outbreaks in Africa were less frequent and severe. In the present, they have become more frequent and severe due to increased mobility of people and increased populations. Compared to the extent of damage of Ebola in Africa, the effect in the United States has been minimal. Ebola virus reached the US population recently and is greatly feared. However, the virus is not a reason for major concern in the US, because statistically, the chances of contracting Ebola in the US are extremely low, as the chronology of the recent United States Ebola concern shows. What made Ebola such a big scare in the United States was the government's reaction to the events that occurred in September-October 2014.

Ebola viruses have been a significant threat to the health of both human and wildlife health in the Congo and Nile basins. The first outbreaks were generally viewed as causing a mysterious disease, the outbreak being so dramatic that it inspired novelists and film producers, such as the movie Outbreak, for example. In most of the cases, the disease appeared without warning out of the wild and natural environment and disappeared slowly during the outbreak. The initial outbreaks of EHF occurred almost simultaneously in June and September of 1976 in southern Sudan and northwestern Zaire (now Democratic Republic of the Congo, DRC), respectively. At first it was thought that the DRC outbreak was due to spread of the Sudan outbreak but, in fact, the outbreaks were caused

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by anti-genically and biologically distinct species of Ebola named SEBOV and ZEBOV (where the S and Z stand for Sudan and Zaire). The first Ebola sufferer in Sudan was a worker in a cotton factory in Nzara who later was the source of nosocomial transmission in Maridi hospital. The mortality rate amongst the 284 notified cases was 53%. The initial case in the Zaire or DRC outbreak was a 44-year-old male teacher at the Yambuku catholic mission school who fell ill after long travels in northern Equateur Province. He had bought fresh and smoked antelope and NHP (non-human primate) meat on his way back to Yambuku. He was treated for supposed malaria at the Yambuku hospital, where the outbreak emerged afterwards. In total 318 cases were noted, with a case fatality rate of 88%. Direct contact with an Ebola sufferer and receiving an injection with reused and unsterilized syringes at the hospital were the major risk factors for virus contraction in humans (Muyembe-Tamfum, et al., 2012).

In 1979, Nzara and Maridi in Sudan again experienced a small outbreak, with 34 cases and 22 deaths, and a single case was described in a child at Tandala hospital in DRC. Allegedly, none of the cases had contact with wild animals. After a quiet span between 1980 and 1993, several independent cases of Ebola virus transmission were recorded. Most of them were caused by ZEBOV and SEBOV but some were caused by the newly discovered species, namely CIEBOV and BEBOV (where CI stands for Ivory Coast and B stands for Bundibugyo, a place in Africa) (Muyembe-Tamfum, et al., 2012).

Ebola hemorrhagic fever in Cote d'Ivoire (1994): A significant Ebola virus outbreak took place among chimpanzees living in the Tai National Park in Ivory Coast. A scientist was infected while performing an autopsy on a dead NHP (chimp). He was treated as supposed malaria case in Abidjan hospital, without success. No secondary cases were recorded. This was the first documented outbreak of Ebola virus among NHP in nature and the first in West Africa. The outbreak led to the discovery of a new species of Ebola virus, namely CIEBOV (Muyembe-Tamfum, et al., 2012).

Ebola hemorrhagic fever in Gabon (1994, 1996, 1997, and 2001-2002): Several Ebola outbreaks, caused by ZEBOV, were linked to the hunting of NHP. The 1994 outbreak involved miners in the Minkebe Forest who had killed a contaminated gorilla for food; the illness was at first confused with yellow fever (Muyembe-Tamfum, et al., 2012). Ebola in the Republic of Congo (2001-2002, 2003, and 2005): The first recorded outbreak of Ebola occurred in 2001-2002. In 2003, ZEBOV re-appeared, affecting 143 individuals in Mbomo (17 cases) and Kelle (126 cases), and 128 deaths were recorded. Three independent index cases were identified in connection to hunting episodes and contact with gorillas. During this *outbreak*, transmission within families was more significant than other kinds of transmission. However, three health workers were still infected. In the same year another small Ebola outbreak in the country was reported in 2005, with 11 cases and nine deaths (Muyembe-Tamfum, et al., 2012).

Ebola in the DRC (1995): ZEBOV reappeared in 1995 in the city of Kikwit, with 400,000 inhabitants, 1000 km south of the location of the 1976 outbreak. In total, 315 cases and 250 deaths were noted. A 31-year-old female Ebola patient traveled in an early stage of her disease to Kinshasa, where she was isolated in a private clinic. No second-
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ary transmission took place. The woman's main occupation was farming and preparing charcoal in one of the remnant forest areas near Kikwit, but the exact cause of infection or exposure is unknown. No great apes but a lot of bats and rodents were present in the region. The risk factors for secondary human-to-human contraction of the virus arose mainly from working in Kikwit general hospital or preparing bodies for burial. Almost 20% of the 250 victims were health care workers (Muyembe-Tamfum, et al., 2012).

Ebola in the DRC (2007-2008, 2008-2009): Another outbreak took place in 2007, in the Mweka health zone, West Kasai Province, with 264 cases and 187 deaths, and a case fatality rate of 71%. Kampungu city was the center of the outbreak with 47% of cases, succeeded by the city of Kaluamba (42% of cases). The initial patient was the chief of the village and a hunter. The outbreak was mostly connected to a massive fruit bat migration through this region. During this outbreak, the deaths among health care workers were fewer. However, several human-to-human contractions had occurred in churches where patients were nursed (Muyembe-Tamfum, et al., 2012).

In the 2008 Ebola outbreak, Kaluamba was hit again, with 32 cases and 14 deaths (CFR of 43.8%). The index case was believed to be an 18 year old girl who had died from a post-abortion hemorrhage. However, the source of her exposure is still unknown. This outbreak was reported to the national and provincial health authorities 21 days after the disease onset, compared to a period of four months in the 2007 epidemic. The observed low CFR in Kaluamba outbreak is considered to be due to the early recognition of the disease and the prompt response of the national team (Muyembe-Tamfum, et al., 2012).

Ebola in Uganda (2000, 2007, 2011): An outbreak of SEBOV took place in Gulu in 2000 and spread to the cities of Mbarara and Masindi, with a total of 425 cases and 224 deaths (CFR of 52%). This was the largest epidemic caused by SEBOV. The outbreak was recognized from a number of human cases and was exacerbated by nosocomial transmission. Uganda was again hit in 2007 when a new Ebola species, BEBOV, killed 30 people out of 116 cases (CFR of 26%). In isolated cases of EHF caused by SEBOV was reported from Uganda n 2011 (Muyembe-Tamfum, et al., 2012).

Ebola hemorrhagic fever in Sudan, 2004: The epicenter of this small outbreak of 17 cases and seven deaths (CFR 41.2%) was the town of Yambio, near to the two previous Ebola sites (Nzara and Maridi). The outbreak began with the admission of a 27-year-old man to Yambio hospital with fever and hemorrhage manifestations. The symptoms started on April 15, 2004. The outbreak was stopped rapidly with the establishment of infection control measures, thanks to the early recognition and confirmation of the outbreak by the Kenya Medical Research Institute (Isaäcson, 2001, p. 1708).

In most outbreaks, Ebola virus is introduced into human populations via the handling of infected animal carcasses, primarily those of NHP's. In these cases, the initial source of transmission is an animal found dead or hunted in the forest, followed by human transmission from the initial patient to family members or healthcare staff. Animal-to-human transmission takes place when people come into contact with tissues and bodily fluids of infected animals, especially those with infected HPS's. Transmission has been reported in Ivory Coast where a scientist contracted the disease through handling an infected, dead chimpanzee (Parkes-Ratanshi, 2014, p. 1744).

However, major differences in EBOV transmission cycles between communitybased and hospital-based outbreaks have been observed. When Ebola virus is introduced into a village, the outbreak seems to end spontaneously with a limited number of transmissions. As shown for the DRC outbreaks, Ebola virus was introduced into 55 villages around Yambuku (1976) and 25 villages around Kikwit (1995) (Muyembe-Tamfum, et al., 2012).

Tropical rain forests in Africa constitute a favorable ecosystem for Ebola virus emergence, providing rich animal biodiversity. Epidemics appear to be seasonal. Documented human and non-human EHF outbreaks occurred mainly during wet seasons, marked by the abundance of fruit. The index case of the 1995 EHF outbreak in Kikwit fell ill in January and the 1994 EHF outbreak amongst chimpanzees in the Tai forest occurred in November, at the end of the wet season. The natural reservoir of infection remains unknown, but the virus clearly has a zoonotic origin. In some outbreaks where information is available, the human index cases have invariably had direct contact with NHP's, antelope, or bats (Muyembe-Tamfum, et al., 2012).

Managing Ebola patients in the African setting has always been a major challenge because there has been no effective antiviral drug and no specific vaccine available. Only supportive care could be administered, to sustain the functions of the heart and kidneys, with some use of perfusion. Drinking water was recommended but sometimes not realistic because of throat pain, vomiting, and intense fatigue. The main objective was to provide optimal care to the patients with as much protection as possible for the medical and nursing staff. For that purpose, medical and nursing staff had been trained in putting on and removing personal protective equipment and applying barrier-nursing procedures (Easter, 2002, p. 51).

In contrast, the dangers and effects of Ebola virus in the United States have been virtually negligent. The chronology of the recent Ebola scare in the United States reveals the comparative insignificance of the virus's danger and damage in this country. The first visit of Ebola to the United States was in 1989, when a group of "monkeys was imported into a Reston, Virginia, primate facility outside of Washington, DC" (Peters & LeDuc, 1999, p. ix). Epidemics in the facility took place in 1992 and recurred in 1996. The monkeys had arrived from Philippines. The epidemics were contained, and no animal-tohuman transmissions were reported.

According to Romm, C. et al. (2014), the first Ebola patient in the US, the Liberian Thomas Eric Duncan, came under strict isolation in a Texas hospital since Sept 29, 2014, when it became known that he had the Ebola virus. His blood had been submitted to the Centers for Disease Control for testing, and the diagnosis was confirmed the same day. As a result, officials immediately planned to rigorously identify and monitor all those who came in contact with the patient while they were infectious. In a press conference announcing the news, the CDC revealed that the patient recently visited Liberia and had no symptoms (and was therefore not infectious) while entering the United States on September 20. Four days later, the patient started to develop non-specific symptoms and went to the hospital on September 26. He was sent home and then returned to the hospital on September 29, when he was placed in isolation. Duncan died on Wednesday, October

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8. The doctor who had treated him confessed to the misdiagnosis and also to sending the Ebola-ridden patient home prior to his checking in at the hospital on the 29th.

News broke Sunday, October 12, that a nurse in Texas, Amber Vinson, became the first person to contract Ebola on U.S. soil. She contacted it after having treated Duncan. Then a second nurse who had also treated Duncan - Nina Pham - was also pronounced having the virus, making her the second and the last person to contract the disease on American soil in 2014. The nurses soon recovered and went back to work. The fourth and last person in America to have been diagnosed with Ebola was Dr. Craig Spencer, a New York medical doctor, who was diagnosed on October 23. Dr. Spencer went home Ebola-free on November 11. This is the short story of the actual scale of Ebola threat in the United States in 2014. The story of how the threat was perceived and perhaps blown out of proportion by the government follows (Romm, C. et al., 2014).

When news broke Sunday, October 12, that a healthcare worker in Texas became the first person to contract Ebola on U.S. soil after treating a Liberian man who died of the disease at a Dallas hospital, and Senator John McCain called on President Obama to appoint an Ebola "czar" to lead the federal response to the deadly virus. "My constituents are not comforted,' he told CNN's State of the Union. 'I would say that we don't know exactly who's in charge. There has to be some kind of czar" (Romm, C. et al., 2014). The use of the word "czar" underlines the great capacity of US politicians to aggrandize and exaggerate.

On October 15 news came out that the CDC was contacting all 132 passengers who were onboard the Frontier Airlines flight from Cleveland to Dallas on Monday along with a nurse who treated Thomas Eric Duncan, the first U.S. Ebola patient. CDC director Dr. Thomas Frieden told reporters on Wednesday that the nurse should not have traveled on the plane because she was being monitored for exposure to the deadly disease (Romm, C. et al., 2014).

In an indication of the seriousness of the Ebola situation, President Obama cancelled a campaign trip to convene his Cabinet at the White House. The president told reporters after the two-hour meeting that the government would be monitoring the response in Dallas "in a much more aggressive way' and that he had instructed the CDC to dispatch 'a SWAT team' of rapid responders to any hospital reporting a diagnosis of Ebola" (Romm, C. et al., 2014). These statements further attest to how a couple of cases of Ebola in an enormous, well-developed country can create a media news catastrophe.

