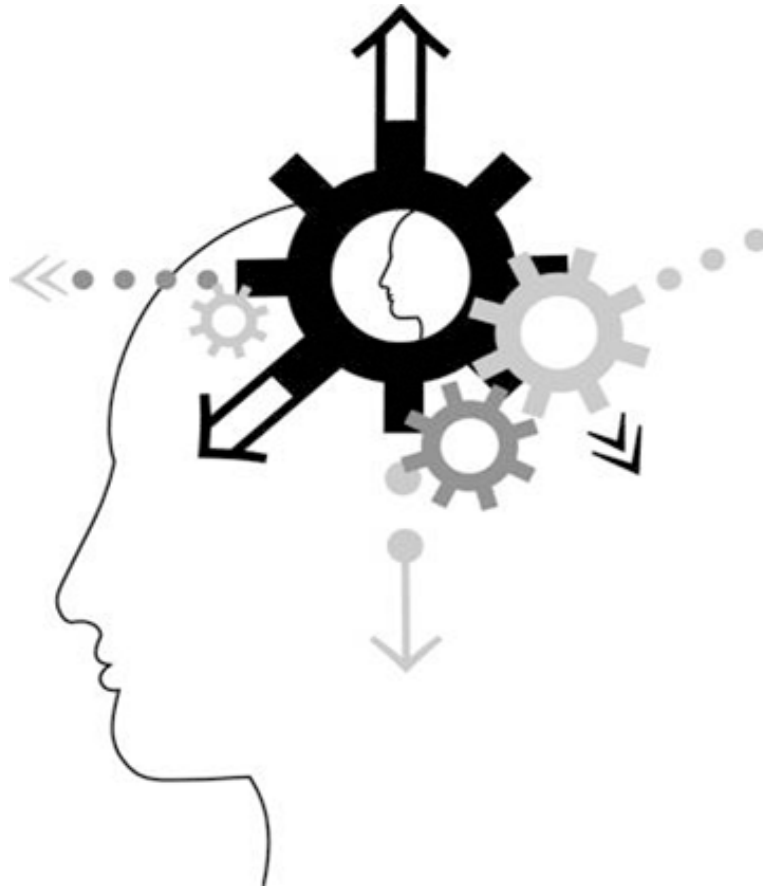


Meeting of Minds XXII



Journal of Undergraduate Research

May 9, 2014

Hosted by Oakland University



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About the Meeting of Minds: Journal of Undergraduate Research

The *Meeting of Minds Journal of Undergraduate Research* is specifically designed to offer undergraduate students the opportunity to experience the manuscript submission and review process. Students who participate in the Meeting of Minds Conference are invited to submit a written version of their presentation to the Journal Review Board for publication in the volume, which corresponds to the presentation year. The initial volume, published in 1998, incorporated submitted papers from the inception of the conference through that year (i.e. 1993-1998). This volume presents papers from the twentysecond conference held at Oakland University in May 2014.

The articles in this journal represent the work of undergraduate students, with the assistance from a faculty mentor. The first author is always an undergraduate student. The faculty mentor and home institution are indicated in the table of contents.

This journal represents the culmination of many years of experience in the collaboration process between three undergraduate universities in Michigan. It also represents the strong personal commitment of many individual faculty members to undergraduate research and creative endeavors.

The Meeting of Minds Conference and this journal are a shared responsibility between the University of Michigan-Dearborn, the University of Michigan-Flint, and Oakland University. Each university accepts the responsibility to host the conference and subsequently to publish the journal on a rotating basis. The order of the responsibility follows the subsequent pattern: the University of Michigan-Dearborn in 2012, the University of Michigan-Flint in 2013, and Oakland University in 2014.

The Editorial Board and faculty mentors reviewed submissions for documentation and compliance with manuscript guidelines. The authors were ultimately responsible for the content, information, and any interpretation within the manuscripts. Manuscripts accepted for publication become the property of the Journal Editorial Board.

Preface

On May 9, 2014, hundreds of undergraduate students, dozens of faculty, and countless community and family members gathered on the campus of Oakland University for the 22nd annual Meeting of Minds Undergraduate Student Research Conference. The annual Meeting of Minds event is a joint effort of three campuses that pride themselves on the quality and quantity of undergraduate research: the University of Michigan-Dearborn, the University of Michigan-Flint, and Oakland University.

As a celebration of the research, scholarly and creative accomplishments that emerge when undergraduates have the opportunity to work closely with faculty mentors, Meeting of Minds has grown significantly since its inception in 1993. At the 2014 conference, there were nearly 140 student presentations with topics ranging from art, dance, chemistry, philosophy and psychology, just to name a few. Sessions were programmed to be interdisciplinary so attendees could learn to value the ways diverse disciplines express their intellectual findings. Making a professional-level public presentation of one's own work is an extremely valuable experience for an undergraduate student. All of the knowledge and skills of their undergraduate years are brought together in the formulation of a unique question or quest and the completion of a significant research project or creative task. Rightfully, students and faculty alike take great pride in the final presentation.

Thirty-nine of the participants in Meeting of Minds XXII have chosen to take their commitment to their scholarship a step further. They have prepared and submitted the professional-level manuscripts that you will find in this volume of *Meeting of Minds: Journal of Undergraduate Research*. All submissions were first reviewed and approved for publication by Faculty mentors prior to assembling the electronic *Journal*. Your perusal of these pages will affirm the excellence and diversity of our students' work. We hope you enjoy the read.

Finally, I want to thank the faculty, staff and students from all three campuses who worked cooperatively to make the 22nd Meeting of Minds gathering a great success. Support begins with the commitment of the Provosts from each campus; their continuous endorsement of the event and their financial contributions which are critical to the success of the day and the publication of the journal. We are grateful to our faculties for their willingness to mentor student projects, their assistance in presentation and journal preparations, and their supportive attendance. My colleagues, Dr. Jennifer Zhao and Susan Gedert at the University of Michigan-Dearborn, Andre Louis at the University of Michigan-Flint, and Dr. Robby Stewart at Oakland University, assured a great turnout from their respective institutions. The faculty, staff, and students on the Oakland University Committee for Meeting of Minds XXII were terrific. I especially recognize the technical support Beth Dawson provided throughout the Meeting of Minds event; her contribution is greatly appreciated.

Anne Hitt, Associate Dean
College of Arts and Sciences, Oakland University

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The Conflicts of the Baghdad Pact: Britain, the United States, Nasser's Egypt, and Iraq

Emma Barko, Oakland University

Research Advisor: Weldon C. Matthews

With the threat of Soviet aggression after the Second World War, Great Britain and the United States strove to protect their interests in the Middle East by the formation of the Baghdad Pact. The Pact was established during the Eisenhower administration through discussions with Turkey, Iraq, Great Britain, Pakistan, and Iran, and was finalized in February of 1955. This paper will argue that the Pact ultimately failed because Eisenhower's policy was not well thought out. US policymakers underestimated the extent to which Britain would use the Pact to advance its imperialist interests, the opposition in Iraq to Nuri al-Sa'id's regime and his ties with Great Britain, and the influence of anti-imperialism and nationalism in the Arab world. Furthermore, the Americans failed to identify the Iraqi army officer corps as a major threat to the Hashemite regime.

The Baghdad Pact was an issue of contention between the Egyptian President, Gamal Abdel Nasser, and Nuri al-Sa'id, the Prime Minister of Iraq. They were both Arab nationalists, but whereas Nuri saw Britain as an ally and cultivated relations with Western interests, Nasser saw the Western powers as a threat to the Arab world and his leadership. Both Nasser and Nuri competed to extend their influence into Syria because of its geographical location and the central role it played in the Arab national movement. Also, alliances among Egypt, Syria, and Saudi Arabia isolated Iraq even more in the Arab world after the Baghdad Pact was formed.

The formation of the Baghdad Pact was initiated by Secretary of State John Foster Dulles during the Eisenhower administration. Dulles believed that Egypt had no interest in a Middle East defense system and that Iraq was most conscious of the Soviet danger.¹ The Pact was organized to defend the region against Soviet aggression, and Dulles intended to keep the Pact indigenous to the region. The Baghdad Pact began with the signing of the 'Turco-Iraqi Treaty of Mutual Cooperation' on February 24, 1955. When Britain acceded to the Pact on April 5, 1955 it was renamed the Baghdad Pact, and accession of Pakistan and Iran followed in September and October of the same year.²

There have been a few scholars who have written on the Baghdad Pact, but not on the same lines of argument of this paper. Elie Podeh argued that the struggle over the Pact dealt with the fight for Arab hegemony between Nuri al-Sa'id and Gamal Abdel Nasser, which ultimately led to the overthrow of the Hashemite monarchy.³ Ara Sanjian, Richard L. Jasse, Nigel John Ashton, and Behçet Kemal Yeşilbursa wrote on the formations of the Baghdad Pact.⁴ Ara focused more on the importance of the original signatories. Jasse argued that the formation of the Pact was about British imperialism more than anything else, whereas the latter two scholars analyzed the Anglo-American tensions in the Pact. This paper, in contrast, explains how all these issues led to the Iraqi withdrawal.

This paper will argue that Eisenhower's policy of forming the Baghdad Pact was not well thought out because US policymakers underestimated several important points: the way in which Britain would use the Pact for its own interest of imperialism, the opposition in Iraq to Nuri al-Sa'id's regime and his ties with Great Britain, the influence of anti-imperialism and nationalism in the Arab world, and the failure of the Americans to identify the Iraqi army officer corps as a major threat to the Hashemite regime. These are the circumstances which led to the overthrow of the Hashemite Monarchy in July of 1958 that resulted in Iraq's withdrawal from the Baghdad Pact.

Once the Turco-Iraqi Treaty of Mutual Cooperation was signed in February 1955, it brought on instability in the Middle East. For Egypt's Nasser it was a challenge to his leadership in the Arab world and his domination in the Arab League. His fear was that the United States and Britain were trying to isolate Egypt to be replaced with Iraq, and he wanted to make sure he was

¹ Ismail Soysal, "The 1955 Baghdad Pact." *Studies on Turkish-Arab Relations* (1990), 45-46.

² Ara, Sanjian, "The Formation of the Baghdad Pact." *Middle Eastern Studies* 33 (April 1997): 226-227.

³ Elie Podeh, *The Quest for Hegemony in the Arab World: the Struggle over the Baghdad Pact* (New York: E.J. Brill, 1995).

⁴ Ara Sanjian, "The Formulation of the Baghdad Pact," *Middle Eastern Studies* 33 (April 1997); Richard L. Jasse, "The Baghdad Pact: Cold War or Colonialism?" *Middle Eastern Studies* 27 (Jan. 1991); Nigel John Ashton, "The Hijacking of a Pact: The Formation of the Baghdad Pact and Anglo-American Tensions in the Middle East, 1955-1958," *Review of International Studies* 19 (April 1993); Behçet Kemal Yeşilbursa, *The Baghdad Pact: Anglo-American Defence Policies in the Middle East, 1950-1959* (New York: Frank Cass, 2005).

able to maintain his leadership to serve the interests of his country. To do this Nasser launched a propaganda campaign against Iraq and Nuri al-Sa'id that appealed to the Arab people to reject the Pact, calling on the Iraqis to riot. This ultimately failed, but his attempt to promote an alignment with Syria and Saudi Arabia did not.⁵ This was an obvious Nasserist move against Iraq and the Turco-Iraqi Pact to maintain his position in the Arab world.

For both Iraq and Egypt, it was important to them to keep Syria as an ally, as it "held the key to the struggle for local primacy." Its geographical location and the central role it carried were essential for Egypt's hegemony.⁶ On February 28 1955 Israel launched a raid onto the Gaza strip, which made Nasser believe even more strongly against the Western Powers and that the Soviets were not the main threat, but that Israel was. Syria and Egypt signed "an agreement on principle" which would be signed later after Salim and 'Azm, the Foreign Ministers of Egypt and Syria, went to other Arab capitals to discuss it further. When they met with King Saud of Saudi Arabia he was exuberant about the proposal and suggested it to be called the "Tripartite Covenant." On March 6 two communiqués were published, one between Egypt and Syria, and one between Egypt, Syria, and Saudi Arabia, which opposed the Baghdad Pact and alliances of Arab states with non-Arab states.⁷

On March 20 Nasser invited the American ambassador for Egypt, Henry Byroade, to an unplanned meeting in Cairo, explaining why he was pursuing the Saudi-Syria-Egyptian Pact. Salah Salim emphasized that everyone was conspiring against Egypt, and that was why Egypt had to organize its own defense arrangement against the Western Powers. Byroade told Nasser that once the alliance with Syria and Saudi Arabia was official, the United States would see it as sabotage of the Baghdad Pact; Nasser replied that the only way the Pact that Egypt was sponsoring would not be necessary was if the United States agreed not to encourage Syria to join the Baghdad Pact and would notify Egypt if the United States changed their minds. Nasser's advisors, however, told him this was unrealistic since Turkey and Iraq would continue to pressure Syria.⁸

This anti-Iraq agreement between them gave Nasser the advantage over Iraq because Nuri could not use the Baghdad Pact as leverage to become leader of the Arab world. Nasser believed that this agreement with Syria and Saudi Arabia could fill the vacuum of a northern defense in the region and save him from being isolated, which he still felt he was by the Pact and the support of the Western Powers.

The Tripartite Declaration made Syria realize that it did not want to oppose Iraq from joining the Arab Pact because the right-wing Syrian politicians wanted to keep the balance of Arab power the way it was and saw no need to encourage the Iraqi military, which was much superior to Syria's, to threaten their "peace." Nuri strove to convince Syria to join the Turco-Iraqi Pact, but Syria was going along the lines of neutrality in inter-Arab relations to overcome the Iraqi-Egyptian differences. In August of 1955 the election of a new Syrian president, Shukri al-Quwatly, gave Nasser renewed hope because the newly appointed cabinet member, Said al-Ghazzi, worked out a bilateral agreement dealing with securing military aid from Egypt through Nasser's newly gained Czech arms deal. This was concluded on October 21 and a bilateral

⁵ Yeşilbursa, 90-91.

⁶ Podeh, 3.

⁷ *Ibid.*, 126-31.

⁸ *The Foreign Relations of the United States* (henceforth *FRUS*), 1955-1957, Vol. XII Near East Region; Iran; Iraq; No. 28. "Telegram from the Embassy in Egypt to the Department of State," March 20, 1955, 41-43.

agreement between Egypt and Saudi Arabia was shortly agreed upon on October 27; both agreements dealt with only military matters so as to not agitate Iraq.⁹

This shows the extent of the Iraqi-Egyptian rivalry and its effects on the other Arab states, thus creating the instability in the Middle East. The fight over Syria was a struggle between Egypt's Arab Pact and the Baghdad Pact. By December of 1955 there were two "camps" essentially: Iraq was supported by Jordan and Lebanon, and Egypt was supported by Saudi Arabia, Syria, and Yemen. A similar situation arose in Jordan, when the members, particularly Britain and Turkey, of the Baghdad Pact tried to recruit it to accede. In general, Jordan was a 'neutral' state in inter-Arab affairs and riots broke out in protest against the Baghdad Pact, and a state of emergency was declared.¹⁰

It is now important to explain the Western Power's involvement in the Baghdad Pact and why such politics made the Pact weaker, versus the initial intention of the Dulles strategy of keeping the defense arrangement indigenous to the region. Even though in 1952 Britain was opposed to a 'Northern Tier' line of defense, it soon concluded that it was essential for Britain's success for it to be involved. Britain also felt that the United States was trying to overtake its power in the Middle East unconsciously and did not understand why American interest suddenly became a top priority. Britain sought to keep its interests in the region by reworking the treaties with Egypt, Jordan, and Iraq, as well as to protect its oil interests through political influence in the Persian Gulf area.¹¹

Britain's first priority to maintain its interests was to cooperate with Egypt in resolving the Anglo-Egyptian dispute of the continuation of the British forces in the Suez Canal Zone. A treaty of 1954 concluded with Britain withdrawing from the base in Egypt just as Nuri became Premier. By joining the Baghdad Pact in April 1955, Great Britain replaced the 1930 treaty and maintained Iraq's regional influence. The proposals of the Turco-Iraqi Pact in 1954 and early 1955 had the underlying scheme of writing in the renewal of the Anglo-Iraqi Treaty of 1930, which allowed British access to the air bases in Habbaniya and Shaiba near Basra, storage of military wares in preparations of war, and the installations remained Britain's property.¹² This is one way by which Britain had the priority of its imperialism over the real reason for the Pact, containing the Soviets.

The regime of Nuri Sa'id was never popular with the citizens of Iraq. When he was negotiating military aid from Britain and the United States in 1953, he was playing them against one another so he could receive free weapons, which he eventually gained because of Britain's fear that the U.S. would take over its power in the Middle East if it did not comply with Nuri's requests and threats. Nuri told Britain that if it provided the aid Iraq required, he would allow the British troops to use Iraq's military facilities. When negotiating with the Americans, Nuri stressed the importance of Iraq for the oil concessions it possessed and told the Americans that if Iraq had to use its money to purchase weaponry it would take away from its economic development, which could result in a rise of communism in the country. While playing the

⁹ Podeh, 131-171.

¹⁰ Podeh, 172-195.

¹¹ Ashton, 123-124.

¹² Jasse, 140-141.

British against the Americans, Nuri was also forcing Britain to realize that it could lose the dominance in the region to the United States.¹³

Foreign Secretary of State Anthony Eden encouraged American military aid to Iraq because it helped the financial situation of Britain since its economy had suffered since the Second World War, but he also wanted to be able to control the aid given to Iraq by the US. Washington repeatedly related to Eden during the negotiations of the military aid to Iraq that its intention was not to replace Britain as the main weapons supplier, but wanted to complement the British aid. On February 26 1954 the United States and Britain signed a Memorandum of Understanding that meant the aid the Americans could give Iraq was required to confer with London before any deals were made, and Britain would waive the section in the Anglo-Iraqi Treaty that prohibited Iraq of purchasing weaponry other than British.¹⁴

The American ambassador to Baghdad believed that the military aid that was to be given to Iraq would help stabilize the Hashemite monarchy and would be useful in defending its borders against an aggression. In addition, he also believed that the aid given was a ploy to have Iraq as a member of the Pact.

On March 2 1956 General Glubb, the British commander of the Jordanian Arab League, along with two British officers, were dismissed by King Hussein. Hussein believed that if he did not place himself in the lead of the nationalist movement since his monarchy was a current target for criticism due to Templer's mission of trying to convince Jordan to join the Pact, that he would be overwhelmed. Britain was completely thrown off by this, and suspected that Nasser was behind it because of reports of Egyptian propaganda against Glubb. He saw striving to get Jordan to accede to the Baghdad Pact as a breach of the agreement he reached with Anthony Eden in February of 1955 when Britain agreed not to extend the Pact to any other Arab states; Nasser concluded that they were indeed trying to isolate Egypt in the Arab world.¹⁵

On July 26 1956 Nasser nationalized the Suez Canal and was received with enthusiasm by the Arab states, with the surprisingly exception of Iraq. Iraq soon related to Britain its opposition to Egypt's actions. Either Nasser would be successful in his scheme or Britain and Iraq would be. The Suez War erupted on October 29 by an attack on Egypt from Britain, France, and Israel, against Dulles' opposition. It was more of a surprise that Britain aligned with the enemy of the Arabs, Israel, than a Western power attacking a sister state. This created an increase in the tensions in Iraq because Britain was an ally of Nuri al-Sa'id and was a member of the Baghdad Pact. The outbreak of the Suez War caused students at Iraqi colleges to protest against Iraq's involvement with the Pact and allying with Britain. Nuri used his usual method of declaring martial law, and even after the riots were concluded, these trends continued. It was presumed that Iraq would be forced to withdraw its membership from the Pact because of the constant protests but he refused to surrender. Nuri did not believe that he could maintain order in his country for more than six days because of the current deterioration of the domesticity.¹⁶

In November 1956 Iraq announced that it would no longer participate in the Baghdad Pact meetings involving Britain, which revealed the extent of the pressures Iraq was in. Nuri's

¹³ Brandon King, "In the Eye of the Storm: Ambassador James Richards' Mission to Iraq in April 1957," *Cambridge Review of International Affairs* (July 2012), 8. Daniel Williamson, "Exploiting Opportunities: Iraq Secures Military Aid from the West, 1953-56," *International Journal of Middle East Studies* 36 (Feb 2004): 96.

¹⁴ Daniel Williamson, "Understandable Failure: the Eisenhower Administration's Strategic Goals in Iraq, 1953-1958," *Diplomacy and Statescraft* 17 (September 2006), 604-605.

¹⁵ Ashton, 135; Podeh, 156; Yeşilbursa, 145-147.

¹⁶ Podeh, 212.

goal was to reduce the public criticism and to display the Pact as a Muslim organization against Israel and open it to other Muslim states, asserting that Nasser's fear was correct in that the Soviets were not the main threat, but Israel was.

In the beginning of 1957 Egypt became increasingly isolated in the Arab world due to the proclamation of the Eisenhower Doctrine on January 5. The United States decided to become more involved in the Middle East because of Britain's withdrawal from the region in fear that the Soviets "would seize the opportunity to fill the vacuum."¹⁷

The Eisenhower Doctrine strove to undercut the pro-Nasser forces in the Middle East along with providing military, political and economic aid to any state threatened by an armed aggression that had communist intentions. The United States supported the Hashemite monarchies of Jordan and Iraq in their struggle against the pan-Arab Nasserists of Egypt and Syria, and the Doctrine had an underlining attempt to control the policies *vis-à-vis* the Arab nationalists to prevent their expansion. The United States was willing to join the Military Committee of the Baghdad Pact and would also provide aid to the Iraqi police force to strengthen the bilateral relationship between the United States and Iraq, and to promote their ideals of supporting the Iraqi monarchy in their efforts with the Western powers.¹⁸

Syria and Egypt were both opposed to the Eisenhower Doctrine, and the fact that Saudi Arabia supported it began the distancing of King Saud from Nasser. In January, Saudi Arabia, Syria, and Egypt signed the 'Arab Solidarity Pact,' for which they would together pay the subsidy that Britain was paying to Egypt up to its withdrawal. When Saudi Arabia supported the Eisenhower Doctrine the tensions grew between it and Egypt, and when King Saud visited Iraq from May 11-14 in 1957 it was revealed by Nuri that Nasser plotted to assassinate the king a few days earlier. Saud then proposed that Britain would refrain from giving Egypt financial or economic aid to isolate him even further, leaving him with only the support of Syria.¹⁹

Nuri resigned his premiership in June of 1957 because he felt confident with the defense of Iraq and because of his success in overcoming the Suez crisis and gaining the support of the Arab states. As Egypt's Nasser was kept in isolation, on August 13 1957 Syria had to expel three American diplomats for conspiring against the regime. Nasser, fearing that a victory by the Western powers would imperil his claim to Arab Hegemony, activated the military agreement between Egypt and Syria of October 1955 and landed troops in Latakia. This proved that Syria was still an ally of Egypt and in February 1958 the United Arab Republic was formed, uniting Egypt and Syria and representing the defeat of the pro-Iraqi party in Syrian politics. These events brought Nasser's influence to Iraqi borders and established his leadership of Arab nationalism and proved he had overcome his isolation. As a result, Iraq and Jordan formed a federation called the Arab Union with Nuri as prime minister.²⁰

Since the accession to Iraq to the Baghdad Pact, there had been oppositions from the public and officers of the armed forces, which increased even further with the tripartite invasion of Egypt in 1956. It is not certain when the Free Officers were formed, but had held their secret meetings since 1952, with their belief that if they could find a way to liberate their country, the development in Iraq would improve immensely. In December 1956 the Free Officers organized

¹⁷ Elie Podeh, "The Struggle over Arab Hegemony after the Suez Crisis," *Middle Eastern Studies* 29 (January 1993), 101-102.

¹⁸ Brandon King, "America's Search for Control in Iraq in the Early Cold War, 1953-1961." Phd diss., Toronto University: 2013, 4-5.

¹⁹ Podeh, 104.

²⁰ *Ibid.*, 104-106. Charles Tripp, *A History of Iraq* (New York: Cambridge University Press, 2002), 145.

their Supreme Committee, which consisted mostly of army and air force officers who carried the rank of major or higher. They planned the possible coup d'état and 'Abd al-Karim Qasim and 'Abd al-Salam 'Arif soon joined as members of the Supreme Committee, but they did not have much in common beside their dislike for imperialism and for the status quo.²¹

In 1957 'Abd al-Karim Qasim became chairman and brought in his link to the younger officers, with 'Abd al-Salam 'Arif merging with The Free Officers' Movement at the end of 1957. On July 13, 1958 'Arif managed to take over control and direct the 20th Brigade to Baghdad; troops were strategically located at important buildings throughout Baghdad and simultaneously surrounded the Royal Palace and Nuri al-Sa'id's house. Shortly thereafter, King Faisal II, the Crown Prince 'Abd al-Ilah and other members of the family emerged from the building and were shot within a few minutes; even though Nuri managed to escape, he was found the next day and shot in the street.²²

The overthrow of the Hashemite monarchy on July 14 1958 was the event that ultimately led to the failure of the Baghdad Pact. The coup d'état of 1958 was well received by the majority of the Iraqi public, especially for the poor and socialist groups because they saw it as an opportunity for the government to become more concerned with fulfilling interests for their country and eliminating the power that Britain held in Iraq. 'Abd al-Karim al-Qasim proclaimed Iraq a Republic. The new regime successfully capitalized on the dislike of Nuri al-Sa'id and elements the new leadership had, emphasizing anti-western interests. The regime was run by military officers, seized the army and police, and a few days after the coup they were trying to encourage normal functional civilian life. The society in Iraq quickly turned pro-Nasser, with the appearance of his picture against those of former rebel leaders.²³ The day after the coup the new cabinet was announced. Most of the important posts were members of the Free Officers; the commanders of the army, air force, and national security were also maintained by the Free Officers. The new government eliminated the *ancien régime* and declared it would continue its commitments, which included the Baghdad Pact. Iraq did remain in the Pact, but did not attend the meetings or any other activities, and officially withdrew from the Baghdad Pact on March 24 1959.²⁴

It is now important to analyze the reasons why the fall of the Hashemite monarchy was not foreseen, because it had the greatest impact on why the Baghdad Pact failed. Analysts, the US embassy, and the intelligence community were not fully able to predict such an event as the overthrow of the monarchy, and the policymakers in the Eisenhower administration received mixed signals of whether or not the Iraqi government was politically stable. They did not completely ignore the evidence they obtained from their sources, but they were only concerned with the evidence of immediate threats to Iraq's political stability.²⁵

US ambassador Waldmar Gallman conceded that Iraq's membership to the Pact was one of the most powerful grievances of the opposition, and the intelligence community agreed that the Pact isolated Iraq and Nuri al-Sa'id from Egypt and Saudi Arabia. In July of 1956 the National Intelligence Estimate, or NIE, claimed that Iraq's isolation from the Arab World

²¹ Tripp, 143-144; Marion Farouk-Sluglett and Peter Sluglett, *Iraq Since 1958, From Revolution to Dictatorship* (New York: I.B. Tauris Publishers, 2003), 47-48.

²² Farouk-Sluglett and Sluglett, 48-49; Tripp, 144-146.

²³ *FRUS*, 1958-1960, Vol. XII, Near East Region; Iraq; Iran; Arabian Peninsula, No. 124. "Telegram from the Embassy in Iraq to the Department of State." Baghdad, July 19, 1958, 5pm. Gallman, 327-328.

²⁴ Poteh, 242; Farouk-Sluglett and Sluglett, 49-50.

²⁵ King, 245-312.

generated distrust among “politically-aware Iraqis.” When the Suez Crisis erupted, it only worsened the affect because students immediately protested Iraq’s involvement with the Pact. Furthermore, the National Intelligence Survey of October 1957 and the Special National Intelligence Estimate of February 1958 showed that Iraq’s membership to the Pact was one of the main sources of the popular anti-government sentiment; most of the young population admired Nasser and were extremely hostile towards Iraq’s role in the Baghdad Pact.²⁶

Despite the unpopularity of Nuri al-Sa’id’s regime of the general public, another important issue that the analysts and policymakers of the Eisenhower administration failed to recognize was the conspirators in the armed forces in the Iraqi military were a threat to the monarchy. The commitment of the Eisenhower administration’s support and supplies to the training of the Iraqi police and security force was deeply unpopular and was hated by the ruling elite and citizens. In April 1957, Point IV, the technical assistance program for developing countries announced by President Truman, noted that Iraq was once of the most policed nations in the “free world” and that its police force was extremely hated because of their “low morals, major problems of corruption, and their poor performance in internal security matters.”²⁷

America’s officials’ biggest failure was their underestimation of the Free Officers. US observers in Iraq were only aware of them in 1956, but they still knew little of what they were about until the coup in July 1958. The Operations Coordinating Board report in December of 1955 argued that the Free Officer’s did not have the power to overthrow the government or influence it in any way as long as Nuri’s regime was in power. This report was important because Iraqi Communist Party was simultaneously reorganizing their party after the Baghdad Pact’s formation.²⁸ This also proves that there were inconsistencies in the reports on the stability of the Iraqi government. Brandon King wrote that “if one starts with the overthrow of the Iraqi government on 14 July 1958 and works backwards, the “trail of clues” suggests the regime would ultimately become a victim of the public’s discontent seems easy to spot.”²⁹ An example of this would be a report from the CIA stating that forty junior officers were arrested during the Suez Crisis when they were voicing their dissatisfaction with Nuri’s regime and the alignment with Britain.³⁰

The conclusion to this is that the struggle for Arab hegemony and the influence of Britain and Western Powers isolated Iraq in the Baghdad Pact. Nuri was constantly struggling from criticism of the public in Iraq, with the demonstrations which caused him to impose martial law, and of the Arab states, especially Egypt and Syria, which were influencing Arabs and Iraqis to oppose Nuri’s regime. The opposition of the Iraqis and the failure of the Eisenhower administration and policymakers to realize that the Free Officers of Iraq had meetings to plan a coup to overthrow the government highly impacted the fall of the Hashemite monarchy. Once ‘Abd al-Karim Qasim and ‘Abd al-Salam ‘Arif organized their regime and pulled out of the Baghdad Pact, the failure was inevitable because Iraq was the foundation , and without it, the Pact dissolved because its effectiveness deteriorated.

²⁶ King, 263-265.

²⁷ *Ibid.*, 270.

²⁸ *FRUS*, 1955-1957, Vol. XII, Near East Region; Iran Iraq, No. 427. “Operations Coordinating Board Report,” Washington, December 14, 1955, 979-986.

²⁹ King, 282.

³⁰ *Ibid.*, 286.

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Effects of Polyphenolics on Amphibian Larval Development, Growth and Survival

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Abstract

Previous studies have shown that larval amphibian fitness traits are affected by litter quality (carbon/nitrogen/phosphorus content), primary producer biomass and water chemistry (polyphenolics and pH). Polyphenolics, such as tannins, that are released by decomposing leaves in ponds have been shown to negatively affect the survival, growth and development of many larval amphibian species. Polyphenolics may directly affect amphibian fitness by altering physiological and endocrine pathways, or indirectly by reducing food resources. In the present controlled laboratory study, using an eight fold range of polyphenolic concentrations, we found that polyphenolics had no adverse effects on wood frog larval growth, development and survival for a range of polyphenolics concentrations that normally occur in natural ponds. These results indicate that the negative effects of polyphenolics on amphibian species previously reported in other literature are likely a result of an indirect effect of tadpole food resources (phytoplankton and periphyton biomass).

Introduction

Our forests in Michigan are under constant stress from human activities, invasive species, and climate change, which have ultimately altered the forest community (Stephens, 2013). Ephemeral ponds, temporary pools that form from snowmelt and rainfall, acquire most of their nutrients in the form of leaves that drop every fall from the surrounding forest community. Changes in the plant community can change the quality and quantity of leaf litter input and alter the ephemeral pond ecosystem (Maerz, Cohen, & Blossey, 2010). One of the most abundant native trees in the eastern United States, red maple (*Acer rubrum*), produces leaf litter, which results in prolonged development times, smaller size at metamorphosis, and lower survival (Stephens, 2013). Currently, the number of red maple trees in the eastern United States has increased dramatically and it has been proposed that if this trend continues red maple will replace the historically dominant oaks (*Quercus spp*) and hickory (*Carya spp*) tree species (Abrams, 1998). Additionally, recent invasion of emerald ash borer (*Agrilus planipennis*) into the eastern United States has largely eliminated the once dominant ash tree (*Fraxinus spp*). In addition, two invasive wetland plants phragmites (*Phragmites australis*) and purple loosestrife (*Lythrum salicaria*) threaten native biodiversity and alter ecosystem services and processes (Stephens, 2013). Several recent studies have demonstrated changes in the forest communities can have far reaching impacts including amphibian larval fitness, which rely on vernal pools and allochthonous input for reproduction.

Plant detritus is the primary source of energy in freshwater benthic food webs, and the flow of energy from detritus to consumers is largely a function of detritus quality (Cohen 2009). Plant litter quality, as well as primary producer biomass, and water chemistry (Stephens, 2013), is a consistent predictor of larval anuran performance, even when there are multiple plant species, predators, or variations in soil biota communities (Cohen, 2013). Stephens' research revealed many contributing factors to metamorph fitness and one resounding topic is polyphenolics. Polyphenolics, compounds such as tannins found in plants, leach into water during decomposition and have been shown to correlate with reduced survival and development in tadpoles (Maerz, et al., 2005). Other

research has shown that phenolics (bark tannin) cause epithelial damage to the gills of carp through binding to and cross-linking of cell membrane enzymes (Temmink, et. al, 1989).

Stephens (2013), as well as other researchers, (Earl et. al., 2012) (Maerz et. al., 2005) (Kraus et. al., 2003), have found a correlation between higher polyphenolic concentration and reduced survival, longer development times, and slower growth rates. Larval amphibians appear vulnerable to polyphenolics at low concentrations, yet they have been largely overlooked.

However, studies to date have confounded phenolic levels with other factors such as litter quality (carbon, nitrogen, and phosphorous content), primary producer biomass, and pH. A low ratio of C:N:P correlates with faster development, increased survival, and faster growth rates. Additionally, low quality leaf litter (high C:N) tends to have higher phenolic concentrations. Consequently, the direct effect of polyphenolics on larval anurans has yet to be explored in depth. This experiment attempts to isolate polyphenolics from those confounding factors to discern if polyphenolics alone inhibits development, growth, and survival using a controlled laboratory experiment. If polyphenolics have a direct effect, there should be longer development times, slower growth rate, and lowered survival in higher phenolic concentrations. Given that lower temperature and lower food levels increases developmental time we would predict the negative effects of phenolics to be greater at low temperature and lower food availability.

Methods

Leachate

In October 2012, 1 Kg of red maple and sugar maple senescent leaves collected from the natural preserve on Oakland University's campus, were placed in 300L plastic wading pools and allowed to leach for six months. Species of litter were selected based on proximity to amphibian habitat and high polyphenolic levels. The leachate was stored in garbage cans in a 4°C unlit cold room for the duration of the study. All dilutions were made using this leachate. The dissolved concentrations of polyphenolics were determined using the Folin-Ciocalteu assay (Clesceri and Eaton, 1998).

Larvae Collection

Frog larvae were obtained from adult wood frogs, *Lithobates sylvaticus*, at Saginaw Forest, Ann Arbor, Michigan. Wood frog larvae were selected for the experiment because they breed primarily in ephemeral ponds with moderate to high levels of phenolics (Berven 2009). Adult wood frogs were transported to Oakland University, Rochester, Michigan, and allowed to amplex in a container of water. After egg masses were deposited they were separated into groups of 5-10 eggs then transported to an aerated water pan and allowed to hatch.

Experiment 1: Phenolic Concentration and Temperature

In order to determine the effects of polyphenolics and temperature on tadpole growth rate, development, and survival rate we performed a 6x2 factorial design with six phenolic concentrations (0, 5, 10, 20, 40, 80mg/L) and two temperatures (17°C and

22°C). Each treatment was replicated ten times for a total of 120 cups. A single tadpole was placed into a 1L cup filled to a 750ml mark. The tadpoles were maintained on a 12/12 hour day and night cycle in constant temperature incubators. The cups were cleaned and the phenolic solution changed weekly. The tadpoles were fed Tetramin fish flakes *ad libitum*. Weighing and staging (Taylor-Kollros developmental stage) occurred once a week. At metamorphosis (emergence of front limbs, stage XX), the water in the cups was removed and the tadpoles were allowed to resorb their tails (stage XXV) and weighed. Larval period length was determined as the time from day one of the experiment until stage XXV (Taylor and Kollros, 1946). The experiment was terminated when the last tadpole metamorphosed.

Survival rate was determined by number of tadpoles that successfully reached metamorphosis. Date and mass was recorded for each tadpole when metamorphosis was reached. Developmental rate was determined as 1/ the days to metamorphosis. Growth rate was defined as mass at metamorphosis/days to metamorphosis.

Experiment 2: High Food/Low Food

To account for the possibility that higher phenolic concentrations may have provided extra food resources, we performed a second experiment in which tadpoles were fed a constant level of food. The design was a 4x2 factorial experiment. Four phenolic concentrations were examined (0, 10, 20, 40mg/L) at two different food levels (high food and low food). Each treatment was replicated five times giving a total of 40 containers.

Tadpoles were fed Tetramin fish flakes three times a week. The level of food provided each week was adjusted to maintain a constant growth ratio for high and low food treatments (5% of body mass for low food and 15% for high food). Weighing and staging occurred once a week. The experiment ran for 32 days.

Experiment 3: Effects of Phenolics on Periphyton Biomass

To examine the effects of polyphenolics on primary producer biomass we performed a third experiment examining the effects of polyphenolics on photosynthetic primary producers at four concentrations of phenolics. The phenolic source for the primary producer experiment is the same leachate mixture of red and sugar maple as the past two experiments. Plastic tubs were established containing 10 L of phenolic concentrations (0, 10, 20, and 40 mg/L) and replicated three times. Two ceramic tiles were placed in each tray and finally the trays were inoculated with 5 ml of C/N nutrient and a liter of filtered pond water. The trays were allowed to sit at the outdoor research station for ten days before the ceramic tiles were sampled. To assess periphyton abundance, the clay tile was scrubbed and rinsed with water in an enamel pan on each sampling date. The slurry was then filtered through GF/F filters (0.7 µm; Whatman, INC, USA) and stored at -20°C until fluorometric analysis. Phytoplankton was collected from four 0.5 L water surface samples taken from each pond. These four samples were combined and an approximately 200 ml subsample was taken from the mixture and filtered through a GF/F filter. Fluorometric analysis (Trilogy Model, Turner Instruments, USA) was utilized to determine chlorophyll *a* (chl *a*) for both periphyton and phytoplankton samples following a modified version of the EPA method 445.0 (Arar and Collins, 1997).

Statistical Analysis

ANOVAs were conducted to analyze the means and their associated procedures and determine the observed variance. A Tukey HSD test was used to compare all possible pairs of means and find the means significantly different from each other.

Results

Experiment 1: Phenolic Concentration and Temperature

Growth Rate

There was a significant effect of phenolic concentration ($F = 7.24$; $P < .001$) and temperature ($F = 32.98$; $P < .001$) on tadpole growth rate, however, there was not a significant interaction between phenolic concentration and temperature ($F = .608$; $P < .694$; Figure 2). Pooling phenolic concentrations, tadpoles grew 1.41 times faster at 22°C compared to 17°C (Figure 2). Growth rate at both temperatures (17° and 22°) were the highest at intermediate phenolic levels (10 mg/L and 20 mg/L). At 22°C and 20 mg/L of polyphenolics the average growth rate was 14.6 mg/day compared to 11.1 and 9.0 mg/day at 0 mg/L and 80 mg/L respectively. The Tukey HSD test grouped the treatments into three subsets. The first subset contains 0 mg/L and 80 mg/L indicating no statistical significance between the control and the most extreme level of polyphenolics. The second subset contained 0, 40, and 5 mg/L and the final subset contained 5, 10, 20, and 40 mg/L. Though not significant, it is worth noting that at the higher phenolic concentration (20-80 mg/L) growth rate declined faster at 22° than at 17°C.

Developmental rate

Developmental rate produced similar results compared to growth rate. There was a significant effect of phenolic ($F = 15.88$; $P < .001$) concentration and temperature ($F = 1179.75$; $P < .001$) on tadpole developmental rate, however, there was not a significant interaction ($F = 1.22$; $P < .318$; Figure 3). Pooling phenolic concentration tadpoles developed over three times faster at 22°C compared to 17°C (22°C = .484; 17°C = .148). Intermediate levels of polyphenolics produced tadpoles that developed fastest (10 mg/L and 20 mg/L). Tadpole developmental rate at lower and higher concentrations (0 mg/L, 80 mg/L) had the slowest developmental rate. The Tukey HSD test grouped the data into three subsets. The developmental rate of tadpoles in the 80 mg/L treatment differed from all other treatments, while developmental rate in the 0, 5, and 10 mg/L did not differ from each other and in the third subset was 5, 10, and 20 mg/L. There is a slight overlap with 5 mg/L, but this breaks down the fastest developmental rate in phenolic concentrations of 5, 10, and 20 mg/L.

Survival Rate

Survival was generally higher in the lower phenolic concentrations but this difference was not significant (Kruskal-Wallis; $P = 0.416$; Figure 1). Survival (across all polyphenolic concentrations) was higher at the high temperature treatment (88%) compared to the low temperature treatment (83%).

Experiment 2: High Food/Low Food

There was a significant effect of phenolic concentration ($F = 27.34$; $P < .001$) and food level ($F = 40.10$; $P < .001$) on tadpole growth rate, but not a significant interaction between phenolic concentrations and food levels ($F = 2.39$; $P < .107$; Figure 4). Pooling phenolic concentration tadpoles grew 1.75 times faster at high food compared to low food (High food = 7.23 Low food = 4.12). Growth rate among the high food and low food treatments also increased linearly with increasing phenolic concentrations indicating that the tadpoles are obtaining additional nutrition from the higher concentrations of polyphenolics (Figure 4).

Experiment 3: Effects of polyphenolics on periphyton biomass

There was a significant effect of phenolic concentration ($F = 4.58$; $P < .038$) on photosynthetic periphyton biomass (Figure 5). Tubs with either no polyphenolics or moderate levels (10 mg/L) had the greatest photosynthetic periphyton biomass (Figure 5). At higher phenolic levels the mean biomass of photosynthetic periphyton declined by a factor of 3 (Control tubs: 35.83 chl *a* ug/tile vs. 40 mg/L :12.43 chl *a* ug/tile).

Discussion

Our results suggest that polyphenolics do not have a direct negative effect on larval amphibian's growth, development or survival at low to moderate levels of polyphenolics typically found in ephemeral ponds. Furthermore, moderate levels of polyphenolics appeared to have a beneficial effect. In contrast, the reduced growth and developmental rates at higher phenolic concentrations were more likely due to the indirect effects on food availability in the form of photosynthetic periphyton. These results, along with a growing body of research, support the idea that changing forest community can have an impact on ephemeral pond communities and the amphibians that utilize these ponds for reproduction.

Forests in Michigan are experiencing a rapid decline in ash tree with proposed and possible extinction in the future. Ash trees supply leaves with the highest leaf litter quality (low C:N:P) and their disappearance from plant forest communities may have a larger affect than immediately apparent. In conjunction with the decline in ash tree there has been a rise in red maple, also known as the Red Maple Paradox (Abrams, 1998). Red maple currently dominates the understory and mid-canopy of many eastern United States forests and is projected to increase its dominance in the overstory, and displace a large majority of historically dominant trees (Abrams, 1998). The recent eradication of ash trees will no doubt accelerate this process. Red maple has some of the lowest leaf litter quality and one of the highest levels of polyphenolics. These changing forest communities could have a large bottom-up impact on pond communities that rely on allochthonous leaf litter.

Our hypothesis that the negative effects of phenolic concentration would be greater at lower temperatures was not supported. In contrast it appears that polyphenolics were beneficial in some cases. Looking solely at growth rate and developmental rate, our research shows the fastest rate at 10 and 20 mg/L. Also the slowest growth rate is at the control (0 mg/L) and 80 mg/L, which are unrealistic concentrations in the field (Stephens, 2013). A faster developmental rate and growth

rate are directly related to a juvenile amphibian's survival in the field. The larger the tadpole is at metamorphosis and the sooner it completes development, the higher its probability of survival (Berven, 1990).

These results could have several implications to amphibian population dynamics.