On October 16 it became known that Dr. Thomas Frieden would take his turn under the congressional klieg lights on Thursday, as Republicans plan to grill the CDC director over his agency's flawed response to Ebola in the United States. Lawmakers on the House Energy and Commerce Committee briefly left the campaign trail to hold a hearing on the public health crisis that had quickly become a top issue in the midterm elections. President Obama was now facing growing calls from Republican officials and candidates to overrule Frieden and institute a commercial travel ban from the West African countries where the epidemic was centered (Berman, 2014).

Then on October 17, Obama appointed former White House official Ron Klain as the new "Ebola czar" (Romm, C. et al., 2014). Klain, who was not a doctor and had no

healthcare background, was best known as Al Gore's former chief of staff and a member of his inner circle during the 2000 presidential campaign and Florida recount. This is rather ironic and perhaps even ridiculous, because a person assigned to deal with a deadly virus outbreak should probably have some medical background. But, perhaps most importantly, Mr. Klain had a name.

On October 21, it became known that U.S. had tightened travel from Ebolaridden countries. It was not an outright Ebola travel ban, but the federal government was limiting the ways in which passengers from West Africa could enter the United States. "The Department of Homeland Security announced that travelers from Liberia, Sierra Leone, and Guinea - the three countries at the center of the Ebola outbreak - would have to fly into the U.S. through one of five airports: New York's JFK, Washington D.C.'s Dulles, Atlanta, Chicago O'Hare, and Newark, N.J." (Romm, C. et al., 2014). Those were the same five airports where officials had begun screenings of travelers from those countries earlier.

At the same time, Kaci Hickox, a nurse with degrees from the University of Texas at Arlington and the Johns Hopkins University, had been caring for Ebola patients while on assignment with Doctors Without Borders in Sierra Leone. Upon her return to the U.S. on Oct 24, she was placed in quarantine at a New Jersey hospital. She had tested negative in a preliminary test for Ebola, but the hospital said she would still remain under mandatory quarantine for 21 days and monitored by public health officials. In her own words, when she arrived at the Newark International Airport in Newark, New Jersey, Hickox was greeted by people rather well prepared to handle a potential Ebola carrier. Hickox writes in her Dallas News article about the first customs officer to greet her, "He put on gloves and a mask and called someone. Then he escorted me to the quarantine office a few yards away. I was told to sit down. Everyone that came out of the offices was hurrying from room to room in white protective coveralls, gloves, masks, and a disposable face shield" (Hickox, 2014). Hickox was eventually released after having to spend 21 days of mandatory quarantine although she had tested negative for Ebola twice.

To conclude, African Ebola is a much bigger threat to Africa than to the United States. With time, Africa and its benefactors have learned to contain outbreaks with more efficiency. Now, although travel has increased throughout Africa, and the outbreaks have grown stronger, the affected countries contain the outbreaks rather quickly. As for the United States, it was more of a scare than a real threat. It must be said, however, that very drastic measures taken by the US government were perhaps to account for the quick containment of the disease in the US, to some degree. Ebola spreads much more quickly in Africa mostly due to the unsanitary conditions that are widespread on the continent. The outbreaks, therefore, are much more likely to happen in Africa, as well. As far as the United States is concerned, an ebola outbreak is not very likely here because the government responds with tremendous overcautiousness to any potential threat, even the most minimal one, such as the one described above where only a few people were found to have been infected. The medical establishment, the media, and the law enforcement worked together in aggressive effort orchestrated by the government. The US also politicized the ebola threat tremendously. It is important in any campaign for the government to look like a hero. And so it did when president Obama appointed former White House official

Ron Klain as the new "Ebola czar" - an epithet quite suitable for blowing the event out of proportion. Overall, however, an average US citizen should appreciate the efforts take by the government because it is indeed better to be safe than sorry.

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Contributing Factors to Rape Culture on College Campuses'

Diane Nguyen

Abstract

With large outlets such as entertainment, news articles, television programs, the younger growing generation is now face-to-face with an over-sexualized culture. This in turn enables the teen to adopt a pro-rape mindset that carries on when they enter college. This paper focuses on a brief history of rape culture, the portrayal of rape culture through media and how it is related to Walter S. DeKeseredy's theory of male-peer support and Marcus Felson and Lawrence E. Cohen's Routine Activities Theory, and ultimately results in various sexual assault cases that have happened on college campuses.

Introduction

A syoung adults striving to embrace and adapt to the new boundaries of each growing year, we are left vulnerable and susceptible to the influence of others. At such an impressionable age, who are we really supposed to listen to?

Although more attention has been brought to the topic of rape and sexual assault, it has been rooted in our culture's history. With periods such as the 17th century Colonial Era spanning across the 20th century Victorian Era in American culture, the viewpoints and opinions of many have grown to support a bias that favors men over women. In today's culture with such a large population engulfed in technology, media is now the primary way for how people digest news and entertainment. The crucial role of media can further influence how young adults perceive, identify, and justify rape. The media's need to maintain the appearance of reliability and trustworthiness often competes with the objective to sell news and thus gain an audience.

On the other hand, colleges try to maintain an image of a safe environment for students. According to the National Sexual Violence Resource Center's examination of Fisher, B.S., Cullen, F.T., & Turner, M.G.'s study of campus sexual violence, Fisher et al.

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state that the estimation of rape falls between 20 to 25% over an academic career with less than 5% of cases being reported, making this a vastly under-reported crime (2000).

This paper will briefly examine the history of rape culture and the impact of rape culture on college campuses along with the factors that support and reinforce rape culture.

Rape Culture: A Brief History

As exhibited through periods of the 16th,19th, and 20th century, Patricia L.N. Donat and John D'Emilio's *A Feminist Redefinition of Rape and Sexual Assault: Historical Foundations and Change*, provides analyses on rape culture exposing the common underlying factor of showing a favorable bias for men.

During the Colonial era, Koehler states, "The woman was regarded 'not a person...but a sexual 'type"—an inferior, a receptacle... or a simple answer to his needs" (Donat, D'Emilio, 93). At that time, the colonies were heavily influenced by the church, resulting in strict gender roles. With strict gender roles reinforced by the church, sexual intercourse was reserved only for legitimate offspring. Because family was considered an integral part of the development of the community, women were forced to assume the responsibility for regulating pre-marital procreation and faithfulness. Viewed through the lens of a patriarchal society, Donat and D'Emilio acknowledge, "In order to assure her safety, a woman who was sexually attacked needed to comply with male standards for her behavior by proving her non-consent through physical and verbal resistance..."(10) shows that with standards assigned by the church, the laws were favorably biased towards men. In the 19th century, women were moving into jobs in the workforce and creating an independence movement. Courtship and marriage were met with the trading of sexual favors. Even though women were adopting an independent mindset, differing from a more family-oriented one, they were still caught in the bind of a patriarchal society. If a woman were to engage in sexual intercourse, even by force, the woman would usually be blamed.

With the rise of the 20th century's Victorian era, Psychologist Sigmund Freud perceived rapists as mentally ill and that rape was a perversion. Freud believed that if a patient was sexually assaulted it was a result of childhood molestation and they fantasized about it. Although there was a small shift away from a hyper-patriarchal society, women were still seen as "simply a by-product of his pathology." (Donat, D'Emilio, 12). Despite the fact that the definition of rape shifted from being seen as a crime to a mental illness— women were still left victims with no advocacy for their rights.

Media Portrayal of Rape Culture

This section discusses three different treatments of rape by the media: television programs, news headlines, and music videos. The analysis of the studies shown pertain to how media can choose to restate and manipulate interview material to further gain interest from audiences. In rape and sexual assault cases, the audience's reaction and opinions are easily swayed by strategic editing.

Television

Deb Waterhouse-Watson, in *Framing the Victim: Sexual Assault and Australian Footballers on Television*, reports three separate television programs and how they choose to portray the survivor's words through editing. Watson notes that the television program, "Four Corners", is also heavily edited with tools such as music and fragments from interviews and reenactments. Despite being heavily edited, the production staff of "Four Corners" depicts the sexual assault survivor's testimony in such a way that it is deemed believable. With obvious hints as to where acts of non-consent are being played, there are also reenactments to where the scenes aid and add credibility towards the survivor's claims of rape. The narrator, Ticky Fullerton, also chooses a carefully constructed language of, "Introducing Sarah's account of the alleged rape as what she 'remembers' rather than what she 'alleges' or 'says'." (Waterhouse-Watson, 60). Repetition is also a main factor that helps validate the survivor's account of what happened. While Fullerton is describing the survivor's version of the event, the production staff cuts back and forth to reinforce the validity of the claim to the audience.

Another television program "The Insight 'Foul Play", also serves as an example for how much power the narrator and repetition can have. Unlike "Four Corners", "The Insight" is an unscripted and unedited program of a discussion forum that gathers people with different backgrounds. The format of "The Insight" also differs from "Four Corners" by giving the survivor a chance to tell her own account. Waterhouse-Watson includes an excerpt from the program: "Finali (narrator) asks: 'How has the assault affected your life?' simultaneously implying belief in the complainant's story." (Waterhouse-Watson, 61). Finali's wording of her questions not only allows the complainant to tell her story from a first-person narrative, but also allows the audience to view her as something more than just a victim.

Another television show, "Code of Silence", received awards in regards to the strong reactions and the intense debate (Waterhouse-Watson, 64). "Code of Silence" airs a testimony from a woman named 'Clare', who was involved in a sexual assault case that the football players involved had termed 'consensual group sex'. In fact, it was the opposite. Waterhouse-Watson introduces the case as Clare, a hotel waitress, who is brought by two team players back to their room. It is also where ten other players, uninvited, " over two hours...had sex with her, while others watched and masturbated, joking amongst themselves." (64). After the airing of the episode, the public's response was strong due to the fame of the players involved. As a result, the players were immediately dropped from their teams, an unprecedented result for sexual misconduct.

In comparison, the cases from "Four Corners" and "The Insight" differ greatly from "Code of Silence". While "Four Corners" and "The Insight" displayed the sexual assault survivors in such a way that they were seen as more than just results of aggression, Waterhouse-Watson highlights that, "The framing of complainant testimony seriously undermines their authority as witnesses, particularly in the case of Clare. Because of the strong feedback "Code of Silence" received, it shows how modern day society views rape and sexual assault as a serious crime rather than how, for example, the Colonial era viewed it.

News Headlines

How much (or little) can one read and obtain information? Renae Franiuk, Jennifer L. Seefelt, and Joseph A. Vandello, in *Prevalence of Rape Myths in Headlines and Their Effects on Attitudes Toward Rape*, deals mainly with the issue of the recurrence of rape myths in newspaper headlines. A small sample of rape myths include, "suggestions that the victim is lying, deserved the sexual assault, or asked for it because of how she was acting or what she was wearing." (790-791). Rape myths are often employed to give the reader the gist of the article in the headline to lure them into reading the full article. Franiuk, Seefelt, and Vandello also bring up the 2003-2004 assault case regarding basketball athlete, Kobe Bryant. They cite a Denver Post article with the headline "Kobe Accuser Admits Lies" which implies that the victim is the type of person who lies in general and, at worst, is read as "Kobe's Accuser Admits Lies [about the sexual assault]." (Franuik et al.,792). In addition to editing of television programs, news writers also have a lot of control over how headlines sound and how they hook in a reader.

Further into their analysis on newspaper headlines perpetuating rape myths, Franiuk, Seefelt, and Vandello created their own study. Both delved into the testing of two hypotheses. The first looked into whether or not the participants who were exposed to headlines endorsing rape myths were expected to be less likely to attribute blame to an alleged perpetrator. The other was whether or not those participants exposed to headlines endorsing rape myths were expected to express less sympathy toward sexual assault victims after being shown rape myth-endorsing headlines (796-797). Despite no significant differences between the two test variables (non-Kobe Bryant myth headlines as opposed to Bryant headlines), the male participants still showed a higher number of men with expressed rape-supportive attitudes towards Bryant compared to the low number of female participants. The second hypothesis was more straightforward compared to the first. As predicted, the participants that were introduced to the headlines with rape myths were more inclined to support Bryant (Franuik et al.,795-796). The first study shows how much rape myths can impact one's opinions towards supporting the assailant in sexual assault cases.

Music Videos

With younger generations increasingly engrossed in media and technology, music videos serve as another platform that introduces sexual content. Michelle E. Kistler and Moon J. Lee's *Does Exposure to Sexual Hip-Hop Music Videos Influence the Sexual Attitudes of College Students?* reviews the primary aspects, characteristics and results of over-sexualized media content released to the public, particularly youth. Kistler and Lee note that in 2001, the Kaiser Family Foundation reported that entertainment media serves as a source of information. With MTV's target demographic age ranging from 12 to 34, "On a daily basis, 65% of adolescents between the ages of 13 to 18 listen to hip-hop over any genre."