Our results suggest that polyphenolics may be affecting another factor in the ephemeral pond community important to amphibian development. Past research has found less primary producers (phytoplankton and periphyton) in ponds with higher phenolic concentrations (Stephens, 2013). In our study, periphyton biomass was highest in the control (0 mg/L) and 10 mg/L solutions. The 20 mg/L was significantly lower and the 40 mg/L yielded, relatively, little periphyton biomass. Past research has shown that darkening water of larval anurans resulted in lower survival rate (Stoler and Relyea 2013). From this we can ascertain that polyphenolics have an effect on the primary producers, the food of larval amphibians, and not a direct effect on the tadpoles.

Another possibility is that wood frogs are evolutionarily apt to survive in moderate levels of polyphenolics. The primary breeding habitat for wood frogs are vernal pools, which generally have some traces of polyphenolics; natural selection would favor larval amphibians that had a resistance to polyphenolics. Other species of larval anurans or species with gills that are not apt to surviving in polyphenolics may react to the toxicity, such as carps in bark tannin (Temmink, et. al, 1989). Some phenolic and phenol compounds target the process of enzyme binding and interfere with the intracellular signaling pathways (Kudo & Yamauchi, 2005).

Other research shows that lowered survival in tadpoles might have been caused by lowered dissolved oxygen or high tannin concentrations, but some tree species are known to have high concentrations of toxic monoterpenes, which should be further researched (Earl, et. al, 2012).

Lastly, there could have been some flaws in the experimental design. The leachate may have contained a minute amount of edible detritus or microbes. Other research has shown that wood frog tadpoles will consume allochthonous leaf litter in addition to primary producers (Licht, 1974). This means that the wood frog tadpoles could have been gaining additional nutrients from higher concentrations of leachate, which would explain the results from experiment 2 (Figure 4). If this experiment was to be performed again we would suggest filtering the leachate to remove edible detritus from the solution.

Developmental rate had the largest impact by 80 mg/L leachate. Some of the tadpoles stopped growing and developing and eventually died, however, this level of polyphenolics is unrealistic in the field. This is the one instance in our data where it appears polyphenolics had a direct impact on tadpole development. Past research has shown that tannins effect fish gills and inhibit respiration (Temmink et. al, 1989). This may have been the case in 80 mg/L leachate, but the answer to why the survival rate is lower than the other concentrations is uncertain.

It is worth noting for both developmental rate and growth rate that the right side of the bell curve decreases at a higher rate than the left side increases. Figure 2 could show that there is some favorable, edible detritus in the leachate, but after the concentration gets too high, the polyphenolics negatively impacts the larval amphibians even if there is a surplus of available food. It would appear the tadpoles hit a maximum favorability between 10 mg/L and 20 mg/L; once that concentration gets higher the results are stunted growth and development.

The second experiment reveals a constant increase in growth rate as phenolic concentration increases. Unlike the first experiment, the 40 mg/L provided the fastest growth rate. This, we believe, shows more than anything that there was some edible

detritus in the leachate that was aiding in growth and development. Pooling food level and looking solely at polyphenolic concentration, there is a predictable linear increase (2, 4, 6, 8 mg/day). Both high food and low food showed the same pattern and there was no interaction between food level, phenolic concentration, and growth rate.

Our results suggest that changes in forest tree species that result in an increase in phenolic concentrations of ephemeral ponds could reduce amphibian larval fitness traits by indirectly reducing food availability. In conjunction, tree species that generally have high levels of polyphenolics also have low leaf litter quality, which will further inhibit larval amphibian growth and development. The presence of invasive species is not enough to look at when assessing impacts on larval amphibians. Invasive species in other research have shown to have positive impacts on larval development. The best indicator of how a plant will impact larval amphibians is leaf litter quality (C:N:P) and polyphenolic concentration (Martin & Blossey, 2012). Other research has shown that water quality has a large impact on specific phenotypic changes (length of intestine, depth of tails, depth of tail muscles), when it may have a smaller impact on survival and development (Stoler and Relyea 2013). In conclusion, polyphenolics appear to have an indirect effect on larval growth and development and instead inhibit primary producer growth.

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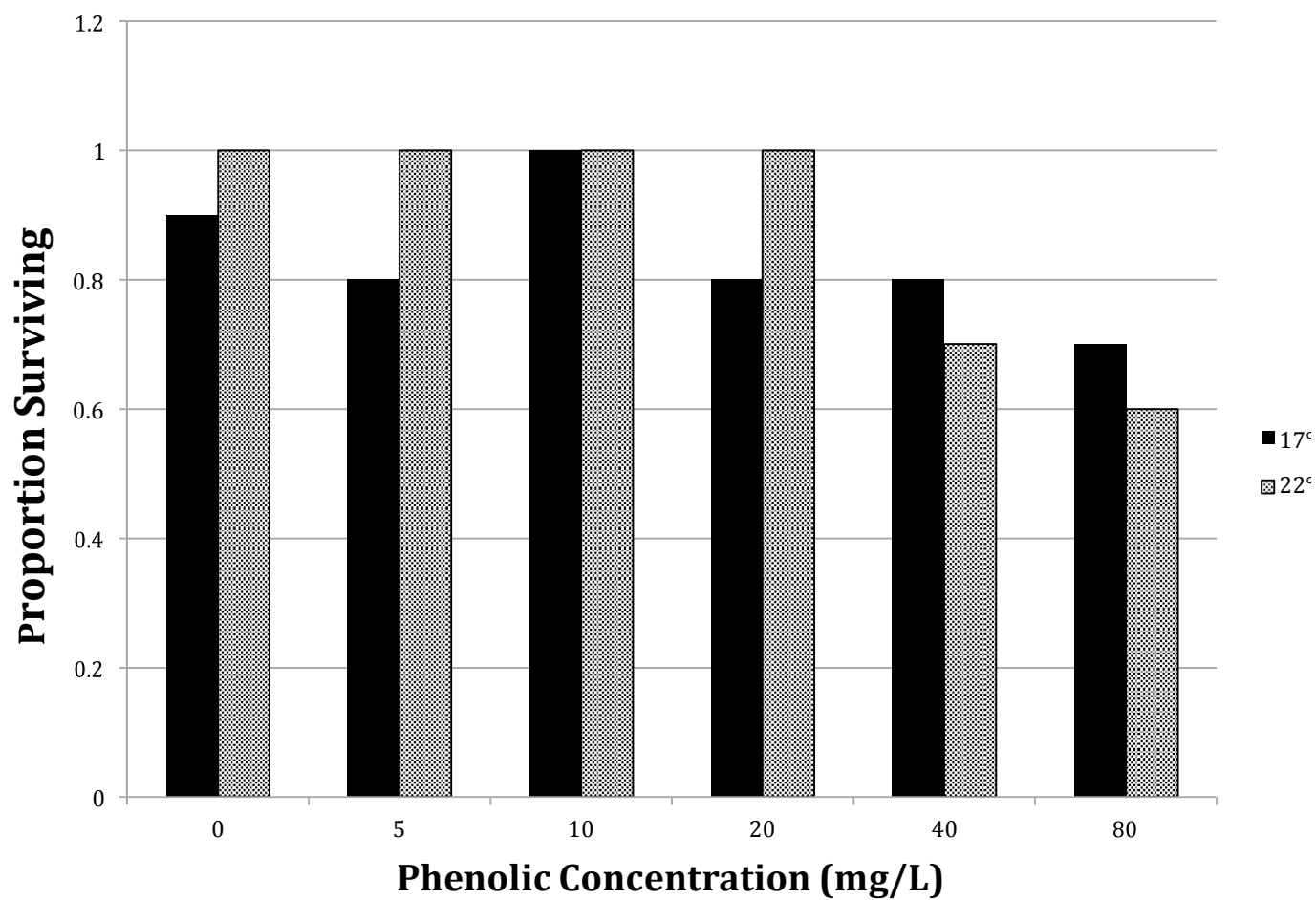


Figure 1. Mean Survival of tadpoles from 10 replicates at high temperatures (22°) and low temperatures (17°C).

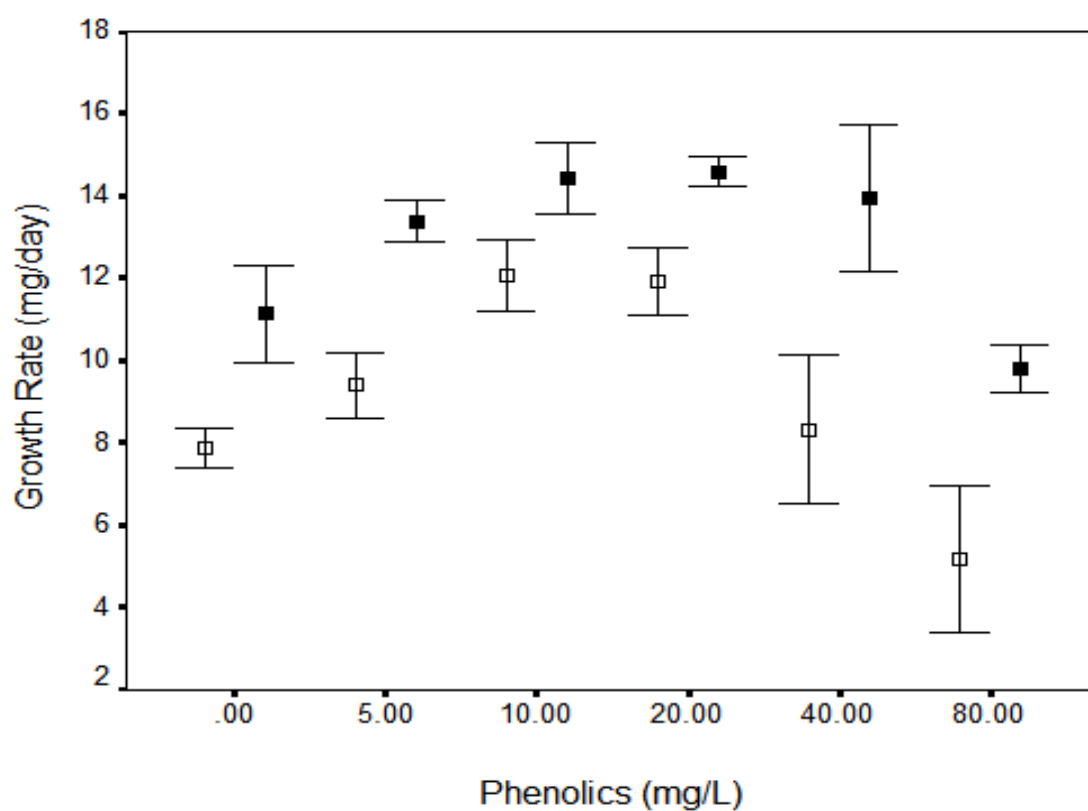


Figure 2. Effect of phenolic concentration and temperature on tadpole growth rate mean (+ and - standard error) for ten replicates are shown. Closed bar = 22°C Open bar = 17°C.

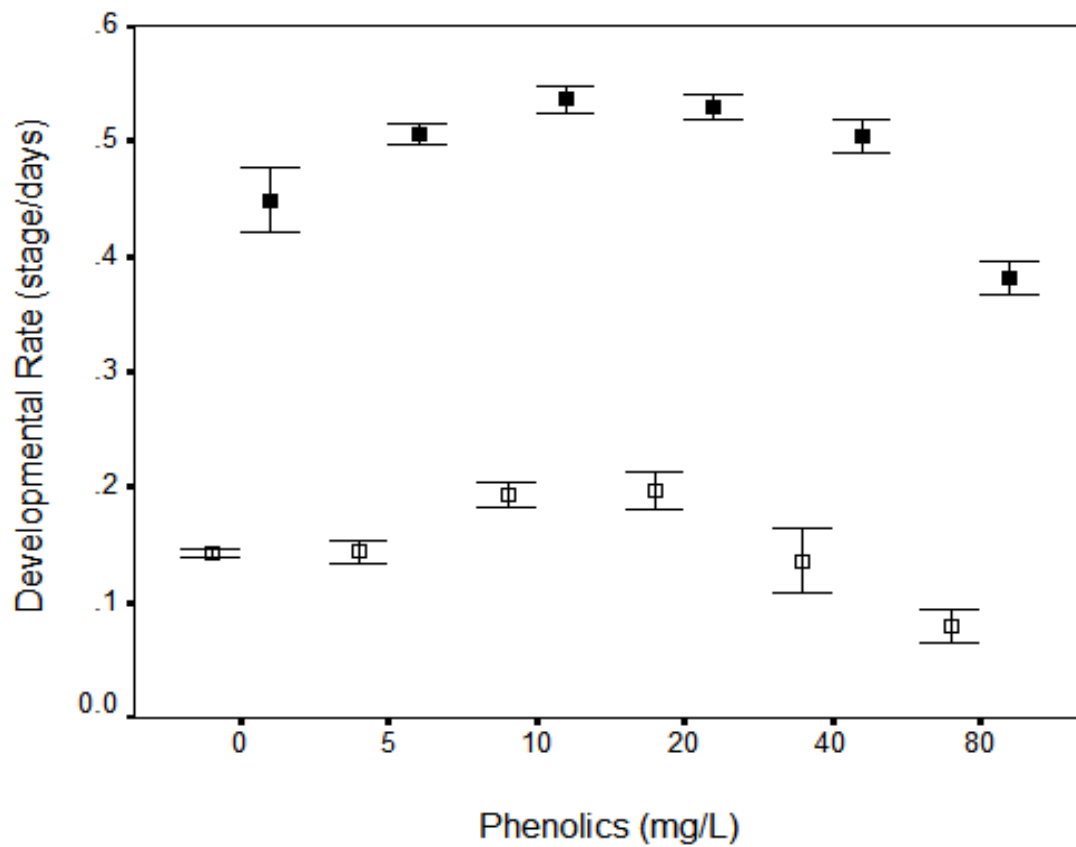


Figure 3. Effect of phenolic concentration and temperature on tadpole developmental rate mean (+ and – standard error) for ten replicates are shown. Closed bar = 22°C Open bar = 17°C.

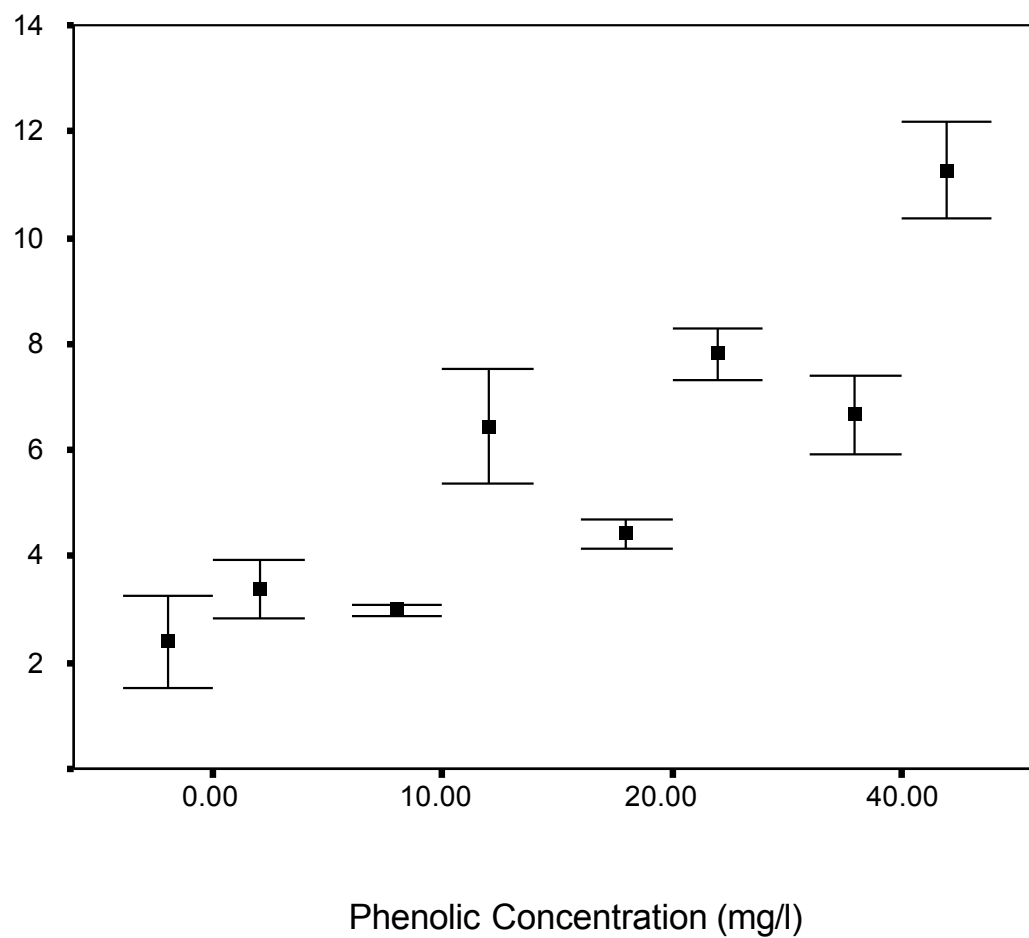


Figure 4. Effect of phenolic concentration and food level on tadpole growth rate mean (+ and - standard error) for five replicates are shown. Closed bar = high food Open bar = low food.

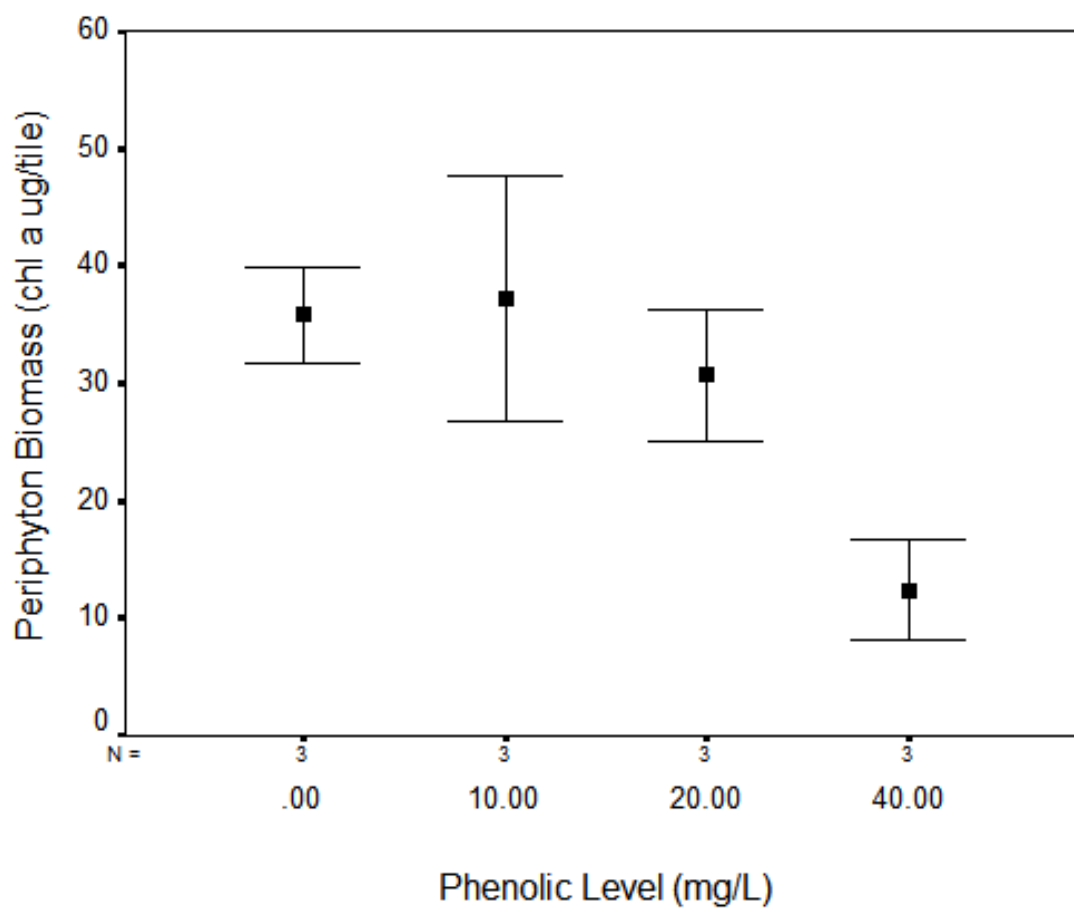


Figure 5. Effect of phenolic concentration on periphyton biomass mean (+ and - standard error) for three replicates are shown.

Gender Bias in Attention to Objects

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Abstract

Males and females have been found to respond differently to different objects, especially when those objects are gender-stereotyped. The goal here was to determine whether males are more likely to notice a change when it occurs to a stereotypical male toy and vice-versa for females, using the one shot paradigm of testing change blindness. Participants were 38 students enrolled at the University of Michigan-Dearborn who completed a task of viewing 30 trials in which an original image was presented followed by a modified version of that image. Of these 30 trials, 10 featured toys stereotypically associated with females, 10 featured toys stereotypically associated with males, and the final 10 trials featured gender-neutral toys. Overall, females noticed more changes in the trials than males. The type of image had a significant effect, where all participants found it easier to notice changes in the male-stereotyped images.

Introduction

Change blindness, a phenomenon in which viewers fail to detect a change to an object in a scene, demonstrates that only a certain amount of items enter our visual awareness at any given time. Overall, humans have been found to be pretty poor at detecting visual changes. This failure at detecting a change can occur when viewing a wide variety of stimuli, from simple patterns of dots (Philips, 1974) and letters (Pashler, 1988) to more complex photographs, movies, and even in interactions in the real world (Simons & Levin, 1997). So what effects what it is that we do choose to visually attend to? Previous research has attempted to answer this question by examining the possible role of a developmental disorder, such as autism spectrum disorder (Smith & Milne, 2009), culture (Masuda & Nisbett, 2006), occurrence of lucid dreaming (Blagrove & Wilkinson, 2010), and visual disruptions (O'Regan, Rensink & Clark, 1999). It has also been hypothesized that video game use could have an effect due to possible benefits related to processing speed, visual perception, and multitasking ability (Johnson, 2005). However, support for this has been conflicting. Although improvements in visual capabilities for both frequent video-game players and non-video game players were found in one study after a 10 day action video game playing intervention (Green & Bavelier, 2003), no clear advantage was found in a replication of the change blindness task given to those who frequently played video games and non-players (Durlach, Kring, & Bowens, 2009)

While the role that gender plays on what we chose to visually attend to and what we ignore remains unresolved, there has been past research conducted on children's preferences for certain toys. These findings were merged with the existing knowledge on change blindness to test whether males will be more visually attuned into the "boy toys" and vice-versa for females. Gender preferences for toys are evident as early as three months of age (Alexander, Wilcox, & Woods, 2009). Female infants showed a greater visual preference for a toy doll and male infants showed a greater visual preference for a toy truck. From this, a likely hypothesis to follow is that preferences for objects including toys, which are apparent at a very early age before we even truly understand the categories of gender and what they entail, may in fact be sex-linked. However, this study used only two objects, a small number of infants (n=30), and took place in a laboratory setting, so it is not clear how generalizable these results are to other objects and other settings. A study with adults found virtually the same results, with men showing greater attention

to the typical male toys (balls and vehicles) and women showing greater attention to the typical female toys (doll and dishes; Alexander & Charles, 2009). Both of these studies demonstrated that males and females respond differently to gender-stereotyped stimuli.

The question of the possible effect gender may have on what we do and do not notice has not yet been fully examined, making it an important issue to further explore. The aim of the current study is to use existing knowledge regarding gender-stereotyped toys to test whether there are differences in what males and females notice. The current study examines gender stereotypes further by testing whether males and females will be better at detecting a change when it occurs to a toy that their gender generally prefers. Specifically, we examine the accuracy males and females have of detecting changes in objects generally preferred by members of their gender, the opposing gender, and objects that are gender neutral.

Method

Participants

Participants were 38 students at the University of Michigan-Dearborn who were currently enrolled in an introductory psychology course. This included 19 males and 19 females who ranged in age from 18 to 47. Participants were limited to those who have lived in the United States for at least the past 15 years, so that they will have been adequately exposed to American gender stereotypes.

Stimuli

30 sets of images were collected and edited for this study: 10 images featuring objects generally preferred by girls, 10 images featuring objects generally preferred by boys, and 10 images featuring objects that are presumed to be gender neutral, listed in Figure 1. Objects used for the stimuli were taken from a series of studies investigating the sex typing of toys by adults (Miller, 1987; Fisher-Thompson, 1990) and the decisions made by young children (Alexander, Wilcox, & Woods, 2009; Fein et al., 1975; Freeman, 2007).

Figure 1: List of stimuli and type of change used

Stimuli used and their type of change:		
Girl-Stereotyped	Boy-Stereotyped	Gender Neutral
Baby dolls- Disappearance	Superman action figure- Color change	Children's books- Disappearance
Barbie-	Boxing gear-	Chalkboard-

Color change	Movement	Color change
Doll cradle- Disappearance	Toy cars- Movement	Etch-a-Sketch- Disappearance
Bracelet- Movement	Fire truck- Disappearance	Magna Doodle- Movement
Jewelry Box- Movement	Football- Disappearance	Paint supplies- Disappearance
Easy Bake Oven- Color change	Ninja weapon set- Disappearance	Play-Doh- Color change
Sewing machine- Color change	Toolset- Color change	Rubber ducks- Disappearance
Tea Set- Movement	Toy gun- Disappearance	Silly Putty- Disappearance
Doll stroller- Disappearance	Toy soldiers- Movement	Spinning tops- Movement
Makeup set- Disappearance	Dump truck- Color change	Toy ATM- Movement

Each set of images included an original image and a modified image. The modified images are copies of the original images in which an item has disappeared, moved, or changed in color. Each gender type features 3 color changes, 3 object movements, and 4 object disappearances.

Procedure

Participants in both conditions were initially asked their age, which gender they most closely identify with (male or female), which objects they remember playing with as a child, with options being doll, tea set, bracelet, toy truck, tool set, action figure, art supplies, etch-a-sketch and play doh. Participants were also asked if they have lived in the United States for at

least the past 15 years. An answer of “no” would lead a participant to indicate via short answer how many years they had lived in the United States.

Condition 1

Condition 1 used the method of testing change blindness where an image is flashed before participants for 3 seconds, followed by a white blank screen for 1 second, followed by a modified version of the original image presented for 3 seconds (following method used by Koustanai, Elslande & Bastien, 2012). This occurred for a total of 30 times in each trial and was presented on a computer screen using MediaLab software. The order in which each set of images was presented was determined by a list generated by www.random.org. Each image was displayed only once and participants were not able to go back to review images. Following each set of images, participants were asked to answer “yes” or “no” to whether or not they noticed a change by moving the cursor to select the “yes” or “no” button respectively. An answer of “yes” led participants to a short answer prompt asking them to describe the change they just noticed.

Condition 2

Condition 2 utilized the same 30 sets of images but unlike Condition 1 both the original and modified images in each trial were concurrently displayed side by side, for 3 seconds. Similar to Condition 1, following each set of images, participants were asked to answer “yes” or “no” to whether or not they noticed a change by moving the cursor to select the “yes” or “no” button respectively. An answer of “yes” led participants to a short answer prompt asking them to describe the change they just noticed. The order in which each set of images was presented was determined by a list generated by www.random.org.

Results

Condition 1

Although females had a total of 12 more correct responses than males, the main effect for gender was not significant, $F(1,18) = 2.09, p < 0.165422$. However, the main effect for image type was significant, $F(2,36) = 21.5, p < 0.000001$. As displayed in Figure 2, male-stereotyped images yielded the most correct responses (101), followed by female-stereotyped images (58), and then gender neutral images (57). There was no significant interaction of gender and image type, $F(2,36) = 0.442, p < 0.646150$. Looking at the averages in Table 1, males and females were very similar in their average number of correct responses given for each image type but females were consistently more accurate for all three image categories. Changes noticed the most were color changes (83 correct answers), followed by object disappearances (78 correct answers), and then object movements (55 correct answers), as displayed in Figure 3. The lack of a significant interaction of gender and type of image change ($F(2,36) = 0.250, p < 0.779887$) indicates that there was not a significant difference between the ability of males and females to notice any of the types of change.

Figure 2: Correct responses broken down by image type

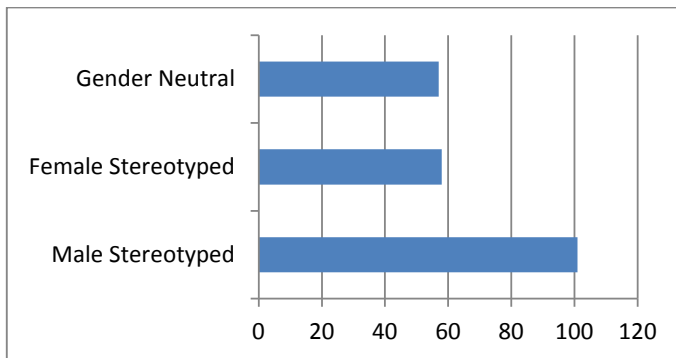
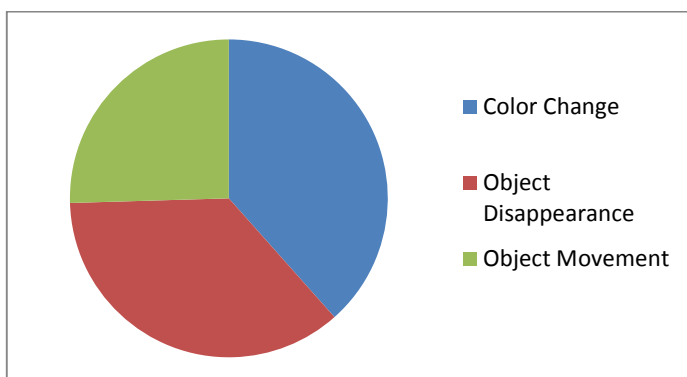


Table 1: Average number of correct responses given by male and female participants for each image type determined by a correct short answer response

	Male Stereotyped	Female Stereotyped	Gender Neutral
Male	5	2.5	2.7
Female	5.1	3.3	3

Figure 3: Correct answers broken down by type of change



Condition 2

The main effect for gender was significant, $F(1,16) = 6.48, p < 0.021624$. Females had 25 more correct responses than males. The main effect for image type was significant, $F(2,32) = 23.8, p < 0.000001$ where the total correct responses were greatest for male-stereotyped images (109), followed by gender neutral images (100), and then female-stereotyped images (64). This difference in correct responses among the different typed stimuli is displayed in Figure 4. There was also a significant interaction of gender and type of image, $F(2,32) = 6.57 p < 0.004066$. Using Table 2 it can be seen that females were more accurate than males in noticing changes when they occurred to the male-stereotyped images and gender neutral images but not the female-stereotyped images. Overall, object disappearances were noticed the most (122 correct answers), followed by changes in color (106 correct answers), and object movements were noticed the least (45 correct answers). Males and females did not have any advantage for any type of change, as evidenced by no significant interaction of gender and type of change, $F(2,32) = 0.135, p < 0.874458$.

Figure 4: Correct responses broken down by image type

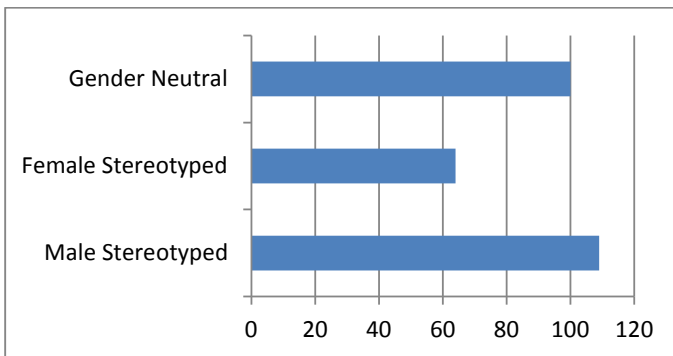
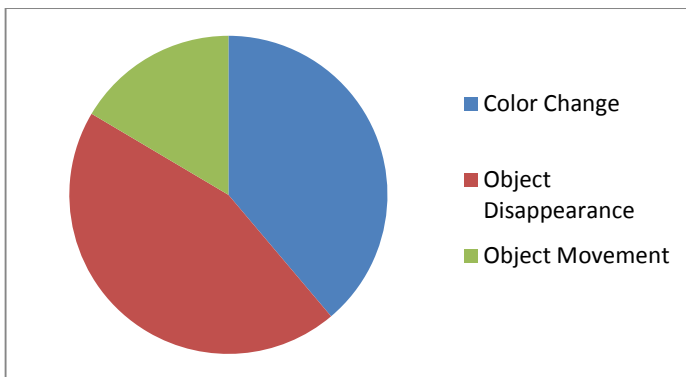


Table 2: Average number of correct responses given by male and female participants for each image type determined by a correct short answer response

	Male Stereotyped	Female Stereotyped	Gender Neutral
Male	4.89	3.78	5.11
Female	7.22	3.33	6

Figure 5: Correct answers broken down by type of change



Discussion

Although the effect of gender was only significant for Condition 2, female participants in Condition 1 also had more correct responses than males. Evolutionary psychology presents a possible explanation for the increased accuracy among female participants. The hunter-gatherer theory proposed by Silverman & Eals (1992) posits that early divisions of labor among humans have resulted in cognitive sex differences that are still apparent today. The heart of the theory is that the differences in food attainment methods, with men being the hunters and women being the gatherers, resulted in the development of different skills among males and females that were associated with their given task. According to this hypothesis males should be more sensitive to large, moving objects while females should be more sensitive to small, static or slow moving objects that are near. Using this theory to interpret the results found here it would come of no surprise that females outperformed males since the images used were small, static, and didn't require the use of farsighted vision.

Female participants in Condition 2 followed a similar trend to females in Condition 1, with more accurate responses than males for the male-stereotyped and gender neutral images. However, the average number of correct responses for the female-stereotyped images was greater among males. The difference between the correct number of responses for males and females was small for the female-stereotyped images but was apparently enough to create a significant interaction of gender and type of image for Condition 2. This was surprising given the prediction from evolutionary psychology theory, as well as the presumption that males would pay more attention to objects associated with males. It is unclear why males outperformed females on this one category. It is possible that it was due to random chance, or type-1 error.

It was also an interesting finding that a large number of incorrect responses were given by participants resulting in statements describing a change that didn't actually happen. The

instructions mentioned that the task would involve images that have been modified, so this could be attributed to expectancy effects. It is also possible that the participants' schemas had an influence on their wrong answers. Unfortunately, schemas can evoke memory errors and after participants saw a set of images they remembered things that didn't actually change because they happened to be consistent with their schema. An example of this can be seen in one of the wrong answers for the change between the baby doll images: "Blue baby does not have hand in mouth in second image". It is possible that due to this participant's experiences with babies their schemas of young children involve their hands being in their mouth. Therefore, when the participant saw the images of the dolls it caused them to recall this schema and its related information, which was not consistent with the images. Also, despite the fact that participants could have answered "no" to whether or not they noticed a change, they could have been led to answer "yes" based on an overestimation of their ability to detect change, an error that has been termed "change blindness blindness" (Beck, Levin, & Angelone, 2007).

It is also important to note that the type of image had a significant effect on the results for both conditions. Instead of all image categories being close to equal in terms of difficulty as was hoped, the male images featured changes that were more noticeable than those in the female and gender neutral images. This was especially pronounced in Condition 1. Condition 2 also featured more correct responses than condition one, likely due to the images appearing side by side concurrently rather than consecutively.

Conclusion

Although this study did not result in the expected results, it raises a number of interesting questions for future research. Because whether the image was male-stereotyped, female-stereotyped, or gender neutral had a significant effect on the results, the images used and their modifications should be revisited before any future research is done. Once the images feature similar levels of complexity and difficulty, it would be interesting to repeat the study with a new group of male and female young adults to test the original hypothesis. Additionally, an interesting direction for the topic would be to repeat the study with a sample of strictly transgender individuals. Will they be better at seeing changes in toys that are associated with the gender they currently identify with or with the one that matches their assigned sex? Also, because gender is culturally determined and different cultures place different levels of importance on cultural ideals, it could be interesting to give a version of the task to members of a culture where gender roles and their associations are more rigid or more fluid. Having children that belong to different age groups complete the task would also be an ideal direction for future research since children appear to go through phases where they view gender-typed behavior, and possibly gender-typed toys, with varying levels of rigidity (Lobel & Menashri, 1993). In the future the study could also incorporate a measure of change blindness blindness by giving participants a pre and post test designed to gauge their beliefs about their visual abilities.

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A Theoretical Debate on Political Philosophies in Ancient China

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Abstract

This essay is a fictional debate between four ancient Chinese scholars that are persuading their ruler, the king of the historical state of Qin, to adopt their respective political philosophy. Of the four philosophies (Confucianism, Daoism, Mohism, and Legalism), I will be arguing on the side of Legalism, which later became the ruling philosophy of Qin. What the reader can learn is an understanding of Chinese politics, culture, and intellectual thought before the state of Qin conquered other Chinese states, supplanted the ancient Zhou dynasty, and became the first Chinese imperial dynasty in 221 BCE. The reader will also understand why certain philosophies gained influence in the imperial court and bureaucracy as well as to why others held less sway. Along the way, the reader might enjoy a few laughs and surprises as they learn about a world that might be foreign to them.

Pronunciation List

Main Characters (In the order of their appearance)

- Secretary Shi (“Shuh”)
- King Zheng (“Jeng”)
- Cai (“Tsai”) the Stenographer
- Lord Li (“Lee”) – The Legalist Statesman
- Master Cheng (“Choh-ng”) – The Confucianist Scholar
- Master Dong (“Doh-ng”)– The Daoist Scholar
- Master Meng (“Moh-ng”) – The Mohist (“Mwohist”) Scholar

Important Names and Places (In the order of their appearance)

- Qin (“Chin”) – The name of King Zheng’s state, which was on the far western side of the Zhou dynasty.
- Dian (“Dian”) – One of the barbarian tribes that were from the west of Qin.
- Qiang (“Chian”) – One of the barbarian tribes that were from the west of Qin.
- Rong (“Rou”) – One of the barbarian tribes that were from the west of Qin.
- Zhou (“Joe”) – The name of the last ancient Chinese dynasty to which the state of Qin belonged. This is also the name of the central state that founded the Zhou dynasty.
- Laozi (“Lao-tsuh”) – Literally translates to “master,” he is the founder of Daoism. Since there is a dispute as to when in the Zhou dynasty he existed, it is believed that Laozi was not a real person but a name for a conglomeration of like-minded scholars.

Secretary Shi: “King Zheng, Your Highness. Master Li is here to see you.”

King Zheng: “Ah, I have been expecting him. Send him in, and be sure to bring the tea, fruit, nut, and snack platters. Also, send in Cai, the court stenographer to record the following conversation.”

Secretary Shi: “Yes, Your Lordship.”

Cai: “Ready when you are, Sir.”

Lord Li: “Sire, I have come to your palace to discuss important matters regarding the policies of improving your government through the budding philosophy of Legalism (*fajia*).”

King Zheng: “Interesting, I have heard there are a great deal of philosophers in the land of Qin and beyond. How can Legalism help me expand my population, the wealth of my realm, and unite all the various Warring States under my rule? I am becoming an old man, and I expect my eight-year-old son to inherit my state rather soon.”

Lord Li: “Legalism can help Your Lordship with all of those three issues. It will solve them first by uniting the Warring States, then increasing the wealth of your realm, and only then expanding your population.”

King Zheng: “Go on with your plan. Please have some tea as well.”

Lord Li: “You are too kind, Sir. In order to unite the warring factions, we must abolish hereditary titles and promote through merit so that more efficient people are taken into office and that Your Majesty is not persuaded by Your family members who look after their own interests (DeBary, 197). Then, You consolidate the serfs under Your rule so that there would be no competition from the princes (Ebrey, 51). Next, we must focus on creating strict laws to rule the common people so that they will not disrespect royal authority and become more obedient subjects (DeBary, 196). Afterwards, we must make the people focus on agriculture and the military in order to distract them from pursuing less important careers like merchants, artisans, and scholars (DeBary, 195). A surplus of food can also help create stronger warriors and allow for more conquests. Finally, we must get rid of the influence of your scholars, wiv...”

King Zheng: “Why did you stop?”

Lord Li: “Sir, it is none of my business about how you go about your romantic relationships, but could you please get that young girl off your lap so that Your Highness can listen without any distraction?”

King Zheng: “My, my, Li. I forgot you only have the pleasure of being comforted by just one wife! Haha! I did not mean to get you jealous.”

Lord Li: "I hold no envy of your wealth and harem of women." As Li pulled his collar and hastily drank his tea, he continued his speech. "As I was saying, we must get rid of the influence of your scholars, wives and concubines so that your Majesty is not distracted by others' words (Ebrey, 51)."

King Zheng: "Well, that sounds like an interesting plan, I must say. A bit heavy-handed, but it sounds like it can get the job done. Please tell me how you can later expand my population."

Lord Li: "Certainly. We will begin by investing the energies of Your people and Your resources into agriculture so that families may multiply from a surplus of food and to prevent famines (Ebrey, 52). We shall also invest the time of our people into military service for a short duration of time, preferably one year or so (Ebrey, 52). This is so that we can fight against the ever-increasing barbarians from the west including the Dian, Qiang, and Rong (Ebrey, 40). Finally, increasing the military can also prevent injury and help Your Lordship conquer lands, thus increasing the population."

King Zheng: "Very well. Tell me then how I can increase the wealth in my realm. Although I think some of your ideas on increasing wealth may overlap with your ideas on expanding my population."

Lord Li: "Right you are, Sir! The increase in food from agriculture will help increase trade of prime products like millet and wheat as well as other products like plum, apricots, dates, melons, persimmons, beef, pork, mutton, and deer. The surplus will help prevent famines so that every family will have something to eat. The strengthening of the military will, as I have mentioned earlier, prevent the Qin from being assaulted both by the western barbarians and rivaling states. The conquest of new lands will increase natural resources, tax revenue, manufactured goods, services, and more skilled workers. Lastly, the creation of strict laws with emphasis on collective responsibility will help prevent people from committing property damage, saving the state monies in repairs, and reduce unnecessary injury amongst commoners so that fewer people will take time off from their occupations (DeBary, 192)."

King Zheng: "A most interesting exposition, Lord Li! I shall require some time consider these options."

Lord Li: "I look forward to your reply soon, Your Highness"

Secretary Shi: "Sir, a few of the scholars have arrived as requested."

King Zheng: "Ah, good. That must be Masters Cheng, Dong, and Meng. Have a seat, gentlemen! Lord Li, I forgot to tell you; I have invited some scholars here to bring their ideas to the table as well. I hope you do not mind a little competition."

Lord Li: "Not at all, Sir."

King Zheng: “I thought a man of your integrity would say that. Masters Cheng, Dong, and Meng are all experts in the philosophies of Confucianism, Daoism, and Mohism. I intend on having each of the scholars present their cases to me, and then I would like you, Lord Li, to offer your opinion on their arguments. As much as I love scholars and self-cultivation, I also need the practicality of my ministers to understand the world. I hope you gentleman are not offended in this regard?”

Masters Cheng, Dong, and Meng: “No, Sire!”

King Zheng: “Excellent! Let us begin! Master Cheng, please tell me how Confucian ideas can help me expand my population, the wealth of my realm, and unite all the various Warring States under my rule?”

Master Cheng: “To expand Your population, Sir, you would have to continue to cultivate Goodness (*ren*) as well as maintain ritual propriety (*li*) so that Your rule becomes the most righteous in all the land. When a ruler is righteous, his subjects perform righteous tasks down to the common man and people from other lands shall take their children to visit Your state (Analects, 13.4). This method would bring more people to the state of Qin, then an abundance of agriculture can help create new families.”

Lord Li: “Pardon me, Master Cheng, but a ruler would have to wait a long time for people of other states to visit the less developed state of Qin, no offense to Your Lordship. Secondly, it has been self-evident for years that population increases when there is a surplus of food and an increase in military strength to prevent injury from western barbarian tribes (Ebrey, 52).”

Master Cheng: “Point taken. In order to increase the wealth of Your state, consider returning to the traditional Zhou tax system of the 10% tithe (Analects, 12.9). This will allow your farmers to have enough grain to reduce famines and allow them to multiply. Secondly, as Master Mencius has said before me, why does Your Majesty seek profit when Goodness is much more desirable for a Confucian gentleman (*junzi*)? When a regent decides that profit is more worthy than virtues, his subjects begin to look for profit themselves and ignore virtues, thus leading the state to gradual corruption to the point that Your vassals will try to overthrow you (DeBary, 115).”