(68). At such an age when they are susceptible to over-sexualized music videos, more will follow the mindset of those displayed in the media. Kistler and Lee conducted a study of how many, in this case college students, are affected by the given music videos (ones with and without sexual imagery). The sexual imagery group consisted of : "My Humps" by the Black Eyed Peas, "Touch It" by Busta Rhymes, "Laffy Taffy" by D4 L, "Here It Go" by Juelz Santana, and "Shake" by the Ying Yang Twins. The videos on the other side of the spectrum were: "Tell Me When to Go" by E-40, "When I'm Gone" by Eminem, "My Hood" by Young Jeezy, "Testify" by Common, and "Poppin' My Collar" by Three Six Mafia (Kistler, Lee 74-75). Although the hypotheses were essentially formed as questions, asking if these music videos had an impact on the groups, they were more than predictable. Compared to the group that was shown less-sexualized content, the ones shown the higher sexualized hip-hop videos had attitudes more supportive towards the objectification of women, traditional gender roles and rape acceptance. In consonance with the numerous outlets shown and the results from the tested hypothesis, Kistler and Lee's study proves that there is a strong correlation between over-sexualized media and the priming of audiences to view women as objects of sexual gratification.

Related Theories-Routine Activities Theory

When entering a new and unparalleled environment such as a college campus, female students undergo re-socialization to a college mindset that includes heightened use of alcohol and drugs. Routine Activities Theory focuses on three main factors: lack of a guardian, an offender, and a victim. It discusses what happens when all three factors are present when an assault happens. Formulated by Marcus Felson and Lawrence E. Cohen, the Routine Activities Theory states that being away from home with lack of guardians raises the risk of coming into contact with sexual offenders and assault. Martin D. Schwartz, Walter S. DeKeseredy, David Tait, and Shahid Alvi's study *Male Peer Support and a Feminist Routine Activities Theory: Understanding Sexual Assault on the College Campus* discusses the Routine Activity Theory, and how it relates back onto college campuses. DeKeseredy et al.states in a 1993 study, "...41 percent of female undergraduate students reported experiencing one of several types of sexual assaults since leaving high school."(624). The Routine Activity Theory focuses on the location and situation one is in when a crime takes place. College campuses are depicted as an environment where there are large numbers of both male and female students without present guardians to intervene.

Because the college campus environment and its population are obviously smaller than the social environment that surrounds it, the cases of sexual assault are put to a larger, magnified scale. Without the presence of guardians, more "likely offenders" are prompted to sexually assault. Schwartz et al. refer to those locations as "hot spots"—a name used when describing a female students' proximity when being placed in a situation where there is contact with likely offenders (626). In conjunction with the "hot spots", female students are also put at even a higher risk when situations such as drinking alcohol and drug use arise.

Related Theories: Male Peer Support Theory

With the messages and myths that are illustrated above, there is a population in society that supports rape culture and justifies their actions because such myths exist. Formulated by Walter S. DeKeseredy, the male peer support theory is based on the bond that men have with their peers that supports a culture that permits of sexual assault. De-Keseredy's premise revolves around situations when a male turns to another male in hopes of guidance, advice and support (hence the name). Depending on what kind of support was given, there is the chance that the advice justified sexual harassment. With situations such as drinking and drug use, offenders rationalize their crimes with the common, "they were asking for it" myth. Rape-supportive culture consists of normalizing, trivializing and encouraging the sexual assault of women. The Los Angeles Times' Danny Robbins, in the article, "Invincible No More : Nigel Clay Planned to Be in the NFL, but Now He Is Playing for a Correctional Center", quotes Nigel Clay, convicted (along with a fellow teammate) of raping a woman in one of University of Oklahoma's dorms, stating, "Well, speaking for myself and a lot of other people, we felt like we were above the law," he said, "like OU would protect us from anything.". Although University of Oklahoma was successful in the prosecution of Clay and his teammate, there have been a number of cases where school administration has turned a blind eye. The Missoulian's Gwen Florio unearthed a slew of emails in "UM Vice President Sought to Punish Alleged Rape Victim, Emails Reveal" the University of Montana's vice president, Jim Foley, was outraged, searching for a way to cover up the case of sexual assault involving the football teams' players. Florio quotes from one of Foley's emails, "I would suggest ... we should not be sending out challenging info to 96,000 folks, many of whom may not even be aware of what has gone on the last three months. This magazine should generally be used to highlight all the good things going on around UM and its alumni."

One of the contributing factors and supporters of a rape-supportive culture is a male-peer environment. Timothy Curry's *Fraternal Bonding in the Locker Room: A Profeminist Analysis of Talk About Competition and Women* studies the locker room environment and includes a confederate's research on what happens in a competitive sports environment at a large Midwestern university. Due to the competitive nature of sports, it can result in an aggressive setting where every member is forced to act in a certain way thus creating a negative light that shines upon their own sense of self. Curry's confederate, a senior with a history as a letterman, is also mentioned as being seen as a peer to the current team athletes. The confederate provided Curry with this piece of conversation:

Athlete 1: He said he was with two different girls in the same day and both girls were begging, and I emphasize begging, for him to stop. He said he banged each of them so hard that they begged for him to stop.

Pete 1: Well, what did you do? Athlete 1: Nothing, he just kept telling me about this; it was hilarious! (61).

Another piece of conversation was also provided in the study after a recruitment's mother

drew attention.

Athlete 1:	She was too young to be his mother!
Athlete 2:	Man, I'd hurt her if I got a hold of her.
Athlete 3:	I'd tear her up.
Athlete 4:	I'd break her hips [all laugh] (Curry,61).

These fragments of conversation draw much attention to the blatant number of jokes surrounding the topic of rape. Randy Thornhill and Craig T. Palmer in their book, *A Natural History of Rape: Biological Bases of Sexual Coercion* not only addresses the biological concept that males have towards sex but also the environmental concept. "Even when a behavior is heritable, an individual's behavior is still a product of development…essentially all men have sexual psychological adaptations designed for obtaining a large number of mates. However, heritable adjustments in the details of sexual adaptations in response to environmental cues…that is, dependent on specific environmental variables" (169-170). With history being the predecessor promoting a sexual assault supportive system, numerous media outlets follow suit, thus reinforcing and advocating that assault is acceptable.

Rape on College Campuses and their Effects

In colleges with a big-time sports program, many officials are willing to look the other way. *The New York Times*' Jim Robbins in his article "Handling of Sexual Assault Claims Brings New Scrutiny to Montana" recalls the multiple cases of sexual harassment involving various football players from the University of Montana. Although the outcomes of those cases resulted in a lack of evidence, expulsion and arrest, when Kerry Barrett, a student that was assaulted after sleeping at a fellow students dorm, called the police to report the crime ,they stated, "There's not much we can do except scare the guy.". Barrett states that the police also made no attempt to investigate the claim.

After the act of aggression, multiple issues can arise—physically, mentally, and emotionally. Ann Wolbert Burgess and Lynda Lytle Holmstrom in their chapter in *Foreible Rape: The Crime, the Victim, and the Offender* address the symptoms that emerge after the traumatic event occurs. The outcome of their interviews with survivors produced a general timeline as to what happens after rape. Burgess and Holmstrom found in their studies that different symptoms appear at two separate times: immediately after the impact of rape, and then after the victim returns to their normal lifestyle. The physical onset of rape can be seen through what Burgess and Holmstrom note are physical trauma, including soreness and bruising, skeletal muscle tension resulting in disrupted sleeping patterns and headaches, stomach pains, and various vaginal infections (320). Burgess and Holmstrom also discuss the long-term effects of rape. After the period of physical trauma comes the beginning of heightened motor skill activity. In Burgess and Holmstrom's sample, they found that the victims were in a constant state of fear when indoors, outdoors, being alone, in crowds, and when people are walking behind them, all corresponding with what happened while they were being attacked.

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neth Ruggiero, and Dean Kilpatrick, in *Reporting Rape in a National Sample of College Women* discuss the factors that result in many rape cases not being reported. In comparison with being sexually assaulted by a stranger, cases with assault involving intimate partners and dating acquaintances appear less likely to be reported; the reporting of many assault cases among college women follow suit. However, in addition to the cases that involve partners and known acquaintances being unreported, the victim's alcohol and drug use at the time of the assault were also a contributing reason to why some go unreported . Marjorie Sable, Fran Danis, Denise Mauzy, and Sarah Gallagher in *Barriers to Reporting Sexual Assault for Women and Men: Perspectives of College Students* also view the number of reported and unreported cases from another perspective. In a situation where the survivor's social location is a college campus, "Barriers to reporting crimes of rape and sexual assault...have included personal shame, concern for privacy...fear of perpetrator retaliation...and not wanting friends and family members to know." control their decisions when deciding whether or not report to the crime (160).

In conjunction with the mental and physical issues as the result of rape, The *Boston Globe's* Stan Grossfeld, in "A Voice for the Victims" quotes Kathy Redmond, a student of the University of Nebraska, who was raped twice by three members of the football team; Redmond states, "I did the self-mutilation thing where I would Cut myself everywhere... at one point I was so desperate I took shears and got lacerations in my throat. I was a psychological mess. It took me seven years of counseling to seem somewhat normal."

Conclusion

Over centuries, society and culture have created a system and way of thinking where some believe that it is acceptable to commit sexual assault. Not only does history demonstrate that people believe in a rape supportive culture, media reinforces it. In this case, the various assault cases depicted on college campuses proven through the routine activity and male-peer support theories. By promoting and publishing articles and media entertainment, it creates a vicious cycle that only continues to spiral downwards. Younger generations now have unlimited access to technology and media that supports such a culture. Through the use of social media, the younger generation is now more than capable at spreading the message of anti-rape and assault.

With the contentious case of Columbia University's Emma Sulkowicz alleging that she was raped in her dorm room, her endurance performance art *Mattress Performance (Carry That Weight)* has sparked both a nation-wide and international movement. The premise of *Mattress Performance (Carry That Weight)* entails Sulkowicz carrying a mattress, similar to the one she alleges she was raped on, around campus until either the accused is expelled from campus or until her graduation. With the broadcast and reporting of Sulkowicz's performance piece, it has gone viral—sparking movements both nationally and internationally, carrying mattresses on campuses.

Compared to past generations, the use of media has now been handled in a way that the message of anti-rape and assault is transmitted to all platforms of communication and is surely to progress this civilization forward.

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Horoscopes¹

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1 Completed under the mentorship of Prof. Valerie Sokolova.

François Boucher & Russian Rococo¹

Alexandra Shynder

Abstract

Objective of the first part of my work was to determine how strong was the influence of French Rococo to Russian Rococo and to specify the characteristics of Russian Rococo. Rococo was very important style for Russian art because it was the first art style which changed the traditional Russian style that was named "Iconography". Russian secular painting began from Rococo. However, Russian Rococo is not exactly the analog of French Rococo; it is unique symbiosis of elements of Baroque, Classical style, and Rococo. Mostly, Rococo was used in architecture, in the decoration of palaces, and the salons of private homes. Actually Russian Rococo was created by hands of foreign artists. This phenomenon in Russian art has been called "Russica." The second part of my paper is a list of the Boucher's works that are in Russian public and private collections.

What is the influence of French Rococo on Russian Rococo? What is the place of François Boucher in Russian Museums?

Local could not answer the questions posed at the beginning of this work, based on the articles of professionals. It was impossible to find them. But, I think that the real influence is when ordinary people like me are acquainted with the artist's work. What can be a measure to determine the popularity of a person? I know at least one. If somebody invents jokes about someone else, that someone else is popular. There is a Russian fun story about Boucher, which I found during my research. The Hermitage a tour guide leads a tour for a group of tourists from Central Asia. One of the tourists comes up to her and whispers in her ear, "Honey, send our women in the other room and show us the picture (he meant Toilet of Venus) (Fig.7). So, Boucher and other French artist certainly had a strong influence on the development of Russian Rococo. I would even say that Russian Rococo was created by hands of foreign artists.

¹ Completed under the mentorship of Prof. Caterina Pierre for ART 34: Survey of Art History II.

Every man has two countries – his own and France! Tout Homme a deux pays, le sien et puis la France! Henri de Bornier, 63 (French poet)

Russian Rococo

The eighteenth century became a watershed in Russian history. It was a time of radical changes as a result of Peter the Great's reforms. He "cut a window to Europe" (Pushkin, 1) when he founded the first Russian seaport city Saint-Petersburg. Peter the Great's political goal was to turn Russia sharply to Europe. This turn and its effects on Russia's further development is the subject of many historical debates to this day. Some historians believe that as a result of Peter's politics, Russia lost the integrity of its culture. The society was split into two parts. The lowest class maintained Russian identification, while the highest class became very influenced by European culture. There was a strong belief that the influence of Europe was helpful for Russia. For example, one of the greatest Russian historians of the nineteenth century, Sergey Solovyov, wrote, "Europeanization was quite compatible with the cultural and historical development of Russia" (Alekseev, 67) Whether this influence was positive or negative, it became obvious that since those reforms, European artists had a huge impact on the development of Russian architecture, painting, interiors, philosophy, fashion and other aspects of life. Despite the fact that the first foreign artists in Russia were of German and Dutch origin, it is important to mention that the cultural relationship established between the French and the Russians has been quite unique to this day. It is hard to explain where this obsession with everything French comes from. It is surprising that German language after the World War II was not desirable in the Soviet Union; yet, the events of 1812 did not diminish Russia's passion for French culture: from fashion to language and philosophy.

As I mentioned above, the stratification of Russian society had led to the emergence of two cultures: nobility and folk. In my paper, I will consider exclusively aristocratic culture as influenced by Western culture. Although Rococo was predominant in Russian art only for a short period of time, its significance is indisputable for later art movements in Russia. Rococo was the first art style which changed the traditional Russian style that was named "Iconography", a genre of religious painting. Thanks to Rococo, Russian secular painting started and spread across the country. However, Russian Rococo is not exactly the analog of French Rococo. It is a symbiosis of elements of Baroque, Classical style, and Rococo.

Obviously, Rococo is an absolutely feminine style that was created exclusively by men. I don't think that many men like this style. The color palette, subjects, and forms were created especially for women's eyes. At the time when Rococo style emerged in France, the main woman of the country was Madame de Pompadour, a very influential person, who also was the mistress of King Louis XV's. Russia was in a better more prone: the middle of the eighteenth century was the best time for Rococo to flourish in Russia. It was the Russian woman's era of two reigning empresses Elizabeth Petrovna (reigned 1741-

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1762) and Catherine the Great (reigned 1762-1796).

In Russia, the Rococo style in art was named after Elizabeth and consequently it was a very typical trend during her reign. Her Rococo was multiform. The Empress liked rocaille and she demanded that element to be used everywhere: from the design of walls to painting on tableware. In this paper, I will analyze this style in architecture, painting and applied art.

Mostly, Rococo was used in architecture. St. Andrew's Church, Kiev (fig.1) and Smolny Convent of the Resurrection, Saint-Petersburg (Voskresensky) (Fig. 2) were built in this style. An architect of both buildings was Bartolomeo Francesco Rastrelli (further -Rastrelli), the main architect of Russian Rococo. He invented new style - Russian Rococo as symbiosis of elements of Baroque, Classical style, and Rococo. Rastrelli, a native Italian, was born and raised in Paris. It is obvious that though Rastrelli was Italian, his educational background was considered to be French. He moved to Russia at the age of fifteen with his father upon the invitation of Peter the Great. Before moving to Russia his father Bartolomeo Karlo Rastrelli worked as an architect of King Louis XIV up to his death. Many other French and Italian artists worked with Rastrelli Jr. Among them were Louis-Roland, a French sculptor and carver, and a teacher in the Academy of Art in Saint-Petersburg, and Nicolas Gilles, a French sculptor, who worked in Rastrelli's team. Rastrelli's buildings were created in a classical style with rich Rococo decoration, predominantly rocaille. Because the buildings had many classical features, it could be easily re-designed when the Rococo was out of fashion. The overall composition of his buildings did not require changes; it was enough to remove rocaille to relieve it from the Rococco decorations (Palace of Peter III in Oranienbaum (fig. 3) and Chinese palace of Catherine the Great in Oranienbaum fig. 4). In 1758 an enthusiast of the Russian Rococo, an Italian architect Antonio Rinaldi, started his mission in Russia. He designed and built Palace of Peter III (1758-1762) and Chinese palace of Catherine the Great in Oranienbaum (1762-1768) (oranienbaum.org). It is important to mention, that Rococo had a short life not only in Russia, but also in European countries. Today there are not many remarkable architectural constructions in the style of Rococo in Russia, but those rare constructions which we have are considered to be masterpieces of Russian architecture in that style.

In the Grand Petergof (Petrodvorets) (1714-1755), the most famous Russian palace, which was completely rebuilt by Rastrelli, Rococo prevails in the interior design (Brunov, 107). Carved and molded designs, torn cartouches and cupids are dominant in Rococo interiors. Also, reliefs and exquisite mural paintings played an important role. Rococo interiors include the numerous mirrors, tapestries, asymmetrical construction of the composition, and numerous accessories such as busts and porcelain statuettes. As we can see all of these Rococo elements were used in the Russian palace's interior (fig. 5). Gilded wood carving was the typical of Russian Rococo décor (fig. 5). Gilt decorations in the Grand Petergof and Tsarskoe Selo Palaces are similar to other Rastrelli's buildings. Rastrelli widely used an openwork carving on a white background. His favorite motifs were intricate swirls and rocaille, inscribed heads, busts, and even whole figures (fig.6).

Although Rococo style was widely used in the decoration of palaces, the center for the formation of this style was the salons of private homes. Most of the aristocratic

Moscow and St. Petersburg houses of the time were decorated with Rococo. For example, Manor Kuskovo (County) of graph Sheremyetev was built in the middle of eighteenth century near Moscow. The Ballroom was designed by mirrors in window frames, so popular in the eighteen century (fig.8). This typical design of large ceremonial halls was originated in the Mirrored gallery of Versailles and repeated in all royal residences in Europe (fig. 5).

Russian Rococo painting and sculpture developed also under the influence of French artists, among whom where were Luis Tocqué, Alexander Roslin, and Étienne Mourice Falconet. The most famous Russian painters of the style were Fyodor Rocotov, Dmitry Levitskiy, Andrey Chernov, Aleksey Antropov, and Ivan Argunov. But, their works are not similar to light pastoral of French painters. The only genre in which Russian painters worked was portrait. Distinctive feature of Russian portrait of eighteenth century is the absence of group portrait. Russian artists honed their skills on the individual portraits. They created formal portraits reflecting human emotions. Such portraits were softer, more intimate than the classic formal portraits. For example, one of the typical Russian rococo portrets is The portrait of Novoseltsevoy Varvary Nikolaevny by F.Rocotov. (Fig. 9).

The importance of foreign artists on Russian culture was so great, that a special term "Russica" was invented. (Kobylinsky, 1). Russica is a term used in the Russian art history to refer Western European artists, who worked in Russia in the eighteenth and first half of the nineteenth century upon the orders of the Imperial court. The list of the foreign artists includes Bartolomeo Francesco Rastrelli, Étienne Falconet, Georg Christoph Grooth, Antonio Rinaldi, Charles Cameron, Carlo Rossi, Giacomo Quarneghi, Carlo Skotti and many others.

Works of François Boucher in Russian museums

I saw a lot of Boucher's works in Russian museums. But, when I started to collect information about his works, I faced a problem: I did not find a separate list of works by Boucher, which had been stored in Russia. Since I knew that his works were in the Hermitage, the Pushkin Museum of Fine Art, and Yusupov's palaces, the first step I took was to check the official websites of these museums. Hence, based on my online research I've created a list of those works which dwell in Russian museums (see the annex). Masterpieces of Boucher were highly prized by Russian aristocracy. In the house museums of Russian aristocracy, one can easily see how those people admired Boucher's art; a lot of Sevres porcelain products as busts, porcelain statuettes and dining sets, based on Boucher's painting; vases and clocks. Unfortunately, Russia, as three centuries ago, lags behind the civilized world for several decades and don't use modernt technologies. Russia has no information about the museums' collections on the internet. By this point, I am sure, that the list in my essay is not complete.

First collections of European art appeared in Russia during the reign of two empresses. The empresses, Elizabeth Petrovna and Catherine the Great, liked European art, but in different ways though. If Elizabeth Petrovna used art exclusively for own pleasure to decorate rooms in her palaces, for example, Catherine the Great was committed to put

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art at the service of education and for this purpose she created galleries, museums and libraries. It was one of the reasons why Boucher's works, which were bought at that time, were more prominent. Pastoral (1740) is the only typical Boucher's masterpiece with a romantic pastoral plot in the Hermitage's fund (Benua, 235). His other works depict historical or mythical stories. One of the Hermitage's guides states, "We are proud that our collection includes one of the most serious works of Boucher." The Hermitage always was more formal than private collections and the snobbish attitude towards 'non serious art' is typical for it.

Collection of great art works was an important part of Catherine the Great's politic. This period was marked by flourishing of private collectors. In the second half of the eighteenth century, the imperial Hermitage and significant private collections were formed at the same time. Prince Nicolay Yusupov was one of the few private collectors, who actively participated in the gathering of the Hermitahe's collections. His own private collections formed at the same time and from the same sources that Empress's collection. Catherine the Great was a great admirer of Boucher's art. She tried to invite him to teach in the St. Petersburg Academy of Art. And though Boucher did not arrive, he was elected an honorary member of the St. Petersburg Academy of Art in absentia.

Prince Nicolay Yusupov was an admirer of French art as well. He sought to gather collection that reflected the history of French art. French explorer of Russian private collections Lui Reo called this collection "a true museum of French art." In fact, modern Russia has two big collections of Boucher's paintings: one in the Hermitage and the second is the Yusupov's collection, which today is mostly hosted in the Pushkin Museum of Fine Art. Also, we have a lot of examples of applied art.

In Russia Boucher was famous not only by his paintings. I found something interesting. It is not a picture, not a sculpture, not a porcelain or a tapestry. It is a Royal carriage of Empress Elizabeth Petrovna (Fig. 10). The carriage is the most magnificent crew in the Kremlin Armory in Moscow. It was made in Paris four-wheel shop of Bournigal. It is important to mention that the carriage preserved its initial look and has never been a subject of restoration.

Another unusual thing in Russian collections is a Mantel clock "Peace and Abundance" made in 1770 (Fig.12). It is an outstanding example of decorative bronze, made of gilded bronze, representing allegorical compositions - triumph of peace over war. Around the clock, there are five figures of cupids floating in the clouds. The cupids handle different attributes of prosperity: coins, fruit, a sheaf, a garland of flowers, laurel branches, and also defeated the spoils of war: a shield with the image of the Gorgon Medusa, club of Hercules, a helmet. Oval cartouche with a laurel wreath on the field and floral rosettes inside is located on the top of the clock. Previously three lilies, a sign of the French Bourbon kings, were placed instead of the floral rosettes (tsarelo.ru). This is the unique exhibit, both from artistic and historical point of view.

His artistic value is the clock made by a famous French sculptor Jean-Louis Prieur, based on a picture by famous French painter Boucher. The clockwork is a work by two most famous watchmakers of the second half of eighteenth century Antoine Pelletier Charles-Athanas Pinon. The dial was made by very famous enameller Henry-Francois Dubuisson. This rich constellation of art masters makes this clock outstanding monument of an eighteenth century French bronze.

The second very important aspect is its historical background. The clock was made as a wedding gift for King Louis XVI and Marie Antoinette. After execution of Louis XVI, the royal property was nationalized and the clock was paid as a repayment of public debt in 1796. Some years later in 1798, the clock was acquired by order of the Russian Emperor Paul I for his new residence, Saint Michael's Castle in St. Petersburg (Serpinskaya). Today, the clock decorates the Portrait Hall of the Catherina Palace.

The works of Boucher were often used as interior decoration. Because Boucher had never been to Russia, the ceiling and over-door decorations were copies from his original works. Examples of such ceiling and over-door decorations can be seen in the Peel Tower in Pavlovsk park (Fig.13). The Tower was built in the end of eighteenth century and was opened this year after restoration (Fig. 14). The ceiling decoration was made as a copy from a picture of Boucher which located in the Hermitage. The other example of ceiling decoration is a plafond "The Venus Disarming Cupids" located in the Chinese Living Room of Alexander I in the Catherina Palace (Fig.15).

Russian museums include porcelain of Boucher. For example, Omsk Regional Museum of Fine Arts named after Mikhail Vrubel has a Vase with painting based on engraved pattern of Boucher's work. In 1874 a Russian painter A. Borisov made the vase in Saint-Peterburg Imperial Glass Factory. The original Boucher's drawing is in the collection of the Metropolitan (see fig.17) (www.metmuseum.org). I found also porcelain statuettes of Boucher made in the Sevres Porcelain Manufactory. Most of them were gifts to Russian Empires or were purchased by Russian aristocracy to decorate their homes. One of them is "Punishment rods."

In conclusion, although we can speak about the influence of French Rococo on Russian art, they have many differences. If the flowering of French Rococo was from beginning of eighteen century, in Russia, it came much later. In Russian art, Rococo appeared mostly in architecture and interior. Russian painters did not create any pastoral work. I couldn't find any explanation as why Russian finds did not include pastoral works, yet my suggestion is that the Russian climate is not favorable for the pleasures of outdoor activities, or Russian herders were serfs and the livestock associated only with hard labor.