Lord Li: “First of all, the ideas of the Zhou kings may have been useful in their own respectful times, but if we are to make progress we need to understand that the Zhou kings lived in different times with different situations. Although decreasing taxes may sound like a good idea in the long term, the state should keep its current tithe of 20% in order to have enough currency to supply a growing army. Second of all, the King explicitly said that he wants to profit, not seek virtues, or do you not understand that? The rites you speak of may be useful if they can help the King govern, but if most of them cannot increase wealth or population fast enough, what good are they? (Analects, 4.13). To prevent assassination, the King should abolish hereditary titles and promote through merit so that there would be no regicides (DeBary, 197).”

Master Cheng: “You did not have to be so blunt, sir, but another point taken. In order to unite all of the Warring States under Your realm, it would be wise to cultivate Goodness in Your heart so that it can spread through diplomacy and trade to other states and influence them to be like you. A gentleman’s Virtue sways the petty man’s Virtue like the wind bends the grass (Analects, 12.19). Sooner rather than later, people shall flock to your kingdom, other regents shall become your vassals, and all without the use of military intervention.”

Lord Li: “I apologize for the abrupt remark. Diplomacy may sound like a fine idea at a more peaceful time, but it is not possible to conquer warring nobles or barbarians with men of letters and the fine language of sophistry. Instead, we should put our people in military service for a short duration of time in order to build up an army quickly in order to strike a weaker state in the future (Ebrey, 52).”

King Zheng: “Very well, we shall move on to Master Dong. Sir, the same questions apply to you.”

Master Dong: “First of all, my King, I believe that the population does not need to be any bigger than it already is. The sage Laozi has said that a state should be small and the people few so that they will have fewer ambitions and acquire less wealth, keeping them happy without the excess of material possessions (DeBary, 94).”

Lord Li: “Again, the Lord’s precise ambition is to grow his population. An increase in population will create more friends and acquaintances for the people and create more diverse populations. Still, the best way to increase the population is to through military might and an increase in the food supply (Ebrey, 52).”

Master Dong: “Interesting, but hopefully the King will make the right decision. If His Highness would like to increase the wealth of Qin, I would suggest that the King would abandon such a project for the good of His state. The more one promotes the worthy and tempts people with riches, the more the people will become corrupted (DeBary, 80). The best thing to do is to keep his subjects well fed and less ambitious. The wise king does nothing (*wuwei*).”

Lord Li: “Not a bad idea, I must say, as the people’s ambitions must be diminished so that they do not seek wealth by becoming merchants, artisans, or scholars (DeBary, 195). However, it is the state’s rightful duty to lay down strict laws so that they are not tempted to disobey or cause crime (DeBary, 196).”

Master Dong: “Finally, concerning the unification of the Warring States, I suggest that the King not meddle in the affairs of other people, including those of other states. Let your subjects come back in harmony with the Way (*Dao*) and live simple lives (DeBary, 78).”

Lord Li: “The King should not take such course of foreign affairs in a time of turmoil and war. It is better to strengthen the people with military training and values so that they can protect their homes from robbers, barbarians, and dare I say it, invading armies (Ebrey, 52).”

King Zheng: “We shall move on to Master Meng for his take on these matters. I offer you the same questions.”

Master Meng: “In order to increase the population of Qin, it would be wise to promote officials by merit and eliminate the rites of which the Confucians speak so highly. If a king employs the able and worthy, he will attract virtuous people across the world to work for him (DeBary, 67). If a king rightly disregards the practice of depressing lengthy mourning rituals and other rites, his people’s hearts will not be filled with sorrow and thus they will put their attention on raising and assisting their living relatives and will be in higher spirits when an enemy attacks the garrisons (Ebrey, 55).”

Lord Li: “I see no flaws in your reasoning, Master Meng. However, you have forgotten the importance of agriculture and how it can raise more families (Ebrey, 52). Proceed.”

Master Meng: “If the King wishes to increase the wealth of our noble state, it would be wise to, as usual, promote the worthy and able as opposed to one’s family members, the rich, or those with pleasant features (DeBary, 66). A worthy person would seek to fulfill their duties while an unworthy person would seek to ignore the duties and find leisure. Secondly, it is imperative the people share their skills, wealth, strength, and knowledge of the Way with others in order to make for a more equal society (DeBary, 74).”

Lord Li: “I agree with the first statement, but not the second. The only people who should be well off in a proper society are the farmers, the military, and the King since they do more for the state than the artisans, merchants, and scholars who grow wealthy on behalf of the farmers and military (DeBary, 195).”

Master Meng: “As far as dominating the Warring States, Your Majesty, I believe that it would be wiser to extend the concept of universal love (*jian ai*), and not fight them altogether (DeBary, 70). If a noble king rules by partiality and is malevolent towards his neighboring states, he will only care about his own needs and thus other states will despise him. If however, he rules by universality and is benevolent towards the other states, then other states will hold him in high regard.”

Lord Li: “This is a poor idea that should not be implemented. Any man with a hint of knowledge of world events will understand that a strong military and cunning is needed in order overcome the other states (Ebrey, 52).”

King Zheng: “Splendid! What a lovely debate! Thank you gentlemen and that will be all for today. Secretary Shi, please escort the three scholars to the garden.”

Secretary Shi: “Yes, Sire.”

King Zheng: "Cai, please finish the transcript"

Cai: "I am putting the finishing touches as we speak."

King Zheng: "Lord Li, I must thank you for this lovely exposition we had today. It may be too early to say, but I rather admire your ideas of strict laws, military values, and promotion by merit."

Lord Li: "Thank you, Sir. I shall see you at your earliest convenience. Good day."

The End

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America's Taboo of Redistribution

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Abstract: American culture has created a belief that any redistribution of wealth or income is inherently bad for society. Business has been empowered through globalization, marketing, and government to teach the public the importance of free-market economics and to discourage any collective action. By taking hold of main tenants of the American dream, business interests have indoctrinated the public that individual autonomy and meritorious work is the only way to succeed in this country, and that this success is never out of reach. Even as the prospects of climbing the social ladder grind to a halt, these beliefs are still prevalent. All of this has been at the expense of the common understanding that societal empathy is imperative to any nation and common knowledge is the foundation that all success and wealth is built on. Collective action and redistribution can no longer be shunned from the common discourse in the United States.

America is exceptional in many ways; Americans often think of the positives of being American, the freedom and opportunity. However, there is a flip-side to the exceptionalism and this has caused a taboo in the country about redistributive policy. This is easy to observe. In Europe there is a much larger “social state.” This provides for a larger societal infrastructure in education, health care, and other public goods. These public goods are larger because there is more emphasis on tax revenue from the wealthy. It is not politically unpopular in Europe to have progressive taxes that weigh heavily on the wealthy and provide for less inequality through support for the lowest levels of income. Their systems are not foolproof, and the wealthy still prosper, but why is it that in America it has become politically unacceptable for both parties to talk about “redistribution”? It comes from a combination of aspects that American culture has embraced from the capitalist hegemon.

In America we have come to believe in the myth of individual autonomy, a myth that stems from our belief in the individual's ability to achieve happiness and better one's life. This has been to the detriment of collective pursuit. The “American dream” is about individual entitlement to further one's place in society. This has contributed to the culture that has encouraged disdain for redistribution because we place individual action at the top of our list of ideals. In American society, everything that is achieved regarding rising within the social strata is attributed to individual behavior. The fact that every millionaire or billionaire built their fortune on top of the contributions of others is completely ignored. This has been the basis of our culture since the founding of our country. The American Revolution took place on the basis that the United States would be the embodiment of meritocracy where people would be judged on individual abilities rather than family connections. 68% of Americans, even after economic recession, believe they are in control of their own economic situation and have either achieved or will achieve the American Dream (PEW, 2011). People now blame themselves for their lack of economic or social success based on their own lack of merit. These ideals are easily transferred over to the idea of redistribution. It is not anyone's social responsibility to help eradicate inequality or even reduce it; redistribution is stepping on the toes of a main tenant of American culture. Only through charity is helping the poor really championed and this is because it does not interfere with individual autonomy, you are doing it out of personal goodness; therefore it is

actually reinforcing the myth of individual autonomy. That is partly why the idea that redistribution is good for society is almost completely absent from American culture.

In America there is resentment in social rather than economic inequality, which contributes to the redistribution taboo. The American dream embodies this principle. Inherent in the culture is the fact that people see themselves as “pre-rich” instead of deprived. People do not want to come to the realization that social mobility is stagnant in America, and instead hold on to the hope of climbing the social ladder. By viewing opportunity in society this way, people also view redistribution as a threat to their success. “I will not want to pay those high taxes when I reach the upper echelon,” is a common ideology within the mindset of American workers. More generally, it can be seen in how the status of the worker is viewed; most often it is a temporary stopping point in movement towards the middle or upper classes. Therefore, workers are not very resentful of income and wealth inequality, but instead are fearful of efforts that would address the issues because it saps the possibility for their ambitions to be fulfilled. American political culture is also in opposition to equality based on outcome. That is to say that it is not expected for the system to provide guarantees of employment, housing, food, healthcare, leisure, and other social and economic rights. Redistribution can easily be identified as small step towards “outcome equality” and therefore viewed with disdain. The government should not play a role in ensuring economic equality among citizens but should only enforce equal opportunity to “pursue happiness,” but even that is rarely guaranteed.

Another aspect that has played a role in the lack of faith in redistributive government policy has been the belief in the free market. The belief that the free market has created and enabled the aspects of society that make America great is actually a myth. This belief has been instilled by the capitalist hegemon and has blinded the mass public from realizing the complex reasons that living standards have risen and a middle class has emerged. Rather than it being because of natural market forces without interference from the government it has been caused by the opposite. Public policies such as the Homestead Act of 1862 that gave land to farmers, tariffs that protected emerging industry and social security, which took pressure off of the market to provide for well being, are examples. These were accompanied by unionization that checked the power of capital and lobbied for better working conditions. By failing to realize that it has been these interferences that have helped progress society, the majority of the public believes that the free market is the hero. They have been instilled by every aspect of society to believe that neo-classical economics has given them their way of life, has elevated them above the developing world. It makes perfect sense, then, that they would believe redistribution as a threat to this way of life. Any interference is viewed to have the potential to take away all of this progress.

In order to instill these exceptional beliefs, there is also uniqueness in the American public relations system. America is the birthplace of modern advertising, which was created out of economic necessity. Emerging from World War II America needed to keep producing to ensure the economic prosperity the war brought. Unlike in Europe where economies and people were rebuilding the basics of life, Americans were being marketed new luxuries as necessities. Rather than focusing on workers being a collective with common interests in the nature of consumption and production, the advertising campaigns focused on self-identity and the deservingness in individualized satisfaction. This constantly fed into the idea that mass action was, and still is, irrational and an impediment to well being. Redistribution is a type of mass action; politically it cannot be achieved without mass support. If everyday people are bombarded with advertising encouraging movement away from mass action, support for redistribution policies from the government will be difficult to achieve. Additionally, the emphasis on

individualized satisfaction has increased egotism and decreased empathy for others, which is a main tenant of the moral argument for redistribution.

Corporate legal personhood, which affords organizations many of the rights of human beings, creates a totalitarian nature for the corporation and extends their control into society. It has created corporations as the hegemonic institutions of this era. By allowing corporations to completely control culture, information, politics, society, public health, the environment and the economy, the public has lost understanding of the need to organize collectively. It has blinded workers from the fact that they are completely accepting the corporate hegemony, which has made them feel grateful for their jobs, income and whatever they can acquire. These beliefs enhance the taboo of redistribution because redistribution is seen as a threat by corporations and therefore has to be exposed as threat to the rest of the population. They have been able to achieve this because the government and people have acceded to legal personhood.

American labor unions, which by comparison to other developed countries have been weak, have continued to languish from the late-20th century. This decline has meant a reduction in bargaining power over wages and more importantly support for social legislation and redistributive programs. “The political consequences of high levels of unionization are... straightforward,” political scientist Michael Wallerstein observes. “Other things being equal, union movements representing a large share of voters are better able to influence policy” (Alperovitz, 2005, p. 15). To back this up, there are studies that show that in the Western world greater unionization is one of the best predictors for greater equality (Alperovitz, 2005, p. 15). Labor has also been the main force to counteract conservative political power during the 20th century (Alperovitz, 2005, p. 15). With the decline in labor there have been more aggressive corporate and conservative campaigns that have demonized redistributive programs of all kinds. This echoes the claims made in the previous section. With the decline in belief of collective action, in this case labor unions, the public is more susceptible to capitalist, or conservative, ideology. This ideology of course warns against the “evils” of redistribution, feeding into the stigmatization of the concept.

Globalization also plays a key role in the stigma that has surrounded redistribution. Globalization has increased the power of large corporations economically and politically (Alperovitz, 2005, p. 15). Just as corporate legal personhood has added to the power of capital and corporations, globalization has been a tool that has given them power over society. Because corporations can more easily relocate as globalization occurs, it gives them more leverage by threatening to leave a market (Alperovitz, 2005, p. 15). Businesses have used this leverage very readily to ensure that they win concessions from labor. These concessions have amounted to wage austerity and the government reducing business tax rates, which have shifted the tax burden to lower- and middle- income groups. This shift has also meant a cut in the government’s ability to spend on redistributive social programs (Alperovitz, 2005, p. 15). The redistributive programs that have been left in place have become inefficient because of this shift in revenue, and therefore achieved a negative connotation. It has also created more gratitude from workers in terms of being provided jobs; nothing is taken for granted when you could be laid-off if a company moves to a cheaper labor market. Therefore corporations have gained the consciousness of the public by pushing labor out as a voice in the government and also by creating more instability among the working class to scare them away from collective action.

The social, economic, and cultural concentration of suburban political power post-World War II; accompanied by the post-1960s urban exodus, has increased the white suburban middle class and their elitism (Alperovitz, 2005, p. 16). The elitism is displayed in the fact that this

group is no longer willing to pay for the progressive political agenda that it views will only support poor urban minorities (Alperovitz, 2005, p. 16). Tagging on to this issue is the fact that racial and ethnic divisions have been highlighted because of the new suburban common consciousness. These divisions have weakened collective action to rally behind redistributive measures.

Within capitalism, the people at the top, who have amassed the most wealth and power, have seen the need to come up with defensive arguments for their treasured system. Capitalists have focused on regarding state intervention as being the external cause for the looming crises. Since the beginning of the 20th century, capitalism's instability has been blamed on government interference (Wolff, 2012, p. 28). One does not have to look deeply to see an argument similar to this pop-up in any political campaign across the country. With the negative connotation that government interference has gained as a whole, it is no wonder that redistribution has come to have no political hope.

There is hope for a shift in this stigma. By conceptualizing wealth as "social inheritance," the idea of redistribution could be less alienating. There is, as Edwin Perkins notes, an increase in per capita income from the 1770s level of \$1,805 (in 2002 dollars) to \$31,034 in 2002. Gar Alperovitz gives a unique perspective to this increase:

If, on a rough assumption, individuals worked as hard in both periods, the extraordinary seventeen-fold increase is a rough measure of the contribution of inherited technology and capital accumulation in the United States over this time period. And—given the longer hours commonly worked in the earlier period—there is every reason to believe that this is a conservative estimate" (Alperovitz, 2005, p. 315).

He adds that the economist William Baumol pointed out that the United State's per capita GDP has increased nine-fold since 1970 and that 90% of that growth was caused by innovations that were developed in the previous 130-year period (Alperovitz, 2005, p. 237). He also displays evidence for this with the claim from economist and Nobel laureate Robert Solow, which says, "current economic growth must overwhelmingly be attributed to 'residual' factors that, broadly speaking, involve the huge contributions of inherited technological knowledge" (Alperovitz, 2005, p. 237). Economist Edward Denison also has supported this perspective, showing that advances in knowledge are the biggest reason for long-term growth of efficiency (Alperovitz, 2005, p. 237).

That all current economic production is overwhelmingly dependent on a long prior history of socially created science, technology, and other knowledge is difficult to refute. There is no reason to give excessively large rewards to individuals whose specific creations are built on the gifts of the past (Alperovitz & Daly, 2008, p. 140-141). Some argue that great innovators deserve all the economic gains they can capture because without their discovery society would have suffered. This ignores what we know about how innovation occurs; once science or technology reaches a certain point of development, the next breakthrough is almost inevitable (Alperovitz & Daly, 2008, p. 143). Put another way, every new breakthrough starts from a plateau of knowledge created by others and preserved and passed on by society. Increasingly, at every new stage, most of the work is already done, and in most cases the scientist, the inventor, and the business innovator may add something new, but mainly they recombine what others have done in a way that is usually about to become evident to others as well. Each year, each decade, each century the knowledge that is passed on from generation to generation grows greater and greater. Consequently the "mismatch" between "productive realities" and "individualistic formulations" of entitlement inevitably becomes greater and greater (Alperovitz & Daly, 2008, p.

144). What leads clearly from the illumination of knowledge inheritance is that society as whole, not individuals and elites, should benefit most from the knowledge society has created over many generations.

Seth Shulman very clearly states the issue. He says that the elites hold most of the rights to the modern technologies, which “are legally sanctioned,” but the legitimacy of the claims are precarious because they owe a large debt to the previous innovators in their fields that have made their advancements possible (Alperovitz, 2005, p. 238). Additionally, William Gates Sr. argues that elites today disproportionately reap the benefits of what is naturally a collective investment (Alperovitz, 2005, p. 238). With this understanding, it is easy to see that the uneven holding of what is essentially an inherited social product actually deserves to be redistributed. In order to achieve fairness and efficiency, people should demand redistribution. Redistributing would be seen as movement away from the wealthy minority and toward the excluded but actually deserving majorities.

Realizing the importance that previous knowledge has played in American economic growth would play a role in how wealth was viewed in the United States. Alperovitz argues that if so much of the current efficiency, growth and increase in living standards are received from past contributions, then what is the moral basis for the massive inequality in wealth and living conditions? When looking at wealth distribution under this microscope it becomes evident that wealth is largely based on genetic inheritance, inherited property, or geographical endowment. Much of the wealth is not gained based on effort or sacrifice as is commonly believed. It results from “impersonal social processes” that ignore the inherited knowledge.

Diminished societal empathy is a major cause for the malevolent behavior of the populace towards redistributive policies. It is important to look more deeply to examine what is causing this lack of empathy within society. Most of the reasons discerned here are directly connected to the capitalist mode of production. The antagonistic relationship between buyer and seller, egocentric behavior, lacking of information about the production processes, and routine mispricing all play a role in the decreasing empathy in society.

Egocentric behavior will obviously create less empathy; importantly egocentrism is valued within capitalism. In capitalism there is a premise that selfishness and competition are central social purposes needed to succeed. Competition is inherent in capitalism and the belief that every person is to succeed on their own. The competition seriously injures empathy within society because everyone views one another as a hurdle to overcome on their path to success. Instead of competing like in black jack where everyone is against the dealer, everyone views one another as competition. This is how the capitalist prefers the system since it discourages mass organization that could take away their power. By making people focus on one another as the cause of difficulties in society, the pressure is taken off of the elites and the system itself.

By not being aware of the production processes involved in making commodities, society has developed a fetishism of these commodities. In order to understand the true value of an item one must understand the means by which it was produced; the person whose craftsmanship made it, how much time and effort were invested in it, etc. By understanding the human nature of the item, the commodity would represent humanity and not some mystical value inherent in the good. Marx recognizes that the value of items should reflect the amount of socially necessary labor that is devoted to the production. Yet, by claiming inherent exchange value in inanimate objects, society is losing contact between human beings. There is nothing on the label or price to tell you anything about the process of production, effectively making the producer invisible. This

strains relationships and reinforces selfishness, because it is unimportant to be aware of the other people the exchange affects.

Ultimately, as is reiterated through this essay, corporations are monolithic forms of power that profit at the expense of society. With this monolithic power comes the ability to create a form of obedience from the people, which ensures that the system prospers. Capitalism demonizes anything that would encourage mass action and creates insecurity in the individual in order to ensure obedience within their social constructs. The most powerful tool against societal empathy is their ability to discredit the victims of capitalism. They invalidate the victims of the system; it is the poor's fault that they are suffering, they have not risen to the challenge. Therefore, by drawing attention away from the poor and suffering, they are making these problems invisible to the masses and erasing any possible empathy because the people are unaware of the massive problem that exists.

None of this is to say that incentives do not play a role in economic behavior or that poorly crafted governmental policy is cost free. What it is trying to say is that studies have showed time and time again that carefully designed redistributive policies can support greater economic wellbeing and social equality. If we are able to couple this revelation with an enriched sense of empathy, then we could move towards a more accepting culture of redistribution. In order to increase societal empathy we must move away from egotism and competition, which in reality is hurting the greater good. Let us take the economic pain that has become widespread through the country and hit large segments of society and create power to engage humanity. It is time for an exceptionally American shift in society. The Jeffersonian "second revolution of the 1790s; the Populist revolt of the 1890s; the powerful electoral ratification of the New Deal; and the social revolutions of the 1960s have all shown how this country is capable of change. The change we need now may be one of the most difficult we have encountered but we can take our blinders off and understand how necessary it is to rebuild our economic structure to allow for the wellbeing of all through social equality.

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Seeing the Spirit in Duane Michals' Photography

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Abstract

The following paper addresses the use of light, double exposures, and long exposures in Duane Michals' depictions of the spiritual and unseen in his photo sequences. Without these three techniques, his photographs would not clearly convey the images he had previously held only in his mind. An ex-Catholic, Michals spent most of his life seeking different ways of thinking about life and death, choosing to focus on the wondrous journey of the soul after life rather than the agony of death. Inspired by the horrific murders of two of his close friends in the year 1966, Michals began making sequences out of his photographs, creating between five and eight gelatin silver prints for each series. Acting as the photographer, producer, and director of his sequences (which he has compared to the stretching-out of haikus), the ground-breaking photographer explored new territory with his work and has continuously inspired people to this day.

“I’m fascinated by the transience of death, the act, the change of consciousness. I’m hypnotized by the notion of death.”¹ No one could describe the essence of their own art better than Duane Michals. The photographer, born in 1932 in a small town in Pennsylvania, seems to have an intuitive sense of the meanings of reality, death, and the spirit.² This paper finds its foothold upon these ideas.

Originally raised as a Catholic, Michals eventually began dabbling in other religions while on his quest to find the answers he was seeking (in one interview, for example, the artist cites Hindu beliefs about existence and Eastern ideas about God being pure energy, not a real form).³ Although he uses different belief systems to create his own morality, the notion of Christianity carries throughout his work. The journey of the spirit after death is a concept that has a base in many religions, but the names of his photographs prove that he is a man that has been influenced by Christianity (biblical ideas and terms such as “angel,” “the Prodigal Son,” “Jesus Christ,” and “grievous fault” often find their way into his titles).⁴

Duane Michals credits his start in photography to a trip overseas in the 50s. “I ended up going as a tourist to Russia in 1958 with a borrowed camera... If I hadn’t taken the camera, I never would’ve been a photographer.”⁵ At that point, he was working for Time, Inc. doing promotional work for other various magazines. During the 1960s, when Michals was working in magazine design and production, the idea of arranging photos into sequences emerged.⁶ He has stated that 1966, the year two of his friends were murdered, was the critical starting point as it was then that he began seeing his subjects as stage sets.⁷ One can only imagine how he made this connection; the photographer neglected to explain further when this interview occurred. Michals claims (in a very poetic way) that these sequences are similar to haikus: “you just stretch one moment to two moments to three moments to four moments.”⁸ This idea is related to the stream of consciousness that comes from creating videos. This directorial mode means that he is at once the producer, director, and photographer of his own work.⁹ Anyone who has created

¹ David Seidner and Duane Michals, “Duane Michals,” *Bomb* 20 (1987), 25

² Renaud Camus and Duane Michals, *Duane Michals (Photofile)*, (London, New

² Renaud Camus and Duane Michals, *Duane Michals (Photofile)*, (London, New York: Thames & Hudson, 2008).

³ Seidner and Michals, 27.

⁴ Camus.

⁵ Duane Michals, Interview by Maureen Cavanaugh, *These Days*, KPBS, November 4, 2009.

⁶ Joel Smith, “More than One: Sources of Serialism,” *Record of the Art Museum*, Princeton University 67 (2008), 26.

⁷ Duane Michals and William Jenkins, *The Photographer’s Choice* (Danbury, New Hampshire: Addison House, 1975).

⁸ Michals, Interview by Cavanaugh.

⁹ Claude Baillargeon, “Fabricated to be Photographed,” Lecture, AH 369, Rochester Hills, MI, April 2, 2013.

a video (even a short, amateur film) understands this way of thinking: you move from one scene to the next, striving to make the transition as clean as possible. Michals' series truly are the work of a man who knows how to make these transitions flow. He has even claimed that he would love to produce big-budget films; he's just waiting for someone to ask him.¹⁰

Michals discovered over the years that, through the use of light and long and double exposures composed on gelatin silver prints, he could begin to materialize the ideas that, before, had existed only as thoughts. Through his photography, Duane Michals finds a way to demonstrate abstract ideas in a concrete way: he flawlessly conveys sorrow, pain, passion, longing, and desire through his photographs alone. Often, these photos show fleeting moments in time: death coming to retrieve an old woman, an angel losing his wings after touching a woman, the journey of a man's soul after passing away (see figs. 1, 2, and 3, respectively).¹¹ These series create small memoirs of sorts; they demonstrate the humanity of the living and the spirituality of the unseen. It should be understood that his photographs are not meant to be scientific; rather, they create personal interpretations of the meaning of life and the experiences of death.

The use of contrasting light often finds its way into Michals' photographs about death and the journey of the soul. This light plays a big role in his photoseriess *A Man Going to Heaven*: as the man ascends the staircase, the light in the doorway above him gets brighter and brighter, creating the metaphorical "light" that is supposedly seen by a spirit when entering the afterlife (see fig. 4). This light begins with his head; it gradually engulfs his entire body. This technique was probably created using an actual light source in the doorway, but certain parts of the series are clearly created in the darkroom. The first image in the series is dark, save for two strips of light around the doorway. The next image shows a stark difference, going from dark to light in one swift movement.

This use of light has been noticed by others as well. Marco Livingstone, for example, notes the following in his writing of *The Spirit* in Michals' work:

Never content to photograph simply what he can perceive with his eyes, Michals has repeatedly sought to find a pictorial form through which to embody his notions of the spirit, which by definition cannot be seen or touched – since it has no material substance – but only sensed. His favored solution, common to a great range of religious art, has been to represent the spirit as pure light. (Livingstone 1997, 124)

It was probably the use of light in religious art that inspired Michals to portray the spirit in this way. Although he freely professes that he is not a scholarly man (he stated, in the same interview that was mentioned earlier, "I'm not an intellectual person. I haven't read Kierkegaard"), Michals clearly is aware of his artistic predecessors. This quote from

¹⁰ Michals, Interview by Cavanaugh.

¹¹ Marco Livingstone and Duane Michals, *The Essential Duane Michals* (London: Thames and Hudson Ltd, 1997).

Livingstone also acknowledges a crucial point about Michals: he finds remarkable ways to put on paper the image that he holds in his mind. Any photographer who seeks to create an image of otherworldliness, one that is from the mind, knows the challenge that Michals faces.

These photos are Michals' own creations and are therefore based on his own thoughts. At the same time, however, these interpretations that are personal to Michals touch each viewer in a completely individualized way. He is a magician in that way. For example: the same photoseries mentioned earlier, *A Man Going to Heaven*, might have little or no effect on someone who has never lost a loved one. When Michals views it, he might be thinking of his parents or family members that have gone before him. For this viewer, all that can be imagined is the death of her father, an image of him climbing his last stairwell into a place free of pain and suffering. The interpretation of his works depends solely on the experiences with which each individual has dealt.

Related to *Going to Heaven* is the series *The Human Condition* (see fig. 5). Although it is not specified whether the man in *The Human Condition* is dead or in the process of dying, the same light that Michals uses in *Going to Heaven* appears. This man stands amid a crowded subway station platform, staring at the camera, unmoving. The only lights in the original image are those in the train, on the ceiling, and that which illuminates a clock on the wall to his left. As the subway train whizzes past the crowd, a light slowly begins to grow on his face, gradually expanding to engulf his body and the bodies of those around him. Eventually, this great light begins to morph into a nebula, situated in the center of a night sky. Stars take over the scene, and suddenly the man disappears. The last image is simply the deep night sky, an image seen time and time again in astronomy textbooks. The only mark left from the original scene is the glow of that illuminated clock. The first four images are clearly made using Michals' camera and the work of his hands in the darkroom, but the last two appear to be the astronomy images previously mentioned.

Livingstone, in the same piece about *The Spirit*, notes that "one is free to view this [scene] in mystical terms or simply as an account of what happens to us when we die."¹² The man simply fades away from the living into "the blinding white light of the universe," leaving the world behind.¹³

In an attempt to touch back on those "fleeting moments in time" mentioned previously, the focus will now be placed on Michals' use of long exposure to achieve a desired effect. Some people (and on a wider scale, religions) have long believed that, when you die, someone or something comes to retrieve your soul. Michals, of course, has created his own take on this strange phenomenon. *Death comes to the Old Lady* is a believable yet entirely imaginary interpretation of the occurrence (see fig. 6). The first image depicts an old woman, sitting comfortably in a chair in the middle of the scene. As the viewer goes through the next two images, a blurry (but completely recognizable) man dressed in black slowly comes around the corner and approaches the old woman from

¹² Ibid.

¹³ Ibid.

behind. In the fourth image, the man (understood at this point to represent death) is now only a blur of darkness. All that can be recognized of him is a hand, now gently resting on the woman's shoulder. In the fifth and final image, she stands up from her chair, now becoming the same kind of blur that death was.

Once again, the imaginative photographer captures a fantastical interpretation of death in only five images, something most people cannot explain even in words. The use of long exposure is absolutely necessary to create this series, as the same scenes could not have been made without this technique. If the figure of the man in black had not been blurred, he would appear to be alive. Because his form drags behind him, he looks otherworldly, as if he isn't really a form at all. He becomes a mass, a blob of nothingness that moves like a ghost. The connections between this series and the scenes from dramatic films such as "A Ghost and Mrs. Muir," in which a woman finds herself in a haunted house, drive home the point that Michals is a directorial photographer.

The Fallen Angel also uses long exposure to create more drama and realism (or, in this case, a sort of surrealism). As one can imagine, this sequence depicts an angel who loses his wings after having relations with a woman (see fig. 7). Throughout the entire sequence, the angel is blurred in some way, whether it be his wings or his limbs as he moves to touch his partner. After his wings disappear, the now-human curls up into himself in emotional agony, realizing the error of his ways. He dresses in human clothes and runs out of the room, leaving viewers with one last look at the blurry ex-angel. Here, the use of long exposure emits a sense of drama. Viewers are saddened when they realize, almost at the same time as the angel, that he has made a mistake. Without the long exposure, the same effect would not have been impressed.

The final physical aspect of Duane Michals' work with spirituality and death is his use of double exposures. The most well-known and glorified example of this can be seen in the series *The Spirit Leaves the Body* (see fig. 8). As mentioned earlier, Michals used his poetic mind and his haiku-technique to stretch this singular moment into seven separate images. Throughout all of the images in the series, a dead man lies on a small bed in an empty room. The first scene is the man, alone in this position. From the second image through the seventh, viewers can witness the man's soul sit up, turn around, and slowly walk away from his empty shell of a corpse. He appears to disappear after walking straight through the doorway the camera sits in, eventually leaving viewer with the seventh and final image, the same scene as the first. Michals could have used long exposure to create the dragging, blurry effect mentioned earlier to make ghostly figures; however, the man lying on the bed throughout the sequence is absolutely necessary for this illusion to work. The corpse places an emphasis on the fact that it is only his soul moving around, not his physical body.

Duane Michals let his stunning gelatin silver prints reflect the inner workings of his mind, actively choosing to not capture photographs of the everyday. His photo sequences about spirituality, life, and death are ground-breaking, opening up doors to

other spirit photographers such as Francesca Woodman.¹⁴ The way the multiple techniques he uses to flawlessly convey any thought are materialized is absolutely stunning, and these results are interpreted individually by each and every viewer. He was a staple of the surrealist photography movement, and continues to inspire people today.

¹⁴ Alison Ferris, “Disembodied Spirits: Spirit Photography and Rachel Whiteread’s ‘Ghost,’” *Art Journal* 62, no. 3 (2003), 45.



Fig. 1 Duane Michals, selection from *Death Comes to the Old Lady*, 1969.



Fig. 2 Duane Michals, selection from *The Fallen Angel*, 1968.

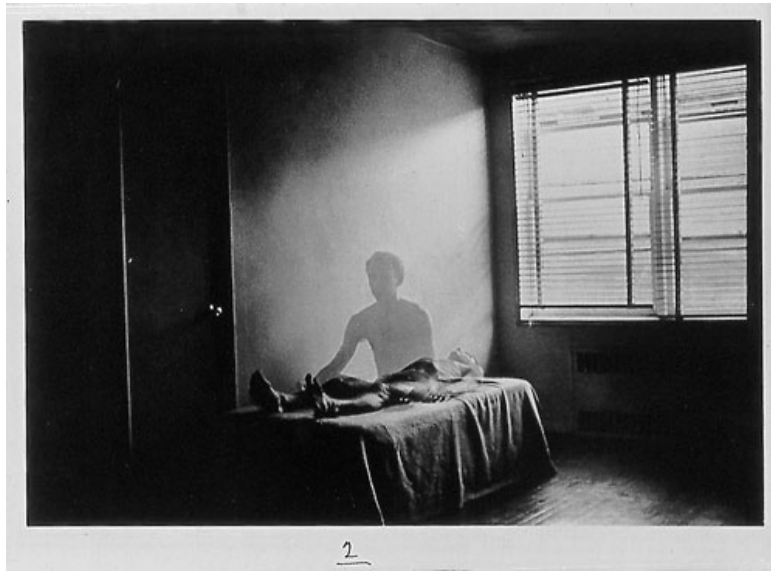


Fig. 3 Duane Michals, selection from *The Spirit Leaves the Body*, 1968.



Fig. 4 Duane Michals, selection from *A Man Going to Heaven*, 1967.



Fig. 5 Duane Michals, *The Human Condition*, 1969.

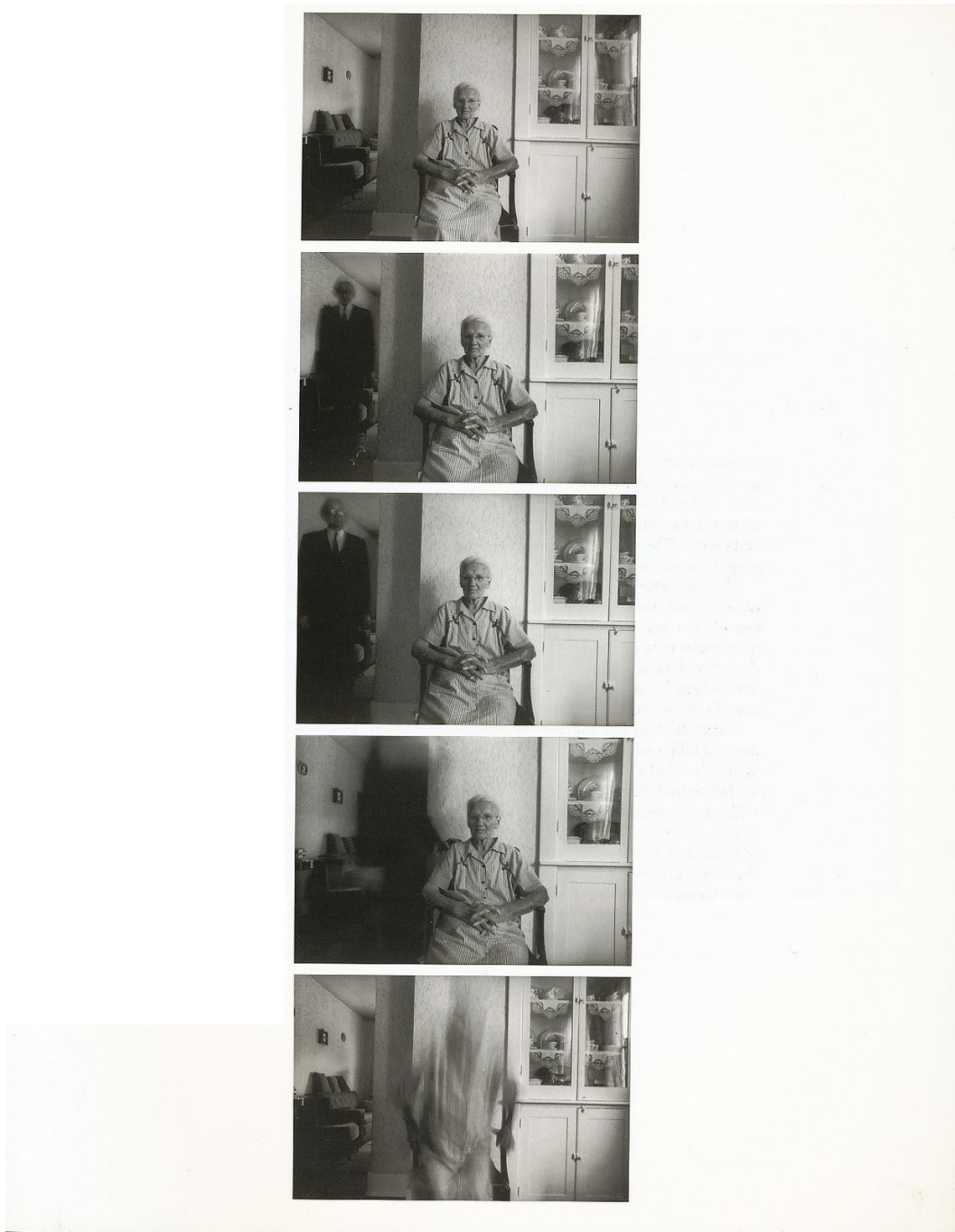


Fig. 6 Duane Michals, *Death comes to the Old Lady*, 1969.



Fig. 7 Duane Michals, *The Fallen Angel*, 1968.



Fig. 8 Duane Michals, *The Spirit Leaves the Body*, 1968

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The Special Photographs: Sydney's New Style of Prison Portraits, 1919-1930

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Abstract

A collection of one hundred thousand police photographs made in Sydney, Australia between the year 1912 and the late 1960s includes a collection of ‘Special Photographs,’ atypical mug shots used by police detectives of the Central Police Station in the 1920s. This unique collection, used to capture the natural appearance of professional criminals known to be recidivists (persons who repeatedly reoffend), shows a divergence from the typical prison portrait style that had been used by surrounding penal institutions since the late nineteenth century. This departure from the standard style of police officer and biometrics researcher Alphonse Bertillon, used widely since the late nineteenth century, demonstrates the detectives’ knowledge of photography as a tool for identifying criminals and preventing future crime. This change was one that greatly aided their efforts during the aftermath of the First World War, when a low number of prisoners showed a remarkably high rate of recidivism.

Rescued from a flooded warehouse in Sydney, Australia in 1989, a collection of one hundred thousand police photographs made between the years 1912 and the late 1960s includes a smaller subset of ‘Special Photographs,’ atypical mug shots used by police detectives in the 1920s. Organized into a cohesive collection in the late 2000s, this unique approach to capturing the visage of recidivist prisoners shows a divergence from the typical prison portrait style that had been used by surrounding penal institutions since the late nineteenth century. This was a change that demonstrates the detectives’ knowledge of photography as a tool for identifying criminals, and one that greatly aided detectives in their efforts to stop the reoccurrence of crime.

The Special Photographs, coming out of Sydney’s Central Police Station, demonstrate a clear divergence in the typical style that had been used in surrounding penal institutions; the one that will be used most readily in this paper as an example of an institution using the typical style is the State Reformatory for Women at Long Bay. Compared to the naturalistic Special Photographs of the Central Police Station, the prison photographs coming from the State Reformatory for Women are cold and purely documentative. This paper will therefore employ a comparative analysis of the images coming out of the two institutions. I will compare the purpose of the images’ creation, their styles, and their compositions in an effort to best demonstrate this divergence in style.

Perhaps the best way to begin this study is to provide a quick history of the penal system that was in place leading up to the time of these Special Photographs’ creation, for they resulted from the need to deal with the administration’s rapidly changing goals and practices.

Until the late nineteenth century, Australia’s penal system was largely based on the British prison system¹, one that favored a system of reform through solitary confinement and intimidation.² In 1895, Frederick Neitenstein was appointed as the New South Wales Comptroller General and suddenly found himself in control of “60 proclaimed gaols, 23 established prisons operated by the Prisons Department and 37 police cells attached to police stations.”³ Neitenstein likely viewed these astonishing numbers as a failure in the system, since the system he had inherited was not producing the intended results of near-complete rehabilitation.⁴ After a long trip to the United States and Western Europe in 1904 (and aided greatly by the country’s recent national independence),⁵ Neitenstein returned to Australia, ready to influence a much-needed reform. He improved the transportation facilities of New South Wales, which in turn allowed for “many of the smaller scattered gaols and lockups throughout the state” to be

¹ Sean O’Toole, *The History of Australian Corrections* (Sydney: University of New South Wales Press Ltd, 2006), 147.

² Ibid.

³ Ibid, 72.

⁴ Ibid, 147.

⁵ Ibid, 65.

closed.⁶ He also produced an annual report that suggested future changes to the system he had overseen for the past two years, for he could foresee the need for further improvements. Many of these changes (including the standard that no child under the age of sixteen be sent to prison and the need for the creation of a training program for prison officers) were later put into effect, demonstrating his incomparable ability to influence a permanent change.⁷

According to writer Sean O'Toole, Neitenstein continued to influence changes in various institutions around the state for fourteen years until 1909, when he retired from his reform work.⁸ By this time, "there was no system that Neitenstein had not profoundly influenced," leaving a legacy that continued to ask for the increasingly more positive treatment of prisoners well into the twentieth century.⁹

The work done by Neitenstein and his successors was largely stalled (but not forgotten) during World War I as the government became increasingly preoccupied by the war efforts and their effect on the local economy. Less time, therefore, was spent focused on the continued reform efforts begun by Neitenstein in the nineteenth century, leaving the criminal system in a strange state of limbo as small changes continued to be made among the chaos of fiscal restraints and a modification in the system (men and women who were accused of non-payment of fines were no longer sentenced to imprisonment).¹⁰ This modification, in addition to the drop in crime during the war, helped lead to the sharp decline of the prison population: the total rate of sentenced criminals "for each 100,000 of the population" in 1920 had dropped to 51.69, compared to 1895's rate of 146.9.¹¹

The 1920s, therefore, marked a calm in the storm that was the years between World War I and the combined horrors of the Great Depression and World War II.¹² A markedly low number of prison inmates still showed a surprisingly high rate of recidivism, leading some administrators to believe that the reform started by Neitenstein had not quite succeeded in rehabilitating their prisoners (probably due largely in part to the ability to change identities easily; this is discussed later in the paper). This, perhaps, is when the detectives of the Central Police Station in Sydney began to stray away from the typical mug shot photographs, making a distinct effort to keep track of prisoners likely to repeat their crimes.

⁶ Ibid.

⁷ Ibid, 148.

⁸ Stephen Garton, "Neitenstein, Frederick William (1850 – 1921)", Australian Dictionary of Biography, National Centre of Biography, Australian National University, <http://adb.anu.edu.au/biography/neitenstein-frederick-william-7735>.

⁹ O'Toole, 153.

¹⁰ O'Toole, 72.

¹¹ Ibid, 154.

¹² "The Twentieth Century," History of NSW Corrections, accessed February 15, 2014, <http://www.correctiveservices.nsw.gov.au/about-us/history-of-nsw-corrections#Twe>.

First authorized by Inspector of Prisons Harold Maclean, prison photography was introduced at the Darlinghurst Gaol in 1871.¹³ Maclean's memo stated that portraits would be taken of offenders upon arrival and "fourteen (or more) days prior to discharge" (although this second portrait was rarely taken).¹⁴ The practice was spread to other institutions in the mid-1870s, and, until 1894, each photograph was designated to have been composed of one face-on photograph (the face-on and side-on composite photograph became the norm in 1894), a style influenced by Alphonse Bertillon.¹⁵ Bertillon was a French criminologist living in the late 19th and early 20th centuries. He believed that criminals (especially those likely to repeat their offences) could be classified by a certain set of identified characteristics, features that could be tracked by a system of measurements, specific photographic styles (mug shots), and record-keeping.¹⁶ These techniques, he believed, could help police identify these repeat offenders and therefore *prevent* crime instead of processing crimes after they had occurred.¹⁷ The claim recently made by the National Library of Medicine claims that Bertillon (and, therefore, his system) had, "by the mid-1890s... achieved international celebrity."¹⁸ This claim has been proven to be true for Australia, thanks largely in part to an article from the nineteenth century entitled "Criminal Identification." The Sydney article printed by the "Marlborough Express" on December 19th, 1895 states that, after asking for recommendation for a better means of criminal identification, the New Zealand authorities replied with the following statement:

New Zealand thinks that the system in vogue has been proved to be ample for the requirements of a colony where there are so few criminals, but the time has arrived when the Bertillon [sic] system might be adopted in the Australasian colonies with great advantage...¹⁹

This finding demonstrates that the Australian police authorities were aware of this style, likely due to the history of a shared penal system with, and the recent travels of Neitenstein to, Western Europe.

This style can be seen in nearly all institutions throughout the state of New South Wales, and its descriptive purpose in this paper is to start an analysis that will later serve as a comparison with the Special Photographs, a collection demonstrating an abrupt change of style in the early 1920s. This collection shows a clear divergence in

¹³ "Photographic Description Books [Darlinghurst Gaol]," State Records Archives Investigator, <http://investigator.records.nsw.gov.au/Entity.aspx?Path=\Series\2138>.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ "Alphonse Bertillon (1853 – 1914)," Visible Proofs: Forensic Views of the Body, last updated 01/06/2014, <http://www.nlm.nih.gov/visibleproofs/galleries/biographies/bertillon.html>.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ "Criminal Identification," *Marlborough Express* XXXI, issue 296 (December 1895): 4.

photographic technique, and it was a modification in the system that demonstrates a clear knowledge of the abilities of a photograph to help in the identification process of recidivist criminals, ones who managed to slip through the system without serving much time in gaol. Now that a brief history has been established, I will move to a description of the discovery of the Special Photographs collection.

In 2003, researcher Peter Doyle was approached by the Justice and Police Museum and asked to complete research on an enormous collection of a hundred thousand negatives (taken between the years 1912 and “the late 1960s”) that had been rescued from a flooded warehouse in 1989.²⁰ Doyle and Sydney Justice and Police Museum curator Caleb Williams have spent a combined eighteen years attempting to sort through and organize the collection. Although it took quite some time before the images were identified, cataloged, and sorted, the two men were fortunate in finding that the negatives were largely unharmed by the floodwaters (although many of their accompanying descriptions and investigation files were destroyed), and a cohesive collection was formed.²¹ These images include everything from crime scenes, fingerprint records, and photographs of ballistics and police authorities, among others.

Fifteen thousand of these negatives,²² taken by the police officers at Sydney’s Central Police Station and other inner-city prisons from 1912 to 1930, make up the entire collection’s number of prisoner photographs. Made with a superior processing, but extremely toxic, technique Doyle refers to as the “pyro”²³ method, the thousands of 6” x 4” glass plate negatives generally have an inscription including a name and date in addition to, of course, the image of the offender (this process is particularly noteworthy because it demonstrates the care and time taken when creating these photographs).²⁴ The inscription would have been written backward on the wrong side of the image; this accounts for the backward letters sometimes seen in the negative’s printed version. Additionally, the amount of decay and mold left on these negatives is small, considering the water damage inflicted upon them during their stay in the warehouse.

The detail that remains in all of these images after three quarters of a century (or more) of storage and water damage is incredible: in most images, viewers can see every wrinkle, pore, misplaced curl of hair, and scar. Doyle, in his article “Public eye, Private eye: Sydney Police mug shots, 1912-1930,” acknowledged that these details are noticeable even when the image is viewed in negative.²⁵ Again, this attention to detail demonstrates the great care taken when creating these images.

²⁰ Peter Doyle, “Public Eye, Private Eye: Sydney Police mug shots, 1912-1930,” *Scan 2* no. 3 (December 2005), <http://archive.is/cY1Q9>.

²¹ Peter Doyle, *City of Shadows* (Sydney: Historic Houses Trust of New South Wales, 2005), 9.

²² Ibid.

²³ Peter Doyle, *Crooks Like Us* (Sydney: Historic Houses Trust of New South Wales, 2009), 17.

²⁴ Doyle, “Public eye, Private eye.”

²⁵ Ibid.

I will begin by describing the twelve thousand portraits that can be classified as “prison portraits,” or Bertillon-influenced portraits, in order to demonstrate the contrast between these and the approximately three thousand leftover mug shots that make up one especially unique collection, known to the officers of the time as The Special Photographs.²⁶ The source of the examples of prison portraits from this point forward will be the State Reformatory for Women at Long Bay in New South Wales.

Opened in 1914, the State Reformatory for Women stressed the importance of “reformation and industry,” for it was said “to be the equal of any prison in the world,”²⁷ the portraits coming out of this institution, therefore, were distinctly Bertillonian, as this style was used within rehabilitation institutions. This facility was designed to provide a more therapeutic environment for female offenders, one that was based on the previous efforts of Neitenstein.²⁸

The mug shots that came out of the State Reformatory for Women at Long Bay between 1914 and 1930 suggest a style of image making that is documentative rather than naturalistic, for nearly all of the images coming out of the institution follow Bertillon’s style, showing each female offender two or three times in one composite image. This composite image contains at least two shots of the face, one face-on and one side-on; others contain a third, full-length image showing the whole of the offender. Two examples will now be provided, each demonstrating the consistency of style throughout time.

In figure one, for example, we see Elsie Bowman, a “pickpocket, prostitute, and thief,” depicted in three distinct views: two close-ups (one face-on, one side-on), and one full-length image.²⁹ The full-length image includes a measuring tape used to demonstrate the height of the convict. These three images combined into one composite shot, along with their tight cropping, presence of a measuring tape, and sloppily-made fabric backdrops lead me to believe it was taken for the more scientific purposes of documenting and tracking. Because she was being detained in a reformatory especially made for the rehabilitation of women, it can be assumed that there was no immediate concern of her escaping and having to be captured again in the very near future.

Just shy of two years earlier, a Ruth Carruthers, “convicted on four charges of false pretenses and sentenced to six months at Long Bay,” was photographed in nearly the exact same style.³⁰ In figure two, we see close shots of her face and profile next to a full-length image of Carruthers in front of a staged background that includes, again, a measuring tape. Elsie Bowman was not a unique case; the State Reformatory for Women

²⁶ *Crooks Like Us*, 17.

²⁷ O’Toole, 155.

²⁸ Ibid.

²⁹ “Mug Shots,” NSW Police Forensic Archive, <http://sydneylivingmuseums.com.au/justice-police-museum/forensic-archive/mug-shots#data4301>.

³⁰ Ibid.

was following a style specifically designed to document, much like the previously mentioned Bertillon style.

In stark contrast to these prison portraits are the Special Photographs, a three-thousand image collection showing a distinct change in style that was used to achieve a different purpose than the one sought after in institutions such as the State Reformatory for Women at Long Bay. Although he does not mention the source of this information, Doyle writes in his article, printed in the journal *Scan*, that skilled police photographers took all of these mug shots (but acknowledges that the Special Photographs were quite different than the prison portraits):

All of the mug shots in the police collection, (ie, the prison portraits and the Special Photos) are of a generally high production standard, in sharp focus, and tonally well-balanced. We do know that they were all taken by police photographers, and not outsourced. Nonetheless, there are dramatic compositional and tonal differences between the two classes of portrait.³¹

As Doyle writes, one of the differences between these three thousand Special Photographs and the other twelve thousand prison photographs is found in their composition, for these Special Photographs lack the “scientific” quality found in the prison portraits (again, “scientific” refers to the previously mentioned Bertillon style). The subjects of the Special Photographs, Doyle writes, appeared to be “so in command... [that] I assumed they were detectives – special squads perhaps.”³² It was only after a closer investigation by Doyle that the backdrops and subjects of these images became clear: those were police station walls in the background, most belonging to the Central Police Station in Sydney, and the subjects were criminals, not detectives. After this realization, Doyle was able to successfully deduce that most of these subjects were taken into custody on the same day their photographs were taken, a theory that explains the offenders’ everyday outfits and distinct lack of prison stripes. (More evidence later uncovered by Doyle confirmed this hypothesis, for the connections he was able to make between subjects and police newsletter articles showed shared dates, reaffirming that the images were taken on the same day as their arrest).

This theory alone, however, does not explain the reason for the often relaxed, casual poses taken on by the offenders. These men and women are seen in all kinds of differing positions: some have their hands behind their backs, some cross them over their torsos; some lean to the side and show their profiles, while others tip their heads down in obvious defeat. Doyle quite accurately refers to this style as “decidedly ‘non-Bertillonian,’” and one that shows no consistency in photographer, location, or required position.³³ The only consistency, in fact, is this non-Bertillonian style. In quite a few images, the shadow of a worn hat or the crossing of the arms of an individual offender hides some of the delicate minutiae mentioned earlier.

³¹ “Public eye, Private eye.”

³² Ibid.

³³ Ibid.

This allowance for prisoners to pose themselves is quite problematic when you think of the purpose of a mug shot, for they were initially designed to *show* all of these little details, not to *hide* them. The seeming allowance for personal preference, this decision to let the offenders pose themselves in the process that had now become shared (for each party was making their own decision about how to participate in the photograph to be made), is one of the biggest changes between the Special Photographs and the prison portraits. This marked difference between the mug shots taken at Central Police Station and those taken at correctional facilities (such as the previously addressed State Reformatory for Women in Long Bay) was unexplainable at first, for as natural and relaxed as the Central Police Station mug shots were, the mug shots coming out of the State Reformatory for Women were stiff and posed.

For an explanation of the naturalistic look of the Special Photographs, call to mind the description of the photographs and their varying differences in style and composition. Doyle claims that, although all of the convicts going through the system since the 1870s had been “routinely photographed” and documented, the Special Photographs “seem to have been taken on an ad hoc basis.”³⁴ This means that the men and women making up the Special Photographs collection were chosen and photographed for a specific reason, one that evaded Peter Doyle for quite some time.

During a time when change was constant and the return of people to cities post-war left recidivism rates high, private collections of Special Photographs that helped keep track of the repeat criminals were not just an option; for the city’s detectives, they were a necessity. Names could be easily changed and identities were fluid. This ability to change identities quickly was embodied by a trio of con artists from the 1920s. A man identified as Paddy Miller in a May 27th, 1920 mug shot was later identified as Frank Harris. His conspirator and partner in the 1920 mug shot, labeled only as “Harris,” was later identified as “Bourke” in a 1921 mug shot (this was, coincidentally, one of the few Special Photographs that showed an offender actively resisting the process).³⁵ George Wallace seems to be the only one who kept a consistent persona; his image only appears once, since, unlike Miller (“Harris”), Wallace actually arrived at his scheduled court date and was later sentenced to two years of hard labor.³⁶

This special collection, Doyle suspects, was used by detectives as a way of identifying and keeping track of the professional criminals who often changed their identities, distinguishing them from those who were simply caught up in their one-time wrongdoings, or those who were simply in the wrong place at the wrong time. A paragraph from Supplement C of the 1935 *New South Wales Police Gazette* confirms Doyle’s suspicion: it mentions that, when the arresting officer believes that the offender “is liable to lapse into a life of vice and crime,” they were to be photographed by “expert photographers” of the Photographic Section.³⁷ It was the job of these detectives to get to

³⁴ Ibid.

³⁵ Ibid, 23.

³⁶ Ibid, 22.

³⁷ Ibid.

know these offenders as real people; young officers, for example, often had the duty of escorting criminals back and forth from their cells to the courts.³⁸ While this gave them time to learn more about them and adjust to any of their unique physical qualities, it was also tedious and time consuming. Providing the detectives with these Special Photographs was a way of allowing them to study their subjects without necessarily having to spend time with them (which is something they would not have always been able to do regardless, since these repeat offenders were often released on bail or had their cases dropped).

This explanation also explains the allowance of the offenders to assume whichever pose they chose (although Doyle suggests that they might not have been allowed to pick their own backdrop; see the bathroom stalls and puddles in figure five). Because so many of these offenders were released without charge or on bail, officers who felt that they were recidivists would request their portrait, one that best demonstrates the way they would be found in the streets. The only way to determine how they would look in the streets, committing their crime, would be to allow the appearance of small, personal ticks to be captured in their resulting mug shots. This would have proven more useful to the detectives than a stiff, posed mug shot, for they needed to know how the offenders looked when they were most comfortable, in their own environment. Compared to the impersonal shots from the State Reformatory for Women at Long Bay, the mug shots from Central Police Station look far more natural and relaxed. This was a necessity for identifying these men and women once they were released from prison, especially since it was so easy to change identities.

The decision to publish the Special Photographs only in police newsletters and not release them for public viewing (the only exception is Eugenia Falleni, whose case will be addressed later in this paper) was again due largely in part to the detectives' desire to recapture the recidivists who had somehow slipped through the system without charges, for if the Special Photographs were published in a public journal or newspaper, their purpose of clandestine observation would be lost. While the prints of the Special Photographs were almost never reproduced or published publicly, Doyle explains that copies of the prison portraits, such as the ones coming out of the State Reformatory for Women at Long Bay, would have been passed along to the detectives who would have added them to their working files, or stored in easily accessible boxes so that copies could be sent anywhere in the country.³⁹ Doyle has also suggested that "another print, cropped almost to postage stamp size, was then pasted in a large, leather-bound book,"⁴⁰ of which there were over ninety by the early 1920s.⁴¹ The ease and accessibility of these copies would have been necessary for repeat criminals in particular, since the example of Paddy Miller/Frank Harris demonstrates the quickness of change and frequency of recidivist activity.

³⁸ Ibid, 17.

³⁹ Ibid, 17.

⁴⁰ Ibid.

⁴¹ Ibid, 302.

Unlike the recidivist lifestyles of the Central Police Station inmates, the possibility that an inmate at the State Reformatory for Women at Long Bay would slip back into a life of crime after the completion of their sentence at the institution (which, again, placed a strong focus on rehabilitation and reform) was most likely seen as an impossibility among the police administrators. The criminals photographed in the Central Police Station, I believe, were generally allowed to pose themselves because the risk of them being back out on the streets and repeating their crimes was more immediate than those who found themselves in the State Reformatory for Women, since this institution in particular worked so hard to stop crimes from being repeated. The state reformatory's images, therefore, could afford to be more documentative than the Central Police Station's are naturalistic.

This clear distinction between the images from the Central Police Station and those from the State Reformatory for Women also demonstrate an almost innate ability to recognize the possibilities a camera provides. The detectives recognized that, when made to demonstrate what Doyle calls the "potent alchemy of inborn disposition, personal history, learned habits and idiosyncrasies, chosen personal style (haircut, clothing, accessories) and personal characteristics," a photograph could be as useful as a one-on-one encounter with an offender.⁴² The detectives of the Central Police Station recognized the role of photography as a tool for identification, perhaps because photographs alone are able to capture the truth behind a person's disposition (even the offenders placed in front of less than desirable backgrounds still show their own personal ticks) and provide a level, unbiased ground for anyone viewing it.

Another example of the Central Police Station's use of a Special Photograph in identifying a professional criminal can be found in the case of Guido Calletti. Calletti, one of Australia's most notorious criminals, was photographed due to his extreme recidivist lifestyle. One of Darlinghurst's most greatly feared "bludger, razor-man and standover artist[s]," Calletti was one of the infamous criminals who continued to repeat his crimes over the course of his lifetime ("lifetime" in this sense is to be taken literally; Calletti began his criminal career at the tender age of ten years old).⁴³ Although the police believed this master criminal had committed at least four killings over his lifetime, he was never charged with murder.⁴⁴

His 1930 Special Photograph mug shot, seen in figure six, shows a calm and seemingly content Calletti. He wears a nicely pressed three-piece suit and rolls something between his hands; nothing about his image leaves the impression that he was distressed. The fact that he was a well-known crook would have encouraged the Central Police Station detectives to take this image, as this is one that depicts how he likely would have looked when he was out in public.

⁴² *City of Shadows*, 163-164.

⁴³ *Ibid*, 241.

⁴⁴ *Ibid*.

A more appropriate mug shot for documentation was taken after his arrest in 1934. Following the theme of the state reformatory, this composite image follows the typical mug shot design (see figure seven). Because this sentence totaled many months of jail time and service, this photograph was taken simply to document the beginning of his stay at a penal institution. It therefore served a different purpose than his 1930 mug shot, for his 1934 prison stay had a greater chance of influencing reform and rehabilitation.

Both of Calletti's images provided a different (yet equally important) use for their respective institutions. The 1930 image, likely taken at Central Police Station, would have been used by detectives as a means of identifying this man on the street, since his constant dances around a prison stay probably prevented any one detective from getting to know him personally. This image would likely have been one of the few means of visual identification provided to the police; it would have been necessary in continuing to catch him and attempting to prevent any of his further crimes. While Calletti and most of the repeat offenders in the Special Photographs collection had a reputation for being fast with their weapons and had committed multiple robberies (although none that I have found have appeared in court as many as Calletti's 56 times), few members of the collection had been convicted of murder; only one of those few has a story as unique as the one belonging to Eugenia Falleni.

Images from the Special Photographs collection, although rarely released publicly, occasionally proved to have a wide scope of usage; this is demonstrated particularly well in the case of Eugenia Falleni. An Italian who was moved to Australia at the age of two, Falleni lived a complicated life that ended in tragedy. Shortly before her twenty-second birthday, Falleni, who had always dealt with conflicting feelings about her biological identity as a woman, joined a crew of men on a Norwegian sailing ship, not as Eugenia, but as *Eugene* Falleni.⁴⁵ (Until it is indicated otherwise, Falleni will, from this point forward, be referred to with male pronouns, as this is how he likely would have preferred it in life) He lived a relatively normal life on the ship until a small mistake revealed his true identity as a woman to the ship's captain, an Italian man who only went by the names "Capitano" and Martello.⁴⁶ After suffering a brutal sexual assault by the captain the next day and spending the resulting two months in a cell within the boat's bowels, Falleni was released at the Newcastle docks, pregnant and alone.⁴⁷

Falleni later gave his daughter, Josephine, up for adoption, but continued to visit her routinely, this time as her "father" and asking to be called 'Harry Crawford.' In 1912, Falleni met a thirty-five year old widow named Annie Birkett.⁴⁸ They married shortly thereafter, living a happy life until five years later, when Josephine revealed to a neighbor that her father had been born female. The neighbor explained this confession to Annie, Falleni's unsuspecting wife. The two struggled to maintain a normal life until 1917, when

⁴⁵ Mark Tedeschi QC, *Eugenia: A True Story of Adversity, Tragedy, Crime, and Courage* (NSW: Simon & Schuster, 2012), 3.

⁴⁶ Ibid, 5.

⁴⁷ Ibid, 10.

⁴⁸ Ibid, 29.

Annie died “accidentally” during a heated discussion with Falleni.⁴⁹ Although her burned body was discovered in the park where the accident occurred shortly after her death, her murder went unsolved for the next two and a half years.

It was not until 1920 that Annie Birkett’s son (and Falleni’s stepson), also named Harry, became old enough to piece together the many clues left after his mother’s murder.⁵⁰ These new revelations were later revealed to the investigative detectives, leading to the arrest of Falleni in Annie Birkett’s murder case.

At the time of Falleni’s arrest, the police were still unaware of his biological sex. Because of this, he was still dressed in men’s clothes when his Special Photograph was taken after he was questioned and eventually charged at Central Police Station (which was, at the time, Sydney’s police headquarters; see figure eight).⁵¹ After refusing to visit with the government medical officer and realizing that he would likely be going to prison, Falleni told the arresting officer that he would prefer to go to the women’s ward rather than to the men’s ward. When the officer explained that men were not allowed in the women’s ward, Crawford confessed that he had been born a female.

In order to understand why Falleni was not required to change into women’s clothes and retake his Special Photograph, I contacted Mark Tedeschi, an Australian photographer, professor, and prosecutor of the Queen’s Counsel. Tedeschi has spent the last few years studying and documenting Falleni’s dramatic life. During an e-mail exchange between the researcher and myself, Tedeschi explained that his photo was not retaken in female form because of the use his being dressed as a man still provided to the investigative officers:

...Sgt Robson, the officer in charge of the investigation, also had another reason for keeping Eugenia in her male clothing. When he took her from the cells to the adjoining courthouse, instead of using the usual route via an underground passageway, he took her outside and through a public area where the newspaper photographers photographed Robson and Eugenia in male clothing. This was followed by a request from Sgt Robson for anybody to come forward who had seen this person (in male clothing) on a particular weekend 3 years earlier... where the body of Annie Birkett... had been found (in 1917).⁵²

This public trip to the courthouse simultaneously promoted Sgt. Robson’s public profile and actually led to some witnesses coming forward with information from the day of Annie’s murder (“almost unbelievably,” Tedeschi explained).⁵³ Although this evidence would never be admitted in today’s court system, it ended up proving to be useful

⁴⁹ Ibid, 58.

⁵⁰ Ibid, 81-82.

⁵¹ Ibid, 85.

⁵² Mark Tedeschi QC, e-mail message to author, February 10, 2014.

⁵³ Ibid.

evidence in Falleni's trial.⁵⁴ Additionally, keeping the initial male mug shot was necessary because it would have been the closest match to any image taken by a newspaper photographer during the walk to the courthouse.

This idea demonstrates that the officers in charge of taking the Special Photographs understood that their use went beyond the scope of their own personal abilities to recognize others. In Falleni's case, his mug shot was still used to help solve Annie Birkett's murder, but this time, it was the general public who was providing the recognition, not the police officers.

Falleni's portrait from the State Reformatory for Women at Long Bay (see figure nine), on the other hand, is as cold as Central Police Station's portrait is forgiving, personal. This composite photograph depicts Falleni in two poses: one face-on, one side-on in a decidedly Bertillonian style (to counter Doyle's earlier "non-Bertillonian" statement). We do not see Falleni lean forward and place one hand in his pocket the way he did in his first mug shot, hair perfectly parted and suit coat straight; instead, his body is truncated, revealing only messy hair and what appears to be a prison-mandated uniform. The composition of the Central Police Station shot allows for a small bit of Falleni's personality to shine through; it is a way of determining the kind of person he was before his arrest, something they would have needed to know during his prosecution. Long Bay's agenda was different, for once he was arrested, there was no need to photograph his individuality. This portrait was taken for documentary purposes only, since his eight-year sentence was able to keep him out of the streets and, therefore, out of trouble.

The third and final portrait taken of Falleni during his experience in the New South Wales prison system (see figure ten) was taken nearly three years before his 1931 release from prison since, under certain conditions, section 463 of the *Crimes Act* allowed prisoners to serve the remainder of a sentence in the community rather than in gaol.⁵⁵ At the time this image was taken, Falleni appears to have been the picture of proper rehabilitation: she (the pronouns will now change to female, since Falleni began asking to be called "Jean" and expressed herself as female) does not seem to have retained any of her Eugene Falleni or Harry Crawford personality. This image, comprised of three separate shots following the Bertillonian style of the State Reformatory (one face-on, one side-on, one full-body shot with a measuring tape), depicts an obviously aged Falleni. Her institutionalized gown and the blank look in her eyes shows a woman who has had the fight taken out of her. Compared to the freedom she felt in the world as Falleni/Crawford, Falleni as a *prisoner* was defined by years of being confined in gaol.

Jean Ford, as she was called after her release, only lived until June 10, 1938. Until then, Jean lived a quiet life living and working as a woman, per the agreements of her parole. The rehabilitation efforts of the State Reformatory for Women proved fruitful, for Jean lived out the rest of her life in quiet peace. The images taken during her stay at the

⁵⁴ Ibid.

⁵⁵ *Eugenia*, 215.

Reformatory didn't need to be as natural as the ones taken at Central Police Station, for the idea that personal images were not needed at a reformatory proved to be true.

Falleni's case is perhaps the best example of the differences between the Special Photographs and the standard Bertillonian portraits. During the early twentieth century, institutions such as the State Reformatory for Women created purely documentative images due to its desire for complete rehabilitation; the Central Police Station, on the other hand, created Special Photographs, a collection of images that was used to depict each offender's individual personality in order to better prevent any future crimes to be caused by their recidivist nature.

Beginning with Frederick Neitenstein's reform efforts as early as 1895, the penal system in New South Wales, Australia reflected growing changes in the desire to rehabilitate inmates, treating them as humans rather than scientific subjects. Although these efforts came to a slow halt during World War I and the years before the Great Depression and World War II, cases such as Falleni's demonstrate the frequent success of this new agenda.

Neitenstein's nineteenth century changes are reflected in the Special Photographs as well. An understanding of the camera and its abilities to depict the truth of each offender's individual personality (despite the unnatural backdrop of prison walls) allowed the officers behind the creation of the Special Photograph collection to demonstrate a new way of thinking. This new pattern of photographing "professional" crooks in a style as close to natural as possible (for a photograph's subject can only be so natural in a prison environment) shows a deviation from the widely used Bertillonian style, one that had come to be used only for purely documentative purposes. The style of the Special Photographs made way for a different kind of surveillance and identification, one that allowed officers to catch their criminals in the act rather than one based on science and measurements. It was this new knowledge that ensured that a criminal would be recognizable in any dress or pose, regardless of any shadows that might have covered their faces or bodies in their respective Special Photograph. These officers realized that a Bertillonian photograph could only go so far in allowing police to recognize a recidivist, for not many of the female offenders whose State Reformatory for Women portraits are seen in this paper resemble their Central Police Station counterparts (the first two sets of images taken of Falleni are perhaps the best examples of this idea; although the masculine clothes in the first shot clearly differ the outfit worn in the second, Falleni's appearance alone provides an idea of how he looked in the real world as opposed to how he looked in prison). The new style of the Special Photographs allowed investigators to learn about and come to know their targets personally without having any personal interaction, and this unique approach shows a divergence from the typical prison portrait style that had been used since the late nineteenth century. This shift demonstrates the detectives' knowledge of the photograph's ability to capture and identify its subject's key features, and one that greatly aided detectives in their efforts to stop the reoccurrence of crime.



Fig. 1 Mug Shot of Elsie Bowman, 31 October 1928, State Reformatory for Women, Long Bay, NSW



Fig. 2 Ruth Carruthers, Criminal Record Number 691LB, 7 September 1926. State Reformatory for Women, Long Bay, NSW

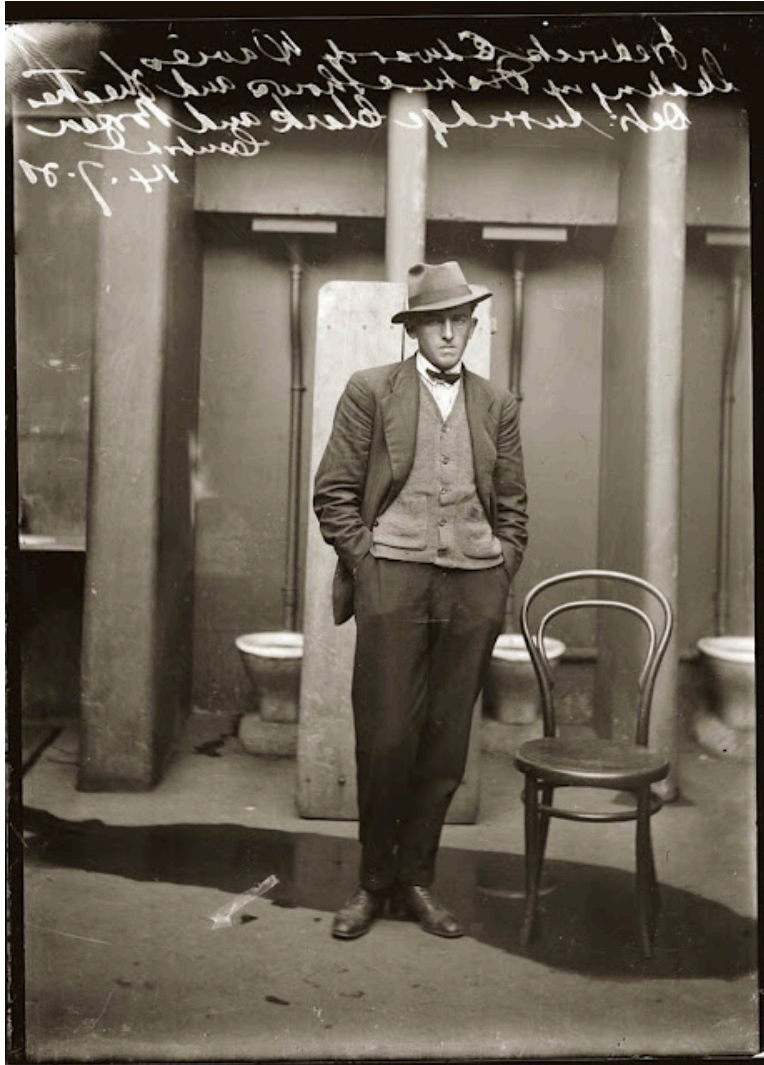


Fig. 5 Mug Shot of Frederick Edward Davies, 14 July 1921, Central Police Station, Sydney.



Fig. 6 Guido Calletti, circa January 1930, Central Police Station, Sydney.

Name		GUIDO CALLETTI @ Guido Colletti		No. 144/148.	
Native Place	Paddington				
Year of Birth	3. 9. 02.				
Arrival in { Ship State { Year					
Trade or occu- pation previous to conviction	Labourer				
Religion	R. C.				
Education, degree of	Nil.				
Height	5	feet	6	$\frac{5}{8}$	inches
Weight { On committal in lb. { On discharge	161				
Colour of Hair	Dark brown				
Colour of Eyes	Brown				
Marks or Special Features :-	Nil.				

Fig. 7 Guido Calletti, New South Wales.



Fig. 8 *Eugenia Falleni, alias Harry Crawford, special photograph number 234, Central Police Station, Sydney, 1920.*



Fig. 9 *Eugenia Falleni, alias Harry Crawford, criminal record number 499LB, 21 October 1920.*



Fig. 10 *Eugenia Falleni, alias Harry Crawford, criminal record number 741LB, 16 August 1928, State Reformatory for Women, Long Bay, NSW.*

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Semiotics and the Book of Kells

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ABSTRACT

The Book of Kells (ca. 800) is one of the foremost impressive examples of illuminated manuscripts the Western World still has intact. It was intended to be a liturgical Gospel codex. The Gospels were written by the four evangelists: Matthew, Mark, Luke, and John. The gospels of Matthew and John include a cover page depicting them and a carpet page illustrating Mark and Luke because their pages were lost over time. In this paper, “semiotics functions as a more interdisciplinary version of iconography and iconology, an expanded way of asking questions about what works of art mean and how they go about creating or expressing those meanings.”¹ Saussurean semiotics will be used to analyze some of the signs in the Book of Kells in order to get a better understanding of what the Celtic monks were trying to portray to people of the ninth century. Saussurean semiotics consists of a signifier and a signified that create a sign or symbol. The Book of Kells is full of rich, religious iconography that reflects the beliefs of the time, but can also be studied from a contemporary perspective with Saussurean semiotics to gain an alternative view.

¹ Anne D’Alleva, *Methods & Theories of Art History* (London, UK: Laurence King Publishing, 2012), 27.

Semiotics and the Book of Kells

Religious iconography is present in most religions, whether it be in image, text, or both forms. People often look to religious icons to venerate, whether it be one of Christ, the Virgin, or one of the many saints. The saints in the images are thought to transfer the words of the person who is praying up to God. That was, and still is in some cultures, thought to be the truth. Religious iconography has so many symbols that are involved within it. In Christian iconography, the symbols have their specific meanings that relate to the Old and New Testaments of the Bible. One of the best known symbols is the cross. There are many different representations of the cross in Christian art. One form of art that usually houses religious iconography, such as the cross, are illuminated manuscripts. Illuminated manuscripts are often representations of biblical stories and scenes. Most commonly depicted are the twelve feasts² and the four canonical gospels.³ Oftentimes, in illuminated manuscripts the text works with the image and they help to describe each other and further present the information. "Illustration of sacred scripture is the illumination of the close connection between the text and image, of the dogma and its interpretation at a given time."⁴ Illuminated manuscripts were created by leaders of religion, such as monks. Monks also were scribes and wrote the manuscripts with beautiful calligraphy. Monk-scribes created detailed works of art that were used for liturgical purposes. The Book of Kells (c.800) is an illuminated manuscript that depicts the four canonical gospels. The Celtic monks chose to use iconography in the representation of the calligraphy in the Book of Kells because it mirrored the religious undertones of the four gospels that it illustrated. Saussurean semiotics will be used to analyze some of the signs in the Book of Kells in order to get a better understanding of what the Celtic monks were trying to portray to people of the ninth century.

Background

The Book of Kells was created by the Celtic monks in the scriptorium of the monastery on Iona, a small island off the west coast of Scotland. "Intended as a large liturgical Gospel codex⁵ to be displayed on an altar, the Book of Kells was perhaps the last and most ambitious production undertaken by this great Hiberno-Saxon scriptorium."⁶ The codex was created in honor of Saint Columba, the monk who founded the monastery at Iona in the sixth century.⁷ "It is at once the most

² Twelve feasts are: Annunciation, Nativity, Presentation at Temple, Baptism of Christ, Transfiguration, Raising of Lazarus, Entry into Jerusalem, Crucifixion, Anastasis, Ascension of Christ, Pentecost, and the Dormition of Mary.

³ Matthew, Mark, Luke, and John

⁴ Denise Doyle, "Imagery as Exegesis in the Book of Kells," *Journal of the Australian Early Medieval Association* (2008): 53, Accessed October 14, 2013, <http://go.galegroup.com/ps/retrieve.do?sgHitCountType=None&sort=DA>

⁵ A book made from sheets of parchment, papyrus, paper, or in this case, vellum.

⁶ Suzanne Lewis, "Sacred Calligraphy: The Chi Rho Page in the Book of Kells," *Traditio* 36, (1980): 139, accessed September 25, 2013, <http://www.jstor.org/stable/27831075>.

⁷ Roger Stalley, "Investigating the Book of Kells," *Irish Arts Review Yearbook* 10, (1994): 96, accessed October 20, 2013. <http://www.jstor.org/stable/20492768>

ancient, the most perfect, and the most precious example of Celtic art in existence.”⁸ It was created of vellum, prepared calfskin. It took approximately 185 calves to create all the needed vellum.⁹ Although the manuscript is called the Book of Kells, there is a consensus among scholars that it was created on the island of Iona.¹⁰ The reason why it is called the Book of Kells is because it was transferred to Kells in approximately 802-806 because the Vikings attacked and raided Iona in 802 and 806.¹¹ The raids by pagan Vikings caused much damage to the monastery and the scriptorium, leading the monks to leave Iona for the small Kells monastery circa 807.¹² It is unknown how much of the manuscript was finished at Iona and how much was finished in Kells. However, what is known is that the subject matter depicts the four canonical gospels.

Semiotics

The Book of Kells houses many symbols that hold a meaning. Within the meaning is a sign that represents something else. Semiotics is the study of signs. In art history, and in this paper, “semiotics functions as a more interdisciplinary version of iconography and iconology, an expanded way of asking questions about what works of art mean and how they go about creating or expressing those meanings.”¹³ Ferdinand de Saussure was a Swiss linguist whose work served as the basis for the theory of signs. Saussurean semiotics is comprised of two parts: the signifier and signified. The signifier is “the form that the sign takes” and the signified is “the concept it represents.”¹⁴ Within the Book of Kells there are many religious iconographical signs.

The Four Evangelists and their Gospels

The four gospels were written by the evangelists Matthew, Mark, Luke, and John. The four evangelists represented parts of Christ’s life: Matthew was the Incarnation, Mark represents the Resurrection, Luke was the Passion, and John represents the Ascension.¹⁵ Matthew, Mark, Luke, and John are all represented by symbols as well. Matthew is represented by an angel, Mark by a lion, Luke by an ox, John by an eagle, as can be seen in Fig 1. “St. Gregory’s homilies on Ezekiel explain the symbols as the four stages of Christ’s life: at birth he was man [often thought of as an angel in art works], in death he was a calf, in resurrection he was a lion and in ascension he was an eagle.”¹⁶ Each of the four canonical gospels of Matthew, Mark, Luke, and John talk about each of their personal experiences of Christ’s life and ministry.

⁸ John Bradley, *Illuminated manuscripts* (London: Bracken Books, 1996), 42.

⁹ Stalley, 94.

¹⁰ *Ibid.*, 96.

¹¹ *Ibid.*

¹² Linda Fay Skidmore, “The Book of Kells: The Celtic Monks and Their Art.” (master’s thesis, Michigan State University, 1982), 7.

¹³ D’Alleva, 27.

¹⁴ *Ibid.*, 28.

¹⁵ John Vinycomb, “Fictitious and Symbolic Creatures in Art.” Sacred Texts, accessed October 24, 2013. <http://www.sacred-texts.com/lcr/fsca/fsca13.htm>.

¹⁶ Courtney Davis, *Celtic Ornament: Art of the Scribe* (London: Cassell & Co, 2001), 74.

Semiotical Analysis of the Four Gospels

Every Gospel begins with a carpet page, followed by a portrait for each evangelist.¹⁷ The portraits of the Evangelists St. Matthew and St. John survive, but the ones of St. Mark and St. Luke are missing.¹⁸ Mark and Luke's carpet pages¹⁹ will be analyzed instead.

The first gospel presented is the book of Matthew. In the folio 28v, *The Portrait of Matthew*, many symbols are present (see fig. 2). Central in the work is Matthew holding his gospel. Matthew is present with angel wings because he is often symbolized that way. There is also the signifier of the eagle on the right of Matthew. The signified is John because that is what he is often represented as. The same is true of the ox, the signifier of Luke. Lastly, there is the signifier of John, the lion. It also looks like Matthew is sitting or standing up against a throne that includes the signifiers of his fellow evangelists. The whole scene is framed with copious snakes forming many intricate knots. Hall states that the snake is "a symbol for evil and a biblical synonym for Satan."²⁰ Hall continues, "the snake also signified fertility, wisdom and the power to heal..."²¹ However, the snake could be a signifier for Christ's resurrection. Davis argues, "the snake symbolizes Christ's resurrection, due to the belief that a snake regained its youth with the shedding of its skin."²² This is a way of interpreting that is not usually heard of. The most common of the snake being the devil is the norm.

The next Gospel is that of Mark. It is said that the portrait of Mark is missing, so the opening carpet page of his Gospel will be examined (fig. 3). The beginning of Mark's gospel opens with the Latin words: "INIT/IUM EUANGELII IHU / XPI" which translates to "The beginning of the Gospel of Jesus Christ."²³ The signifier of XPI represents the name of Jesus Christ. This is the use of the Chi Rho in Latin. There is also a heavy use of the trinity in Mark's Gospel. The trinity represents the Father, Son, and Holy Spirit. As can be seen in the detail of figure 3a, there are three interlocking hands in the shape of a trefoil. "Three geometrical shapes coming together can express the Christian Trinity, one God in three persons...the architectural device of the trefoil is often found in churches."²⁴ The hand is often used a signifier of God, so the three interlocking hands signify the Holy Trinity. There is more symbolization of snakes, which, as argued above, represents the resurrection of Christ or Satan. "The Latin word *draco* signifies both snake and dragon and both represent evil in Christian art."²⁵ The snake can also be a signifier of the Fall. "The fall from grace of Adam and Eve is inextricably linked with the

¹⁷ Ibid, 66.

¹⁸ Robert G. Calkins, *Illuminated books of the Middle Ages* (Ithica, NY: Cornell University Press, 1983), 83.

¹⁹ Pages in illuminated manuscripts that contain little to no text, mostly geometrical ornamentation.

²⁰ James Hall, *Dictionary of Subjects and Symbols in Art* (New York: Harper & Row, Publishers, 1974), 285.

²¹ Ibid, 285.

²² Davis, 81.

²³ Bernard Meehan, *The Book of Kells* (United Kingdom: Thames & Hudson, 2012), 80.

²⁴ Miranda Bruce-Mitford, *The Illustrated Book of Signs and Symbols* (New York, NY: DK Publishing, 1996), 102.

²⁵ Hall, 285.

serpent...The serpent is therefore viewed as a symbol of smooth-tongued evil and deceitfulness, and as the embodiment of temptation and sin.”²⁶ It seems that most research points to the snake being a signifier of evil, however Davis continues to argue that the snake is a symbol of resurrection. In the upper right hand corner of Figure 3 there is a man dressed in white with orange detail. He is seen holding a lion’s tongue in one hand and his own beard in his other hand. The lion is the signifier of Mark. There are also two birds, perhaps peacocks or eagles, right by his head and knee. The peacock is a signifier for Christ along with the lion.²⁷ The eagle is the signifier of John. However the Gospel that follows Mark is Luke, not John. John’s Gospel is last.

Luke is the next Gospel represented in the Book of Kells. St Luke’s portrait page has gone missing so the opening carpet page will be discussed, as was with St Mark (Fig. 4). The opening words to his gospel are “QUO/N/IAM” which translates to “Foreasmuch as.”²⁸ “Four pairs of men sit at the top centre at the right of the page, their legs entangled as interlace and pulling each other’s beards.”²⁹ Françoise Henry argued that the image represented “hell’s torments,” while Pierre J. Payer said that the lower, central figures’ arms seem “to be in such an attitude as to confirm the necessity for the prohibitions which were enacted in the Irish penitentials against homosexual practices.”³⁰ Luke’s Gospel, in addition to having many figures, also has many Celtic knots. According to Hall, a knot is a “symbol of union.”³¹ It could “also symbolize fate and ward off evil.”³² “A knot can be tied for protection.”³³ In this case it could be presumed to ward off evil. People are often comforted by verses in the bible because they are the Word of God. John discusses God as Word in his Gospel.

St John’s Gospel is the last of the four Gospels (Fig. 5). John’s Gospel’s opening page begins with “In principio erst Verbum et Verbum,” which translates to “In the beginning there was Word.”³⁴ John talks about Logos being word. God is Logos, and therefore God is Word. This represents that God created all and refers back to Genesis and the creation of everything. “St John, extravagantly haloed and seated on a throne, his scribal accoutrements to hand, is one of the most powerful images in the entire book.”³⁵ It is one of the most powerful because of the greatly adorned halo, which is the most extravagant in the Book of Kells. Behind St. John is another figure with arms outstretched and feet

²⁶ Bruce-Mitford, 59.

²⁷ Bernard Meehan, *The Book of Kells: an Illustrated Introduction to the Manuscript in Trinity College Dublin* (United Kingdom: Thames & Hudson Ltd, 1994), 50.

²⁸ Ibid, 86.

²⁹ Ibid, 71.

³⁰ Ibid,71-72.

³¹ Hall, 184.

³² Bruce-Mitford, 43.

³³ Ibid,105.

³⁴ Michel Melot, *The Art of Illustration* (United States of America: Rizzoli International Publications, 1984), 45.

³⁵ Meehan, *The Book of Kells: an Illustrated Introduction to the Manuscript in Trinity College Dublin*, 36.

together.³⁶ Unfortunately, the head and half of a hand of the background figure had been cut off in the nineteenth century, so identification is cumbersome, however it is said to be an image of the Crucifixion of Christ.³⁷ The Crucifixion of Christ is one of the most powerful events in Christianity, so it just adds to the influence that St. John's Gospel has on viewers.

The Book of Kells is one of the world's greatest treasures that still remains. It is full of religious iconography that holds different meanings. The Saussurean theory of semiotics featuring the signifier and the signified were implemented to analyze the signs and symbols within the Book of Kells. Even though the Celtic monks who created the book were invaded a few times on the Isle of Iona, they fled to Kells and succeeded in creating a liturgical codex that housed the four canonical gospels that still lives on today at Trinity College in Dublin, Ireland. Religious iconography tends to be the same because it is based on one story, the bible. However, the Book of Kells depicts the gospels in such a way that it can be interpreted many different ways with the copiousness of the symbols present on the pages.

³⁶ Gerard Rice, "The Book of Kells." *The Furrow* 52, no. 7/8 (July-August, 2001): 402, accessed December 9, 2013, <http://www.jstor.org/stable/27664337>.

³⁷ Meehan, *The Book of Kells: an Illustrated Introduction to the Manuscript in Trinity College Dublin*, 36.

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Figures



Fig. 1. *Folio 27v, symbols of the four evangelists*, c. 800. Vellum. Trinity College Dublin, Ireland.



Fig. 2. *Folio 28v, portrait of St. Matthew*, c. 800. Vellum. Trinity College Dublin, Ireland.



Fig. 3. *Folio 130r, the beginning of St. Mark's gospel*, c. 800. Vellum. Trinity College Dublin, Ireland.