Rococo was the first style of "small form" oriented not on the public or religious idea, but on people, their interests, comfort, and private life. That was time of development of individuals' interests. Although in global architecture form we don't have many examples, Russian aristocracy love this style and use it in their interior a lot. Despite the fact that I don't know any Russian artist who was influenced by Boucher, I can say that creativity of Boucher is a part of history of Russian art of eighteenth century.

I was very surprised that I could not find academic research on Russian Rococo, not even an article on the subject. It was very interesting, but hard work. Before I started my paper, I did not realize that I would have so many difficulties with information about Rococo in Russia and Boucher's works. It seemed to me, that many Russian palaces, at least inside, is Rococo style. I saw a lot of Rococo paintings. I was sure that many authors and researchers would touch that topic. I was severely mistaken. All of information in the

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essay is collected on particulars from different sources. I have to admit that even the information from official sites of Russian museums, such as the Hermitage and the Pushkin Museum of Fine Art, is not complete. All the conclusions are made by me and I can not guarantee that all of them are absolutely accurate.

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the official website of the Pushkin State Museum of Fine Art.

the official website of the Hermitage.

the official website of the Pushkin city where Catherine Palace located.





 Fig. 4 - Palace of Peter III in Oranienbaum.

Fig. 1 - Andrew's Church, Kiev

Fig. 2 - Smolny Convent of the Resurrection(Voskresensky), Saint-Petersburg.



Fig. 4 - Chinese palace of Catherine the Great in Oranienbaum.



Fig. 5 - Decorations of the Catherine Palace. Tsarskoe Selo.



Fig. 6 - Decoration of the grand staircase of the Catherine Palace. Tsarskoye Selo (Pushkin).



Fig. 7 - Toilet of Venus. Boucher. The Hermitage.



Fig. 8 - The Ballroom. Museum-manor Kuskovo in Moscow.



Fig. 9 - F.Rocotov. The portrait of Novoseltsevoy Varvary Nikolaevny. 1780. oil on canvas, the Tretyakov Gallery.Moscow



Fig. 10 - The Royal carriage. Made in Paris fourwheel shop of Bournigal. 1757

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Fig. 12 - Mantel clock "Peace and Abundance".



Fig. 13 - The ceiling decorations of the Peel Tower in the Pavlovsk Park. www.Vpress.ru



Fig. 14 - The Peel Tower in the Pavlovsk Park. www.Vpress.ru



Fig. 15 - A plafond "The Venus Disarming a Cupids" in the Chinese Living Room of Alexander I. The Catherina Palace. http://tsarselo.ru



Fig. 16 - Vase with painting based on Engraved pattern of Boucher. 1874 Painting A. Borisov. Milk glass, painting, gilding. Russia. Saint-Petersburg. http://izi.travel. 10/27/2014



Fig. 12 - Drawing of Boucher. www.metmuseum.org. 10/27/2014

Annex to the essay

List of Works by Boucher in Russian Museums

The Pushkin State Museum of Fine Arts

- 1. Jupiter and Callisto. Oil on canvas. 98X72 cm. 1744
- 2. Hercules and Omphale. Oil on canvas. 90X74 cm. 1732-1734
- 3. Female Head (Awakening). Pastel on pergament. 39X21cm. 1730-1740
- 4. Sleeping Venus. Oil on canvas. 49X69 cm. 1735
- 5. Bacchante Playing Reed-Pipe. (Erigone). Oil on canvas. 49X62 cm. 1740
- 6. The Landscape with hermit (Frere Luce). Oil on cooper. 66,5X55,5 cm. 1742
- 7. Pomona. Etching. (not available other information)
- 8. Farm, landscape with a hermit. Oil on canvas. 57,5X71 cm. 1752
- 9. Virgin and Child with the Little Saint John. Oil on canvas. 118X90 cm. 1758

The Hermitage (Hermitagemuseum.org)

Painting

Triumph of Venus. Oil on canvas. 103X87 cm. After 1743. Toilet of Venus. Oil on canvas. 101X86,7 cm. After 1743 Crossing the Ford. Oil on canvas. 59X72 cm. 1730s Pygmalion and Galatea. Oil on canvas. 230X329 cm. 1766 Female Head. Oil on canvas. 36X28 cm. 1740-1750s Girl with a Rose. Black, red chalk and pastel on brown paper. 22,5X18,1 cm. 18 century Crossing the Bridge. Oil on canvas. 59X72 cm. 1730s Pastoral Scene. Oil on canvas. 61X75 cm. 1730s Landscape with a pond. Oil on canvas. 51X65 cm. 1746. Rest on the Flight in to Egypt. Oil on canvas. 139,5X148,5 cm.757. Cupids. Allegory of Poetry. Oil on canvas. 82X87 cm. 1760s Cupids. Allegory of Painting. Oil on canvas. 82X87 cm. 1760s Landscape Near Beauvais. Oil on canvas. 49X58. 1740s

Sketches

Woman in an Armchair (Study for "Breakfast"). Black, white, and red chalk on brown paper. 34,6X25,3 cm.1739

Sheet of Sketches. Charcoal, white and red chalk on brown paper. 21,8X16,3 cm. 1748 Young Woman Sleeping. Black chalk and pastel on brown paper. 25,9X42,5 cm. 1760 Pilgrims at Emmaus. Black and white chalk on yellow paper. 33,8X27,8 cm.1750s-1760s. Italian Comedians. Copy of original painting of Watteau. Etching. 42X30,5 cm. 1727 Vinegar Seller. Red Chalk. 25X27 cm. 1736

Dessus-de-porte: History. Red Chalk. 34X24,5cm. 18 centry

Study of Two Male Figures and a Dog. Black and white chalk on grey paper. 19,3X27,4. 1730-1735

Study of a Female Nude. Black, white, and red chalk on brown paper. 26,2X34,6 cm. 1740 Three Cupids: Two are Making Music and One Holads a Palm. Sheet 6 from the "Third Book with Depictions of Groups of Children" Series. Etching with engraving. 227X282 cm. Middle of 18th century

Copy from original painting of Boucher

Aveline, Pierre-Alexandre. Three Cupids with Musical Instruments. Sheet 2 from the "Third Book with Depictions of Groups of Children" Series. Etching with engraving. 281X243 cm. Middle of 18th century

Basan, Pierre Francois. Mercury Teaching Cupids. Line engraving. 27X39,8 cm. 1750s Basan, Pierre Francois. Venus Giving Cupid to Drink Nectar. Line engraving. 27X39,2 cm. 1750s

Beauvarlet, Jacques Firmin. Cupid Captivated by the Graces. Etching with line engraving. 50,4X37. 1763

Beauvarlet, Jacques Firmin. Dreamer. Etching with line engraving. 44,7X30,5. 1780s Bonnet, Louis Marin.Head of a Woman. Coloured engraving in mixed technique, printed from a five wooden blocks. 33X34 cm. 1788

Daulle, Jean. Coquette. Etching with engraving. 27,5X28,3X20,9 cm. 1758

Demarteu. Gilles I. Shepherdess. Engraving in pencil manner. 43,2X54 cm.1673

Dennel, Antoine Francois. Dangerous Attention. Etching with line engraving. 31,7X49. 1783

Laurent, Pierre Francois. Landscape with a Bridge and Dovecot. 42,5X37,3 cm. Etching. Second half of 18th Century

Leveille, Augustin. Jupiter and Leda. Etching, stipple engraving, aquatint, multicolored printing. 24,9X19,7 cm. Late 18th century.

Miger, Simon Charles. Harmless Wound. Etching. 44,8X34,2 cm. 1785

Rue, Louis Felix de la. Three Cupids with Spoils of War. Sheet 5 from the "Third Book with Depictions of Groups of Children" Series. Etching with engraving. 229X278 cm. Middle of 18th century

Applied art, after the drawing by Francois Boucher

Mantel Clock "Peace and Abundance" based on drawing of Boucher. 1770. Bronze. Ekaterininsky Palace (tsarelo.ru)

Cup and Saucer. Soft-paste porcelain. Sevres. 1783

Grand Coronation Carriage. Painting by Boucher. Early 1720s

Miniature sculptures

Blondeau, Pierre. Gardener Girl Carrying Fruit in her Apron. Series. :Children of Vincennes." Soft-paste porcelain, biscuit. h.22 cm. 1757-1766

Falconet, Etienne-Maurice. Boy with a Vessel (Water). Hard-paste, biscuit. h. 15,7 cm. Sevres. 1772-1780.

Falconet, Etienne-Maurice. Sculptural Group "Children by a Turnstile (Raffle)" Hardpaste, biscuit. h. 15,3 cm. Sevres. 1772.

Falconet, Etienne-Maurice. Sculptural Group "Inside of a Leaf." Soft-paste porcelain, biscuit. h. 21 cm.Sevres. 1760-1767.

Falconet, Etienne-Maurice. Part of the Centrepiece "Fishing" (copy of the model of 1758) Hard-paste porcelain, biscuit. h.28,5. Sevres. 1895

Falconet, Etienne-Maurice. Sculptural Group "Hunting" (copy of the model of 1758) Hard-paste, biscuit. h. 27,5 cm. Sevres. 1895.

Le Riche, Josse-Francois-Joseph. Sculptural Group. "Graces Carrying Cupid." Soft-paste porcelain, biscuit. h.26 cm. Sevres. 1768-1773

Suzanne, Charles-Louis. Boy with a Piece of Bread. Soft-paste porcelain, biscuit. h.19,6 cm. Sevres. 1757-1766

Suzanne, Charles-Louis. Girl with a Bowl. Soft-paste porcelain, biscuit. h.18,7 cm. Sevres. After 1780

Voorst, Van der. Sculptural Group "Corydon and Lizetta". Soft-paste porcelain, biscuit. h.20,7 cm. 1752

Voorst, Van der. Sculptural Group "Jealousy". Soft-paste porcelain, biscuit. h.21 cm. 1757

Omsky oblastnoy Muzey Izobrazitelnykh Iskusstv im. M.A. Vrubelya Vase with painting based on Engraved pattern of Boucher. 1874 Painting A. Borisov. Russia. Saint-Peterburg. Imperial Glass Factory. Milk glass, painting, gilding. Novo-Mikhailovsky Palace. Saint-Petersburg.

Arkhangelskoye Gosudarsvennyy Museum-Mantion Frightened Bather. Oil on canvas. 1736

Armoury Chamber of the Moscow Kremlin The Royal carriage. Painting by Boucher. 1757

Interiors

A plafond The Venus Disarming a Cupids and Game Cupids in the Chinese Living Room of Alexander I. The Catherina Palace.

The ceiling decorations of the Peel Tower in the Pavlovsk Park. A plafond Game Cupids.

Chicken Prices, Subprime Mortgages, and the Forgotten Man

Shawn Weber

D uring the past century, government intervention in the economy during times of economic crises has proven to be either too extensive, thus exacerbating the problem and sending the economy further into recession, or too little, creating an equally bedeviling tumult of problems, especially financial. The Great Depression exhibited the overeager regulatory actions undertaken by the government, while the Great Recession stemmed from hesitant government regulations in the marketplace. Both economic crises are prime examples of the devastating effects that can occur when a government is either too active or too idle in regulating the economy.

Milton Friedman, Noble Prize winner and author of "Capitalism and Freedom," posits that in a free society the role of the government is to operate as a "rule-maker and umpire" (25), meaning the government creates rules and regulations and enforces them. Having a set standard of rules, and an umpire to enforce those rules, creates a level and unambiguous playing field, the same way an umpire of a baseball game follows and enforces objectively set rules, and holds each team to the same standard. In the absence of an umpire, both teams would be left to their own devices and more inclined to cheat, as each team is highly motivated to win. Tempting each team to play in flagrant disregard of the rules that govern the game. That being said the rules and regulations enacted by the government should not be too restrictive, forcing conformity and the search for loopholes, or too loosely drawn, creating an environment of ambiguity and loopholes.

As Friedman said, "The role of the market is that it permits unanimity without conformity; that it is a system of effectively proportional representation" (23). The phrases "unanimity without conformity" and "proportional representation" must be understood thoroughly as they are key to understanding the free market. "Unanimity without conformity" means the majority of the market place should be in agreement with the acceptability of a range of choices—in a given situation—without individuals having to conform to

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the one size fits all government paradigm. Subsequently, "unanimity without conformity" coincides with "proportional representation," by satisfying aggregate choices of consumers and producers, with supply offering a range of products and prices that corresponds with various segments of demand. In a free market economy, supply and demand allocates resources in the most efficient way possible—meaning getting the most out of what we've got—maximizing the benefit society obtains from available resources, with suppliers mobilizing scarce resources to earn a profit by satisfying demand. Supply and demand are thus interconnected and self-regulating.