Fig. 3a. Detail of *Folio 130r, the beginning of St. Mark's gospel*, showing the trinity trefoil. c. 800. Vellum. Trinity College Dublin, Ireland.



Fig. 4. *Folio 188r, the opening of St. Luke's gospel*, c. 800. Vellum. Trinity College Dublin, Ireland.



Fig. 5. *Folio 291v, portrait of St. John, with the tools of a scribe*, c. 800. Vellum. Trinity College Dublin, Ireland.

François Villon: A Troubled Artist

Katelyn Hovey

Abstract

François Villon is widely considered to be one of the most influential poets of the Middle Ages. He had a very difficult life growing up, but, despite his hardships, managed to get an education in the arts. Although he was imprisoned and exiled numerous times, he was able to write numerous works during his stay in prison. One example is his Ballade Finale. In this work, he expounds upon his obsession with death and his struggles with sin. Villon was truly ahead of his time in terms of his focus on humanism and aptly represents the struggles and hardships of those during the Middle Ages.

Despite its name, the “Dark Age” or the Middle Ages is not an era deprived of works of art and literature. In fact, François Villon is one of the most well-known poets during this time period. Many people believe that Villon wrote about more serious themes because he had a very difficult life. He was obsessed with death and wrote about subjects concerning humanity, sins, religion, forgiveness, and famous historical figures. Many of these topics are an accurate reflection of the difficulties and worries of the people living during the time. In addition, scholars believe that because there is not a lot of information about the life of Villon, his works serve as a biography. Examples of the poems that thoroughly explain the thought and worries of François Villon are his “Ballade Finale” and “Ballade des Pendus.”

It is true that the most brilliant men and women often have a difficult life. This is the case with François Villon, as well. He was born in Paris in 1431 (Taylor 23). Unfortunately, he was orphaned at a very young age and then raised by an adoptive father named “Villon” (Taylor 23). He was fortunate to be adopted by Villon because he taught François Latin and grammar (“François”). No one knows very much about the details of his early life, and that is why his poems are a good indication of these details. Despite the lack of information about his personal life, there are documentations about his education. Villon received his bachelor’s degree of arts from the University of Paris in 1449 (Taylor 25). Six years later, he finished his master’s program in 1452 (Taylor 25). There are no archives about how he financed his education (perhaps with the help of his adoptive father), but he was fortunate to have studied at the University of Paris.

For his works, Villon used his own experiences to develop and describe his feelings and the themes of his poems. After he finished his education, Villon became a criminal. On June 5, 1455, Villon was arrested for killing a priest names Philippe Sermoise in a bar brawl in Paris (“François”). On his death bed, however, the priest publicly forgave Villon, who had fled the city (“François”). It was a tragic experience for Villon, and his criminal life became

the central topic for his *Testaments*. When he returned to Paris in 1456, he wrote *Le Lais* or *Le Petit Testament* (“Villon”). It is interesting that Villon says in *Le Lais* that he was writing this poem during Christmas, but he was in fact stealing gold from the University of Navarre (“Villon”). Could he have been using this as an alibi to aid in his crime? This intrigue is why the works of Villon are considered a good source and biography pertaining to the details of his life. Villon pointedly used his poems as an interlaced part of his life.

History says that Villon had friends and admirers of his work, but he does not mention them in his poetry. Because he was often exiled or hiding, he relied on the help of others when he needed help or committed another crime. He was selfish in this way because the principal subjects of his poems were his own absolution and regret with how he was living his life. Rarely if ever did Villon show gratitude for those who helped him, but often remained focused on his own pitiable existence (Taylor 46). Villon was not entirely self-centered, however. For example, in his poems “Ballade des pendues,” Villon addresses all of humanity when he declares “Fères humains qui après nous vivez” or “Brothers who live after us” (“Pendus” 1). This preoccupation with humanity is a new concept for the Middle Ages, and becomes more important during the Renaissance when the concept of humanity becomes the center of many areas of study. Villon’s address to mankind has more to do with a concern for spiritual health, however. In this poem, he voices his regret for having done things in his life that he is not proud of and prays that “Tous nous vueille adbsouldre!” or that God will forgive them of all their wrongdoings (“Pendus” 10). As a result, even though Villon was a criminal, his legacy is a complicated one because one has to consider the impact of his works and the messages he portrays. Like everyone, Villon has things he regrets in life (some a little more severe than others), but he is also painfully aware that his actions have consequences and wishes for “les neiges d’antan,” as one would say.

Another example when Villon describes his own very personal feelings and beliefs is in “Ballade Finale.” The principal theme is, of course, death and Villon’s fear of it, but there is also feelings of regret. Throughout the poem, there is a definitive allegory to his difficult and life and poverty. For example, when he says “Car en amour mourut martyr” or “For in love died a martyr,” it seems that he is referring to the fact that he is a martyr to the hardships in his life (“Finale” 6). Villon was brilliant, but, perhaps due to his poverty and lack of parents, he became a criminal. The poverty and hardships he suffered is also referenced when he says “Quand un mourut n’avoir qu’un haillon” translated as “When I died with only a rag” (“Finale” 18). For Villon, the “Ballade Finale” is like a last will and testament. It still exudes the subjects of death and a difficult life, but with a tone of finality that is truly palpable throughout the work. After having spent the majority of his life alone and running from the law, death seems inevitable but still terrifying. This is why the refrain of his poem reads “Quand de ce monde vout partir” or “When you leave this world” (“Finale” 8). Perhaps he comes to accept the fact that death waits at the end of life for everyone, or, more probably, it symbolizes the constant reminder that death and fear have played in his life.

Even though François Villon’s life was not a happy one, the collection of poems that he left as a legacy gives modern scholars an insight not only of his worries and fears, but also those of others living in the Middle Ages. It is important to continue to study and appreciate these works with both a historical and cultural value. Granted that Western society has become secular, religion has still played a significant historical role in society in cultures all around the world. When studying Villon’s poems, it reveals the feelings towards and importance that many people placed on religion and the way it influenced their everyday lives. As one would say, “you don’t know where you are going until you know where you

have been.” The study of passed authors gives us a perspective not only of the culture of the period, but also helps to establish the building blocks that have helped form modern society.

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Rock, Paper, Scissors:
An English Translation of Catherine Kalengula's *Pierre, feuille, ciseaux*

By Brittany Kelley

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INTRODUCTION

For my independent translation project, I chose *Pierre, feuille, ciseaux*, a young adult novel written in French by Catherine Kalengula:

After the death of her parents in a car crash in France, Alice moves to Oxford, England, to live with her grandmother, and she resigns herself to grieve in silence and solitude. Meanwhile, Shane, adopted by a wealthy English couple as a young boy, is now a rebellious teenager who feels that his Korean heritage sets him apart, as he struggles to fit in. These two tortured teens will find comfort and solace in one another's arms, after fate traps them together in a broken-down elevator. But can they make it work, when all the forces around them threaten to keep them apart?

This project proved challenging due to its combination of the French language and British culture, as well as the numerous idioms, slang, and sophisticated diction. For instance, Kalengula writes, "le honte me fait plonger le nez sur mes chaussures" (49). A literal translation provides us with this: "the shame makes me plunge the nose on my shoes." It is necessary to make slight changes to the diction and syntax in order to reflect colloquial English and a style appropriate to an American young adult novel; thus, my translation becomes, "I stare down at my shoes in shame."

In addition, this is a French novel written about a French young woman who moves to Oxford, England and begins a relationship with a British teen. The book is written in dual perspective, switching between Alice's and Shane's point of view each chapter, so it was necessary to distinguish between the characters through their word choices, tone, and cultural references. Moreover, I am also writing with an American reader in mind, so it becomes quite a balancing act to reflect the French and British language and culture of the characters, while making it understandable to readers in the United States.

In one case, the author uses the made-up verb "desaimer," which translates as "to dislike" in English. However, if I simply chose the direct translation, English readers would lose the context of the character creating a new word just to represent how he feels about his family. Therefore, I inserted the word "dislove" in my translation to convey both the connotative and denotative context of the author's diction. These are just a few of the challenges I faced during this project.

What follows is an excerpt from my translation of the novel, taken from Chapter 4. Written from Alice's perspective, this chapter begins just after she has a panic attack at her new psychologist's office and, while attempting to flee, she becomes stranded in a broken-down elevator with a young stranger, who turns out to be Shane. And cue their meet-cute . . .

Chapter 4: Alice-

I must not crack. Start to scream and pound on the desperately closed doors. Or worse, collapse onto the carpet and burst into tears. Because I'm not alone, and I especially don't want him to think I'm crazy.

I force myself to breathe. *It's nothing, just a little breakdown. Don't panic. The elevator won't take long to start moving again, and you will be able to get off.*

The button lights, like the lights in the elevator, are off. It must be caused by a power outage. Without a word, the young man takes a smartphone out of the pocket of his black leather jacket, turns on a flashlight app, and then sets the phone on the floor, in front of our feet.

Breathe, stay calm.

Right afterwards, without warning, he violently pounds the wall with the palm of his hand and then mumbles something I don't catch. This sudden movement surprises me, intrigues me. He seems to have reached his limit too. I wonder why. After all, we've only been stuck for a few minutes. He must have another reason.

That's it, focus on him. That might help you stop the rise of the fit.

I inhale and turn my head slightly to the side, discretely, I hope. His profile is harmonious, though not very contoured. His dark black hair, cut squarely across and a bit long, is shiny and natural. He has a captivating face, because it has this slight imperfection—it's all relative—which makes him look interesting.

He looks like a Korean actor. In high school, I knew a girl who was a fan of Korean shows and stuck photos of the actors on her agenda and folders. One day, she explained to me that most *dramas* feature one character type, tall and handsome, whom the heroine falls madly in love with.

Physically, this guy fits the role rather well, I think. His full, sensual lips are wonderfully compatible with his straight nose. And I wonder, by what strange phenomenon, I find myself interested in him, when I'm on the verge of imploding.

His square, masculine jaw tenses at regular intervals, hollowing his cheeks, with the same rhythm as his flaring nostrils. His fists soon join in. He clenches, relaxes, and then tightens them again.

I sympathize. If *I* were to give in like him . . .

"It doesn't seem like it's going, does it?" I ask timidly.

He raises an eyebrow. Annoyance? Surprise? Impossible to tell.

"There isn't a network connection here. . . . Bloody hell, what a shitty life!"

His biting reply takes me by surprise.

"I totally agree with you. But there are worse things in life than an elevator breaking down, don't you think?"

I almost pity myself. Come on, I'm the last person in the world who should be giving advice.

He turns his head towards me, and his almond-shaped eyes, below perfectly shaped eyebrows, scrutinize me with a sudden attention. He has a look of surprising intensity, as if illuminated by a fire behind his eyes. I'm pinned in place by it, speechless. Is he angry at me? Is this how he usually looks at people?

He looks like he's trying to set the world on fire.

"Yes, that's true. There is worse in life than being trapped with a pretty girl who stares at you without seeming to," he declares in a cold tone.

I feel myself blush.

“That’s not it. It’s just that . . . I’m nervous. I need to do something.”

“So you chose to check me out?”

I’m aware that my explanation was weak, and I stare down at my shoes in shame.

The minutes pass with an inhuman slowness, while I do my best not to think about biting my nails. . . . Nothing changes, apart from the rising heat. Or is it really only me who is feeling hotter and hotter? Not knowing what to do with the yellow sweatshirt that I am holding, I decide to set it down in a corner. But then I find myself with free hands, and it is hard to resist the temptation of bringing them to my mouth.

I hear an irritating, repetitive noise. The guy has started to tap the metal wall with his fingers.

When is this elevator going to get moving again, so I can finally get out of here?

I start to pant again, in the search for oxygen. It’s all in my head, I know that. There’s enough air in the elevator for the two of us, and it’ll take many hours before it runs out. So why am I suffocating? This is like my nightmares: the terror of imminent catastrophe and the urgent need to flee immediately, now, in order to search for refuge and save my life, at any cost. Sometimes, I don’t make it there.

Breathe. Think of something else.

I force myself to close my eyes and, although I’m not looking for memories, one of them resurfaces unexpectedly. I know why. Because I have already lived through this type of situation.

I’m five years old. Since my mother is getting training, it’s my dad who, under these exceptional circumstances, is taking care of him me, one Wednesday. In order to distract me and

because he feels helpless when he is with his little girl whom he never takes care of, he takes me to Fnac, even if he hates the crowds there.

Only, once we have arrived, he persuades me to walk very quickly and I don't have time to look around in each department. With Mom, I'm used to spending hours browsing books and listening to music. So, this quick pace puts me in a bad mood. To make matters worse, on our way out, we find ourselves trapped in an elevator at the shopping mall, the one that we took because, after complaining that I was hot and thirsty, I had added that my feet hurt.

"I'm afraid, Dad," I whined.

I would like him to take me in his arms, caress my hair, and murmur reassuring words, like Mom would do, but he stays true to himself—stone-faced and distant.

"No, please. Don't be afraid. I'm here."

I lift my head to look up at this huge giant who has taken the place of my dad, and I don't dare slide my chubby, hot hands between his powerful fingers. He looks at me and starts to smile timidly, an expression so rare at home.

"What if we played a little game? How about that, Alice?"

"Hey, you're smiling and staring into space."

The young man's voice makes me jump, and I open my eyes. Buried in my thoughts, I had lost track of time and place, and for a marvelous moment, I was back in Paris, 13 years ago, next to my colossus of a father.

The crisis is past, I think. My father is somewhere next to me in this elevator. . . . I'm breathing normally again. The walls don't seem to be moving or getting dangerously close to me anymore.

“I was thinking back to a day when my dad and I were also trapped in a broken-down elevator. I was still only a little girl, and I was terrified. So he proposed that we play Rock, Paper, Scissors to help pass the time. Really, I think it was the only game he knew! I know it can seem banal worded like that, but it was one of the loveliest moments that I ever shared with him.”

Talking about my dad fills me with emotion. I’m this close to crying, which I haven’t done for weeks.

I have relived this scene so vividly that my father’s face seems to fade away before my eyes, transforming into an indistinct cloud. To my dismay, I’m incapable at this moment of recovering the exact image.

The young man puckers his lips into a sort of pout that I can’t seem to decipher, but which, after a short reflection, seems indifferent. It’s obvious I’m boring him with my stories.

“Sorry . . . It must be my appointment with the psychologist that has upset me. Besides, I couldn’t . . . It’s not important, forget it.”

The minutes pass by oppressively. I try to think about my dad again, to imagine his reassuring presence beside me once more, but the miracle doesn’t repeat itself. My fingers wind up in my mouth, and I tear at each piece of my nail methodically, no longer preoccupying myself with my companion.

The light from his cell phone goes out, plunging the elevator into sudden darkness. The boy bends down, grabs his phone with an abrupt and almost violent movement, and presses it frantically.

“Great! It’s dead!” he fumes, chucking his phone to the ground.

Now, only the little light suspended near the ceiling weakly illuminates the elevator, creating strips of light and dark on the walls. I sneak a glance at the boy, furtively, for fear of setting off his anger. Shadows outline his face, and I can no longer distinguish all of its details, but I note that his eyes still shine just as much as before.

We're alone, plunged into darkness, and there is not a sound. Yet, I'm not afraid. In fact, I feel almost normal, as if I've found myself in a bubble that nothing bad can burst. Protected.

And he seems to relax as well. He has stopped clenching his fists and isn't taking out his frustration on the walls anymore. The darkness helps me let go. I don't have to hide my emotions or pretend anymore. I feel a tear coming, and I let it trickle down my face and then fall on my shirt, as if nothing had happened.

Anyways, he can't see it.

After a while, he starts to talk to me, while staring at his black boots. "I have a memory like this too. I was 4 years old, and I was playing hide-and-seek with my adoptive father in the garden. My mom was making obvious gestures in the window towards his hiding spot so I could find him. So, of course, I won every round, and he told me I was the best. That's crap, huh?"

I know that if I open my mouth too soon, I'm going to say something stupid. It's my thing, really. I'm lucky he confided in me, and I hope to measure up to it. So I wait a little bit to find the right words.

"Not at all. That sounds great."

"If you say so. . . . It's too bad it didn't last. Now, between him and me, it's a Cold War."

"And with your mom?"

He doesn't respond. Did I ask the wrong question? He stuffs his hands into the pockets of his jeans and appears to reflect, while moving as far away from me as possible, which is relative

in this very small space. I tell myself that, if he could, he'd leave the elevator to get some air.

Maybe he wouldn't even come back.

"The problem is she does everything my father tells her to do. Or eventually her shrink. In my family, seeing a shrink is a rite of passage."

"You've already consulted one before?" I ask, eager to jump on any conversation that engages him, while trying to catch his eyes—a waste of time.

"My father forced me to. Seems my behavior left much to be desired. And I didn't really have a choice: it was that or he would have cut me off completely."

"I see."

"Between you and me, it didn't change much, but at least, it had the benefit of reassuring my mother."

"They were probably worried about you. There are a thousand-and-one ways to love someone," I say, thinking of my mother, since it was one of her favorite sayings.

"Yeah. They have to love me! If you ask my opinion, it's really a way to clear their conscience. They unload their problems on someone else. . . . To give you the rundown, going to see a shrink is like performing a full striptease in front of a stranger."

His analogy evoked from me a little "oh" of surprise, since he included gestures along with the words.

He removes his heavy jacket, sets it on the metal railing at mid-height, and adds to it his grey, wool scarf. Beforehand, he had tried to roll up his sleeves, but they were too thick and stiff and kept slipping back down to his wrists.

He seems to turn things over in his head a moment before also taking off his sweater. When he pulls it over his head, his V-neck T-shirt lifts up, revealing his fine, muscular torso,

where my eyes, beyond my control, stay glued. A scent of deodorant spreads out through the elevator, adding to my confusion.

I must force myself to look elsewhere to get a hold of myself. If this situation continues, this boy risks making me lose what little reason I have left.

“You really think your parents don’t love you?” I add, as he carefully puts his shirt and his hair back into place.

In the darkness, the expressions on his face are even more cryptic.

“I would rather say that they ‘dislove’ me. Not very gifted in school, not very athletic, not very well-behaved. I don’t measure up to their expectations, not the way they had hoped. They can’t present me to their friends anymore, as one proudly exhibits a race hound. I am a black sheep . . . And you, what about your parents?”

“They’re dead. Killed by a reckless driver five months ago.”

“I’m so sorry . . .”

He seems perturbed and doesn’t know what to say. I seem to have that effect. People always have a hard time dealing with death. Me, most of all. We imagine that death will never knock on our door, and the less we talk about it, the more we can indulge in this delusion. Blissful ignorance. Or pure nonsense.

I continue, “That’s why I was coming to see a psychologist, but I don’t think that will work. I’m too scared he’ll talk to me about the future.”

I start to tremble, which forces me to breathe through my mouth. It’s so nice to be able to let myself go, with no pressure.

“You don’t have any family or friends to . . . talk to?”

“Some friends . . . Anyways, when we suffer, we’re all alone in our soul.”

“I think I know what you mean.”

I catch his eye, surprised by the sadness in his voice. He doesn’t elaborate. It’s too bad. I thought I felt a bond forming between us.

“The night when it happened, two police officers came knocking on my door. Ever since, I can’t stand that noise. But it’s not something I can tell anyone about. I’m ashamed.”

“You told me about it just fine, didn’t you?”

“I think that’s because it’s dark and also because I don’t know you and we’ll probably never see each other again. It’s kind of like what I confide in you doesn’t matter. My words seem lighter here, inconsequential. I don’t need to put on an act.”

And you seem to understand me, at least a little . . .

I think his eyes reflect a touch of gentleness within the inferno. But I’m not sure.

“So, in order for us to be on equal ground, it’s my turn to confide in you something that no one knows. Here’s the best thing! (His tone is ironic.) My biological mother refuses to meet me. The person who carried me for nine months and brought me into this world is rejecting me!”

I feel for him.

“That’s terrible. I can’t begin to imagine how you must feel.”

He lets out a loud laugh, which sounds false.

“I remind you that, between the two of us, it’s still you, all the same, who has the most to pity!”

“You really think you can compare two pains with each other? Each wound is intimate, personal. The fact that your mom doesn’t want to get to know you, that must be painful.”

He averts his gaze and plays with his large, gold class ring, turning it around between his thumb and his index finger. This lasts for some time, during which neither one of us says

anything. He swipes a hand across his cheek and starts to look the other way. He might think he has said too much. Would he like to be somewhere else right now?

Not me. I've grown accustomed to the darkness, and to his company. I no longer want the elevator to start moving again. A semblance of my life is back on track.

Time is suspended. It flows in the elevator with an undefinable ambiance. I don't dare move anymore.

When he finally decides to raise his head in my direction, his incendiary gaze is impossible to bear. He moves closer and leans towards my ear. His fragrance fills my nostrils. I feel dizzy.

"Good, let's stop talking about such depressing topics . . ." he murmurs. "What could we do to pass the time? Don't you have any ideas?"

No. Don't blush.

"No, sorry," I respond, trying to sound disinterested.

"I think I've already got one."

He hides a hand behind his back, as I freeze, disconcerted. After a few seconds, I finally understand where he's going with this. Rock, paper, scissors.

"I warn you right now that winning is in my blood," he announces, teasingly.

I don't need a mirror to know what color my face is right now.

He seems to reach the height of jubilation. I didn't know that I could feel so funny.

"Don't worry. I'm not going to ask you to take off a piece of clothing each time you lose, even if it is awfully hot in here and that would be very entertaining, I admit."

Why must he embarrass me by talking about these kinds of things? I know I am clumsy, all "too much" or "not enough." Wide hips, a narrow chest. In high school, they called me 'pear.'

I imagine that *he* drags along beautiful girls in his wake. But a tiny part of me, the one that is still young, carefree, and sensitive to the charm of bad boys, really likes this game.

It reminds me that I am still alive.

“Okay. But no tricks. We’re simply playing. As long as that’s clear: the fantasy of the girl and the guy stuck in the elevator together, no thank you.”

“You can’t know if you don’t like something before you’ve tried it,” he murmurs, with a wink that does me in, exasperates me, and makes me shrug.

I prepare myself for what’s about to happen, waiting for him to proclaim a newly invented rule for the sole pleasure of watching my reaction. He is happy just goading me to play, with a nod in the direction of my hand.

And in the following minutes, for several matches, we amuse ourselves with rock, paper, scissors, like I did with my father in the past. A surge of nostalgia overwhelms me, powerful and irrepressible. My emotions rise brutally to the surface, taking with them my vain attempts at courage.

I clear my throat, which has become so tight that I struggle to swallow. Tears, tremors, I can’t control them anymore.

“I’m sorry,” I mumble.

What is he going to think of me? I decide to turn my back to him in order to wipe away my tear, hastily, with the back of my hand, in the darkest corner of the elevator. But the crisis doesn’t pass, and I start to tremble again.

Suddenly, I jump, feeling a hand on my shoulder.

“Usually, I assure you, I don’t have this effect on women,” he teases.

His voice might still be mocking and pretentious, but I perceive a new tone there: a hint of fragility.

With wet cheeks, I turn around to try to discover the reason for it.

“Don’t worry, I understand,” he adds sadly.

Our eyes meet, and I don’t feel ashamed anymore to show myself the way I am: devastated.

A moment later, I find myself—I don’t know how—in his arms. Is it he who grabbed me? Me who’s moved closer to him? Both at the same time? I think so, but maybe I’m mistaken that this gesture came naturally to both of us and that he needs this as much as me.

Nestled against his powerful, reassuring chest, my face buried in the crook of his shoulder, I smell the intoxicating scent of his skin mixed with that of his deodorant. His fingers wander across the nape of my neck, barely brushing my skin.

While I nestle up to him with a growing need, wrapping my arms around his body, his hand slowly skims the length of my back, triggering a delicious chill of pleasure.

The lights come back on.

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Effects of Rumination on Shaken Beliefs after Great Japan Earthquake

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Abstract

It is through the act of cognitive processing that an individual can make meaning from trauma and experience posttraumatic growth (Tedeschi & Calhoun, 2004). This study aims to not only support current research demonstrating that intrusive and deliberate rumination are necessary to experience growth after stressful life events, but to also examine intrusive and deliberate rumination in relation to the five domains of posttraumatic growth. Japanese undergraduates ($N=309$) specified how their thoughts manifested about the Japan earthquake in 2011 by filling out the Event-Related Rumination Inventory (ERRI), answering a question to assess how shaken they felt after the earthquake, and reported feelings of growth from their experience by filling out the Posttraumatic Growth Inventory (PTGI). A t -test for independent means revealed those who reported to be highly shaken from the earthquake reported significantly more rumination than those who reported to be only slightly shaken. Five multiple regression analyses assessed if the two types of rumination significantly predicted growth in the five domains of PTG. Results from two bivariate regressions showed that both high intrusive rumination and high deliberate rumination significantly predicted posttraumatic growth. Five multiple regression analyses illustrated how the two types of rumination affected growth in each of the five domains, both intrusive and deliberate rumination significantly predicted growth in each domain, however deliberate rumination accounted for more of the variation in scores across all five domains. Future directions and clinical importance of research on cognitive processing and posttraumatic growth are discussed.

Keywords: posttraumatic growth, domains, shaken, deliberate, rumination, Japanese

Effects of Rumination on Shaken Beliefs after Great Japan Earthquake

Posttraumatic growth (PTG) stems from the theory of reactions to shattered assumptions. This theory explains that growth can occur when a person struggles to cognitively overcome the challenged assumptive world (Janoff-Bulman, 1992). It is necessary to recognize PTG is not the absence of distress, but often the presence of a coexisting relationship between distress and growth. A traumatic event that can facilitate growth must have shaken an individual's foundation. (Calhoun & Tedeschi, 1998). If an individual does not feel the traumatic event impacted their life enough to shake their beliefs system, it is unlikely the experience will foster posttraumatic growth. Thus, it is the distress and shattered beliefs that accompany the trauma or in which leads a person to experience posttraumatic growth.

Current research defines posttraumatic growth as an experience of positive change following a traumatic event that has shaken an individual's core beliefs (Lindstrom, Cann, Calhoun, & Tedeschi, 2013). Cognitive processing is essential to adapting to the shattered beliefs resulting from trauma and stressful life events (Calhoun, Cann, Tedeschi, & McMillan, 2000). Tedeschi and Calhoun (2004) demonstrate that through the act of cognitive processing a person can experience growth and reevaluate their current belief system appropriately.

Many researchers in the field of psychology refer to cognitive processing as repetitive thinking or rumination. There are two types of rumination analyzed in this study. Intrusive rumination is the obsessive thinking that is unwanted and can essentially take over an individual's thoughts, even when they are not purposefully trying to think about the event.

Rumination may also manifest in a more positive manner. Deliberate rumination is a more constructive type of cognitive processing. This occurs when an individual intentionally ruminates about the event, and purposefully makes meaning about their experience with a traumatic event (Lindstrom et al., 2013). PTG research identifies these two types of rumination as a process we go through to appraise our shattered belief system after being shaken from trauma.

Hypothesis 1: Individuals who report that the Great Japan Earthquake highly shook their beliefs will report more event-related rumination.

Studies thus far have attempted to discover which of the two types of rumination act as grounds for facilitating posttraumatic growth. Nightingale, Sher, and Hansen (2010) studied PTG in a population diagnosed with HIV. Findings suggested that deliberate cognitive processing soon after diagnosis did not directly lead to growth, but it was intrusive cognitive processing soon after the diagnosis that directly leads to posttraumatic growth.

These results show intrusive rumination, despite its bad reputation in the field of psychology, may actually be necessary in order for an individual to be impacted enough to experience growth. Taku, Calhoun, and Cann (2008) illustrated that distress and growth can coexist. Participants who do not experience the high levels of intrusive rumination may not show high levels of PTG. This unwanted rumination has been seen as a primer to deliberate rumination (Taku, Cann, Tedeschi, & Calhoun, 2009). An individual that does not experience this type of cognitive processing may not have been affected, shaken, or stressed enough from the trauma to facilitate growth. Although it is expected that intrusive rumination will occur after trauma, it is necessary that those intrusive thoughts eventually transform into a more meaningful type of rumination.

Deliberate rumination in the context of trauma should lead an individual to find opportunities for growth. Past research demonstrates that deliberate rumination has been found to be significantly and positively related to growth (Stockton, Hunt, & Joseph, 2011). Taku, Kilmer, Cann, Tedeschi, and Calhoun (2012) found deliberate rumination plays an important role in the experience of growth among a sample of Japanese youth. Deliberate rumination allows a person to actively engage in rebuilding their shattered beliefs and recognize possible positive outcomes of the event (Cann et al., 2011). Participants who are capable of engaging in high levels of deliberate rumination should experience more growth after trauma.

Whether it is intrusively or deliberately, an individual will cognitively process their experience. This may involve both types of processing at different but appropriate phases after experiencing trauma. The study by Nightingale et al. (2010) found that there might be different suggested paths leading a person to experience either psychological distress or growth. When an individual is able to constructively process their experience they are more likely to effectively assimilate new beliefs as a result of trauma (Lindstrom et al., 2013). Ruminating with an intentional nature may be the key to assimilating new beliefs appropriately and to provoking growth rather than distress or recovery from trauma.

Few studies have addressed the individual domains of posttraumatic growth, and even fewer have demonstrated how rumination can predict growth in each of the five domains. Current research has discussed that rumination can foster growth, but research has not fully explored the effect of rumination on each domain separately. Growth can manifest in each person differently and research has not yet addressed whether the type of rumination a person cognitively engages in can affect the nature of growth an individual experiences.

One suggested relationship in past literature is one between the domain of *Relating to Others* and deliberate rumination. An individual who deliberately thinks about their experience with trauma is more likely to share their feelings and disclose their experience with others (Lindstrom et al., 2013). If the disclosure is reinforced with positive feedback the relationship between disclosure and deliberate rumination may become reciprocal. This positive feedback from disclosure may then initiate further deliberate and positively valenced rumination.

It is through disclosure of an event that deliberate rumination can provoke PTG. Those who deliberately ruminate and disclose their struggles may experience growth especially in domains such as *Relating to Others*. Disclosure is interpersonal by nature and may specifically be related to growth in the domain of *Relating to Others*. A person who discusses their experience with others may report higher growth on this domain if they have purposefully reflected on their experience and shared with others.

Foregard (2013) found interesting connections between creativity and deliberate rumination. Deliberate rumination may be key to the facilitation of creative thinking. This creative thinking may have particular manifestations in PTG. The ability to recognize new possibilities requires a creative mind, linking deliberate rumination to the domain of *New Possibilities*. Those who deliberately think about their experiences may possess the creativity that allows them to perceive new possibilities that can occur following a trauma or stressful life events (Foregard, 2013).

Calhoun, et al. (2000) researched the relationship between posttraumatic growth, religion, and cognitive processing. Findings suggested self-reported rumination soon after the event and the degree of openness to religious change were both associated with growth. Although this research measures timing of rumination rather than distinguishing differences in intrusive and deliberate rumination, it is believed the rumination occurring soon after an event will be more intrusive in nature than rumination later after the event. Thus, here we are assuming the rumination soon after the event is intrusive. Taking these findings in consideration, there may be a relationship between intrusive rumination predicting growth in the domain *Spiritual Change*.

Hypothesis 2: Deliberate rumination will have a stronger association with the PTG domains of Relating to others and New Possibilities. Intrusive rumination will have a stronger association with the PTG domain of Spiritual Change.

Methods

Participants

Data was collected from university students in Japan ($N=320$). The paper and pencil survey administered in 2013 asked questions regarding the Japan earthquake in 2011, a traumatic event for many people living in Japan at the time. Participants answered various demographic questions (demographic characteristics displayed in table 1). One question on the survey addressed where the student was born and raised. In order to be included in the analysis for the study the participant had to mark that they were born and raised in Japan ($N=312$). Three participants were excluded from the analysis because of their age. Participants who were kept for the study were between the ages of 18 and 24 ($N=309$).

Measures

Shaken. The variable assessing how shaken a participant felt after the Great Japan earthquake was measured with one question. "How has the event shaken your beliefs?" Participants were asked to provide details about the Great Japan earthquake according to their experience. Participants answered the question on a scale from 1 (not at all) to 7 (very much). For the purpose of analysis the variable was dichotomized. An answer from one to four was

operationalized as being slightly shaken from the earthquake. An answer from five to seven was labeled as being highly shaken.

Posttraumatic Growth Inventory Revised. The standard inventory that assesses self-reported posttraumatic growth contains 21 items, and assesses five domains. The revised version contains 29 items, still assessing the same five domains of *New Possibilities*, *Appreciation of Life*, *Personal Strength*, *Relating to Others*, and *Spiritual Change*. However, the revised inventory allows for more questions that pertain to the domain of *Spiritual Change* and are geared toward the Japanese culture, “I have a greater sense of harmony with the world.” These questions were added to assess religiousness using terms more relevant to Japanese culture since Japanese often identify themselves with Buddhism or no religious affiliation.

Participants answered a 6-point Likert scale with values ranging from 0 (not at all) to 5 (very great degree). The 29 item revised version of the PTGI has not often been used in previous research but showed a very strong reliability in the current study ($\alpha = .96$). For the purpose of this study posttraumatic growth was also computed for each domain. The Cronbach’s alpha were .89, .87, .82, .67, and .67 for the domains of *Spiritual Change*, *Relating to Others*, *Personal Strength*, *Appreciation of Life* and *New Possibilities* respectively.

Event-Related Rumination Inventory (ERRI). This inventory was divided to measure intrusive and deliberate rumination. It’s important to recognize the purpose of the inventory is to assess thoughts about the disclosed event specifically, and not thoughts about possible depressive symptoms or other negative symptoms possibly resulting from the event. The ERRI was created with an effort to exclude any negative or positive implications of either of the two types of rumination (Cann et al., 2011). Participants were instructed to answer each question specifically pertaining to their experiences during the weeks immediately after the Japan earthquake in 2011. Both deliberate and intrusive rumination were assessed with ten questions on a 4-point Likert scale from 0 (not at all) to 3 (often). The Cronbach’s alpha ($\alpha = .91$) also showed excellent reliability in the current study.

Results

Analyses from a statistical program for the behavioral sciences (SPSS) supported hypothesis one. A *t*-test for independent means demonstrated individuals reporting they were highly shaken from the Great Japan earthquake reported significantly more event-related rumination ($M=28.46$, $SD=11.90$) than those who reported they were only slightly shaken ($M=19.67$, $SD=12.36$) from the natural disaster $t(307) = -6.27$, $p < .001$.

Five multiple regression analyses were conducted to predict growth in each domain from intrusive and deliberate rumination. From previous literature it was anticipated that intrusive and deliberate rumination would predict growth in specific domains of PTG. Due to the nature of deliberate rumination it was expected that only deliberate rumination would predict growth in the domains of *Relating to Others*, and *New Possibilities*. All multiple regression analyses were significant ($p < .001$), indicating the combination of intrusive and deliberate rumination significantly predicted growth in all five domains. However, deliberate rumination consistently accounted for more variance than intrusive rumination across all five domains of PTG.

The domain *Relating to Others* was assessed using statements such as “I more clearly see that I can count on people in times of trouble.” We predicted that only deliberate rumination would significantly predict growth in this domain. Both types of rumination together significantly predicted growth in the domain *Relating to Others* ($R^2 = .20$, $F(2, 295) = 36.84$, $p < .001$). This trend is found for all domains of PTG, *New Possibilities* ($R^2 = .30$, $F(2, 296) = 62.03$,

$p < .001$), *Personal Strength* ($R^2 = .11$, $F(2, 295) = 18.23$, $p < .001$), *Appreciation of Life* ($R^2 = .21$, $F(2, 296) = 38.95$, $p < .001$), and *Spiritual Change* ($R^2 = .26$, $F(2, 295) = 52.32$, $p < .001$).

The beta weight was only significant for deliberate rumination in two of the domains. Deliberate rumination accounts for 36% ($p < .001$) of the variance, intrusive rumination accounted for only 11% ($p = .11$) of the variance in the domain *Relating to Others* (shown in Table 2). Deliberate rumination accounted for 27% ($p < .001$) of the variance, and intrusive rumination accounted for 9% ($p = .24$) of the variance in the domain *Personal Strength*. Beta values were significant for both intrusive rumination and deliberate rumination in the other domains, *Appreciation of Life*, *Spiritual Change*, and *New Possibilities*. However, deliberate rumination consistently accounted for more variance in every domain ($p < .001$).

Discussion

Posttraumatic growth is a long and complex process involving numerous psychological processes. This study focused on event-related rumination and how ruminating about the Great Japan Earthquake could potentially foster growth in a population of Japanese undergraduates. Hypothesis one was supported giving the evidence those who were highly shaken were also reporting significantly more event-related rumination than those only slightly shaken from the earthquake. This finding suggests the initial distress caused from the shakenness resulting from an event can set these psychological processes in motion. Research is currently finding distress and shaken beliefs to be necessary for the facilitation of growth. Those only slightly shaken may not be engaging in processes such as event-related rumination necessary for experiencing growth.

When observing the effects of intrusive and deliberate rumination on each of the domains, analyses show that deliberate rumination consistently accounts for more of the variance across every domain. Even though the combination of both types of rumination predict self-reported growth in the five domains, beta values show deliberate rumination is a stronger predictor variable than intrusive rumination. Results did not support the second hypothesis; the two types of rumination did not display the hypothesized specific relationships with growth in the five domains. However, there were two domains in which intrusive rumination did not account for a significant amount of variance. Intrusive rumination did not significantly account for variance in the domains *Personal Strength* and *Relating to Others*.

Deliberate rumination is not affecting the experience of growth differently for each domain. Intrusive rumination may be partially responsible for a person experiencing growth in the domains of *Appreciation of Life*, *New Possibilities*, and *Spiritual Change*, but is not shown to be as predictive of growth in the domains *Personal Strength* or *Relating to Others*. This gives us basic evidence that intrusive rumination may be more critical to growth in some domains and not others, but deliberate rumination is comparably predictive of growth in all domains.

This finding furthers current research, suggested intrusive rumination can influence an individual's growth in particular domains and not in another, deliberate rumination however does not influence domain growth. Results showed that event-related rumination is a universal predictor for total PTG but is not necessarily affecting the five domains individually to the extent hypothesized. There is likely other psychological process making growth unique from one individual to another.

Future Directions and Implications

First and foremost this study gives evidence that event-related rumination should be broken down into intrusive and deliberate rumination in research. Both types of rumination play a particular role in predicting PTG and growth in each domain. This research is exploratory in

the way that research is frequently concentrated on PTG total. This study may be used as a precursor for future research to examine the psychological processes affecting domains differently.

Although this study assesses two types of rumination, it does not assess the timing of the rumination. Further research should assess when the types of rumination occur in relation to the five individual domains of PTG. Perhaps if the type of rumination was broken down into soon after the event and at the time of the survey (recently) we may see relationships to individual domains. Perhaps an individual who experiences very high intrusive rumination at both time points will experience more growth in the domain Personal Strength because they felt stronger after experiencing more intrusive natured thoughts over a longer period of time. This break down of types of rumination and when it occurred has been used in cited research (Nightingale et al. 2010; Taku et al. 2009) but has only been used to assess total PTG and not scores from each domain.

Also, these results may not be generalizable due to the specific population and traumatic event. All participants were born and raised in what they consider a typical Japanese culture. The results may not be able to be replicated in Western cultures. The questions were all centered on the Great Japan earthquake, suggesting that these results may only be generalizable to those who report natural disaster as their traumatic event. This study is very focused on an isolated event participants experienced. There may have been other traumatic events unique to participants that were not analyzed or accounted for in analyses.

Beyond the difficulty to generalize to other populations, this study demonstrates cognitive processing cannot explain variability in scores across the five domains. Since both intrusive and deliberate rumination can predict growth and deliberate rumination consistently accounts for a significant amount of the variance across all domains, it may be the work of other variables that leading to growth in some domains and not others. Future research should address other possible predictors of PTG that may lead a participant to experience growth in each domain.

Researching the effects of cognitive processing on posttraumatic growth demonstrates after trauma, an individual must spend time rebuilding the beliefs according to what they have experienced, specifically in a purposeful manner. The way an individuals thoughts manifest will affect how much positive change a person reports, but will not affect any domain differently. Findings suggest the event-related rumination is a critical component of posttraumatic growth. Both intrusive and deliberate rumination play a unique part in experiencing PTG. According to Tedeschi and Calhoun (1998), the ability to perceive positive changes after trauma can increase psychological adjustment and future well-being. Time that is being spent ruminating about the event should not be suppressed but encouraged. Rumination should be seen as a part of the process towards well-being and should be encouraged inside and outside of clinical settings.

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Table 1

Demographic Characteristics

	<i>N</i>	%
Gender		
Male	155	50.2
Female	152	49.2
Age (<i>SD</i>)	19.32 (1.20)	

Table 2

Beta Values for Domains of PTG

Domain	Intrusive β	Deliberate β	R^2
Relating to Others	.11	.36***	.20
New Possibilities	.18**	.41***	.30
Personal Strength	.09	.27***	.11
Appreciation of Life	.14*	.35***	.21
Spiritual Change	.19*	.36***	.26

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

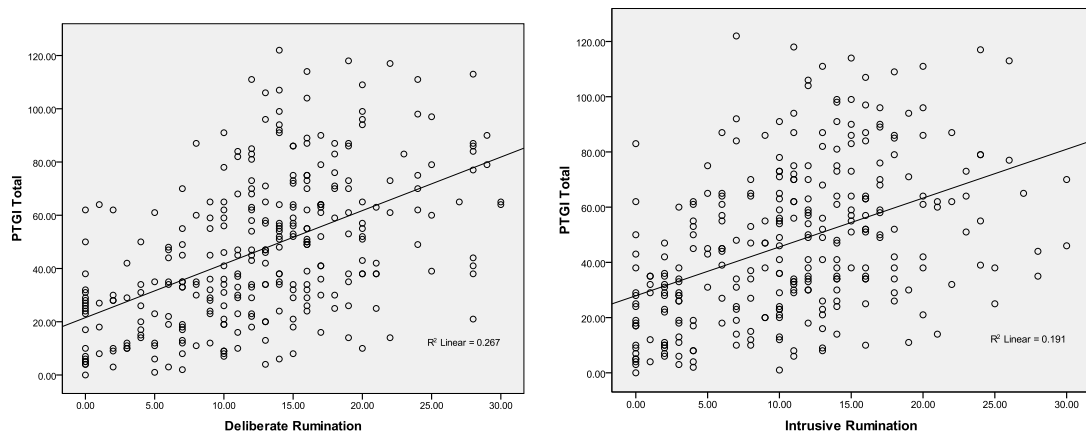


Figure 1. Regression lines of rumination scores and PTGI scores.

Deconstructing Classical Codes of Female Representation in

Alfred Hitchcock's *Vertigo* (1958) and *Psycho* (1960)

Linda Williams explains in her essay “Film Bodies: Gender, Genre, and Excess” that Classical Hollywood Cinema is structured “as efficient action-centered, goal –oriented linear narratives driven by the desire of a single protagonist, involving one or two lines of action, and leading to definitive closure.”¹ This linear structure often uses continuity editing to allow the spectator to follow the protagonist as he completes his narrative journey. The horror genre both embraces and subverts this classical structure, featuring “non-linear spectacles [that focus] more directly upon the gross display of the human body.”² Horror films, in selectively embracing and eschewing classical structure with the intention of shocking its spectator, reveal and break down codes of representation not immediately evident in purely classically structured films – particularly in the way women are represented. I will use Alfred Hitchcock's *Vertigo* (1958) and *Psycho* (1960) to demonstrate how this destabilization of classical structure results in the destabilization in the codes of representation of women.

To demonstrate how the horror genre subverts classic codes of representation of women, the different codes of representation common for women must first be understood. Laura Mulvey in “Visual Pleasure and Narrative Cinema” explains that, conventionally, women are introduced through the point-of-view shot of a male character, allowing the woman “to be simultaneously looked at and displayed, with their appearance coded for strong visual and erotic impact so they can be said to connote ‘to-be-looked-at-ness’”³ Alfred Hitchcock's *Vertigo* embraces this tradition. The film's protagonist, John “Scottie” Ferguson is contacted by a friend to investigate

¹ Williams, Linda. “Film Bodies: Gender, Genre, and Excess.” *Film Quarterly* 44 (4), 1991. 3.