While there should be proportional representation through free market prophecies, during both the Great Depression and the Great Recession there were many misguided and unconscionable attempts at stimulating the economy that were far from the model of proportional representation. Whether it was through three letter government programs such as the National Recovery Administration (NRA) and the Agriculture Adjustment Administration (AAA) in the Roosevelt era, or the repeal of the Glass-Steagall act and the signing of legislation enacting the Commodity Futures Modernization Act (CFMA) in the run-up of the 2008 collapse, government exacerbated rather than ameliorated the economy's malaise. The government's attempts at stimulating the economy denied freedom of choice and individual responsibility for poor choices in the market place, randomly inflicting inequitable taxation on those with no role in causing the economic crises, creating the forgotten man and economic distress.

The Great Depression was a time of vast economic turmoil and political discontent. The unemployment rate reached 25 percent and showed no sign of dropping. Economic activity was stagnant and deflation was a persistent problem. The government decided the only way to fix the economy was to take matters into its own hands. While some of the government actions had a stabilizing effect, such as the creation of the Securities and Exchange Commission and enacting banking reform, the majority of government programs had a destabilizing effect on the economy and helped prolong the Depression earning it the adjective "Great."

F.D.R's push for nationalization led to the National Recovery Administration or NRA, which was the primary New Deal agency. The purpose of the NRA was to bring labor, industry, and government together to create codes of fair practices, set prices and eliminate cutthroat competition. In pursuit of this purpose, the NRA created a tidal wave of codes:

A report submitted to the fifty-seventh annual meeting of the American Bar Association noted that by June 25 of 1934, some 485 codes and 95 supplements had been approved by the president and 242 more by the Administrator for Industrial Recovery. In a period of a year, 10,000 pages of law had been created... In twelve months, the NRA had generated more paper than the entire legislative output of the federal government since 1789. (Shlaes 202)

Not only was there an immense creation of laws, the laws were often so vast and ambigu-

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ous that they created hesitation among the business sectors. Many of the codes focused on minimum wage laws and minimum prices at which goods could be sold. Having a guaranteed salary sounded great to the average worker, but to the producer or business owner this was detrimental to their survival, especially in a time of deflation and scarcity. In fact, "Businesses decided to wait Roosevelt out, hold on to their cash, and invest in future years" (Shlaes 8). However, the great experimenter, F.D.R, had an answer for the "hesitant" business owner. Roosevelt introduced the undistributed profits tax. This tax was meant to put more money in the hands of the consumer through a targeted tax aimed at corporations who were not distributing dividends to their shareholders. During difficult economic times, distributing dividends makes little-to-no-sense to the business owner, who is nursing resources to get through the economic crisis. The redistribution of profits might prevent businesses from reinvesting in the company when recovery begins, helping them expand which, in turn, would create more jobs for the economy.

Along with the NRA there was the Agriculture Adjustment Administration (AAA). The AAA's purpose was to reduce agricultural production by paying farmers subsidies not to plant crops on parts of their land and to kill off excess livestock. The subsidies paid to the farmers were generated by an exclusive tax on companies that processed farm products. In other words, the AAA taxed middlemen. The AAA believed that "Middlemen were [viewed as] the profiteers in a system; if a retail price for food was simply too high, then it was the middlemen who, through their cut, were pushing up retail prices" (Shlaes 154). While the NRA was generating codes, limiting businesses and consumer choices, the AAA was taxing those same businesses and giving the money to farmers for doing less work. The U.S. is still wrestling with the distortion, rigidity, and unfairness produced by government intervention in the agricultural sector. City dwellers, including the urban poor, pay artificially high prices for food.

The Schechter brothers of Schechter Poultry Corp. became the focus of these regulations, which eventually led to the Supreme Court case of, "Schechter Poultry Corp. v. United States" in 1935 (Shlaes 239). The Schechter brothers were chicken butchers from Brooklyn, NY, who got snared in a prosecution by the Justice Department for violating codes established by the NRA. The code pertaining to the Schechter brothers was, "The Code of Fair Competition for the Live Poultry Industry of the Metropolitan Area" (Shlaes 217). The code restricted "straight killing," which meant customers could not directly choose the birds they wanted for purchase (Shlaes 217). This falls under the mentality of "order what you want, but eat what you get." What consumer would go to a restaurant and pay for food that they did not want? Instead of unanimity about each consumer being free to choose their bird, the code forced conformity.

Since customers could no longer choose the product they wanted, the Schechter brothers lost business. The code, in effect, undermined the relationship of the businessman with his customer. Despite the rules from the NRA and AAA, "The letter of transmittal assured, were 'not designed to promote monopolies or eliminate or oppress small enterprises.' The argument was that they would help small businesses by eliminating competition" (Shlaes 217). Eliminating competition among businesses sounded great to the government, but not to the consumer. For, the consumer became the forgotten man in this equation, being denied the possibility of a more efficient provider from entering the market and supplying the product at a lower price, perhaps even a better product at a lower price, a juicier chicken for less.

Along with the limitations forced on consumers, the NRA also limited the business owners themselves with the implementation of price fixing which was a misguided attempt to fight the current environment of deflation. "The code forbade setting prices too low, in part to combat a general 'low price problem'—deflation. But one could not drive all prices up generally by ordering a specific business to charge more. Something larger about the currency had to change" (Shlaes 220). Regardless of the assurance from the NRA in their letter of transmittal, small businesses did suffer as they saw their profit margins and customer base slip away from them. Even larger corporations were taking a hit. However, the larger corporations were able to sustain business at the higher prices due to a larger customer base, and their customer base was growing as small businesses had to shut their doors.

Along with price fixing, the NRA was implementing change to the rate of wages paid to employees. The NRA created a new code targeting minimum wage laws. The businesses owners were being attacked on all fronts. They couldn't sell their product for too low of a price, forcing prices up, preventing customers from buying their products; and now businesses owners had to pay their employees a wage above the market price causing layoffs and preventing new employment. Fred Perkins of York, Pennsylvania, was one of the many victims prosecuted by the NRA who would end up serving jail time for failure to pay the code rate:

Fred Perkins had paid 20 cents an hour to a staff of ten who built lighting batteries for him. NRA officials had insisted that he pay the code rate—40 cents an hour... his profits for 1933 were only \$2531—and [Fred] offered to raise the wage to 25 cents... he asked for an exemption and was denied... The government prosecuted... and Perkins spent weeks in prison before his trial. He lost. (Shlaes 225)

The actions taken by the NRA proved to be disastrous for many business owners and for consumers of their product. The NRA attempt to legislate prices plus wages was running up against the prices plus wages set by the free market, which affected the real world availability of factors of production, causing economists to rename the National Recovery Administration the "National Retardation Affair" (Shlaes 225). Had the government paid attention to free market realities, the Great Depression may not have lasted as long, as price fixing and minimum wage laws closed businesses as well as discouraged new ones from forming.

In order to understand the dramatic mis-steps taken by the NRA, one must understand the free market systems relationship to the price system and minimum wage laws. First, the price system. In the case of the Great Depression the NRA attempted to combat deflation—a general decrease in the prices of goods and services—by setting a minimum price for those same goods and services. Therefore, when prices wanted to go

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down and stabilize the NRA artificially held the prices higher than their market value. Directly affecting the interrelationship between prices and supply and demand, "Prices are fixed through the relationship of supply and demand and in turn affect supply and demand. When people want more of an item, they offer more for it. The price goes up" (Hazlitt 106). On the other side of the coin, when people demand less of an item, price will go down. With an artificial barrier set by the government the consumers and producers have no choice. The consumer can buy the product at a higher price and go without other goods which, in turn, would lower their standard of living; or the consumer does not buy the product and finds a substitute or even worse holds on to their money and doesn't stimulate the economy at all. Unfortunately consumers during the Depression adopted the latter posture and held on to their money. The producer in this equation has far less choices. They have to sell the product at the government-fixed price, causing the producer to lose business and ultimately lead to permanent closure. Price fixing may also lead to increased black market activity on the part of both producers and consumers, sidestepping the government entirely, while fostering contempt for the law thus undermining civil society.

Minimum wage laws pose the same kinds of effects as price fixing, "For a wage is, in fact, a price" (Hazlitt 134). This relationship should not be surprising as a price is a cost for a product and a wage is the price or cost for services rendered. Minimum wage laws hurt the very people they are intended to protect in numerous ways. First, an employer will not pay an employee a wage that exceeds the value they add to the firm causing the unemployment of less skilled workers. Second, an employer may try to pass the cost of higher wages through to the consumer in the form of higher prices. However, "A higher price for the product may not be possible: it may merely drive consumers to the equivalent imported products or to some substitute" (Hazlitt 135). If consumers continue to buy the product at the higher price, inevitably, the higher price will cause them to buy less, hurting the employment in the industry. By the same token, interfering in the market by forcing prices below market price will also have negative consequences:

If the price of the product is not raised, marginal producers in the industry will be driven out of business; so that reduced production and consequent unemployment will merely be brought about in another way... There is no escape from the conclusion that the minimum wage will increase unemployment. (Hazlitt 135-36)

No matter which action is imposed on the employer—artificially set wages or prices—the end result will be unemployment hurting the employees and the community where that industry is located: higher price leads to lost sales and jobs, while a higher wage without a higher price causes layoffs. The economic distortion caused by the NRA is evident as unemployment reached 21.3 percent in 1935 the same year the NRA was dissolved. One year after the NRA was dissolved the unemployment rate fell to 15.3 percent in 1936.

The attempt of excessive regulation during the Great Depression, raises the question, "Should the government stay out of the economy altogether?" The simple answer is, no. Too little regulation can lead to excessive speculation and reckless behavior-a condition known as moral hazard. The Great Recession was the consequence of excessive government de-regulation resulting in severe moral hazard on Wall Street. To understand the start of the Great Recession we must first re-visit the Great Depression and the Glass-Steagall Act. The Glass-Steagall act of 1933 was legislation that separated investment banking from commercial banking. In other words, large commercial banks could not underwrite domestic corporate debt and equity-one of the most lucrative parts of investment banking. In 1987 the Federal Reserve, under Section 20 affiliates, granted corporate bond underwriting privileges to a handful of commercial banks. Shortly thereafter, J.P Morgan was granted to underwrite corporate equity. Of course this special treatment did not last long as other banks continued to push the limits and search for gray areas in the Glass-Steagall Act. In due course, the Glass-Steagall Act would be repealed when the Gramm-Leach-Bliley Act was passed by Congress in 1999. The Gramm-Leach-Bliley Act was legislation that allowed cross-ownership of financial institutions. Freed from previous restraints, various bank holding companies now merged together into enormous financial centers. Not only did bank holding companies merge with other financial institutions. They also merged into dealing riskier financial instruments:

Money center banks entered into all manner of underwriting: not just initial public offerings (IPOs) and bond issuance, but structured financial products, including collateralized debt obligations (CDOs) and credit default swaps (CDSs). These derivatives are one of the prime villains in the credit crisis, and grew out of the housing debacle. (Ritholtz 135)

Only one year after the repeal of Glass-Steagall Congress passed another de-regulatory piece of legislation known as the Commodity Futures Modernization Act (CFMA). The CFMA allowed derivatives such as credit default swaps (CDSs) to go unregulated by state and federal regulatory oversight. To put this in perspective, "There was no reserve requirements... no audit mandates... and there was no central clearing firm, so nobody knew precisely how many CDSs there were or who owned them" (Ritholtz 138). Un-regulated derivatives became the new vehicle to transfer risk growing from \$100 billion to over \$50 Trillion by 2008. Why was there a need to transfer so much risk? Because of the ever growing credit bubble due to the subprime mortgage loans banks were pushing out at a mind-numbing rate.

Traditional banking typically did not involve the lending of subprime mortgages as banks were often on the hook for the full extent of the loan whether it was a 15 or 30 year term. The key for banks staying in business and guarding against default was to make loans to creditworthy-borrowers, who provided a sizable down payment and had good credit history. This insured the bank that the borrower could afford the mortgage for the full term. Starting in the early 2000s, banks switched from a "fiscal prudence" mentality to one of "lend to securitize" (Ritholtz 120). What does "lend to securitize" mean? Instead of banks insuring a borrower would not default on their loan for a full 30 years they guaranteed the borrower would not default for 90 days, basically until the securitiza-

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tion process was complete. The process of securitization is pooling a group of loans into a trust and then selling securities issued against the trust, thus transforming non-traded loans (mortgages) into traded securities. Thus residential mortgage-backed securities (RMBSs) grew exponentially. Especially at the beginning of the 2000s when nondepository mortgage originators started to rise. These lenders did not act like traditional banks and injected high volatility into the market:

They had no depositors to provide them with a capital base. They started with seed money, but once that grubstake was exhausted, they could not write more loans. To do more business, they had to move the existing paper off their balance sheets and replace it with fresh capital. Hence they had little choice but to sell mortgages they underwrote just as soon as they could. (Ritholtz 121)

The free-for-all lending standards would lead to abhorrent loans such as, "Alberto Ramirez, a strawberry picker earning just \$14,000 a year, was able to obtain a mortgage to buy a home for \$720,000" (Ritholtz 121). A mortgage for a \$720,000 home with 5.5 percent interest would result in a monthly payment of \$4,258. A monthly income for a \$14,000 a year salary is \$1,166 that is only 27.4 percent of the amount needed to pay for the mortgage, regardless of everyday expenses! How were lenders able to authorize such egregious loans? Because as the mortgage race heated up and demand for RMBSs were increasing, loans became more and more exotic virtually covering any individual that wanted to borrow. The typical mortgage loan is a 30-year fixed rate which was the staple of traditional bank lending. As securitization heated up different mortgage types were coming out of the woodwork. Such mortgages as the interest only loan, piggyback loan, reverse amortization loan, liar loan, no money down loan, high loan to value, and finally the NINJA loan which stood for no income, no job or assets. Each newly developed mortgage required less money, assets, and verification. And then there was the 2/28 adjustable rate mortgages (ARMs) which offered a teaser rate for the first two years and then adjusted to the prime rate after the two years was up. The words of advice to the borrower was, "Buy as much house as you can get. Refinance before the reset" (Ritholtz 126). Consequently, adjustable rate mortgages were the first mortgages to default. Nearly 4 million foreclosures would ensue the housing crash and the taxpayers were left to cover the losses of big banks. The end result was privatized gains and socialized losses. Those who caused the housing collapse—bankers, builders, appraisers, and realtors—all benefited from their financial impropriety, while innocent taxpayers were forced to pay the losses through huge federal deficits and financial repression-being deprived of normal rates of interest on their savings. New government programs, to "ease" the recession, would reach further into the forgotten man's pockets as big banks filled theirs.

The Great Recession could not have happened if banks had still followed their strict traditional lending standards. Banks had no skin in the game and therefore no incentive not to issue subprime mortgages as they were paid by the quantity and not the quality of their loans. Accountability measures, such as holding a percentage of the loan on the banks liabilities side of its balance sheet and requiring a sizable down payment, are all steps in the right direction. Requiring banks to hold a percentage of the loan for its entirety would ensure thorough investigation of potential borrowers of funds. On the other side of the coin, requiring a sizable down payment from the borrower would facilitate repayment and help prevent the possibility of foreclosure. For example, a borrower is approved for an \$110,000 loan with a 5 percent interest rate and puts 3 percent down as a down payment. A 3 percent down payment is only \$3,300 a relatively low down payment, but during the housing crisis 3 percent or no percent down were a common theme. The homeowner in question would be able to miss 6 months of payments before their down payment was wiped out. If the homeowner in question experienced a price drop of 10 percent or more on their house, as happened starting in 2007, their motivation to pay back their mortgage would drop considerably. With a price drop of 10 percent their house would be worth less than the mortgage, but they would still have to pay their mortgage as if it were worth the same amount. The homeowner would be able to live in their house for 6 months, using up their down payment, and live cost free for as long as possible until evection. However, if a homeowner put down a larger down payment, say 20 percent, they would have more skin in the game and would lose money if they didn't pay their mortgage, because eviction would be possible before they could use up their down payment. The increased accountability on part of both lender and borrower would create a more efficient and stable housing market.

The next course of action for stabilizing the financial sector is for banks to have risk weighted capital to cover all their investment positions, specifically in the case of risky derivatives. This would nip risky investments in the bud before they bring down large systemically important financial institutions. The losses of those financial institutions could not balloon and be imposed on taxpayers because they would be capped, when the institutions capital was deemed insufficient to retain the investment by objectively set standards. Therefore, by stabilizing large financial intermediaries, the domino effect of interconnected failure would be mitigated.

One can reasonably conclude that neither over-regulation, during the Great Depression era, or under-regulation, during the Great Recession, is a beneficial approach to ameliorate the economy. If anything can be learned from history it is that government should serve as a rule-maker and umpire in the economy. They cannot over-regulate and defy the basic rules of the free market system, just as they cannot under-regulate and leave actors to their own devices at the expense of others. Unfortunately the government has not learned their lesson regarding minimum wage laws or the housing industry. New legislation is being pursued for \$15 an hour minimum wage and in some states has already passed. The result has been businesses looking to replace workers with automated machines increasing unemployment. What's more, only 6 short years after the subprime mortgage crisis the government is looking at loosening lending standards to buy a home sound familiar? No matter how low lending standards go, many banks will be reluctant to lend and as well they should be. However, some financial institutions may lend if the government—once again—removes market discipline, by encouraging low down-payment mortgages for high risk borrowers. To repeat the same course of events would be adding insult to injury and only further shake the economy. Banks would have the same rate of recidivism as most prison inmates and they just may join them for lending to subprime borrowers again.

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The Lost Ummah: Good Places Empty. Why?

Sarah Younus

A third of the world's population is Muslim, but when a person goes to the mosque it may not feel like there's a lot of Muslims in his or her community. A mosque or a *masjid* is where a Muslim goes to pray; it's the House of God, just like a synagogue or church. The purpose of a mosque is to provide a space in which to learn more about Islam, to pray the five daily obligatory prayers, and to become closer to God and to the community. However, in modernity, fewer and fewer people have time to go to a masjid; of course, an individual could pray at home, and a person's absence from a *masjid* doesn't mean that he or she isn't a religious person. Does the fact that *masjid*s appear empty today mean they are not welcoming or do not fit into modernity? Or does it mean that we're just too modern and new to go to older, more traditional places?

In modernity, an individual must establish his/her own identity; this can become a difficult task because society may not welcome that identity or fit into his/her existing frameworks. In modernity a person is always changing his/her identity to fit into the space in which they are located. For instance, in the *masjid* you're a Muslim and your only purpose is to follow God's command by praying. When a person prays, that individual has to forget what his/her surroundings are or what his/her identity signify to the outside world and concentrate on his/her internal relationship with the Creator.

However, individuals within a particular group and individuals from the outside often have misconceptions about what's going around them, or how different identities intersect. A significant problem that Muslims face in the West is the misconceptions and stereotypes that non-Muslims have of them, misconceptions that while not created are certainly heightened by the acts of certain individuals who identify themselves as Muslims. Muslims face problems of perception from other religions, but they also face such problems from within their own community, even as with all religions there is great variation in how Islam is understood. All Muslims form a single *Ummah* (community), even within

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those differences of beliefs, and we should deal with our problems through communication, even as we can become more humble and simply worship God.

I attended an event at Kingsborough Community College sponsored by the Muslim Students Association called Muslim in the Mirrors. The event was an open discussion about the three "isms": racism, nationalism, and sexism, not only in the secular world outside of Islam but within the Muslim community as well. Islam is an open-minded religion but many Muslims also practice their own cultural traditions which may contradict some of the teachings of Islam, therefore making the religion itself seem more closed minded. During the event, there were some people who expressed frustration that some *masjids* are not receptive to cultural differences, and that the elders of those particular *masjids* are not understanding of such differences or less welcoming to a new face in their mosque. However, even such critics noted that there are some people within these specific *masjids* who are welcoming to new people. Either way, it's clear that many people experience tension between taking their faith seriously and having their own way to deal with new faces. As humans we need to be open minded and understanding but sometimes a person becomes closed-minded because of his/her surroundings or lack of understanding within his/her community.

As I suggested above, all individuals have different frameworks within which his or her identity is created, and without such frameworks we wouldn't have any identity. Charles Taylor discusses this relational aspect of identity in his book Sources Of the Self: The Making of Modern Identity. However, as Taylor emphasizes, frameworks can also create problems for a person, particularly in the relationship to his/her surroundings. Masjids can be problematic for some people, while for others that place can be comforting. It all depends on the person's perceptions, but those perceptions are in large part determined by the very frameworks that establish his/her identity. In modernity, we're always confused about whether to follow our traditional frameworks or the one we have learned from our peers. It gets hard to choose which frameworks define the self because that could create a crisis for a person whose identity involves conflicting sources. Also, people mix both the traditional frameworks and the new frameworks they adopt in a changing world into one single framework. As Taylor says, it can be hard to break a traditional framework because you're not only fighting yourself but the entire cultural context in which your family has raised you. In modernity, people "are taken beyond the gamut of traditionally available frameworks. Not only do they embrace these traditions tentatively, but they also develop their own versions of them, or idiosyncratic combinations of or borrowings from or semiinventions within them" (Taylor 17). Modernity sometimes encourages and sometimes forces us to combine our often conflicting frameworks and to borrow some ideas from our surroundings and traditions, etc. in order to find our identity in changing spaces and times.

I rarely go to a *masjid* because I don't have a local *masjid* in my immediate neighborhood. While the nearest *masjid* is ten blocks away, I made a promise to myself of going at least once a week if I can't go every day. When I first went to the Turkish American Eyup Sultan Islamic Center, located on 2812 Brighton 3rd St, Brooklyn, I was amazed by its beauty. I went to this mosque because my friend told me that it was beautiful and

peaceful and that I simply had to go visit it. When I went inside, it seemed to be empty. I only saw three males and no females. It was just me and my friend on the female side (*masjids* are divided into separate spaces for males and females). I was sad but I wasn't surprised, because in the present time in the U.S., mosques are often empty, while bars and clubs and other places Muslims shouldn't be going to are often filled with Muslims. I believe because the youth does not believe that the *masjids* is not modern enough in the present day or it can be that they want to be label as Muslim because of the portrayal in the media. If maybe *masjids* were a little bit more welcoming than maybe youth would come to the *masjid* more often.

As with *masjids* in general, in the Turkish American Eyup Sultan Islamic Center there are two sections. One is for the males and one is for females, for reasons of privacy and also so that we can concentrate more on our relationship with God. Some people think this division is wrong but I disagree, because your relationship with God should be only between you and Him, without the distraction of gender. The Turkish American Eyup Sultan Islamic Center also has five floors; the first floor is the basement, which is where Muslims performs the *wudu*, which is the washing that Muslims do before praying. This is also where the entrance is located and where a person removes his/her shoes and places them on a rack because a person can't wear shoes when he or she prays. On the first floor is the men's section where the men pray and also the imam or any person leads the prayer and says the *Adhan*, which is the call of the five daily prayers. On the second floor is the women's section, where the women pray. On the third floor is a room whose purpose I don't know; when my friend and I went on that floor we thought it was someone's private room because we saw a bed. On the fourth floor is the room full of chairs and that room is used when a lecturer comes and gives a lecture about Islam.

Before going to the *masjid* on a particular Friday, I took a shower and wore new clothes, not my usual attire, which is the American style of jeans and shirt. I also wore my traditional Pakistani dress, which was long. I told my mom that I was going to a *masjid* to pray, and she told me that I could pray at home and that females shouldn't go to a *masjid*, because in Pakistani culture females shouldn't go to the *masjid*. I told my mom, yes we can attend the *masjid*; Prophet Muhammad said it is preferred that women stay at home but that they are allowed to go to *masjid* if they can get away from the household. My mom said yeah, okay, but you should still pray at home. I asked her, why are you stopping me from going to the House of God? Then my mom said okay, fine, go, and pray for everybody not for yourself. I said to her, I will. When I left the house and walked to the *masjid* I felt as if I had broken my traditional framework and was going into another framework.

On a different Friday I went to another *masjid* which is located on 20th Avenue and 64th Street. This *masjid* is called Brooklyn Islamic Center. There was a separate entrance for males and females. I went to pray Salaat-ul-Jummah or Friday Prayer, which is offered in congregation. It is offered in place of Zhuhr Prayer. Friday Prayer is an occasion for the assembly of the Muslims of a whole city or a town. In a large city, Friday Prayer can be offered in more than one place for the convenience of the Muslim community. It gives them an opportunity to meet together to discuss and solve their individual as well as community problems. Getting together once a week develops unity, co-operation, and

cohesiveness among Muslims.

I went to the women's section and I was shocked again because when I went to the other *masjid* it had been empty. In contrast, on this particular Friday the *masjid* was full, especially the male side. I was shocked, but at the same time I was happy because it shows that as individuals we have time to pray. The *khutbah* (sermon) was in English so I understood it very well, and we had big speakers to listen to the sermon because the sheik (Islamic pastor) was a male in the male section. After listening to the *khutbah* we prayed Jummah. The women got up and we all formed a line and stood next to each other, shoulder to shoulder, even though were strangers. I felt very peaceful and I said to myself that I was missing this unity in my life. This is why I promised to go to a *masjid* at least once a week. I was so excited about the feeling that I stood up when I was supposed to be sitting down, and when I realized this I felt very embarrassed. But still, that feeling of peace remained.