² *Ibid*, 3

³ Mulvey, Laura. “Visual Pleasure and Narrative Cinema.” *Screen*, 1975. 9.

the mysterious behavior of his wife, Madeleine Elster. Scottie's friend asks him to peer on Madeleine discreetly as they dine at a restaurant. Scottie, sitting at the bar, looks over as the camera sweeps in a graceful crane over to Madeleine, in a striking deep green dress against a bright red background. This scene features classical codes of representation for women – Madeleine is introduced for the first time through Scottie's male gaze. Though the way the camera sweeps to the side suggests another viewer as well – the spectator. The spectator, by viewing Madeleine through a male point-of-view for the first time, is being instructed by the camera to view Madeleine through a male perspective. She does not connote her own meaning – Scottie does – and she is to be looked at from a male perspective.

Female characters are not only connoted through a male perspective, but they are often denied an active relationship to the frame, space and narrative so common to male protagonists in classically structured films. Women are often fragmented in the frame, close-ups of their breasts, butts, legs, etc. fetishizing them for the viewer. This denies female characters of their ability to actively relate to the space and further reinforces her as an object "to-be-looked-at." *Vertigo* features this convention as well. The opening credits feature extreme close-ups of a woman's mouth, eyes, and then a single eye, coming in progressively closer as if the camera were dissecting the woman's appearance. This is Hitchcock's playful nod to the classical convention of fragmentation he is evoking and exploring.

Though *Vertigo* has these classical codes of female representation it obsessively works to deconstruct these codes. As the story of *Vertigo* unravels, these traditional codes of representation become undone. We find out during the film that Madeleine is actually Judy Barton, hired by Scottie's friend to fake Madeleine's death to cover up his wife's actual death. After Scottie thinks Madeleine has died, he spots "Madeleine," but as Judy – with darker hair,

thicker eyebrows, and less polished clothing. He then fanatically recreates Judy in her old image as Madeleine, revealing that the only way Scottie knows this woman, and the spectator knows her, is through these representational codes. The film ends with Scottie realizing Judy's deception and returning her to the place where she faked her death. She falls from the top tower of a church, fulfilling the fate that Scottie originally believed befell her. Judy, through her deception, was given an active role in determining the plot. Her death, faked by her, was a moment of actively controlled space. The peak moment of bodily excess in the film, Judy's true death, reverts her back to passivity. Her active role in the plot and story is effectively erased by her dying as "Madeleine" in the way Scottie originally believed. Though Judy/Madeleine is ultimately returned to passivity, the film's conflicted relationship with her representation destabilizes codes seemingly invisible in purely classically structured films. The extreme focus on Judy's appearance is a crucial element of bodily excess in the film that both embraces and subverts classical codes of representation. Through connoting Judy from Scottie's point-of-view and fetishizing her through her hair, makeup, and clothes, classical representation is embraced. But the excessive focus on these codes as a central element of the plot goes against classical structure. A female character's "visual presence tends to work against the development of the story, to freeze the flow of action in moments of erotic contemplation" in classically structured films.⁴ But erotic contemplation of Judy as Madeleine is central to *Vertigo*'s plot, and its excessive amounts reveal how these codes work in classically structured films.

Psycho similarly embraces and subverts classical codes of representation. The film follows Marion Crane as she steals money from her employer and then goes on the run, hoping to avoid detection. The film immediately subverts classical codes of representation by following Marion,

⁴ Mulvey, Laura. "Visual Pleasure and Narrative Cinema." Screen, 1975. 11

a female protagonist, on her journey with continuity editing. Her active relationship to the frame, space, and narrative is constantly emphasized through the film. She is not introduced through a male point-of-view shot, so she connotes her own meaning, her actions determine the plot, and the audience is set to view the film from her perspective. This is most evident in the numerous driving scenes with Marion. The camera, framing her in a medium close-up, follows her as she drives from destination while a voice-over narration of different characters commenting on her thievery and whereabouts gives the spectator her subjective experience. The film still follows classical conventions of a linear narrative and continuity editing, but eschews the tradition of the passive female character.

Halfway through the film, when Marion arrives at the Bates Motel for the night, this subversion of female codes of representation starts to fade away. The owner of the hotel, Norman Bates, takes an interest in Marion, his only visitor. Norman is shown peering through a hole in the wall at Marion. An extreme close-up of his peering eye cuts to a point-of-view shot of Marion undressing from Norman's perspective. Here Marion is being suddenly connoted from a male point-of-view as an object "to-be-looked-at." Suddenly the film has returned to very traditional codes of representation of women, the male perspective strongly emphasized by Norman's peephole. This small move towards more traditionally feminine representation gives way to an excessive bodily spectacle. Shortly after, as Marion takes a shower, Norman, dressed as his mother, appears and stabs Marion to death. The camera frantically fragments Marion's body in extreme close-ups and Norman's knife goes to puncture her skin. Marion is rendered passive to the space around her by the fragmentation of her body, and also the literal fragmentation of her body by Norman's knife. An extreme close-up of her lifeless eye gazing from the bathroom floor further emphasizes the ultimate passivity to be found in death. The film then continues in

traditional classical structure, as Marion's lover tries to discover what happened to her. Like *Vertigo's* Madeleine, Marion's active nature is effectively destroyed by a violent return to classical codes of representation displayed through bodily excess. However, the conflicted nature of Marion's representation effectively deconstructs and reveals codes of representation so common to classical Hollywood structure.

In conclusion, both *Vertigo* and *Psycho* embrace and subvert conventional codes of representation for women found in classical Hollywood structured films. Female passivity, so often communicated through conventions of male point-of-view shots, fragmentation, and an inactive role in the narrative, is challenged by these films due to their varied horror-genre structure – revealing these codes as otherwise “invisible” elements of Classical Hollywood Structure.

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SCHOOL-BASED COMMUNITY GARDENS IN FLINT, MICHIGAN

A Proposed Nutrition-Based Intervention to Decrease
Childhood Obesity Rates

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Abstract: The purpose of this article is to present the objectives, design and evaluation plan of a proposed program to decrease obesity among elementary school students in Flint, MI. The objective of the 12-month proposed program is to decrease participants' BMI, increase intake of fruits and vegetables, increase food security and self-sufficiency by offering participants the opportunity to grow organic produce in a community garden at a local elementary school. The multi-component program will include nutritional lessons that emphasize the benefits of a diet that includes fruits and vegetables, provision of monthly fruit and vegetable snacks, instructional support for developing school-based gardens, planning sessions to assist in the selection of crops and work sessions for planting, maintaining and harvesting a garden. The outcome evaluation will use qualitative post-intervention focus groups with students, parents, teachers and volunteers. The focus group questions will assess the effectiveness of the program by evaluating changes in participants' eating habits, nutritional intake, food security, self-sufficiency and academic performance.

Introduction

Studies have shown that increased consumption of fruits and vegetables can lower the risks of obesity, cardio vascular disease¹¹⁻¹³, strokes^{13, 16} and cancer^{14, 15}. It is difficult for many residents of Flint, Michigan to purchase fresh produce because there is a lack of full service grocery stores that offer healthy and nutritious food choices¹⁷⁻²⁰. We live in an agriculturally rich area that offers excellent growing conditions. The proposed program in this paper will offer participants the opportunity to provide organic produce for their families for very little work or expense by developing a community garden at a local elementary school

Prior interventions/projects involving gardens for growing fruits and vegetables

Growing Healthy Kids - A Community Garden-Based Obesity Prevention Program³

The “Growing Healthy Kids” program focused on low-income Latino families in North Carolina. The program provided the land, tools and supplies to school-aged, Latino children and their families to help them plant and maintain community gardens. The goal of the program was to increase availability of fresh produce within the community, influence dietary habits and food preferences of participants and to increase the daily consumption of fresh fruits and vegetables.

Weekly gardening sessions and training workshops were available to teach necessary gardening skills and strategies. Cooking and nutrition classes were conducted in Spanish to help participants learn how to make healthy food choices. Periodic social activities were held to support societal bonds and to increase interaction between participants. Events included potluck dinners that included fresh produce grown in community gardens, regular garden meetings to discuss planning and trouble shooting, birdhouse building, scarecrow making and pumpkin carving.

Results showed that 17% of overweight children decreased their BMI and 100% of participants within a normal weight range maintained their BMI. Parents reported an increase of 146% in household availability of fruits and vegetables, a 28% increase in the consumption of fruits, and a 33% increase in the consumption of vegetables. Limitations for this pilot program included the lack of a control group and nonrandom sampling.

LA Sprouts: A Garden-Based Nutrition Intervention Pilot Program Influences Motivation and Preferences for Fruits and Vegetables in Latino Youth⁴

LA Sprouts was a quasi-experimental pre-post test with a control group garden-based program for Latino children, ages 9 to 10 years, in Los Angeles, California. The goal of the program was to influence dietary habits and food preferences and to increase the daily consumption of fresh fruits and vegetables among participants. During the 3-month long study, participants received weekly, 90-minute training sessions that were designed specifically for Latino students at a local community garden. Control subjects received shorter and delayed classes. Participants reported an increased preference for vegetables

in general and an increased preference for the flavor of garden-grown vegetables vs. store-bought vegetables. Participants reported an increase of 1.8 points in their preference for vegetables when compared to control subjects who reported a decrease of 1.3 points their preference for vegetables. This intervention was not a randomized controlled trial and had a small sample size.

School-Community Garden Pilot Projects in San Diego County⁵

The School and Community Gardens Program in San Diego, California established a case study to determine the most effective elements of long-term community garden projects. Researchers identified characteristics of successful long-term community gardens and barriers to successful long-term community gardens. The program also compared and contrasted community garden barriers to those found in other joint use venues such as libraries and parks.

The success of gardens was dependent on the support of a few garden “champions.” The productivity of the school-community gardens waned as the garden “champions” left the program.

Isles’ Community Gardening and Nutrition Education Initiative ^{6, 7, 10}

Isles' Community Garden Initiative consisted of thirty-five community gardens and nine school gardens. Isles collaborated with local schools and YWCA afterschool programs to teach students how to become self-reliant and how to develop the necessary skills to grow food and thus improve dietary intake. After the project's first year, the community garden produced 7500 pounds of vegetables. Sales of cut flowers provided revenue of \$6000 and sales of perennials provided revenue of \$2000⁷. Researchers determined that for every \$1 invested the average community garden could produce \$6 worth of vegetables⁶. Additionally, the students were able to sell excess produce at a local farmer's market in order to finance field trips to places like university horticultural centers, flower shows and commercial greenhouses¹⁰.

Studies show that access to healthy foods in many urban neighborhoods is extremely limited¹⁷⁻²⁰. Many lower socio-economic families only have access to convenience stores that sell liquor, cigarettes, chips and pop. This proposed program will develop a school-based community garden in one elementary school in Flint, Michigan to help teach the students how to grow organic produce for themselves and their families. The goal of this program is to increase food security, increase knowledge of fruits and vegetables, increase preferences for and consumption of fresh produce and positively influence dietary habits for participants.

The proposed program

We will provide monthly vegetable-based or fruit-based snacks and nutritional lessons for the students to encourage healthy food choices. We will offer instructional support to teach the students how to design their garden and choose desirable crops that

grow well in this climate. We will facilitate seasonal gardening work sessions to plant the garden. We will facilitate weekly gardening work sessions to maintain and harvest garden. We will also encourage the students' families to take part in the project. We will recruit volunteers from nearby 4H clubs and local churches. In addition, if the garden is sufficiently productive, we will teach the students how to sell the excess produce at the farmer's market and we will use the proceeds to fund field trips to university horticultural centers and commercial greenhouses. This program was specifically designed for younger children, ages 9 to 10 years old.

This proposed program is unique because it will teach elementary school students how to develop their own school-based community garden. This proposed program will attempt to help students to decrease their BMI or maintain a healthy BMI. The proposed program will improve students' nutrition and increase the variety of produce that students prefer to consume. By teaching students how to grow organic produce, the proposed program will help students become more self-sufficient and increase students' food security. As suggested in the Health Policy Consulting Group Report⁵, the proposed program will recruit several "champions" and develop a succession plan so that the program will always have more than one person who has a vested interest in continuing the success of the garden. Drawing support from the local 4H clubs in the more rural sections of Genesee County will also expand the participants' concept of a community.

Logic model

Major inputs for the program will include funding for the project, vacant land for the garden, a study coordinator, a part-time assistant, teachers, community volunteers and parents (Figure). Garden supplies will include seeds and seedlings, all the necessary tools including shovels, hoes, trowels, rakes and hoses, fencing and fertilizer. Soil amendments and rototilling services will be donated from a local partner. The sample will consist of students in elementary schools in Flint, Michigan. Permission from the schools and IRB approval will be obtained.

The program will consist of five components. We will conduct nutritional lessons that emphasize the benefits of a diet that includes fruits and vegetables as in "LA Sprouts"⁴. We will offer monthly "fun" fruit and vegetable snacks. For instance, in September we could show the students how to make zucchini bread and in October we can teach them how to make baby carrots, cream cheese and almond slices that look like fingers for Halloween, etc. We will provide instructional support for developing school-based community gardens, including how to choose the right plants for the climate, when to plant hardy and tender crops, how to develop an organic garden for optimum production, and soil preparation as in "Growing Healthy Kids"³. We will conduct planning sessions with students to help them choose crops that they would like to eat and help them design their garden. We will facilitate planting, maintaining and harvesting the garden.

The program will include the following implementation objectives. The program will provide nutritional education to students with emphasis on benefits of fruits and vegetables. The program will provide monthly fun fruit and vegetable snacks to students.

The program will help students create an appropriate garden design for planting crops. The program will help students, participating family members and community volunteers plant a garden.

The program will include the following outputs. Teachers will conduct monthly nutritional classes with emphasis on benefits of fruits and vegetables. Monthly healthy snacks will be provided for all participating students. Teachers will provide weekly instruction on how to plan, plant, care for and harvest a garden. Students will design a garden and create a list of desired crops. Project participants and volunteers will cultivate one school-based community garden.

The program will produce the following short-term intended outcomes. Students will increase their knowledge about why good nutrition and increased consumption of fruits and vegetables will keep them healthier. Students will increase their consumption of healthy meals. Students will increase the variety of produce that they prefer to consume. If students understand how and why they need to make healthy food choices, they will be more willing to make the necessary lifestyle changes that can improve their health. Students will increase their knowledge about gardening and the program will be integrated with current school curriculum. Students will increase their understanding of gardening and their level of commitment to project and community. If students understand how easy it is to grow their own health fruits and vegetables, they will be more likely to continue the activity on their own. In addition, students and their families will have an increased availability of fresh, locally grown produce. Increased availability of fresh produce will help students and their families to eat a healthier diet and not be as dependent on local party stores to supply their food.

The program will produce the following medium-term intended outcomes. Students will decrease their obesity rates. Students will improve the likelihood that they will continue healthier eating habits into their adulthood. Students will increase their test scores. Integrating the school curriculum with the real-life lessons of planting and harvesting will help students improve their academic performance and improve their chances of getting a better education. Students will increase the likelihood that they will include gardening in their lifestyle. Learning how to garden will increase students' level of self-sufficiency and if they continue to garden, they can pass the behavior on to other members of the community.

The program will produce the following long-term intended outcomes. Students will experience better health, including a decrease in cardio-vascular disease, stroke, cancer and Type 2 diabetes. The overall community health will improve. The community will experience lower crime rates and higher property values. Students will have an increased likelihood of having better careers. Improved academic performance and improved education will improve the students' overall chances of having additional career opportunities (Figure).

Figure. Logic model including implementation and outcome objective

Logic Model: School-Based Community Garden Project in Flint, MI						
Implementation				Intended Outcomes		
Inputs	Components	Implementation Objectives	Outputs	Short-Term	Medium-Term	Long-Term
<ul style="list-style-type: none"> • Funding • Vacant Land for Garden • Seedlings • Seeds • Garden Tools: shovels, hoes, trowels • Hoses • Rental Equipment or Rototilling Service • Fencing • Fertilizer and /or Soil amendments • Community Gardener Volunteers • Teachers/Parents • Study coordinator 	Nutritional education with emphasis on benefits of fruits and vegetables	To provide nutritional education with emphasis on benefits of fruits and vegetables	Monthly nutritional classes with emphasis on benefits of fruits and vegetables	Increased knowledge about good nutrition and why consumption of fruits and vegetables will keep students healthy	Decreased obesity rates	Better health
	Monthly fun fruit and vegetable snacks	To provide Monthly fun fruit and vegetable snacks	Monthly healthy snacks for all participating students	Increased consumption of healthy meals	Improved likelihood that students will continue healthier eating into their adulthood	Healthier community
	Instructional support for developing school-based community gardens	To provide students with necessary instruction and support	Weekly instruction on how to plan, plant, care for and harvest a garden	Increased knowledge about gardening and integrating the program with current school curricula	Higher test scores	Better careers
	Instructional support for garden design and crop selection	To create an appropriate garden design and to plant crops that the students and their families will enjoy	Garden Design and List of Desired Crops	Increased understanding of gardening and increased level of commitment to project	Increased likelihood that student will incorporate gardening into their lifestyle	Better, healthier communities
	Seasonal gardening work sessions to plant garden	To plant a garden for the students of Doyle/Ryder Elementary School	One School-Based Community Garden	Increased availability of fresh, locally grown produce for students and their families	Decreased obesity rates	Better health
	Weekly gardening work sessions to maintain and harvest garden	To facilitate necessary and equitable division of labor	Work schedule			

Process and outcome evaluation design and methods

The process evaluation will use qualitative post-intervention focus groups with students, teachers and volunteers. We will interview all the teachers and a sample of students and volunteers for focus groups. Questions will be open ended and written at a 3rd grade level. The questions will assess satisfaction with the program, satisfaction with the materials, satisfaction with staff training and ways that the program can be improved in the future (List).

The outcome evaluation will use qualitative post-intervention focus groups with students, parents, teachers and volunteers. Questions will be open-ended and written at a 3rd grade level. We will interview all the teachers and a sample of students, parents and volunteers for focus groups. The questions will assess the effectiveness of the program by evaluating changes in participants', such as changes in participants' eating habits, behavior and academic performance eating habits, nutritional intake, food security, self-sufficiency and academic performance. (List).

List. Evaluation tools to be used during focus groups

Process evaluation tools – Students

- What was your favorite part of the garden project?
 - Design? Planting? Maintenance? Harvest?
- What was your least favorite part of the garden project?
- Would you be interested in doing a garden project again? Why or why not?
- How interesting were the lessons? Were they easy to understand?
- What would help you eat healthier?

Process evaluation tools – Teacher and Volunteers

- How did you integrate the program lessons into your regular curricula?
- How helpful were the teaching materials?
- How would the materials need to be revised for next year?
- Which activities were most popular with students? Which activities were most popular with teachers and volunteers?
- How difficult was it to encourage the students and volunteers to do the work necessary to maintain the garden? Were you able to find enough workers?
- How was the homegrown produce received? Which produce was the most popular? How would you adjust the selection?
- Would you need additional education to help you conduct the program next year?
- What difficulties were there, if any, with securing the garden lot and obtaining all tools and equipment?
- How well were the activities implemented?
 - Nutrition Lessons? Garden design? Site preparation and planting? Maintenance? Harvest?
- What barriers did you encounter?
- If we did this again, what would you change?

Outcome evaluation tools - Students

- How did the program help you learn about healthy eating?
- How has the program changed the way you eat or think about fruits and vegetables?

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- Which healthy snacks were your favorites? Do you ever have them at home?
 - Which garden grown produce was your favorite?
 - Would you eat fruits and vegetables more often if they were available?
 - How did your family react to the project? Were they interested in the fresh produce?
 - Has your family ever thought about planting a garden themselves?
 - What did you learn about designing and planning a garden?
 - What did you learn about soil preparation?
 - How has this program helped you to be more self-sufficient?

Outcome evaluation tools – Parents

- How has the program changed the way your child eats or thinks about fruits and vegetables?
- What types of fruits and vegetables does your child enjoy?
- How has your child's behavior changed?
- Would you serve fruits and vegetables more often if they were available?
- How did other members of your family react to the project? Were they interested in the fresh produce?

Outcome evaluation tools – Teachers and Volunteers

- How did the program improve the learning experience for the students?
- How has the program changed students' behavior?
- How has the program increased parental involvement?
- How has the children's willingness to eat fruits and vegetable changed as a result of the program?
- How has the program increased academic performance?

Discussion

The purpose of this article is to focus awareness on the role that school-based gardens can play as an intervention to decrease or prevent childhood obesity in low-income, urban families. This proposal could be used by practitioners in schools, to develop programs that will increase students' understanding of the importance of good nutrition while helping students develop the necessary skills to grow their own food to increase food security. Additionally, prior programs have demonstrated that it is possible to produce enough fruits and vegetables to feed the participants families and still have excess that can be sold at farmers' markets⁶. The proceeds from the sales can help create a self-sustaining program for future participants.

This proposed program will develop a school-based community garden in one elementary school in Flint, Michigan to help teach the children how to easily provide healthy food for themselves and their families for very little work or money. The goal of this program is to increase food security, increase knowledge of why consumption of fruits and vegetables can decrease health risks, increase preferences for and consumption of fresh produce and positively influence dietary habits for participants.

It is expected that the students will benefit from the program by an increased sense of self-sufficiency including the ability to provide food for themselves and their families.

The study *Fruit and Vegetable Intake among Urban Community Gardeners*¹ found that the average number of servings of fruits and vegetables consumed by community gardeners was 4.4 servings per day compared to 3.3 servings per day for non-gardeners. It is expected that students who participate in programs such as the one proposed in this article will benefit from improved nutrition, better health, decreased obesity rates and higher math and science test scores. If these students can learn how to grow, harvest, store and sell excess produce, they will have learned a valuable lesson about the rewards of hard work.

Additionally, the experience of working with their classmates and other student volunteers from rural Genesee County can increase the sense of community for the participants and volunteers alike. The schools and teachers may benefit from such a program because the community gardens will increase the students' investment in the school, improve behavior and test scores. The program will offer many opportunities to combine real-life experience with science and math lessons. Suggested lessons could include observing how seeds sprout and develop into full-grown plants, calculating the square footage of garden space for early geometry lessons, and developing profit and loss statements when excess produce is sold at a local farmer's market. The community may benefit from the program because community gardens can increase property values and lower crime rates^{9, 21, 22}. Teaching the students that they are able to growing food for themselves and their families, and providing them with the tools and support to produce high quality fruits and vegetables may be life changing for youth.

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The Land of Balboa: A Case Study of Humanitarian Aid and U.S.-Panamanian Relations

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Abstract

As citizens of a global community, it is both a duty and pleasure to interact with others of varying languages and cultures and to assist when possible to improve the human condition. These interactions between nations and individuals offer complexities that make this process dynamic and worthy of exploration. In the form of a case study, I will examine this notion along with several associated themes, including the successes and shortcomings of humanitarian aid and nongovernmental organizations, and varying perceptions of such assistance. I will specifically consider how these concepts apply to Panama and its easternmost region, Darién.

The Land of Balboa: A Case Study of Humanitarian Aid and U.S.-Panamanian Relations

The relationships between the nations of the world are often complex and daunting. Seemingly insurmountable differences can divide citizens of differing countries, preventing communication across cultures and languages. The inevitable process of globalization however, demands an outward-looking perspective from its constituents--one which strives to overcome these obstacles to promote understanding. For this reason it is imperative as citizens of a global community to aspire to embrace this challenge and to focus on the incredible similarities shared by all of its members.

One clear manifestation of this process is humanitarian aid. At a fundamental level, humanitarian aid could be described as global citizens recognizing the needs of others less fortunate, and striving to alleviate adverse circumstances by fulfilling basic needs. Despite this noble intent, such actions clearly have the potential to be distorted. In this respect, it is essential that individuals devoted to the causes of humanitarian aid examine themselves, their projects, and the reception of their efforts in order to ensure that their goals are being satisfied.

The improving conditions of Panamanians and warming relations between Panama and the United States offer the promise of a better future; however it is evident that challenges persist. This study aims to explore the aforementioned criticisms in general, but also with a focus on Panama in the form of a case study, specifically in the border region of Darién and the operations of the nongovernmental organization Global Brigades. As a nation of great regional importance and with a history intertwined with that of the United States, the relationship between the two nations is worthy of consideration when discussing Global Brigades as it provides an explanation for many of Panama's current situation, and the complex nature of the mission such organizations undertake.

History of US-Panamanian Relations

“Dios es panameño” [God is Panamanian] is a Panamanian colloquialism that is attributed to the nation’s favorable circumstances relative to other countries of the region. It refers in part to the country’s water--largely and uniquely safe for consumption, although this is contested--but is also an expression relating to general good fortune. In many ways it can be likened to English expressions attributing this fortune to divine intervention such as “God Bless America,” in which national pride is apparent. There is an alternate interpretation of this phrase however, one which refers ironically to the nation’s troubled history and current challenges. This is clearly a point of interest for those working to improve the circumstances of Panamanians.

To fully understand the current state of Panama and its present demands, it is important to consider its past. The influence of the United States in Panama, and Latin America as a whole, cannot be discounted as northern interests in the region can be traced to times even before Panama’s independence. Falling under various jurisdictions, the area of present-day Panama was known as the *Confederación Granadina* [Grenadine Confederation] and later the *Estados Unidos de Colombia* [the United States of Colombia]. The economic interests of the United States prevailed in 1846, when the Panama Railroad Company was authorized to construct a railroad that traversed the isthmus following the Bidlack Treaty, a source of conflict justifying the presence of the U.S. military (Weeks & Gunson, 1991, p.21). During the U.S. Civil War era, President Abraham Lincoln crafted the Panama Plan, calling for the colonization of the present-day Chiriqui province. The plan was never actualized, but was designed in response to anticipated coal deposits in the region and as a solution for the displaced freedmen, despite the protests of other Latin American states (Scheips, 1952, 421-444). Even prior to establishing formal statehood, the U.S. and Panama were linked, a relationship that persists into the present.

The creation of Panama as a sovereign nation was achieved for the very purpose of meeting U.S. interests. The isthmus had long been anticipated to be of great logistical value. The merit of constructing a canal linking the Atlantic and Pacific to be utilized by a capable navy was identified well before its creation by naval officer and strategist Alfred Thayer Mahan and provided sufficient incentive for intervention in the region (Chasteen, 2011). When the Hay–Herrán Treaty of 1903— the terms of which permitted the United States to develop a canal to be defended by Colombia- failed to be ratified by the Colombian government, the focus of the US shifted to the efforts of Panamanian secessionists who had previously strived to achieve independence 33 times (Weeks & Gunson, 1991, p. 21-22). Instead, the Canal Treaty was devised, which, in exchange for payment to secessionist leaders, the U.S. was granted

all the rights, power and authority ... which [it] would possess and exercise if it were the sovereign of the territory ... to the entire exclusion of the exercise by the Republic of Panama of any such sovereign rights, power or authority ... in perpetuity. (as cited in Weeks & Gunson, 1991, p. 24)

In this way, the birth of Panama was associated with the U.S. as were many other parts of her history.

It would be inaccurate to state that the U.S.-Panamanian relationship has been without tension. The interventionist policies of the United States, collectively referred to as the Banana Wars, were a source of turmoil leading to outright invasions of Panamanian territory such as in the case of Operation Just Cause. U.S. interests were dominated initially by the maintenance of the U.S. Canal Zone, the presence of which ensured the unhindered control of the Panama Canal (Conniff, 2001, p. 80). Omar Torrijos and Manuel Noriega have become infamous examples of Panamanian Heads of State with interesting ties to the United States. General Torrijos rose to

power via the ranks of Panama's National Guard, and achieved office as the result of a coup. While he advocated policies that promoted the democratization of the country, this was ultimately only a mask for continued military governance headed by Torrijos (Harding, 2001, p. 139). The Torrijos-Carter Treaties were the fruit of the two Heads of State that attempted to preclude U.S. intervention in domestic Panamanian affairs while still allowing the U.S. to defend the Canal Zone (Conniff, 2001, p. 135). Another significant development originating from the Torrijos regime is the 1977 Canal Treaty, which stipulated terms that the U.S. cede jurisdiction over the Canal Zone to Panamanian authorities after the year 1999 (Weeks & Gunson, 1991, p. 24).

Following the abrupt death of General Torrijos, his associate Manuel Noriega was to become the next Panamanian head of state. Under Noriega's oversight, Panama once again experienced far-reaching militarized governance (Harding, 2001, p. 155). In his book *Our Man in Panama: How General Noriega Used the United States—And Made Millions in Drugs and Arms*, John Dinges describes how Noriega was in many ways perceived as a tolerable evil (Dinges, 1990). With ties to the Central Intelligence Agency and Washington, Noriega permitted the use of Panamanian territory as a staging area for military operations in “Nicaragua and the destabilization of the Sandinista regime” (Smith, 2012, p. 122). The relationship with Noriega however, was destined for turmoil given the laundering of funds derived from narcotics trafficking as well as relations with Colombian cocaine cartels, the rigging of presidential elections, and political suppression via the Dignity Battalions (Smith, 2012, p. 122).

These anti-narcotic tensions were largely motivational for Operation Just Cause. The operation was conducted primarily to remove the dictator Noriega from power (Carpenter, 2003, p. 41). The intervention was also justified by concerns of upholding the terms of the Panama

Canal Treaty and to “safeguard American lives” (Carpenter, 2003, pp. 41-42). The invasion had profound implications. In accordance with its objective, Noriega was taken into custody and sentenced for drug charges in U.S. court (Musicant, 1990, p. 416). Moreover, the invasion symbolized a significant escalation of Washington’s antidrug campaign as well as the latest manifestation of the nation’s history of military intervention against Latin American states (Carpenter, 2003, p. 42). While there was popular support for the invasion among Panamanians due to anti-Noriega sentiments and aspirations for a quick economic recovery, other nations within the region maintained different perceptions of the intervention (Weeks & Gunson, 1991, pp. 89-92).

Despite the resolution of Operation Just Cause, resistance to the United States’ influence continued in the form of violent attacks against U.S. servicemen. This was the case of the December 20 Movement (*Movimiento de Diciembre 20*, or M-20), an organization claiming the identity of a “nationalist and revolutionary group,” represented such tensions within a population of varying opinions (as cited in Weeks & Gunson, 1991, p. 93). According to Maryland University’s National Consortium for the Study of Terrorism and Response to Terrorism (2008), M-20’s formation was the direct result of the U.S. invasion of Panama, the inspiration for its attacks on the newly established Panamanian government and U.S. facilities. Presently, the U.S. has shut down or turned over military installations in accordance with the provisions of the Canal Treaty, which called for a withdrawal as of the year 2000. The Panama Canal was transferred to Panamanian sovereignty under the auspices of the Panama Canal Authority. Since the turnover of the canal, the Hong Kong-based investment company Hutchinson Whampoa oversees operations. Panama has witnessed increased autonomy since this transition, but many Panamanians still claim significant indirect U.S. influence in Panamanian affairs, with some

stating that direct U.S. influence is looming—contingent on the status and security of the canal (Theodossopoulos, 2010).

Despite the mixed perceptions of the prior U.S. military presence, security and drug trafficking concerns remain, especially with the continued war on drugs. This has been a source of perpetual cooperation between the two nations, as well as with other partners in the region. Of particular interest to security concerns and to this study is the extensive cooperation between Panama's SENAFRONT [*Servicio Nacional de Fronteras*] in the easternmost province of Darién (Heyse, 2013). Today, Panamanian perceptions of the U.S. remain mixed at best.

Darién

Some of the observations in the following sections are qualified by time spent working in the region with the organization Global Brigades during a summer Global Health Internship. Throughout the duration of the internship, surveys were conducted in communities so that needs, wants, and desires could be assessed for the benefit of the population and organization. Moreover, during time spent in Darién, the progress Global Brigades was making and the community responses became evident, even in a region rife with challenges.

Despite the numerous developments concerning Panama, it must be recognized that the majority, 55.6 percent of the nation's population is situated in Central Panama (The World Bank, 1999). International interest is located here as well, as it is the seat of the nation's capital and the famous Canal. When asking Panamanians, northern Panama is known for its developed agricultural infrastructure as well as appeal to the tourist industry with destination hot spots such as Bocas del Toro. However, this is not the case with Darién, where a concentrated economic and governmental interest in the Canal region has left the rural periphery largely underdeveloped (The World Bank, 1999).

What economic development Darién has witnessed has been troublesome and exploitative at best. The region has witnessed concerning rates of deforestation as rural farmers turn to harvesting tropical hardwoods such as teak for income (Chapman, 2008, p. 17). Such unsustainable economic activity provides only temporary solutions to enduring economic blight, and serves to strip the region of one of its most precious resources—the jungle itself, integral to the lifestyles and sustenance of Latino and indigenous populations alike.

Although noted for its colossal lack of development, Darién offers stunning tropical beauty and biodiversity, providing possibilities of ecotourism and additional income. This underdevelopment however, bears consequences, especially when considering the well-being of inhabitants. The primary thoroughfare through the region, the Pan-American Highway, is hardly sufficient to reach distant communities in the region, many of which are resistant to such development in order to maintain culture and tribal lands. The Darién Gap, the single lapse of continuity in the Pan-American Highway, spanning from Alaska to Southern Argentina, stands as a testament to the lack of infrastructure in the region and also to the difficult terrain. In recent history, the Darién Gap has served the operations of FARC (*Fuerzas Armadas Revolucionarias de Colombia* [Revolutionary Armed Forces of Colombia]) rebels and narcotics trafficking, the latter of which has been a source of foreign interest and intervention in Panama.

The difficulty in Darién is hardly novel. Early attempts in establishing colonial settlements in the region proved to be both arduous and perilous. The Scottish colonization venture, New Caledonia, first established in 1698 quickly ended in disaster, offering death, disease, and weak logistical support in place of profits promised by Pacific markets. The failed colony instead brought heavy human and capital losses and compromised Scotland's ability to operate independently of England (Ibeji, 2011).

Despite the challenges inhabitants of Darién encounter, some indigenous peoples have occupied the region successfully even prior to European colonization efforts. Presently, Darién features rich cultural diversity with the prominent Guna (Kuna) and Embera-Wounaan tribes. These peoples have historically inhabited territory which spans the Panama-Columbia border and presently struggle to balance sustenance and retain culture, a crisis of particular concern for organizations aspiring to assist but not impose. The Guna people are known for their hospitality, *mola* artwork, and for the stunning San Blas archipelago which comprise part of their settlements. However, the tribe's history features tension and violence when the Guna people took action in the 1925 Tule Revolt to protest cultural encroachment—a struggle responsible for the great degree of autonomy enjoyed by the tribe today (Conniff, 2001, p. 87).

These struggles have proven to be lasting as the tribes still grapple with cultural and land issues, another concern for nongovernmental organizations operating in the region. The Guna struggle with legal disputes concerning their lands, with many individuals abandoning traditional tribal settlements in favor of developments alongside the Pan-American Highway. Establishing settlements away from traditional tribal lands is done to deter trespassers hoping to develop valuable real estate near the highway for their own benefit.

As will be discussed later, the concept of core and periphery areas in Panama is a recurrent theme. Its application is broad, including most obviously economic interests, as there exists a tendency to focus resources and efforts into the nation's most profitable assets, the capitol and canal. The consequence is a region which endures chronic underdevelopment and sluggish economic activity, with entire communities left with few means to provide for themselves financially. As there is little incentive to invest in Darién, it was evident throughout the course of work in the province that many Panamanians here are fully occupied in meeting

basic needs. In many communities, large portions of the day were devoted to agriculture to sustain life, and what little remained after was taken to market for meager earnings. In the case of indigenous communities, tourism is increasing but still limited, due in large part to the lacking infrastructure. Instead, the tribes have ingeniously began to utilize their own cultural and heritage for income, offering crafts and artwork in markets.

This struggle to adapt to an ever-changing economy carries into other issues as many Panamanians of Darién find themselves without means to address basic health concerns, waste management issues, variable and dangerous water sources, and severe challenges in education among others. It is not a lack of awareness of these issues, as the people of Darién are incredibly resourceful and cognizant (and with brilliant solutions) of the challenges that face present and future generations. Rather, it is a preoccupation with more immediate needs as a result of economic circumstances coupled with insufficient government initiatives that is at fault. When speaking with community members, the role of organizations such as Global Brigades in empowering communities to mobilize with incentives and methodology was blatantly clear.

The core and periphery extends into cultural considerations as well. As an international hub of commerce, Panama City's influence and western culture extends to the comparatively tranquil jungles of Darién, the ancestral lands of its indigenous inhabitants. While speaking with members of indigenous communities, many of the older generations were concerned with the preservation of a way of life that predates the original European arrival. Thus, the difficult situation indigenous populations navigate, one in which sustenance and cultural preservation must be balanced, is of utmost importance. This was another strength observed in the operations of Global Brigades, which maintains a decidedly secondary role in the endeavors of the community in an effort to preserve rather than impose.

Effectiveness of Foreign Aid

“La ruinas de buenas intenciones en Darién” [The ruins of good intentions in Darién] is a phrase spoken in communities of the region. The expression summarizes what is all-too-often experienced in Darién—the remains of previous humanitarian projects left in disrepair. Whether initiated due to political ambitions to secure votes or by purely philanthropic endeavors, humanitarian efforts are not new to Darién. Manpower, resources, and know-how have all visited the region in an attempt to mitigate crises, to improve the condition of fellow man, and to alleviate suffering—truly noble causes. It is this exact mentality however, one in which assistance is temporary and not lasting, addressing current issues rather than their fundamental cause, which leaves many groups struggling as though the assistance had never occurred at all. With these efforts in mind, one wonders why communities in Darién, the “forgotten province,” still have issues with basic necessities such as potable drinking water (Chapman, 2008, p. 17).

The situation of Embera Puru offers one such example. Adjacent to the community gathering house, an open-walled structure of thatch roofing complete with benches, stands a modern-looking device. The costly and solar powered system was designed by a foreign engineering company hoping to make an impact on rural communities, and ideally serves to transport water from a source within one mile of the village limits. The water is then subsequently stored in a tank near the community center. After conversing with locals, it was clear that the project had not met the expectations of the community as there was a period of several weeks in which the pump was nonoperational. The repair was a simple press of a button. According to the leaders of the tribe, the system was installed, with little instruction regarding maintenance, leaving the tribe unable to service their ruin of good intention. The device to date is unreliable, and no technicians to service the pump or solar technology it uses are available. In

addition, after speaking with Global Brigades staff, interns were informed about the many flaws of solar power in such conditions as jungle vegetation can render the technology useless.

These findings indicate the need for practical solutions to be implemented by communities. This pursuit culminated in a rainwater collection system conceptualized by interns and staff of Global Brigades. The system was designed to address the seasonal scarcities and questionable quality of local water by taking advantage of the massive quantities of rainfall in Darién. The system is affordable, compatible with the existing week-long brigade structure, and constructed with local skills and materials.

Another case involves the Wagandi Guna community, in which a government-sponsored water system consisting of a dam, pump, aqueduct, and storage tower was constructed. However, months after construction, seasonal flooding destroyed the dam and a fallen tree had rendered the pump in need of repair—both of which are far too costly for the tribe to consider. Thus, community members find themselves in a situation very similar to that in which they were before the project's construction.

This issue is hardly localized to Darién. In *Mountains Beyond Mountains* (2004) author Tracy Kidder discusses the international humanitarian work of Dr. Paul Farmer. A theme of discussion in the novel is “inappropriate technology” and its ability to instill hesitance in those that would otherwise rush to aid populations in need. The concept refers in this case to the use of excessive and costly equipment to unsustainably address the needs of a community, should they be sanitary, medical, agricultural, or of any other field. In Dr. Farmer's case the fear of wasting resources on inappropriate technology, systems too complex to be used, repaired, or maintained by a community, is an irrational obstacle when considering that the very lives of people depend on action. Despite Farmer's rejection, it is a very real concern when motivating partners in aid

and development. While on nowhere near the same global scale, these two cases from Darién are examples of the very same issue.

The appropriateness of technology is something that is considered by Global Brigades when designing programs for rural communities. Whether constructing latrines, schools, water treatment or storage projects, the materials and labor (save the volunteers) are sourced locally. This ensures that the community has the access to resources for maintenance and repair should the need arise, or to construct similar projects should the members feel empowered to do so. Additionally, members of the community are encouraged to be involved in the construction of the project and to be invested in its maintenance. Members are required to have some monetary investment and will be supervised by committees of community peers to ensure project maintenance. In this way, Global Brigades aims to empower the community with the organization's own resources to confront issues in a sustainable way that lasts, even when the organization transitions to other areas in need.

Global Brigades' model of sustainable development is said to be the product of the trials of the very organization and others with similar ambitions. The organization observed historical successes and shortcomings to determine a model to be implemented. The Global Brigades model is not without disadvantages, however. One could argue that Global Brigades' model of sustainable development, one that favors a holistic approach to tackling community issues, can tie the organization into relatively fewer communities for longer periods of time, thus restricting the number of communities able to be impacted by volunteer efforts. This limitation has warranted discussion in the past, motivating Global Brigades to consolidate its area of operations in Panama to more effectively partner with communities holistically (Global Brigades, 2011). As

with many nongovernmental organizations, Global Brigades is also vulnerable to economic forces as it is highly dependent on the donations of volunteers to sustain operations.

According to Global Brigades' *Annual Report 2011*, in which the organization releases official data concerning the operations of its holistic model of sustainable development, the organization had a number of its brigade disciplines aiding community members. Throughout the duration of 15 Medical and Dental Brigades, 3,785 patients were served and data was collected to assess future brigade needs and destinations for mobile medical clinics. The Public Health Brigade program was introduced to Panama at a later date and has since been responsible for sustainable waste management projects such as compost latrines and water collection and treatment systems which are maintained by communities. Business Brigades, tasked with providing financial services, business guidance, and organizing community cooperatives with a Community Investment Fund, mobilized 23 brigades in the year 2011 (Global Brigades, 2011). The Environmental Brigades program organized seven brigades, planting a total of 600 trees and provided many hours of education in support of objectives ranging from reforestation, sustainable agriculture (permaculture), and waste management (Global Brigades, 2011). Law Brigades, which focuses on providing rural families access to legal resources to resolve civil and property disputes, completed six brigades throughout 2011, in which 37 families began the land titling process as a result of its services (Global Brigades, 2011).

Global Brigades is by no means the only nongovernmental organization operating within Panama and the confines of Darién. Regarding rampant deforestation, organizations such as Planting Empowerment also utilize a sustainable process, one which empowers local farmers to benefit from their own harvests while preserving the biodiversity and native arboreal composition of the region in the process (Chapman, 2008, pp. 17-18). With well-intentioned

foreign investment coupled with a detailed knowledge of the region only inhabitants can provide, a sustainable solution in which all parties benefit has come to fruition.

The deforestation is the result of the desperate struggle for sustenance in which many Panamanians are engaged, but is hardly an isolated matter. According to The World Bank's Poverty Assessment report, indigenous groups are recognized as being especially afflicted, including the aforementioned Embera-Wounaan and Guna tribes, with Darién named a region of especially high poverty rates (1999). Additionally, the report mentions a staggering amount of troubling observations, including: a "strong correlation between poverty and child malnutrition" involving "over 16% of all children under five (close to 50,000)," "probable wage discrimination" against indigenous workers, disparities in education and healthcare, and lower life expectancies among the poor (1999, pp. ii-iii). With regards to action, The World Bank recommends that "first priority should be given to: the rural poor, the indigenous... poor children and youths, undernourished children, and pregnant and lactating women" in accordance with the Panamanian government's Poverty Strategy and Action Plan (1999, pp. vi-vii).

While nongovernmental organizations maintain a multitude of objectives and specialties, the ways in which the human condition is evaluated also vary. Often these measurements take the form of indices, such as the Human Development Index, assembled by the United Nations Development Programme. The HDI considers lifespan and the quality of health, access to education, and standards of living. Panama ranks 60th in the world with a score of .78 as of 2012 (United Nations Development Programme, 2014). When considering historical index scorings, it is encouraging to note that HDI values have increased in Panama, however these promising findings are not indicative of regional variation (United Nations Development Programme, 2014).

The UN also attempts to account for aspects the HDI may fail to represent, and so modifies HDI scores, such as in the case of the Inequality-adjusted Human Development Index (IHDI) introduced in 2010 (United Nations Development Programme, 2014). With inequality, IHDI values fall below HDI values- the difference is proportional to the extent of inequality. The 2012 data shows a decrease from .78 to .588, a loss of 24.6%, which drops the nation's standing 15 places on the index (United Nations Development Programme, 2014). This illustrates the inequality Panamanians currently face.