Masjids are full of signs, inside and outside. When a person walks into a masjid, he or she sees beautiful carpets, showing that this is a peaceful place. Also, when a person walks in the *masjid* there might be other people there who will greet his/her arrival by saying "Assalam Alaikum," which means "peace be upon you," and the person who is walking in should reply by saying "Walaikum Assalam," which means "peace be upon you, too." In Islam we are taught to greet each other with peace, whether we are strangers or not. When a person goes to the prayer section, he/she can see Quranic verses in Arabic calligraphy on the walls, showing people that this is a religious place, a place in which you can learn about Islam. The carpet is oriented toward the *Qibla*, which is the direction of the Kabah, which is located in Mecca and is the House that Prophet Abraham made for God, so his followers could make a pilgrimage to that place. In some *masjids*, on the carpets there will be a straight line to show people where to stand and what direction to face. People often have this misconception in Islam that Muslims don't believe in the other prophets, which is false, because in the Quran there are many verses that talk about Jesus, Moses, Abraham, etc.; Muslims follow the religion of Abraham, not the religion of Muhammad. The carpets that show the direction to Mecca are a sign or symbol of the ways that Muslims orient themselves not just in space but in a religion with many sources.

Outside of the *masjid* there are often many signs to demonstrate to others—outsiders as well as insiders—that this is a religious place. Of course, this depends on which *masjid* you go to because some *masjids* look like a regular building from the outside, but when a person goes inside it's a whole different story. In Brooklyn, for example, not that many *masjids* have the dome on the rooftop identifying itself as a religious place. Some *masjids* will have nice tiles on the steps leading to the front entrance; this signifies that it is the entrance to a nice, beautiful place of worship and not to an ordinary building.

This aspect of the *masjid* represents an important contradiction explored by Charles Taylor in *Sources of the Self*: in modernity we are surrounded by signs all the time, but we sometimes ignore then or don't perceive them the way they're supposed to be perceived. For instance, a person can easily think that the *masjid* is an office building rather than a place of worship because of the way it's designed. In modernity, we often ignore signs around us that don't fit our identity or preconceptions because we might have the thought that these signs will interfere with our identity and the decisions we make in our lives. As Taylor emphasizes, signs are an important part of our lives in modernity. They make life worthwhile; imagine a life without directions to tell us who we are or where we are heading. We would be lost and confused all the time. But even with signs around us all the time we can still be lost and confused because we may not perceive the sign correctly because we all have different perceptions based on our identities and the frameworks that shape those identities.

Often people have misconceptions about women in Islam because of culture, which while it gives us our sense of identity makes everything complicated for individuals and groups. When Islam started there were many women heroes that helped Prophet Muhammad to get out of trouble; for the Prophet, women were good companions and resources. The first convert to Islam was a woman, Khadijah Prophet Muhammad's wife. During the Prophet's time, despite what many people think, women had much power and did their duties without interference. Prophet Muhammad always encouraged women, and that's why Islamic women have many rights in the same way that men do. But culturally, sometimes women can be degraded because males are most often the dominant figures in any group. Especially in modern, secular times and among younger generations, women are getting more power in relation to the men; we are becoming equal, but there are many challenges to this equality. Throughout the world, Muslim women have proven to be resourceful, creative, and dedicated both to their faith and their communities, individually and communally. Women are now teaching Quran to children to interpret and give khutbah (sermons) to people. Muslim women are becoming active within the Muslim community, as well as more involved with their surrounding communities. There are many Muslim women that I have learned of who have redefined the roles of the women in many Muslim countries. In the beginning of Islam, men and women used to pray together and had open, equal space, but women came over time to be relegated to the back row; however, as time has slowly gone by, women have been able to change the roles they play society and to reconnect to earlier, more equal traditions in the religion and culture.

Muslims have made many organizations globally and nationally to help women in this struggle, such as the organization Sisters in Islam, started in 1993 to promote awareness for women worldwide about justice, dignity, and what their rights are in Islam (DeLong-Bas, Web, n.p.). Individual women in different communities are becoming more aware and helping out each other when help is needed. Women are still fighting to become Imams and to give Adhaans to redefine cultural aspects, but organizations like Sisters in Islam are a sign of important changes that are already underway. It is a sign also of another paradox of Islam in modernity: the community most go ahead and establish new relations between the sexes, but in doing so it must in a sense start all over again, because during the Prophet's times there were many women role models, and it was only when the Prophet passed away that women were systematically degraded or subordinated. But, now learning about their rights, women have raised themselves to power and started to compete with the males in many aspects of life.

Nonetheless, within the Muslim communities, with all their diversity, there can be a lot of prejudice toward people from different cultures and backgrounds. Within the Muslim *Ummah* we are facing the problems of who we are and what our purposes are in our

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community. In Islamic history, despite stereotypes, Muslims were open-minded and were kind to other cultures and religions, but now days the *Ummah* is becoming prejudiced. For instance, there is a prevalent idea that an Arab cannot marry a non-Arab or that the person has to marry the same caste as the person so that their individual differences don't create "problems" for the couple later on in life. But in Islam, Allah told us we can marry anyone we want as long as that person is Muslim, regardless of where he/she came from or the position that he/she holds in society. Our Prophet himself had wives that had come from different backgrounds (Soundvision, 2014).

Even though there are prejudices within the Muslim *Ummah*, when someone is in pain (whether he/she knows it or not), the people pray for him/her to feel better and to endure the difficulty that he/she is facing. Beyond inherited differences of identity, the group reunites when its members perform the prayer in congregation. In an article "Muslims in the Mirror Prejudice in the Muslim Community," the author described the following: "A brother from the United Kingdom who converted to Islam once mentioned how on a trip to apartheid-era South Africa, while he found black and white churches, he did not encounter black and non-black mosques. That made him start thinking about this curious phenomenon, and he eventually accepted Islam" (Soundvision, 2014). Even across such a great divide as the races have been forced to experience in apartheid South Africa, in other words, togetherness has been emphasized more than difference. As all groups, the Muslim people have problems as well; Muslims are not perfect, and we must try our best every day to perfect ourselves. Sometimes we're successful and sometimes we are not, but the important thing is to make an effort to understand the frameworks we live in and the different kinds of identities that are possible in those frameworks.

Around the world and particularly in United State there have been a lot of misconceptions and bias about *masjids* in America. The five primary misconceptions about *masjids* in America are that they are new; that they are trying to spread sharia laws; that people who attend *masjids* are mostly of Middle Eastern decent; that they are funded by governments that are not allies to America; and *masjids* have led to terrorism.

The first misconception about *masjids* is that they are new on America soil, which is false; *masjids* have been here since the colonial period. The first mosque that was ever built in America was on Kent Island in 1731, which was mostly for African Americans. In the 1920s there was a *masjid* near the factories in Detroit where Henry Ford built automobiles. *Masjids* are blended in the community and are similar to churches and synagogues (Curtis, 2010). The second misconception is that *masjids* are spreading sharia laws in America. This is false because sharia law is very complicated for a believer and for a lot of imams to explain the interpretations of sharia law. If *masjids* just teach the Quran and the Sunnahs of Prophet Muhammad (his teachings besides the Quranic verses). The third misconception is that most of the people who attend *masjids* are from the Middle East; this is again false. Muslims are not only from the Middle East, they're from all over the world. Islam is practiced in all the nations. Only fifteen percent of Muslims from New York are of Arab descent (Curtis, 2010). There are many ethnicities and races in Islam; as said in the Quran, "O Mankind, we created you from a single pair of a male and a female, and made

you in to tribes and nations so that you may know each other (not that you despise each other). Verily, the most honoured of you in the sight of Allah is he who is most righteous of you'' (Al-Quran, Chapter 49, Verse 13).

The fourth misconception is that *masjids* are funded from outside governments that are allies to America, which is false, because the majority of *masjids* in America are funded by the members of their respective communities or congregations because they want to be independent, both collectively and as individuals, which is why they left their mainland to come to America in the first place (similar to the Pilgrims leaving England to practice religious freedom). The last misconception is that *masjids* are increasing terrorism in America, which is also false because the main purpose for individuals to attend the *masjid* is to pray and be connected to their community and with God. "Most U.S. mosques hold weekend classes for children, offer charity to the poor, provide counseling services and conduct interfaith programs" (Curtis, 2010). *Masjids* raise charities, help children, and provide social services just like any other religion does. Of course there have been *masjids* that have promoted radical extremism but that doesn't mean an individual should judge each and every *masjid* and say, "Don't go to there or you will become a terrorist"; that is just absurd and closed-minded.

In the Ummah we are facing problems within the group and outside of the group because of misconceptions and cultural differences and also modern individualism itself. Charles Taylor also discusses how the inside and outside of identities work together to generate our sense of ourselves. He says in Chapter 5 of Sources of the Self, "Moral Topographies," that our thoughts, ideas, and feelings are in us while the objects in our surroundings are outside of us; he believes humans are creatures of inner depth but necessarily connected to the objects and structures of the world around us (Taylor, 111). The inside and the outside together defines the person as a relationship, no matter how complicated those relationships are within the person or outside of the person or what kind of division a specific culture draws between the inside and outside. As Taylor said, "What we are constantly losing from sight here is that being a self is inseparable from existing in a space of moral issues, to do with identity and how one ought to be. It is being able to find one's standpoint in this space, being able to occupy, to be a perspective in it" (Taylor, 112). What Taylor means is that we are ignoring the spaces we're in and the ones we are not or the ones that we could be in order to determine a person's identity, without looking the relationships among them. A person may look at his/her surroundings but may not the feel connection because he or she is ignoring what's in their mind unconsciously or maybe not looking at the outside contexts, and not recognizing the different perspectives important to both. That's what I feel is going on inside the *masjid* and outside of the *masjid*, because the misconceptions from the outside are maybe making both Muslims and non-Muslims stay away from masjids. And if a person is in a masjid, that individual may not understand the perspective of the *masjid*'s other members, or those people may not understand the individual for cultural or other reasons.

Again, the paradox is that in modernity we all want to fit in society's trends but also want to see ourselves as autonomous, outside of any group identity. But, being isolated is a problem itself that should be fixed; no one should ever be isolated because in doing so,

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whether voluntarily or not, they aren't aware of what's going on in their surroundings and this can damage them. That's why Muslims have *masjid*s, Christians have churches, and Jews have synagogues, etc., so that each group can connect with itself and its perception of God, and to be as a community. While important differences remain, we all believe in one God and God wants all of us to be connected and one, regardless of individual ethnicities and religions. As individuals we need to be open minded and be understandable we are one *Ummab*. No matter what, and despite the many individual characteristics we possess, we're all create the same, no matter what one's skin color is. As is said in the Quran, "And surely this your nation is one nation and I am your Lord, therefore be careful (of your duty) to me" (Surah Mu'minin 23:52). We are all one and worship God whether we're Muslim or not—this is a belief that unites people despite differences, rather than drives them apart because of those differences.

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SUBMISSION GUIDELINES

General Guidelines

All manuscripts should be submitted electronically as Microsoft Word 2007 (or later) attachments to Professor Robert Cowan (robert.cowan@kbcc.cuny.edu) and include a working e-mail address and telephone number for both the student and mentor. Submissions should be in 12-point font and double-spaced throughout in a legible typeface like Times New Roman or Cambria.

Lists of Works Cited

The biggest problem with our submissions is that the citations are woefully insufficient. Articles should include a list of Works Cited and be properly referenced according to the guidelines of the Modern Language Association, American Psychological Association, or other citation system appropriate to the discipline for which they were written. Please do not give incomplete bibliographic references.

We do not publish:

- Computer science papers that consist mostly of many pages of code
- Art reviews of exhibits that are no longer running
- Class assignments that are letters to officials
- Papers that are basically biographies of famous persons
- Class journals

We are unlikely to publish:

- Papers that are hand-written, unless they include exceptionally beautifully drawn diagrams
- Overviews of topics, unless they include a summary of recent developments in the field
- Art history papers that have no illustrations of the work being discussed
- Papers by students we have already published, unless they are really much better than other related submissions for that issue
- Personal essays, unless they also make an argument about a topic

What we are looking for:

- Articles approximately 3,000-5,000 words, which may include notes, diagrams, and/or illustrations
- An argument, not just a summary of other's arguments
- In-paragraph citations that are clearly connected to the Works Cited list
- As few reference sources as possible

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August 1 for the Fall issue and February 1 for the Spring issue.

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