The UN-affiliated World Bank, responsible for providing financial means to developing countries to reduce poverty, has its own set of measurements. One measure of significance is the Gini coefficient (or index or ratio), which serves to measure income distribution within a nation. A score of 0 indicates perfect equality while 100 signifies a higher degree of inequality in income distribution. As of 2010, Panama has an index scoring of 51.9, a relatively high value when compared to other ratings (The World Bank, 2014; The CIA World Handbook, 2014). This relatively high rating (suggesting income inequality) is a testament to the diversity in development between Panama's urban center and rural periphery. The high Gini score also reflects the significant decrease from HDI to IHDI scorings previously mentioned.

Global Brigades too has its own extensive survey conducted in every home the organization intends to become involved with. Additionally, data is collected when patients are admitted to mobile health clinics during medical brigades, so that the need for additional follow-up brigades can be assessed and proposed to community members. In this way, the data collected provides an intimate view of a given community's challenges, an integral part of fulfilling the organization's tenants of service and empowerment.

According to the World Health Organization Global Health Observatory's Data Repository, several indicators of public health have displayed a progression in medical infrastructure and access to care (2013). Certain measures including declining mortality in under five years of life, increasing per capita expenditure on health, above-average life expectancy, rising use of health services (contraception, antenatal care, births monitored by skilled health personnel) and increasing portions of the population having access to and using improved water and sanitation are indicative of increased public awareness and efforts to improve the quality of life and public health in Panama (2013).

However, serious concerns exist when considering comparable measurements of other regional nations. According to the World Health Organization Data, grave challenges still exist in Panama. The health workforce per 10,000 citizens, including physicians and nurses, remains lower than the regional average, suggesting that the lacking medical infrastructure is an issue that extends beyond the confines of Darién (2013). Additionally, even though under-5 year mortality rates have been declining since 1990, Panama's rate is higher than the regional average, indicating that the country can likely take measures to improve early-life medical care (Global Health Organization, 2013). Despite Panama's challenges, the current state of public health and medicine should be viewed optimistically. The current medical situation compares to others of the region by many measures, and has displayed improvement in recent years. This is an excellent environment to not only improve citizens' access to medical care, but to improve awareness through education and community activism.

Implications and Criticisms of Foreign Aid

While humanitarian aid serves to unify the international community as well as to strive for the betterment of the human condition, there are implications and criticisms of such

international action. When considering the U.S.-Panamanian relationship, an accord plagued by what many Panamanians regard as blatant colonialism, U.S. presence and intervention is viewed with varying degrees of welcome and disdain (Theodossopoulos, 2010). Theodossopoulos also found that in some cases, Panamanians' interpersonal feelings toward U.S. citizens were influenced by these troubled political relations (2010). It is clear then why organizations that are directly associated with foreign (especially that of the United States of America) governments, such as the Peace Corps and USAID, naturally draw suspicion and may encounter varying cooperation and receptivity.

Throughout Darién, communities and their members were incredibly receptive to Global Brigades and its volunteers. In fact, volunteers were permitted to enter the homes and converse with community members to become more personally acquainted with one another, to share in cultural discovery, and discuss the impacts the organization's presence has had on the lives of both volunteers and Panamanians. As Theodossopoulos (2010) noted, difficult times were acknowledged, both in the past and present, but attitudes towards individual *gringos* were both appreciative and receptive.

Within the United States, the government sponsors a variety of foreign assistance programs, whose activity has been increasing due to "concerns that impoverished and failing societies could offer breeding grounds or havens for terrorists" (McMahon, 2007, para. 1). According to a USAID publication, five core goals of U.S. foreign aid include: "promoting transformational development, particularly in governance, institutional capacity, and economic restructuring; strengthening fragile states; providing humanitarian assistance; supporting U.S. strategic interests, especially in countries such as Iraq, Afghanistan and Pakistan; and mitigating global and international ills, including HIV/AIDS" (as cited in McMahon, 2007, para. 15). In

fact, when consulting the Foreign Operations Appropriations Bill for the fiscal year 2006, \$20.7 billion was allotted for foreign assistance (McMahon, 2007). The strategy of government foreign assistance is to coordinate various agencies including the Millennium Challenge Corporation, USAID, the State Department, the Peace Corps among others, and fund other nongovernmental organizations operating abroad.

Despite the vast funding of foreign assistance programs from the U.S.—the top donor within the Organization for Economic Cooperation and Development (OECD)—it had a comparatively low ranking in donations when considering percentage of GNP in 2006 (McMahon, 2007). In light of these criticisms, it must be conceded that a substantial amount of aid is channeled through the U.S. military and thus not accounted for in these reports.

Moreover, the effectiveness of foreign aid in improving the U.S. image in other nations such as Japan offers promising changes in perceptions at times, while in other cases, specifically in Indonesia and Pakistan, findings “suggest that the impact of humanitarian efforts has its limits” (Wike, 2012, para. 1). From the perspective of a government desiring to improve its image internationally, it becomes apparent that humanitarian efforts are not always effective in securing the support of inhabitants, hardly a motivation for government-sponsored aid.

In an article published by the Council on Foreign Relations, the effectiveness of foreign assistance is mixed (McMahon, 2007). The U.S. government is criticized for historically enriching dictators, such as “Mobutu Sese Seko of Zaire and Pakistan’s Mohammed Zia ul-Haq” to promote strategic interests during the Cold War (McMahon, 2007, para. 18). However, to ignore the numerous successes would be to ignore the eradication of smallpox, near-elimination of polio and immunization of children worldwide (McMahon, 2007).

This emphasizes the essential role that nongovernmental organizations maintain in that they may be free from tensions that may arise from these national and political associations, instead able to operate focusing only on the objectives at hand in theory—the improvement of the human condition via the organization’s respective focus. Acceptance and an embodiment of the organization’s vision must exist in the community for lasting results. In the case of Global Brigades, the vision of the community and organization become shared, providing a basis for collaboration, communication, and satisfaction of all parties involved.

To state however, that tensions between host governments and nongovernmental organizations do not arise would be inaccurate. The Overseas Development Institute (ODI) mentions that these relations “can often be strained” as questions of sovereignty and self-reliance arise (Taylor et al., 2012, p. 2). For this reason, organizations must have the capacity to not only effectively resolve mission-oriented issues, but also those involving the host government.

According to the Overseas Development Institute, the global system of humanitarian action comprises mostly, considering presence and resources, of a small group of very large organizations including those of UN origin, the International Movement of the Red Cross and Red Crescent, and five other large NGOs (Taylor et al., 2012). Currently, it should be noted that there are approximately 4,400 total organizations worldwide currently operating and that together the organizational expenditures were greater than \$2.7 billion in 2010 (Taylor et al., 2012). With such a vast sum of money and resources devoted to the cause of improving the human condition, it is crucial to understand to which locations and issues the resources are being allocated. The ODI acknowledges that these resources are still insufficient and unable to address rising demands attributed in part to increases in climate-related natural disasters, and that they are devoted continually to a “small number of protracted crises: Sudan, Pakistan, Ethiopia,

Somalia, DR Congo, Afghanistan, the occupied Palestinian Territories, and high-profile natural disasters such as Haiti” (Taylor et al., 2012, p. 10).

An area of criticism and contention lies in the fiscal efficiency of nongovernmental organizations. The ODI concedes that “many agencies have made real efforts to increase investment in operational capacity and quality of human resources” (Taylor et al., 2012, p. 11). The proportion of budgets derived from donations that go to operational costs has historically been a point of criticism in some organizations, making these efforts a welcome development. Issues such as corruption present clear challenges to the efficiency of an organization, but even a seemingly well-intentioned endeavor, such as “the constant drive to minimise administrative costs” had adverse consequences, leading to chronic underinvestment in some cases (Taylor et al., 2012, p. 11).

Global Brigades’ structure allows it to evade criticisms which can befall such top-heavy transnational nongovernmental organizations. Administratively, the organization utilizes staff from both the donor (U.S., Canada, and various European partners) and host nations, providing a full spectrum of expertise and resources, although limited so as to not detract from resources otherwise channeled to operations. A cursory review of Global Brigade’s finances in its *Annual Report 2011* reflects this strategy. Among the organization’s expenses, general administration, salaries & related, and fundraising & credit card fees are dwarfed by operational expenses such as program and volunteer travel grants (Global Brigades, 2011). With the organization’s projected growth, maintaining such fiscal discipline will continue to be essential to ensure the organization’s impact continues to be lasting.

Still another concern is the specific issue with which the organizations focus themselves. The ODI reasons that “there is an evident tendency within the humanitarian system towards

sudden bursts of attention to particular issues” and that “it was a challenge to maintain sufficient attention within organizations on these issues that need to be mainstreamed” (Taylor et al., 2012, p. 12). It is clear that a number of obstacles that face the global community are chronic in nature, and require sustained attention and effort for any progress to be achieved.

Lastly, concerns over the enduring effects of humanitarian action exist. In the *ODI's The State of the Humanitarian System* (Taylor et al., 2012), it is noted that the “paucity of investment in local and national capacities was a repeated concern, as were the top-down orientation of the system and the risk of undermining local capacities” (p. 46). If local governments and community are left in a debilitated state, the intervention’s effect is compromised. It must also be mentioned that that improvement in these areas has been witnessed, with organizations making efforts to continue to make improvements (Taylor et al., 2012, p. 11). Continual progress in this respect must be ensured.

Donato Ndong-Bidyogo, a native of Equatorial Guinea well known for his literature and articles for the Spanish newspaper *El País*, often refers to flawed approaches in humanitarian aid and development issues in his works. While discussing affairs of his nation and the region, he offers a perspective on the changing nature of humanitarian aid, specifically on the willingness of the international community to provide loans that consequently worsen a region’s predicament. While speaking primarily about the situation in Africa, Ndong specifically details a tendency of some governments to use foreign investments for their own benefits, leaving the intended recipients to suffer (Ugarte & Ndong, 2004). The need for organizations and initiatives to have a significant presence in the host country is clear, and would be conducive to ensure that resources are utilized effectively.

Closing

A traditional Tanzanian folktale describes an unfortunate situation in which two monkeys naively attempt to rescue fish struggling to escape a stream in which they are hopelessly trapped (Healey, 2014). Upon freeing the fish, the monkeys are despaired to see all of the rescued perish, and only regret offering assistance too late to have saved the struggling fish from drowning. Such a scenario could not be more relevant to the international community as its members strive to understand one another, and in the case of the humanitarian aid and development sector, attempt to prevent other parties from drowning.

Doing this remains an extremely difficult task despite improving modes of communication. Linguistic, cultural, geographical and a number of other barriers remain even today, and the world's pressing issues certainly are not vanishing. Thus, continued humanitarian action is and will continue to be necessary. To ensure the needs of the world are being met, an adequate method of self-evaluation must be implemented. The most effective means of ensuring progress is to assess the current situation in a manner independent of influential factors. In observing the progress made to date, the organizational structure, fiscal efficiency, and perceptions of the organization must all be taken into consideration.

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Lisa Montgomery

Ernst Ludwig Kirchner's Philosophy in Art

Meeting of Minds

May 9, 2014

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ABSTRACT

This presentation concerns German Expressionism, specifically the works of Ernst Ludwig Kirchner, (1880 – 1938). Kirchner was a founding member of the group called “Die Brücke” or the Bridge. Kirchner was responsible for and wrote Die Brücke’s manifesto (1906), in which he stated that they were a new generation “who want freedom in our work and in our lives.”¹ These artists worked in a collective societal setting, sharing not only ideals and philosophy but also a bohemian lifestyle of free love and nudity. In this presentation, I will explore Kirchner’s works from Dresden and Berlin produced between 1909 and 1913. The question that I seek to answer is: How are Ernst Ludwig Kirchner’s philosophies, beliefs and lifestyle embodied and displayed in his works of art created in Dresden and Berlin from 1909 to 1913? It is my intention to show that through a review of his paintings and writings by and about him, we can see what he came to believe; that art can and should be created without rules, restrictions or conformity and in understanding this we can see the effects of these tenets on his works of art.

ERNST LUDWIG KIRCHNER

Ernst Ludwig Kirchner was born on the 6th of May, 1880, in Aschaffenburg, Bavaria. His early life was chaotic with the family moving from place to place. His father was a professor and worked in a technological school, which Ernst attended. Kirchner’s parents were early on somewhat supportive of his desire to be an artist but wanted him to pursue a career and get his formal education first, so in 1901, he attended the Königliche Technische Hochschule in Dresden to study architecture. It was in the city of Dresden that Kirchner first started to discover his true talent and philosophy for life. Kirchner often spoke of the time studying in Dresden as “a cover for his involvement and further training in art.”² In Dresden, Kirchner met some likeminded people who shared the same radical ideals as he did: Fritz Bleyl, Erich Heckel, and Karl Schmidt-Rottluff. These ideals were to pursue their study of art unencumbered by the restraints and notions of the past. Armed with a newly found freedom, these men founded one of the greatest expressionist groups of the period, Die Brücke.

DIE BRÜCKE

In 1905 this band of rebels came together to form a group known as Die Brücke. These artists all wanted to challenge the established rules of society and shake up the artistic world. The name of the group was chosen to “establish a new aesthetic which would serve as a bridge

¹ Nina Miall, *Kirchner Expressionism and the City: Dresden and Berlin 1905-1918* (New York: Museum of Modern Art, 2003), 5

² Ibid.

(hence the name Die Brücke) between the Germanic past and the modern present.”³ The group felt that as German artists, they respected and wanted to carry on the tradition of German art. The group drew influence from the following fellow Germans: Albrecht Dürer, Matthias Grünewald and Cranach the Elder.

The group met in Kirchner’s studio in Dresden. Fritz Bleyl said of Kirchner’s studio that it was “that of a real bohemian, full of paintings lying all over the place, drawings, books and artist’s materials – much more like an artist’s romantic lodgings than the home of a well-organised architecture student.”⁴ Ernst Ludwig Kirchner wrote the group’s “manifesto” or statement of beliefs in Dresden in 1906. It was then carved into wood and hung in the studio as a reminder to the group of that for which they stood.



Figure 1: *Program of Die Brücke* (1906). Woodcut.

The translation of the manifesto is: “Believing in development and in a new generation both of those who create and those who enjoy, we call upon the young to come together, as young people, who will bear the future, who want freedom in our work and in our lives,

³ Ibid.

⁴ Ibid.

independence from older, established forces. Anyone who conveys directly and without falsification the powers that compel him to create is one of us.”⁵

The group worked in Kirchner’s studio in a bohemian, voyeuristic and liberal lifestyle. Painting and frolicking in the nude, the artists practiced free love, were able to study the nude fully and began to philosophize over the current events of the time. This was exactly what the group had in mind from their manifesto. In 1911, the group left Dresden and headed for the big city of Berlin and all of the excitement and wonderment it held. It was here that Kirchner created some of his most stunning and important works of art.

KIRCHNER’S PHILOSOPHIES AND BELIEFS

When Ernst Ludwig Kirchner wrote out the manifesto of Die Brücke, it is my belief that he was really pouring out his soul into what he hoped the group and expressionism in and of its self would accomplish. Ernst Ludwig Kirchner was not a prolific writer; we have statements, quotes, letters and the manifesto from which to gather our knowledge of his personal belief system. First, we will examine the manifesto itself. The most telling statement written out is “...want freedom in our work and in our lives, independence from older, established forces. Anyone who conveys directly and without falsification the powers that compel him to create is one of us.” Freedom and expression were first and foremost in Kirchner’s ideal. He no longer wanted to be bound by the requirements of the old guard. Instead he wanted to make anything and everything a possibility, no limitations. This shows through in how he set up his studio with no particular order or scheme. The chaotic setting was meant to express a realm of “no rules”. Rules implied limitations and restrictions, something in which Kirchner was not willing to participate. Kirchner believed that this applied to clothing as well. He and others in the group painted and worked in the nude, using nude models. This he believed allowed the study of the body without inhibition. According to Larissa Borteh in *The Art Story, Ernst Ludwig Kirchner Biography, Art, and Analysis of Works*, “Studio meetings, however, would often devolve into casual lovemaking and general nudity.”⁶ Kirchner “worked feverishly, without noticing the time of day.”⁷ This again shows us his desire and belief that even traditional work time was not something that had to be observed or adhered to by an artist.

Kirchner’s quotes also lead us to understand his mental workings. “It seems as though the goal of my work has always been to dissolve myself completely into the sensations of the surroundings in order to then integrate this into a coherent painterly form.”⁸ Kirchner wanted to become one with the art itself and by being so fully immersed in his work, Kirchner seemed to paint without thinking. “A painter paints the appearance of things, not their objective correctness; in fact he creates new appearances of things.” There is no doubt that Kirchner

⁵ Ibid.

⁶ Larissa Borteh, *Ernst Ludwig Kirchner Biography, Art, and Analysis of Work*, 2013.
<http://www.theartstory.org/artist-kirchner-ernst-ludwig.html/>.

⁷ Jill Lloyd, *German Expressionism: Primitivism and Modernity* (London: Yale University Press, 1991), 23.

⁸ Borteh, *Ernst Ludwig Kirchner Biography, Art, and Analysis of Work*.

created new appearances in his works, they are unlike any others of his day. Kirchner was deeply influenced by African primitive art at the time. According to an article in *Visual News*, "The Bridge to Utopia: die Brücke's Wild Expressionism", Kirchner, "believed the source of inspiration was the human instinct and impulse, and associated with the needs and circumstances that weren't tied to society's rules."⁹

Besides the writings that are attributed to Kirchner from Die Brücke, we can also glean his beliefs and life philosophy through personal letters that he wrote during this time period. Kirchner wrote to a doctor, who was a philosopher and art lover, "the artist and philosopher are creating their own world."¹⁰ Kirchner was obsessed with the notion that breaking down the traditional rules was in effect the only way for the true expression to come out in the artist's work. He did not want to be bound or controlled by form or function but rather wanted to experience something he referred to as the "mystery."¹¹ He describes it in this letter as something that happens when "we talk to a person or stand in a landscape or when flowers or objects suddenly speak to us."¹² In another letter to a Miss Nele, Kirchner writes "While developing artistically one will discover among the infinite riches of the world's art feelings and points of view paralleling one's own (the discovery is made intuitively). To penetrate these by means of drawing helps one to understand oneself and ripens one for further growth."¹³

KIRCHNER AND PRIMITIVISM

Kirchner began to be influenced and his work shaped by the art of Africa and Pacific Island countries. He began to study primitivism and the shapes and forms created in these works. Primitivism is a term used to describe art that is regarded as primal, ancestral, fertile and regenerative. Often the art is sexual in nature and depicts an individual or animal's face, features or body in a distorted fashion. The work of Paul Gauguin's Island life in particular inspired Kirchner's interest in Primitive art and how to depict it in his contemporary works. A study of Primitive art shows us a lack of specific structure or traditional form, something that Kirchner found appealing and in line with his no rules beliefs. Kirchner's form began to take on this

⁹ Christina Tsevis, "The Bridge to Utopia: die Brücke's Wild Expressionism," in *Visual News*, June 4, 2012, <http://www.visualnews.com/2012/06/04/bridge-utopia-expressionist-group-die-brcke-early-20th-century/>

¹⁰ Victor H. Miesel, *Voices of German Expressionism* (Englewood Cliffs, New Jersey: Prentice Hall, 1970), 19.

¹¹ Ibid.

¹² Ibid.

¹³ Ibid., 21.



Figure 2 : Primitive African Masks

expressive design. According to Jill Lloyd's book *German Expressionism, Primitivism and Modernity*, "He seems to be treading a fine line between innocence and self-awareness, between his vision of a liberated 'natural' state, whereby the figures take on the colours of surrounding nature, and the inhibitions of civilization."¹⁴

KIRCHNER'S ART 1909 - 1913

In trying to make a connection between Ernst Ludwig Kirchner's beliefs and life philosophies and how they are represented in his works of art, we must select a period where we can truly see this played out. Kirchner's artistic life began prior to 1909 but it is really in the years from 1909 to 1913 that we see him cultivate and develop a true sense of himself. We see this evidenced in his expression in painting and in his formation and work within the group, Die Brücke.

¹⁴ Lloyd, *German Expressionism: Primitivism and Modernity*, 112.



Figure 3: *Street, Dresden* (1908).

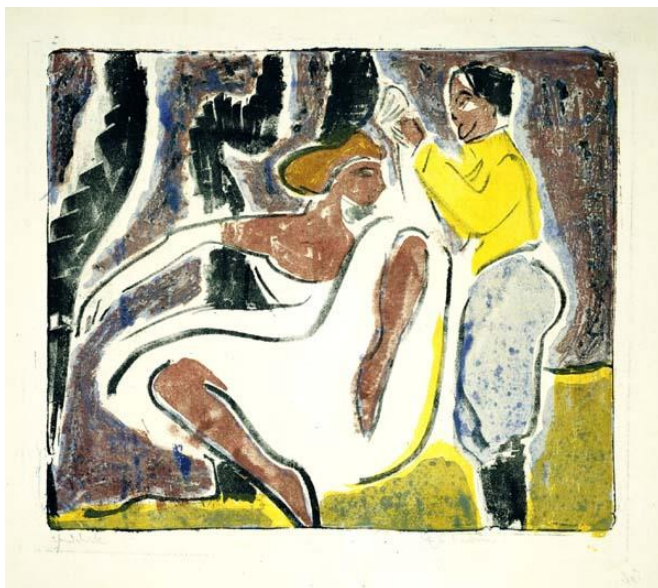


Figure 4: *Russian Dancers* (1909).

Both of the above works were done shortly after the formation of the group and demonstrate how Kirchner begins to play with both shapes and colors. We can see that he has begun to abandon the portraiture formats of realism for a more loose interpretation of human form. He is no longer painting a specific portrait; he is recreating the scene with abandon. Kirchner applies this no rule theory to his paintings by working the entire canvas into the scene, the entire background mixes with and merges with the images in the painting. Kirchner's works in Dresden still employ a somewhat traditional shape for the human body. It is when Kirchner makes his move to Berlin that he truly begins to experiment more fully with lines, shapes, forms and bright, unusual colors.

In the following painting entitled, *Red Elizabeth Bank in Berlin* (1912), Kirchner's work takes on this otherworldly distortion. We recognize the scene, but it is unlike any other we have ever seen. The figures represented are unrecognizable in form but we know they are human beings standing on a bank of a river in Berlin. Kirchner also begins in Berlin to express himself through color, dropping what would have been traditional or the norm and selecting bright, bold and unrealistic shades to portray his desired expression.



Figure 5: *Red Elizabeth Bank in Berlin* (1912).



Figure 6: *The Street* (1913).

Street, Berlin 1913 is perhaps one of the most famous works by Kirchner from his time in Berlin. Here we see the full effect of the primitivism that he has studied and how he has turned the people of the streets faces into masks. The lines of this work are abrupt and sharp and the background is understated and irrelevant. Kirchner is expressing in this work the animalistic by drawing the faces of the men and women as more creature than human. We are reminded that he wants to capture a moment but not in the traditional sense for his moment is one of a fantastical

and limitless world. Kirchner wrote of his technique “First of all I needed to invent a technique of grasping everything while it was in motion...I found new forms in the ecstasy and haste of this work...represented everything I saw and wanted to represent in a larger and clearer way. And to this form was added pure colour, as pure as the sun generates it.”¹⁵



Figure 7: *Berlin Street* (1913-14).

CONCLUSION

Ernst Ludwig Kirchner was one of the greatest expressionist painters of the period. His works are visually some of the most interesting and thought inspiring to me and yet his life was short and tragic. While he was able, I believe, to fully render in his paintings his expressiveness, his personal life suffered immensely. Kirchner left Berlin and volunteered for service for World War I in 1914. Unfortunately his time in the service of his country was shortened by a nervous breakdown. He spent a couple of years in and out of sanatoriums in the Swiss Alps. Once

¹⁵ Miall, *Kirchner Expressionism and the City: Dresden and Berlin 1905-1918*, 5.

released from the mental hospital, he settled in Davos, Switzerland and spent the rest of his life living like a hermit in a small house in the Alps. One could suggest that the workaholic in him never was cured because he continued to paint at his aggressive and challenging pace. Kirchner continued to exhibit but his later works lack the fire and enthusiasm of the period he spent between Dresden and Berlin. Kirchner was forced to resign from the Berlin Academy of Arts in 1937. The Nazis had given him the label of a degenerate artist and they confiscated and destroyed many of his works.

On June 15, 1938 Ernst Ludwig Kirchner committed suicide by shooting himself outside of his Alpine studio in Davos, Switzerland. He was 58 years old. His early death and mental illness took one of the truly great expressionist artists too soon. His works can be found around the world in museums and personal collections and we can learn a lot from his desire to make art without rules. Magdalena M. Moeller said of Kirchner, “What is most German about Kirchner’s art is the intense striving for expressiveness, which determines both form and colour. His inner sensibility, his own view of reality, gave rise to a new way of seeing the external world.”¹⁶

¹⁶ Ibid.

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Modern Dance; not a Patriarchal Society

By Chelsea Nabozny

Abstract

Ballet and modern dance: both genres of concert dance vary in approach, aesthetic and how they execute traditional “gender roles.” The classic partnering of ballet where the male parades the female around in full control and dominance differs from the rebel modern dancer who completely switched the gender role on stage and in performance choreography. Ballet strongly reflects a patriarchal society, shown in the relationship the dancers have while dancing - men dominating women – but rebelling modern pioneers such as Mary Wigman, Martha Graham, and Charles Weidman broke that pattern. Wigman created all female companies focused on deep emotions and breaking more boundaries, such as dancing barefoot. In modern dance, women lift women and women lift men. This paper will show how gender roles have been switched and modern dance is not a patriarchal society as is ballet.

Modern Dance: Not a Patriarchal Society

“What is dance? It is motion. What is motion? It is the expression of a sensation. What is a sensation? The reaction in the human body produced by an impression, or an idea, perceived by the mind.” -Modern Dance Pioneer Loie Fuller (Brown 18). All cultures incorporate some sort of dance into their society; whether it is for traditional ceremonies, enjoyment, or commercial entertainment. Western Europe took the first step in creating some sort of technique, which is now known as ballet, and is a form of dance found all over the world. Ballet stems from the earlier version of social dance known as Baroque dance, which evolved from court dancing to become what is called “concert dance,” reaching its highpoint in the 1800’s. About a century later, after Romantic ballet had been presented and a strict technique program set up, there were dancers who wanted something different.

At the beginning of the 20th century, modern pioneers were not interested in the strict and rigid rules of ballet. They wanted something more free and expressive. Modern dance was born with the intention of breaking the rules of ballet by using different models and tools to create movements, such as utilizing gravity, natural momentum, whole body movement, and pedestrian concepts. During its early years, modern dance struggled to make itself known. Both choreographers and audience found it difficult to change the traditional roles that were common both in society as well as on stage - a man leading and controlling the woman, who followed along and is portrayed as delicate. Modern dance began to express itself, and as early German modern dancer Mary Wigman said, “the manifolds of dance expression [were] overwhelming and confusing after its divorce from the set world of Classical ballet” (Brown 35). Choreographers like Wigman strove to break free from the gender norms, even going so far as completely switching traditional gender roles.

Even today, audiences tend to expect traditional gender roles when they attend dance concerts. This is ballet’s legacy. Most people associate the image of a dancer with that of the female ballerina. When ballet was created and becoming a theatrical spectacle, stories were based off of the traditional roles of men and women in the 19th century. In the 20th century, Balanchine made the dance about the female, but the men showcased them, like a trophy. Although on the surface ballet partnering has women showcased, the men created the dominant figures and implied that the women were expected to obey them and submit to their will. Today’s audience’s expectations have remained the same. Unconsciously they want and expect

to see the male in a position of dominance, even if they consciously resist the idea out in society. The brain unconsciously wants to see familiarity when attending a dance concert and, according to a study by Washington University, this can be attributed to the fact that “cultural norms of masculinity and femininity are often inscribed on the body...because the body is its primary medium of expression and communication.” (“From Sylphs to Subversion”). Even though women continue to gain equal rights, the traditional idea of gender roles still remains prominent in our society, due to centuries of this societal structure being the “norm.”

In traditional 19th century ballet, the female dancer is presented and paraded around like a prize or object by the male dancer, and the male is always the one to lead. The female dancer follows his direction and allows him to guide her as though she doesn't have to think at all, which subtly portrays inferiority. The male dominance and female submission that were considered proper in the 19th century are reflected in ballets such as *La Sylphide* (1832) and *Giselle* (1841) and portray the woman as frail and weak compared to the male dancer. According to the Washington University study:

“*La Sylphide* and *Giselle* illuminate a more clearly defined understanding on the kinds of gendered relationships that were considered appropriate and proper for the 19th century middle-class men and women, especially relationships wherein the woman accepts her domestic role and her obedience to her male partner...Romantic ballets instead relegate the women to an inferior status; her inferiority is most clearly indicated through the fact that the man manipulates and showcases the women's body, placing her in positions and alignments that are pleasing to him, and consequently to the male audience” (“From Sylphs to Subversion”).

This is the theme consistent in all 19th century ballets: *Swan Lake*, *Sleeping Beauty*, *Giselle*, *La Sylphide*, and many more. To the audience members it may seem as though the male just stands there and lifts the girl, but what is really being portrayed is dominance and power.

Early modern dance pioneers created works that addressed the issue of male dominance in addition to rebelling against what they considered to be stuffy and traditional ballet, which they felt dictated every move that was in choreography. Modern dance was created to break free of the constraints and rules that had long been in place by ballet, bringing forth new ideas and concepts, and breaking the traditional gender roles. Many of the modern dance pioneers were

women who attempted to balance out gender inequality in dance, and for them, this was an expression of feminism. There were choreographers, such as Mary Wigman, who even went as far as to create an all-female dance company and work only with female dancers. In this way, she sought to break free of all past rules and restrictions to present something new and uniquely expressive. Modern dance has been influenced by traditional theatrical dance, yet choreographer Jose Limon explains that modern dance's, "greatest contribution lives in giving the dance to the individual. It has broken with the Great Orthodoxy of the traditional Ballet and given validity to personal expression" (Brown 99). Modern dance is not inherently patriarchal, as is ballet, it is only when the choreographer chooses that his or her work reflects traditional roles or ideas.

Early choreographers of modern dance explored new ways of expressing themselves and reached a deeper (and sometimes disturbing) level of emotion which they wanted to share with the world. "Lamentations" by Martha Graham and "Witch Dance" by Mary Wigman are some examples of dances that portray deeper emotions that ballet does not reach. In addition to failing to provide adequate technique for expressing deep emotions, reformers felt that ballet's reliance on formulas lacked creative ideas in its choreography and themes. To expand their horizons and create a new technique, modern dancers explored abstract concepts and broke all existing rules. Through this exploration, modern dance challenged and sought to equalize the roles of male and female dancers. Female dancers lifted the males and other females, presenting women in a new light of strength. The crumbling of inequality became one of the main focuses of original modern dance and remains so to this day.

Even in today's world of dance, modern dance is not always accepted or understood. Audiences still often expect to see traditional concepts, even if the themes of the dances are deep and emotional, because many people are comfortable seeing traditional patriarchal gender roles of 19th century ballet. Some modern dance choreographers still cater to societies' expectations, while others have their ideas taken the wrong way. Modern dance is not patriarchal and was never meant to be; it was created to even out the roles dancers have and break down stereotypes. In their attempts at restructuring, the idea of the dominant male and submissive female became something to use as a guide for presenting the opposite, or a topic to be mocked. In this way, modern dance becomes an expressive medium that allows dancers to communicate that which cannot be spoken.

Traditional gender roles are often perceived as “normal” and safe to the audience. This, however, is not what modern dance is and once the audience members can push aside assumptions or pre-conceived expectations, they will be able to see modern for the truly beautiful art form it is. Women were the main pioneers of modern dance, and although men have become more prominent, the mothers of modern dance still have a lingering influence on current choreographers. To fully express oneself, a dancer must drop rules and gender pressures on themselves, and the same goes for the audience. In order to see modern dance for what it really is, the assumption that the male will do the lifting and females will follow must be dropped. Only then will the audience truly appreciate what modern dance has to offer. Letting go of the expectation of gender roles is exhilarating and a person will find a deeper connection to what the message of the dance is.

Since it began at the turn of the 20th century, modern dance has been fighting to show the world a new idea and new vision, one of equality and true expression. However, modern dance is often expected to fit into the artistic worlds’ definition for “concert dance.” This mindset makes it difficult for modern choreographers to show what modern really is. Modern dance is not dominated by males and their want for power and if, by exception, this is shown in a dance piece on stage, there is most likely another message behind it. It is not that the meaning is hidden in modern dance, just that the cloak covering the meanings lay with society and the stereotypes set forth by traditions from earlier times. As we stride forward, choreographers hope to change audience expectations about modern dance and enable them to open their minds to a myriad of other meanings and ideas that the dance is trying to represent. Modern, once seen in its true form, is a refreshing breath of air into the lungs of someone’s soul. So take a breath, release the expectations, and see that modern dance focuses on equality and the breaking of traditions.

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Pathways of Stress and Anxiety in Emerging Adulthood

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Abstract

Stress is an inherent part of the lives of many emerging adults as they experience major life changes and explore their identities (Arnett, 2000). Stress, if not managed effectively, can have significant mental and physical health impacts. While some research has been conducted on stress in emerging adulthood, little has been done to explore and better understand the interaction between varying levels of stress and emotional well-being. This study attempted to explore this gap in the available literature by examining how clinical anxiety varies by level of stress. The sample consisted of 213 undergraduate students with ages 18 to 24 at a Midwest university. Stress was found to significantly influence anxiety. Implications of this knowledge for mental health practitioners and university personnel are explained.

Keywords: stress; anxiety; emerging adulthood; well-being

Pathways of Stress and Anxiety in Emerging Adulthood

Emerging adulthood is a developmental period characterized by major life changes, transitions and identity exploration. It is during this time of life that major decisions related to love, work, and worldviews will be made (Arnett, 2000). The current research base reveals that emerging adulthood is associated with increased stress (Bland, Melton, Welle, & Bigham et al., 2012). The many stressors that emerging adults face include but are not limited to change in residence, financial concerns, entering college, and relationship issues (Bland, Melton, Welle, & Bigham et al., 2012). Research supports that stress among emerging adults is related to certain mental health related concerns. Mental health issues associated with stress during this time of life include difficulty with memory, concentration problems, anxiety, and depression (Dyson & Renk, 2006; Asberg, Bowers, Renk, & McKinney, 2008). Furthermore, physical symptomology and poor health behaviors can also result from stress (Brougham, Zail, Mendoza, & Miller, 2009). The tension, worry, and associated difficulties associated with anxiety could pose difficulties for emerging adults as they endeavor to make decisions that could impact the remainder of their lives. Thus, it is very important for a firm understanding of how stress influences anxiety during emerging adulthood.

Although past research has found support for the relationship between stress and anxiety, the analyses performed have analyzed general relationships between these variables. Little, if any, research has been conducted examining how clinical anxiety varies based upon level of perceived stress. Unraveling the nature of the relationship between stress and anxiety during emerging adulthood is greatly important. This knowledge could potentially help mental health practitioners develop more effective treatments for emerging adults. This information could also help college educators build effective educational programs and seminars for students related to

stress and stress management. Thus, the aim of the present study was to explore the influence of perceived stress on clinical anxiety among emerging adults. Specifically, it was hypothesized that stress levels reported by emerging adults would significantly influence the amount of clinical anxiety experienced.

Method

Participants

Undergraduate students at a Midwestern university (N=213) enrolled in introductory psychology courses participated in this study. Demographic characteristics of the sample can be found in Table 1.

Measurement

Perceived Stress Scale (PSS) Participants completed the Perceived Stress Scale which contains ten items that assesses stress experienced over the last month (Cohen & Williamson, 1988). A 5-point Likert scale is used to measure stress perceptions. An example of a statement that participants were asked to consider is, “In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?”

Zung Self-Rating Anxiety Scale (SAS) Participants completed the Zung Self-Rating Anxiety Scale which contains 20 items and assesses level of current anxiety (Zung, 1971). Participants were asked to rate the items using a 4-point Likert scale. An example of a statement that participants were asked to consider is, “I can breathe easily in and out.”

Procedure

All participants were recruited through the university’s research pool system. The protocol included a demographic questionnaire, the Perceived Stress Scale and the Zung Self-Rating Anxiety Scale. Participants presented to the on campus research lab to complete the

protocol. Protocols were scored and descriptive statistics and a one way ANOVA were completed on the data set utilizing SPSS 22.

Results

Descriptive statistics were calculated for perceived stress ($M=20.12$, $SD=6.89$) and anxiety ($M=37.97$, $SD=9.33$). Scores on the PSS were divided into thirds to establish three categories of stress: low, moderate and high. Sixty-six participants scored within low levels of perceived stress, 66 participants scored within moderate levels of perceived stress and 81 participants scored within high levels of perceived stress. With these distinctions, 69% of participants fell into the moderate or high categories of perceived stress. Anxiety levels were similarly high, with 23% of participants receiving a score of 45 or higher on the SAS, implying at least mild clinical anxiety being present.

A one-way analysis of variance (ANOVA) was conducted to examine the effect of perceived stress on anxiety. The ANOVA revealed a significant main effect of stress on anxiety [$F(2, 210) = 82.827$, $p=.00001$]. The lowest levels of stress were associated with the lowest levels of anxiety, while the highest levels of stress coincided with the highest anxiety ratings (See Table 2 and Figure 1). A Tukey Post-Hoc Analysis was conducted to differentiate between the three levels of stress. All three categories, high ($M = 45.23$, $SD = 9.16$), moderate ($M = 36.56$, $SD = 5.97$), and low ($M = 30.54$, $SD = 4.45$), were found to be significant at $p < 0.5$ level. This suggests that the different levels of stress were each significantly different from each other.

Discussion

The findings here suggest that perceived stress level is related to anxiety levels among the emerging adult college students sampled. More specifically, the more stress that was experienced by participants resulted in a relatively equal increase in reported symptoms of

anxiety. Large proportions of participants reported moderate to high levels of perceived stress. This evidence supports past research that suggests that emerging adulthood is an inherently stressful development period (Arnett, 2000; Bland, Melton, Welle, & Bigham et al., 2012). This is important when considering that emerging adulthood is a time during which important decisions are made regarding the future. The normal developmental process during emerging adulthood can be stress inducing. If individuals also struggle with other life issues during this time, the stress may become significant and symptoms of anxiety can worsen. This could impact one's ability to consider the future and make thoughtful, effective decisions.

Of particular interest was the relationship between level of stress and reports of clinically significant levels of anxiety. Alarming, 69% of the sample reported moderate to high levels of stress and 23% of the sample reported a level of anxiety that warranted further assessment. This potentially speaks to the high number of emerging adults that experience significant distress. These findings have significant implications for mental health practitioners and college educators. It is important for the mental health community to pay particular attention to the needs/concerns of emerging adults. The findings here suggest that many emerging adults experience significant stress in their lives, that their increasing levels of stress predict increasing levels of anxiety, and that a large proportion may experience anxiety at a level that warrants clinical assessment. These findings should prompt the development of efficacious clinical interventions designed to address stress among emerging adults. Further, it is suggested that college educators and administrators design seminars and educational programs to educate students about stress and appropriate stress management techniques in a manner that addresses the unique needs of emerging adults.

Limitations of the study

Several limitations limit the ability to generalize the findings from this study. First, the sample contained primarily freshmen. This limits the age distribution of the sample. It is recommended that future studies endeavor to obtain a more diverse age sampling so findings can be generalized to all emerging adults. Similarly, the sample was over 50% Caucasian. It is recommended that future studies obtain a more ethnically diverse sample. Lastly, given the use of self-report measures, demand characteristics and social desirability cannot be ruled out.

Areas for future research

Future research should explore how levels of perceived stress and anxiety predict coping strategy utilization among emerging adults. In turn, exploring how physical health is influenced by coping methods and levels of perceived stress is likely to help psychologists and health care providers provide better care to their patients and additionally assist emerging adults in understanding how to effectively cope with stress. Examining how levels of perceived stress and levels of anxiety change over time leading into young adulthood would also be helpful in understanding changes in stress during this developmental period.

Conclusion

Stress is a part of life for emerging adults. If not managed well, it could potentially have deleterious effects upon mental health. It is important for emerging adults and those in the lives of emerging adults such as college faculty, health care providers, family and support systems to better understand the nature and impacts of stress as well as how to effectively manage stress. Through gaining this knowledge and better understanding the unique characteristics of this developmental period, advancements can be made in how to effectively aid emerging adults in identifying, managing and hopefully preventing stress in their lives. These steps are vital in order

for emerging adults to make sound decisions during this developmental period that will set them up for success in the future.

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Table 1***Demographic Characteristics of the Sample (N = 213)***

Demographic Characteristic	Frequency	Percentage
Sex		
Female	94	44.1%
Male	119	55.9%
Age		
18	76	35.7%
19	56	26.3%
20	36	16.9%
21	23	10.8%
22	8	3.7%
23	7	3.3%
24	7	3.3%
Class Standing		
Freshman	102	47.9%
Sophomore	49	23.0%
Junior	48	22.5%
Senior	14	6.6%
Ethnicity		
African American	16	7.5%
Arab American	30	14.1%
Asian American	16	7.5%
Caucasian	120	56.3%
Hispanic American	12	5.6%
Native American	1	0.5%
Other	18	8.5%
Major		
Behavioral Sciences*	64	30.0%
Biology/Chemistry	28	13.1%
Business	19	8.9%
Education	1	0.5%
Engineering	21	9.9%
Undecided	34	16.0%
Other	46	21.6%

* For the purpose of this study, behavioral sciences refers to any of the following majors: Anthropology, Health Policy Studies, Psychology and Sociology.

Table 2

One-Way ANOVA for perceived stress and anxiety

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8136.274	2	4068.137	82.827	0.00001
Within Groups	10314.425	210	49.116		
Total	18450.700	212			

Figure 1

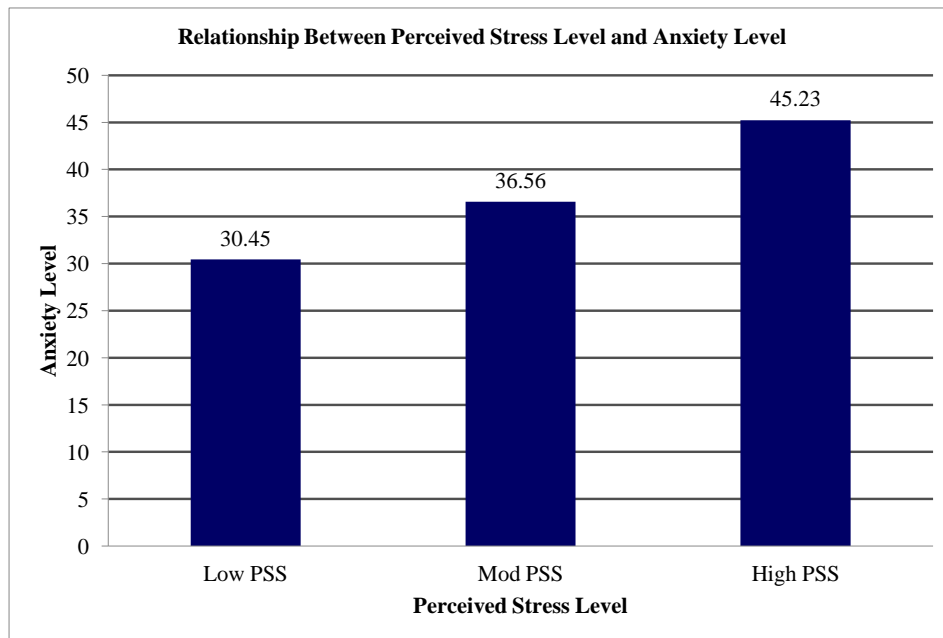


Figure 1: Congruent relationships were found between perceived stress levels and level of anxiety. Therefore, low levels of perceived stress were associated with low levels of anxiety, moderate levels of perceived stress were associated with moderate levels of anxiety and high levels of perceived stress were associated with high levels of anxiety.

Als der Krieg zu Ende war

Amela Pargan-Agic

German 420

Wörter: 2473

Der Schauspiel, Als der Krieg zu Ende war, von den Schweizer Schriftsteller Max Frisch war im Jahr 1948 geschrieben. Dieses Theaterstück findet direct nach dem Zweiten Weltkrieg in Deutschland statt. Der Schreiber hatte die unmittelbare Nachkriegszeit porträtiert. Insbesondere wenn die Rote Armee Berlin überfallen hat. Der Spiel dauert von Jahr 1945 bis 1946. Gelehrten wie Alfred Beerbaum glauben dass Lehrer die dieses Spiel benutzen, wird den Studenten eine Zuweisung geben die voll von literarische Qualität und kulturelle Bedeutung ist. Andere die nicht begeistert von diesem Buch sind, glauben das es veraltet ist (Beerbaum, 1968).

Die Handlung beginnt mit einer deutschen Familie, die durch die ganze Geschichte, ihre Zeit in ihrem Keller verbringt. Ohne Wahl, mussten sie die Nachkriegszeit Problemen konfrontieren, um zu überleben. Das Spiel ist geteilt in drei verschiedene Akte. Ursprünglich, das Spiel bestand nur aus zwei Akten. Die dritte Akt wurde im Jahr 1962 zugegeben, weil der Schriftsteller die Endung ändern wollte. In diesem Aufsatz wurden nur die ersten zwei Akte im Detail diskutiert, weil die dritte Akt nicht in inbegreifen war. In der dritten Akt Agnes hatte über die Kriegsverbrechen, in Warschau, von ihren Ehemänner herausgefunden. Andererseits, ihr Mann Horst hatte ihre romantische Beziehungen zwischen ihr und dem russischen Offizier herausgefunden, deshalb macht sie Selbstmord (Pfeiler, 1951). Max Frisch hatte mal gesagt dass, das Ziel von diesen Spiel ist die Unterscheidung nach Mensch und Unmensch zu beachten (Pfeiler, 1951). Die Gespräche in Yiddish und Russisch haben Funklöcher erstellt (Pfeiler, 1951). Außerdem, hatte Agnes in erzählungen übergangen welches die echte Zeit von den Spiel aufgehört hatte (Pfeiler, 1951). **In dem Theaterstück Als der Krieg zu Ende war, stellt Max Frisch die sofort Nachkriegszeit in Deutschland da, wie Armut unter der Zivilbevölkerung, und die Gewalt gegend Frauen und Männer verpflichtet wurde.**

Die Erste Akt

Die erste Akt, einführt die Hauptfiguren Agnes Anders und ihren Mann Horst. Sie haben sich wieder getroffen nach einer zweijährige Trennung. Wegen ihrer Trennung, bezweifelt Horst dass seine Frau ihm immer noch liebt. Jedoch, Agnes erinnert ihn weiterhin daran, das sie ihm treu bleibt. Sie sind versteckt in ihrem Keller mit ihrem Sohn Martin und ihrer Freundin Gitta. Gleichzeitig die Russische Rote Armee hatte ihren Heimat eingedrungen, und durch die ganze Geschichte die oberste Etage belegt. Jehuda Karp, der jüdischer Diener, geht nach unten, in den Keller, um Wein zu finden. Dort sieht er Agnes, sie gibt ihm den Wein und er geht wieder nach oben. Wenn er zurück geht, informiert er die Offiziere das sie in dem Keller ist. Ihre Freundin Gitta hatte Angst, dass sie wieder missbraucht wird. Deshalb entscheidet sie sich den Keller zu verlassen und nach Potsdam mit den kleinen Martin zu fliehen. Agnes und Horst sind nicht in der Lage das Haus zu verlassen, weil Horst einen Nazi Anzug trägt mit einem Hakenkreuz. Dieses Symbol würde Aufmerksamkeit von den Feinden auf ihn ziehen. Gitta verspricht ihm dass sie ihr Bestes tun will um ihn zurück reguläre Straßenkleidung bringen wird.

In der Zwischenzeit, Agnes geht nach oben weil der Kommandier Stepan Iwanow angefordert ihre Gegenwart. Sie versucht ihm zu erklären dass sie nur ein Mensch ist und das sie nicht sein Feind ist. Jehuda übersetzt für sie, weil Stepan kein Deutsch spricht. Sie macht eine Vereinbarung mit ihm, dass sie jeden Abend mit ihm sprechen wird, im Austausch für zwei Bedingungen. Sie Anträgt das alle anderen Offiziere das Haus verlassen müssen wenn sie mit ihm ist, und das er sich nicht nachforscht wo sie sich in der andern Zeit aufhalte.

Die Zweite Akt

In der Zweiten Akt Agnes sieht Stepan weiter. Sie erfährt echte Freiheit, wenn sie mit Stepan zu Wannsee auf ein Boot geht. Während sie gut versorgt wird, hat Horst kaum etwas zu essen. Sie setzte mit Stephan jedes Abend zu treffen und langsam verliebte sich in ihn. Horst spürt dass sie sich verändert hat. Früher sie würde ihm immer erzählen was ihre Gespräche waren über, aber in der letzter Zeit wurden sie immer weniger und weniger über ihre Sitzungen sprechen. Auch, er hatte bemerkt das sie sich schön kleidet wenn sie zu ihrem Treffen geht.

Außerdem in diesem Akt Jehuda erklärt die Tragödie seiner Familie zu den Klavierstimmer namens Halske. Seine Mutter wurde ertränkt, sein Vater wurde erschossen, und seine Schwester wurde vergast. Er selbst war in Ghetto, in Warsche. Er legte in einem Wagen unter den Toten, so das er entkommen konnte. Wenn es dunkel war, floh er. Halske sagte ihm, das er nichts mit den Morden zu tun hatte und stellt Horst Anders bei der Szene des Verbrechens.

Obwohl Agnes und Stepan können nicht mit einander sprechen, sie verstehen sich. Bis zu diesem Zeitpunkt in der Geschichte haben sie gegenseitigen Gefühle entwickelt. Während sie in einer tiefen Gespräch engagieren, Horst öffnet die Türen und stand in einen grauen Straßenanzug. Er stellt sich vor und fragt Stepan wann das Huas wieder frei wird? Hier erkennt er dass sie ihn angelogen hat dass Stepan Deutsch spricht. Stephan ruft schnell Jehuda zu übersetzen. Dies ist wenn Jehuda lernt das Horst ist der Mann von Agnes. Er erkennt auch das er ein deutscher Hauptmann in Warschau war. Jehuda konfrontiert ihm das er im Jahr 1943 in Ghetto war, und das er teilgenommen hat in der Tötung von 80,000 Menschen. Horst bestreitet diese Anschuldigungen. Er zieht eine Waffe und zeigt es auf Jehuda und Stepan. In Reaktion darauf Agnes stellt sich vor Stepan, um ihn zu schützen. Stephan ruft Jehude und die beide

verlassen das Haus, ohne Agnes oder Horst anzusehen. Das Stück endet mit Agnes und Horst hinter bleiben ohne ein Wort.

Die Armut

Das Spiel präsentiert die echte Armut die in der unmittelbaren Nachkriegszeit in Deutschland existierte. Der erste Beispiel der Armut war sofort in der erste Szene gezeigt. “Eines Morgens, es war ein Mittwoch, mußte Agnes den Keller verlassen, sie hatten keinen Wasser mehr, und der Kleine war ohnmächtig von Durst” (Frisch, seite 6). In dieser Szene ist Agnes ist mit ihrem kleinen Sohn, und Gitta in ihrem Keller. In dem Keller, sie haben keinen Zugang zu Wasser, das wichtigste Element für das Leben. Normalerweise haben Keller keine Brunnen, und die Küche befindet sich im Obergeschoss, der im Moment besetzt bei der Rote Armee ist. Daher ist Agnes gezwungen ihren Haus zu verlassen um ein Eimer mit Wasser zu bringen.

Ein weiteres Beispiel ist das Fehlen von Kleidung. Während und unmittelbar nach dem Krieg Menschen haben keinen Zugang zu neuer Kleidung und Schuhen. Sie haben nur Zugang zu Kleidung, die sie für sich selbst vorher gerettet haben. “Beschissen ist bloß, das ich keinen anderen Anzug habe, Wenn ich das hätte wissen können! Nicht eine einzige Hose, oder wenigstens ein Mantel, der nicht verbrannt wäre.” (Frisch, Seite 8). Horst drückt seinen Wut aus, weil er nur einen einzigen Anzug hat. Alle seine Kleidung wurden verbrannt. Was die Sache noch schlimmer macht, ist das der Anzug ist ein Armee Anzug mit einem Hakenkreuz darauf. Dieser Anzug lenkt mühelos die Aufmerksamkeit auf ihn von den Feinden, wie den Russen. Deshalb ist er gezwungen in dem Keller zu bleiben durch die Ganze Geschichte. Wenn er wenigstens ein einzigen Anzug hatte, konnte er das Haus verlassen. Anges beschreibt auch wie

die Gitta Glück hatte wenn sie ihre Hose gerettet hatte, wenn die Russen sie vergewaltigt hatten. Gleichfalls, zeigt dies wie Menschen arm waren, weil die einzige Kleidung die sie besaßen, waren die sie trug. Es ist schwierig die gleiche Kleidung für eine sehr lange Zeit zu tragen, ohne sie zu waschen. Menschen tun dass nur wenn die Armut sie dazu zwingt.

Außerdem es gibt eine unzureichend Menge der Nahrung. Der Schriftsteller zeigt deutlich dass es sehr wenig zu essen gibt. "Hier hast du die Brote, Martin, aber nur essen, wenn du Hunger hast" (Frisch, Seite 20). Agnes gibt ihm Sohn Brote so das er etwas zu essen hat. Martin verlässt seine Eltern mit Gitta in der Hoffnung zu einem sichereren Ort zu gehen. Während seine Mutter ihren Verabschiedungen sagt, warnt sie ihren Sohn nur zu essen wenn er hungrig ist. Keine Mutter würde ihrem Sohn gerne hungrig sehen, und ihm sagen nicht zu essen wann er will. Es ist schwer genug für sie weil sie trennen müssen. Namentlich wenn sie weiß, dass sie ihn vielleicht nie wieder sehen wird. Auch die Tatsache, das Brot sein Hauptmahlzeit ist zeigt, das er keine gesunden Lebensmitteln hatte. Er isst Brot, nur um zu überleben.

Ein beispiel wenn die Erwachsene nicht genug zu essen hatten, war wenn Agnes einen Deal mit dem Offizier machte . "Jehuda kommt zurück. Sie ist in Ohnmacht gefallen. Das macht der Hunger." (Frisch, Seite 49). Nach einem Gespräch, welches Agnes mit Stepan hatte, fiel sie in Ohnmacht. Stepan selbst räumt dass es wegen des Hunger aufgetreten war. Diese niedrige Menge an Wasser, der Nahrung, und Kleidung zeigt die Schwäche die Leute in der Nachkriegszeit hatten.

Die Gewalt

Max Frisch porträtiert auch die Gewalt die aufgetreten ist in der Nachkreigszeit. Er beginnt das Spiel mit einer Beschreibung von Detschland nachdem sie den Krieg verloren haben.

“Das war eine bittere Zeit. Von Morgen bis Abend, Tage lang, hörte man nichts als das Geschlurf der Kolonnen, die Truppen der Sieger; die Stadt war gefallen; der Feind war da. Hell wie frisches Blut flatterte seine Fahne vor dem finsternen Himmel. Es war mitten am Tage, es war Frühling, Mai, aber der Himmel war finster von Asche und Rauch, und die Sonne schien nicht auf den Boden herab...” (Frisch, Seite 6). Der Schriftsteller macht einen phänomenalen Job, um die aktuelle Situation zu veranschaulichen. Dieses Bild zeigt dass Gewalttätigkeit war aufgetreten. Die Stadt war gefallen. Auf den Boden lagen toten Soldaten von beiden seiten. Andere haben an den Bäume gehingen. Es ist deutlich das viele passiert ist in Berlin.

In diesem Spiel die Gewalt gegen Frauen wird auch angemerkt. Frauen wurden sonderlich missbraucht nach dem Krieg. “Agnes wickelte ein hässliches Tuch um den Kopf, damit sie den Russen nicht gefiele, nahm ein eimer und ging hinaus” (Seite, 6). Agnes hatte Angst dass die russische Armee sie attraktiv gefunden würden, so sie versucht weniger attraktiv aus zu sehen. Sie weiß, dass andere Frauen angegriffen wurden, darum sie mochtet verhindern, dasselbe passiert.

Eine wietere ähnliche Inzidenz geschieht wenn Agnes im Keller entdeckt war. Gitta beschließt sofort dass sie fliehen will, weil sie nicht durch ein anderen Angriff leben wollte. “Verschmieren sollst du dich. Was sonst” (Frisch, Seite 24). Horst schlägt vor das Agnest Asche auf ihr Gesicht schmiert. Er hofft dass wenn Agnes nach oben geht, die Soldaten sie schmutzig und unattraktiv finden. Aber Agnes unterbricht ihn und sagt “Lass dier von der Gitta erzählen, was die Asche ihr gehlofen hat!...Ihrer fünf sind in den Keller gekommen, und wie sie sich wehrt, nehmen sie einfach das Messer. Um ihr die Hose aufzuschneiden, verstehst du...Was soll sie schon machen? Gegen fünf Betrunkene...Nacher kommt der Offizier,...er ist der Sechste.” (Frisch, Seite 25). Agnes erklärt ihrem Mann, dass trotz Gitta einen schmutzigen Gesicht hatte,

wurde sie von sechs verschiedenen russischen Soldaten vergewaltigt. Das ist warum Gitta fliehen möchte.

Der Missbrauch von Frauen wird auch gezeigt wenn Agnes oben geht und sich zu den Soldaten stellt. "Rühren Sie mich nicht an, ich bitte Sie...Sie sollen das lassen, habe ich gesagt." Die zweite Soldaten namens Piotr und Ossip, griffen ihren Rock an. Sie bittet sie zu stoppen, aber wenn sie das nicht machen, bekommen sie eine Ohrfeige. Dies macht Ossip wütend, und er setzt ihr den Revolver auf die Brust. Glücklicherweise rettet sie Stepan schnell. Ob er nicht da wäre, könnte sie getötet worden, nur weil sie für ihre Freiheit kämpfte. Die Frauen wurden nicht nur vom Feind getötet, sie haben auch Selbstmord begangen, weil sie so etwas gruselig nicht erleben wollten. "Wenn es Ihr Wille ist: ich beiße mir die Adern auf, da ist alles, was Sie erreichen können." (Frisch, Seite 39). Agnes sagt zu Stepan das wenn sie planen sie zu beschädigen, würde sie ihre Adern schneiden. Auf diese Weise wäre sie tot bevor die Soldaten sie verletzen können.

In der Nachkriegszeit gab es auch Gewalt gegen Männer. Beispielsweise musste Günther eine lange Zeit sich in den Keller verstecken. "Drei Jahre untergetaucht, und wir alle, die wissen, setzen unsern Kopf aufs Spiel...Am schlimmsten wars ja für die Kleine. Mund halten!...Die Kleine geht an den Wannsee und badet, geht ins Konzert, weiß jeden Augenblick, ihr Vater hockt im Keller. Hinter der Kohle. Sie darf nichts merken lassen. Und dann! Endlich die Befreiung: der gute Günther kann nicht warten,...sofort hinaus auf die Straße, zum ersten Mal seit drei Jahren, die ganze Armee will er umarmen-nun ja, da sieht er eben, wie die Arme gerade sein Kind umarmt, er stellt sich dazwischen..." (Frisch, Seite 8 & 9). Günther war geduldig drei Jahre lang bis seine Tochter in Gefahr war. Drei Jahre Freiheitslos zu sein ist eine lange Zeit. Aber, eines Tages wurde seine Tochter mit betrunkenen Soldaten umarmt. Weil er sie schützen wollte, hat er eine Kolben auf den Kopf bekommen. Es ist klar das die Gewalt in der Nachkriegszeit in

vielen verschiedenen Formen existierte. Beispielsweise Soldaten von einer Seite haben Soldaten auf der anderen Seite getötet, auch beide Frauen und Männer waren Opfer von Gewalt.

Als der Krieg zu Ende war, hat Armut und Gewalt gegen Frauen und Männern in der Nachkriegszeit, nach dem Zweiten Weltkrieg, eingearbeitet. In diesem Spiel hatte eine Familie in ihrem Keller nach dem Krieg gelebt. Durch die Handlung, der Schriftsteller beinhaltet die schwierigen Zeiten die Leute gehabt haben. Sie hatten kaum lebensnotwendigen Mittel, wie Wasser, Nahrungsmittel, und genug Kleidung. Der Autor berichtet auch dass die Gewalt unter den Soldaten von beiden Seiten, Gewalt gegen Frauen und Männer existierte. Soldaten haben einander erschossen. Die einigen die nicht mehr kämpfen wollen, haben Selbstmord begangen. Frauen wurden vergewaltigt und missbraucht, und Männer wurden angegriffen und mussten für Jahren versteckt sein. Es ist auch wichtig festzustellen dass die Privatsphäre dieser Familien verletzt wurde, weil die Russen in ihre Heimat eingefallen sind. Auch diese Familie war getrennt zwei Mal. Das erste Mal war wenn Horst in die Arme gegangen hatte, und das zweite Mal wenn ihr Sohn mit Gitta das Haus verlassen hat. So dieser Krieg hatte auch Familien getrennt. Ihr Sohn ist tot, aber wenn der Krieg nicht passierte, wäre er am Leben. Am Ende ist die Frage, warum hatte es ihnen so lange angenommen einen Anzug für Horst in den Keller zu finden? Vielleicht wusste Agnes dass es einen extra Anzug gibt, aber sie hat es als geheim gehalten so dass sie ihre Zeit mit Stepan verlängert?

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Nicole Peterson
Incurable Neurosis: The Sexual Fixation of Egon Schiele
Meeting of Minds
May 9, 2014

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Abstract

*Great Wits are sure to Madness near allied
And thin Partitions do their Bounds divide.*

—**John Dryden**, *Absalom and Achitophel*, 1681

In late 19th/early 20th century Vienna, sexuality was a subject of supreme suppression. However, “at the same time, sexology, the scientific study of human sexuality, was born,”¹ and contemporaries Egon Schiele (1890–1918) and Sigmund Freud (1856–1939) were not afraid to confront the taboos of their time. While Schiele delved into a lifelong exploration of his own sexual desires, Freud focused his research on the unconscious and psychosexual development, and through his studies, proposed that artists could use their creativity as a means of avoiding neurotic disorders. In this essay, I explore Schiele’s unorthodox behavior and the drawings he made of his sister, his young models, and even himself, in order to understand the ways in which his artwork and lifestyle relate to Freud’s views on creativity as a remedy for neurosis. Instead of sublimating, or transforming his desires into a socially acceptable form (in this case, art), Egon Schiele both lived and expressed himself in ways that reflected his sexual fixation.

¹ Danielle Knafo, *Dancing with the Unconscious: The Art of Psychoanalysis and the Psychoanalysis of Art*, in *Psychoanalysis in a New Key Book Series*, ed. Donnel Stern, vol. 14 (New York: Routledge, 2012), 148.

Incurable Neurosis: The Sexual Fixation of Egon Schiele

Highly sexual and often grotesque in subject matter, Egon Schiele's art is no stranger to psychoanalytic examination. "Schiele's brand of erotically charged expressionism, with all its edginess and neurosis" invites exploration into the anxiety-ridden mind and unorthodox lifestyle of the celebrated early 20th century artist.² Although Sigmund Freud argued that artists were able to avoid neurosis through their creativity, Schiele both expressed his neurotic fantasies through his artwork and lived symptomatically in his personal life.

By definition, neurosis is a mental disorder affecting a specific aspect of one's personality. Through his study of dreams and the unconscious, Freud discovered "a key for understanding the hidden impulses, drives, and anxieties behind overtly pathological personality manifestations."³ The key, or "basic cause of neuroses," he argued, was frustration.⁴ In the case of Schiele, frustration existed in the realm of sexuality, a fixation that developed early in his life and persisted throughout.

Schiele's "fascinating but not wholly admirable character is accounted for, at least in part, by his family background and upbringing."⁵ Born to a mother and father both infected with syphilis, Schiele's early life was tainted with loss. According to Alessandra Comini, "his brooding preoccupation with sex...[was] shaped by the sexual origin of the disease responsible for family deaths, including those of his four siblings and, most important, that of his syphilitic father, who perished paralyzed and completely insane."⁶

Although Schiele's tragic childhood was a fertile ground for mental disorder, he was also blessed with a creative gift—a gift Freud argued was an "alternative to neurosis."⁷ Despite the fact that Schiele's parents ardently encouraged him to "follow in the footsteps of the men in the family"⁸ and work for the railway industry, Schiele "longed only to be an artist and revealed a prodigious drawing ability from early childhood."⁹ According to Freud's theories regarding the creative process,

Art itself can be regarded as a defense mechanism. The artistic creation may be, for the artist, wish fulfillment or fantasy gratification of desires denied by the reality principle or prohibited by moral codes. Art is thus a means of giving expression to, and dealing with, various psychic pressures. The artist can work his fantasy – a substitute for satisfaction – by means of sublimation, into a socially acceptable

² John Zeaman, "The Age of Erotic Anxiety: Egon Schiele's Bodies of Work," *The Record*, November 7, 1997, 18.

³ George J. Seidel, *The Crisis of Creativity* (Notre Dame: University of Notre Dame Press, 1966), 70.

⁴ Ibid.

⁵ Edward Lucie-Smith, *Lives of the Great Twentieth Century Artists* (New York: Rizzoli International Publications, 1986), 83.

⁶ Knafo, *Dancing with the Unconscious*, 134.

⁷ Ana Drobot, "The Process of Creativity," *Psychoanalysis - Techniques and Practice*, accessed November 11, 2013, http://www.freudfile.org/psychoanalysis/papers_9.html.

⁸ Knafo, *Dancing with the Unconscious*, 138.

⁹ Ibid.

form.¹⁰

However, art, for Schiele, was less of an alternative to his neurosis, and more of an execution of his sexual fixation.

For instance, in his adolescence, Schiele developed a close attachment to his younger sister, Gertrude, “which was not without its incestuous implications.”¹¹ As children, “the siblings watched the family hens together and kept exact records of their breeding times...[a] voyeuristic activity [that] reflects something of the erotic nature of Egon’s relationship with his beloved sister.”¹² Additionally, the pair also once embarked on an overnight trip to reenact their parents’ wedding night, even staying at the exact hotel their mother and father had.¹³ Disturbingly, Gertrude was also Schiele’s favorite model growing up, and she oftentimes posed in the nude, a “fact...barely compatible with the moral code of the time.”¹⁴

Despite the fact that the problematic relationship of the pair is based entirely on speculation, Schiele’s drawings of Gertrude are evidence of the sexual frustration, at the bare minimum, that existed between them. As Stéphanie Angoh writes of *Reclining Girl in Dark Blue Dress* (Fig. 1), “Gerti reclines backwards, still fully clothed with black stockings and shoes, and lifts the black hem of her dress from under which the red orifice of her body gapes. Schiele draws no bed, no chair, only the provocative gesture of his sister’s body offering itself.”¹⁵ Such a drawing certainly did not fit the societal norms of the era, nor Freud’s theory that artists could use their creativity as a means to avoid neurotic behavior. *Reclining Girl in Dark Blue Dress* served not as an escape from Schiele’s neurosis, but rather a symptomatic performance of it.

In 1906, Schiele was forced to abandon his favorite model in exchange for those at Vienna’s Academy of Fine Arts, “the nation’s foremost art school.”¹⁶ After attending for just two years, Schiele had “his first small exhibition”¹⁷ in which he displayed works “influenced by Gustav Klimt,”¹⁸ an artist closely associated with the Academy, “whom he [had] reportedly met the previous year.”¹⁹ Although Schiele appropriated Klimt’s decorative style for a short period of time, as can be seen in *Gerti Schiele in a Plaid Garment* (Fig. 2), in which the patterning is reminiscent of that present in Klimt’s *The Kiss* (Fig. 3), he eventually did away with Klimt’s ornamental embellishments “in favour of introspective, non-allegorical images of the body.”²⁰

¹⁰ Drobot, “The Process of Creativity.”

¹¹ Lucie-Smith, *Twentieth Century Artists*, 84.

¹² Knafo, *Dancing with the Unconscious*, 139.

¹³ Eugene D. Glynn, *Desperate Necessity: Writings on Art and Psychoanalysis* (New York: Periscope Publishing, 2008), 118.

¹⁴ Klaus Albrecht Schröder, *Egon Schiele* (Munich: Prestel, 2005), 70.

¹⁵ Stéphanie Angoh, *Schiele* (New York: Parkstone International, 2013).

¹⁶ Jane Kallir, *Egon Schiele* (New York: Harry N. Abrams, 1994), 40.

¹⁷ Ibid.

¹⁸ Kallir, *Egon Schiele*, 40.

¹⁹ Ibid.

²⁰ Ibid.

Schiele left the academy soon after his exhibition, but kept in close contact with Klimt, who “liked to encourage younger artists...[and] continued to take an interest” in Schiele.²¹ Klimt took him under his wing by “buying his drawings,...arranging models for him, and introducing him to potential patrons.”²² Among the connections Klimt fostered was the introduction of Schiele to his 17-year-old model, Valerie (“Wally”) Neuzil, who quickly became Schiele’s “lover and foremost model until the time of his marriage” in 1915.²³

During Schiele’s first years of artistic independence, he rented a studio with Wally in Vienna and began to achieve “stylistic and professional breakthroughs with remarkable speed.”²⁴ At this time, still plagued by sexual fixation, “he showed a strong interest in pubescent children, especially young girls, who were often the subjects of his drawings.”²⁵ Schiele’s studio was filled with girls who “lazily lounged about—something they were not allowed to do at home—combed their hair, pulled their dresses up or down” and willingly modeled for him.²⁶ The resulting drawings, some of which were quite erotic, were often distributed by Schiele “to collectors of pornography, who abounded in Vienna at that time” as a way of supplementing his income.²⁷

While Schiele was known to have drawn young boys in the nude, as can be seen in *Standing Nude Boy* (Fig. 4), the number of works involving girls far outnumber them. Furthermore, there is a noticeable difference in the way each gender is represented. While *Standing Nude Boy* features a young man in the nude, his body is not sexualized. The boy faces forward and poses with confidence, without any hint of the artist’s sexual interest or intention; it is merely a draft of the boy’s form. On the other hand, Schiele’s “nude girls are rarely simply presentations of the body.”²⁸ For instance, *Black-Haired Nude Girl* (Fig. 5), which features a young woman who stares directly at the viewer while exposing her body completely, is highly sexual in nature. Her slightly twisted pose highlights the curves of her body, while red accents are added to her genitals, nipples, and lips to unquestionably emphasize her sexuality. Her expression and “way of looking at the beholder seems to suggest that in spite of her girlish body, she is well aware of her powers of seduction,” as is the artist himself.²⁹

Schiele’s sexual fixation didn’t stop there, however. Not only did he emphasize the sexuality of the female form through color, but it was also not uncommon for him to arrange his models in extremely risqué positions. For instance, many drawings feature singular women masturbating, and pairs of women embracing one another, as can be seen in drawings such as *Masturbating Girl* (Fig. 6) and *Two Girls (Lovers)* (Fig. 7). These drawings, although somewhat “childlike in their simplicity,...[are] deftly...reminiscent of

²¹ Lucie-Smith, *Twentieth Century Artists*, 84.

²² Ibid.

²³ Kallir, *Egon Schiele*, 42.

²⁴ Ibid, 40.

²⁵ Paris von Gütersloh, quoted in Lucie-Smith, *Twentieth Century Artists*, 84.

²⁶ Lucie-Smith, *Twentieth Century Artists*, 84.

²⁷ Ibid, 86.

²⁸ Schröder, *Egon Schiele*, 118.

²⁹ Ibid.

adult pornography.”³⁰ Like pornography, Schiele’s erotic compositions reflect his innermost neurotic fantasies, executed in the form of art rather than authentic sexual acts.

Klaus Albrecht Schröder suspects that “Schiele must have been aware of transgressing the taboo on representing frank nudity, just as he must have been aware that the distribution of immoral pictures—and those representing homosexual love, regarded as unnatural, certainly fell into this category—was an offense punishable by...imprisonment.”³¹ Heinrich Benesch explains that

Like his great colleague Klimt, Schiele was an erotic artist. He was extremely liberal in sexual matters. This might have been all very well with professional models, but not with children, whom he drew in the nude frequently and with pleasure. In so doing, he made no allowances for their innocence (if any)...Whenever he had finished drawing his child models, he often allowed whole hordes of other boys and girls, the models’ classmates, to come into the room where he worked and play there.³²

As a result of the blatant indiscretion regarding the young children that frequented his studio, Schiele was arrested and imprisoned for nearly a month in 1912 on charges of immorality and seduction of a minor. Although “the latter charge was dropped, the court found him guilty of immorality in the corruption of children, because he’d exposed them to his erotic drawings.”³³ Over 100 of Schiele’s works were confiscated, and one was even burned before him during his trial.³⁴

Regarding his interest in childhood sexuality, Schiele probed: “Have adults forgotten how they themselves were incited and aroused by sex impulses as children? Have they forgotten how the frightful passion burned and tortured them while they were still children? I have not forgotten, for I suffered excruciatingly from it.”³⁵ Although Schiele wrote in the past tense, it is clear that his sexual suffering did not diminish as he aged into adulthood, lest he would not have found himself incarcerated for it. The frightful passion Schiele claims “burned and tortured” him as a child quite obviously still existed, as is evidenced by both his drawings and his behavior involving such young models.

In the years following his release from jail, Schiele’s art continued to reflect his sexual neurosis, while his personal behavior shifted toward a new focus—marriage. However, he did not intend to marry Wally, who “was by the standards of the day scarcely better than a prostitute.”³⁶ Instead he placed his sights on a more respectable marriage, vying for the affection of Edith and Adele Harms, two sisters who came from a proper,

³⁰ Knafo, *Dancing with the Unconscious*, 133.

³¹ Schröder, *Egon Schiele*, 190.

³² Heinrich Benesch, *Mein Weg mit Egon Schiele*, ed. Evan Benesch (New York, 1965), 24ff, quoted in Klaus Albrecht Schröder, *Egon Schiele: Eros and Passion*, trans. David Britt (Munich: Prestel, 1995), 107.

³³ Knafo, *Dancing with the Unconscious*, 148.

³⁴ Ibid.

³⁵ Arthur Roessler, *Erinnerungen an Egon Schiele* [In memoriam: Egon Schiele] (Vienna: Verlag der Buchhandlung, 1948), 33, quoted in Knafo, *Dancing with the Unconscious*, 139.

³⁶ Kallir, *Egon Schiele*, 153.

middle-class household across the street from Schiele's studio. In order to capture their attention,

The artist produced a number of strongly coloured, daringly posed self-portraits. Comini recounts that these two well brought up girls would watch Schiele as he worked through their windows across the Hietzinger Hauptstrasse and 'when Schiele discovered their attention, he responded with outlandish pantomimes and began drawing large pictures of himself wearing nothing but his short, sleeveless painting jerkin. He would hold the brightly coloured drawings out of his window to tease and shock the girls.'³⁷

Surprisingly, this tactic proved successful, and Schiele was married to Edith in the spring of 1915.³⁸

Considering that many of his self-portraits were grotesquely sexual, the outlandish drawings Schiele waved out his windows could have easily included works such as *Semi-Nude Self-Portrait in Black Coat* (Fig. 8), or even *Eros* (Fig. 9), both which feature the artist in the act of pleasuring himself. As Schröder writes of *Eros*, "it is not so much Schiele's fully erect, luminous orange penis which is so surprising; rather we are shocked by the ape-like facial expression, assigned by nineteenth and early twentieth century criminal typology to the dull-witted serial offender."³⁹ Schiele has represented himself laid bare, "stigmatized...at the very moment of climactic sexual arousal, as a mindless beast, helplessly at the mercy of sexual lust."⁴⁰ In *Eros*, the full extent of Schiele's sexual fixation is visible; the artist has depicted himself legless below the knees, further emphasizing the already vibrant focal point of his genitals. Instead of a mere projection of his fantasies represented in the form of art, this particular drawing depicts Schiele as a slave to his own sexuality, a notion that has been mirrored in his behavior throughout his life.

Freud believed that "interpretations [of art] should lead back to the reality that the expression obliquely represents."⁴¹ In the case of Schiele's drawings of his sister, young models, and himself, interpretation undoubtedly leads the viewer back to the fantasies produced by the artist's sexual fixation. According to Richard Kuhns, "when psychoanalysis turns to objects, one of the questions that must be asked is the degree to which a particular object establishes its own reality without the need to compel referential inferences outside itself."⁴² However, what happens when the object, or drawing, is a direct mirror of the artist's reality? Although Freud argued that in artists, "there can be a sublimation of the energy fomented by...[neurotic] instincts and by their energetic repression, so that these repressed instincts can be channeled off into areas which are less harmful personally and

³⁷ Sotheby's, London, *Impressionist and Modern Art Evening Sale* (auction catalog), February 5, 2013, 3.

³⁸ Lucie-Smith, *Twentieth Century Artists*, 87.

³⁹ Schröder, *Egon Schiele*, 162.

⁴⁰ *Ibid.*

⁴¹ Richard Kuhns, *Psychoanalytic Theory of Art: A Philosophy of Art on Developmental Principles* (New York: Columbia University Press, 1983), 114.

⁴² *Ibid.*, 115.

more acceptable socially,"⁴³ Schiele's neurotic fantasies were both personally harmful and socially unacceptable. Thus, Schiele's creative gift did not serve as a cure for his neurosis, as Freud hypothesized, but rather as an additional realm for him to express it in.

⁴³ Seidel, *The Crisis of Creativity*, 71.



Fig. 1. Egon Schiele, *Reclining Girl in Dark Blue Dress*, 1910. Gouache, watercolor and pencil with white highlighting, 45 x 31.3 cm. Private collection.



Fig. 2. Egon Schiele, *Gerti Schiele in a Plaid Garment*, c. 1908–1909. Charcoal and tempera on brown wove paper, 133 x 52.4 cm. Private collection.

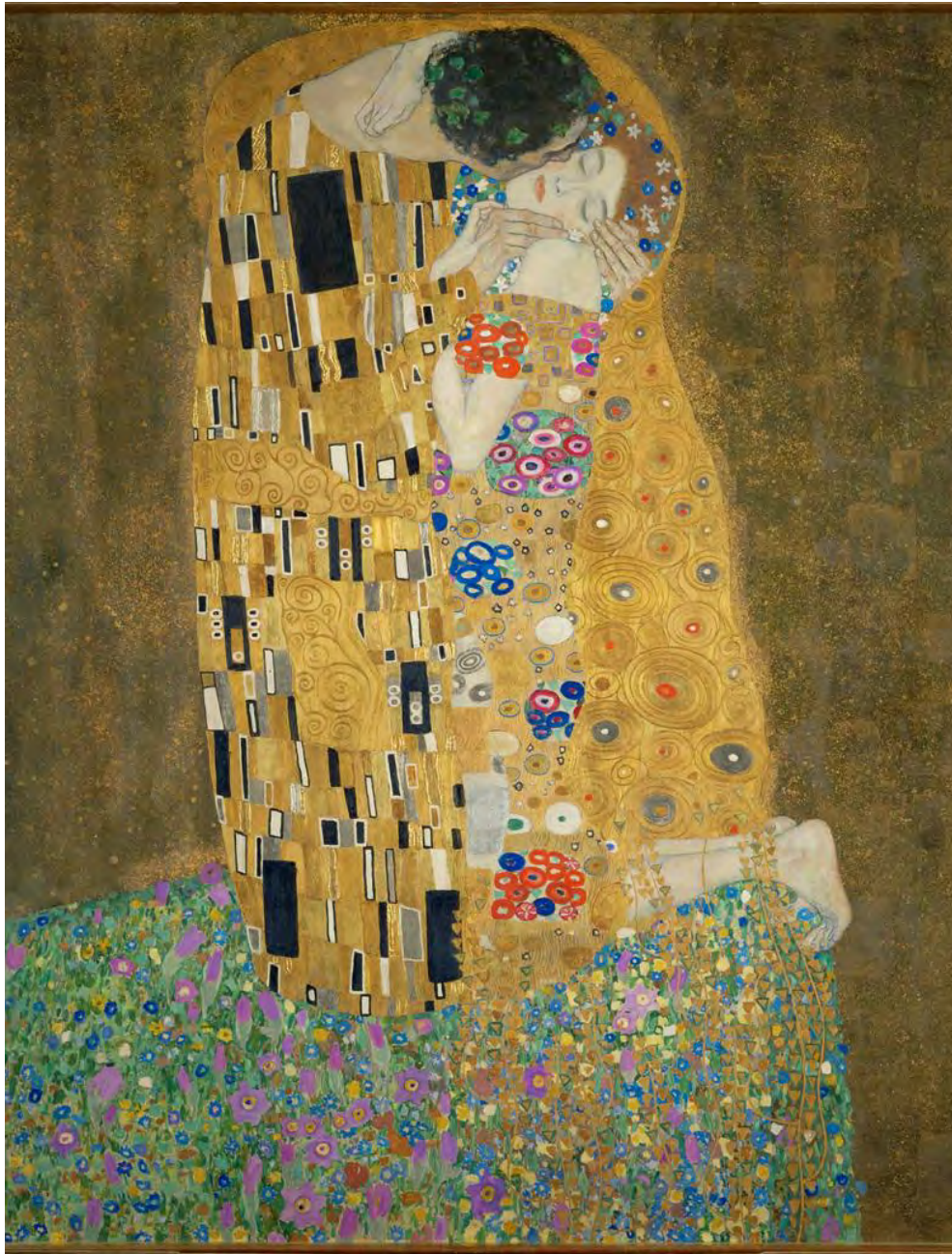


Fig. 3. Gustav Klimt, *The Kiss*, 1907—1908. Oil on canvas, 180 x 180 cm. Österreichische Galerie Belvedere, Vienna.

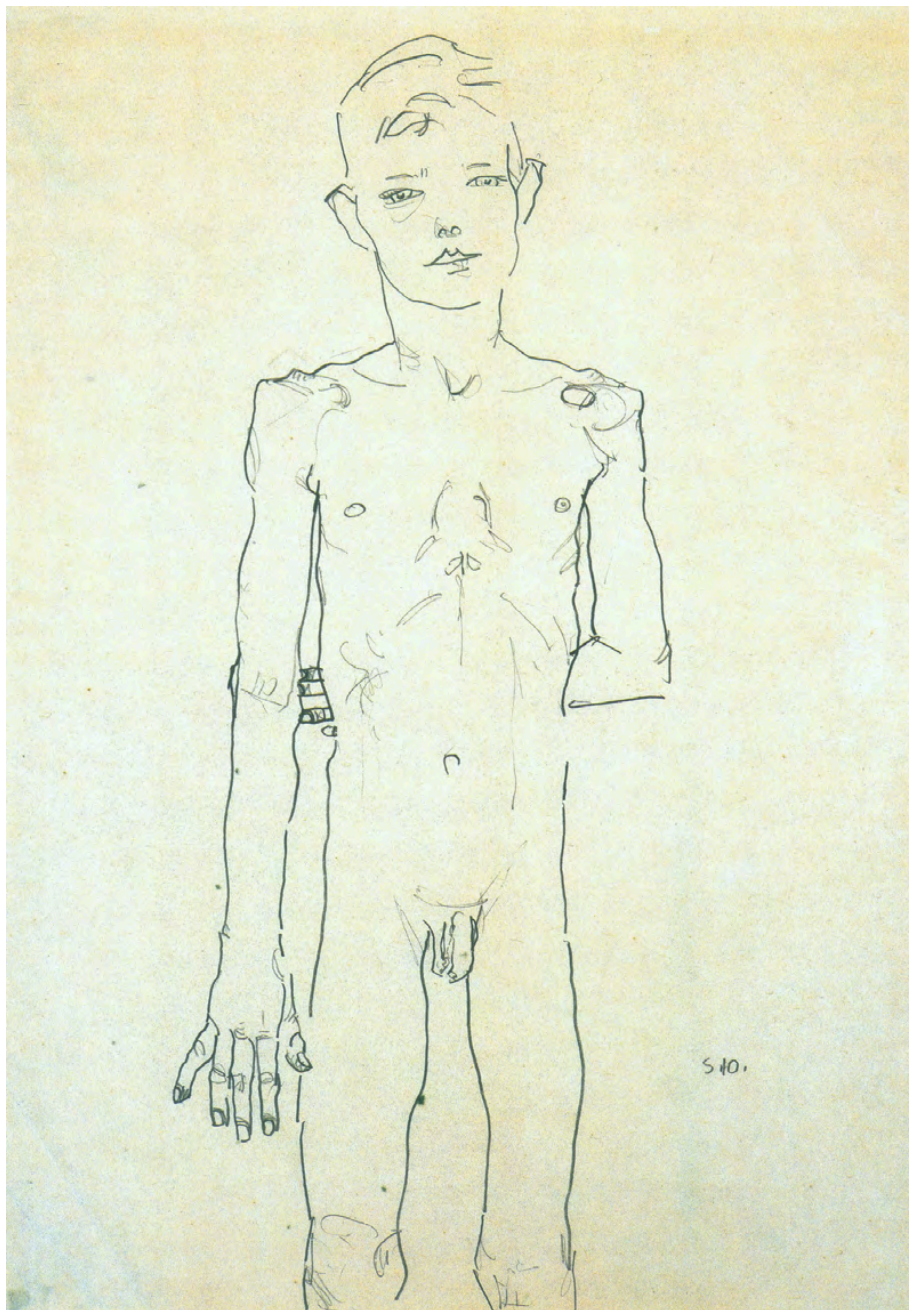


Fig. 4. Egon Schiele, *Standing Nude Boy*, 1910. Pencil, 36.6 x 26.8 cm. Neue Galerie Graz am Landesmuseum Joanneum.

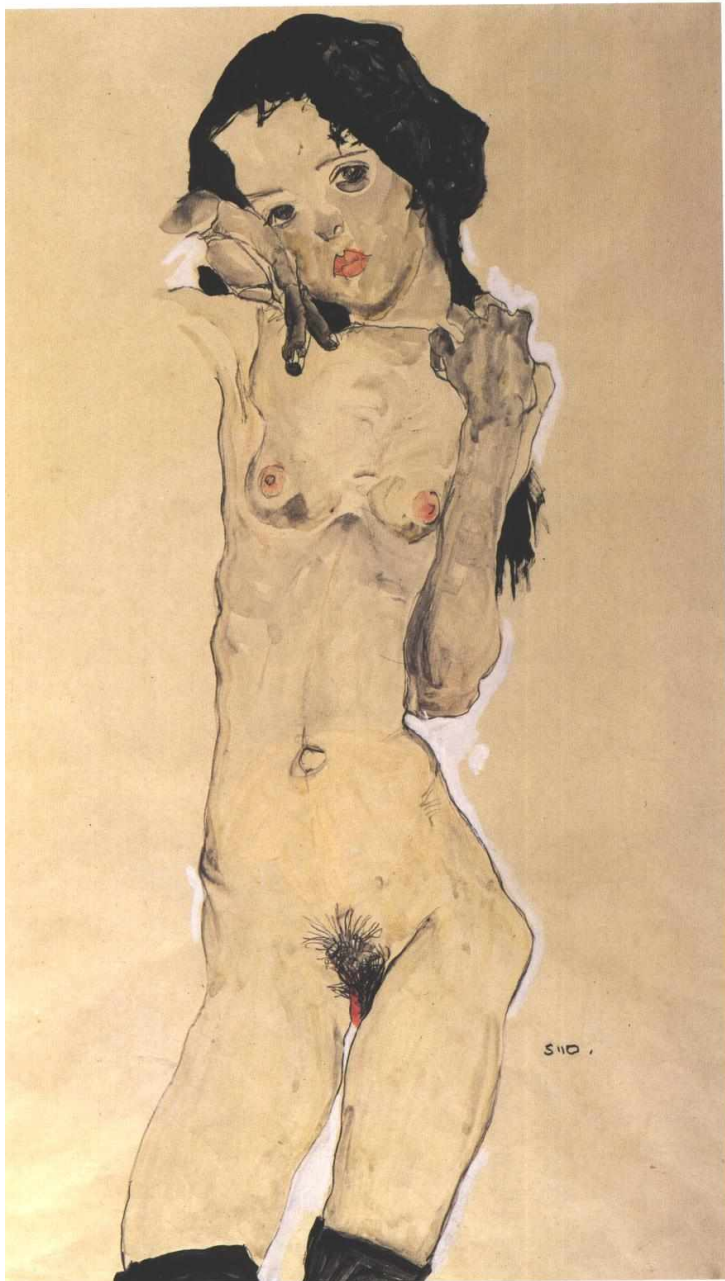


Fig. 5. Egon Schiele, *Black-Haired Nude Girl*, 1910, Pencil, brush, watercolor, with protein-based binder, opaque white on wrapping paper, 56 x 32.5 cm. Albertina, Vienna.

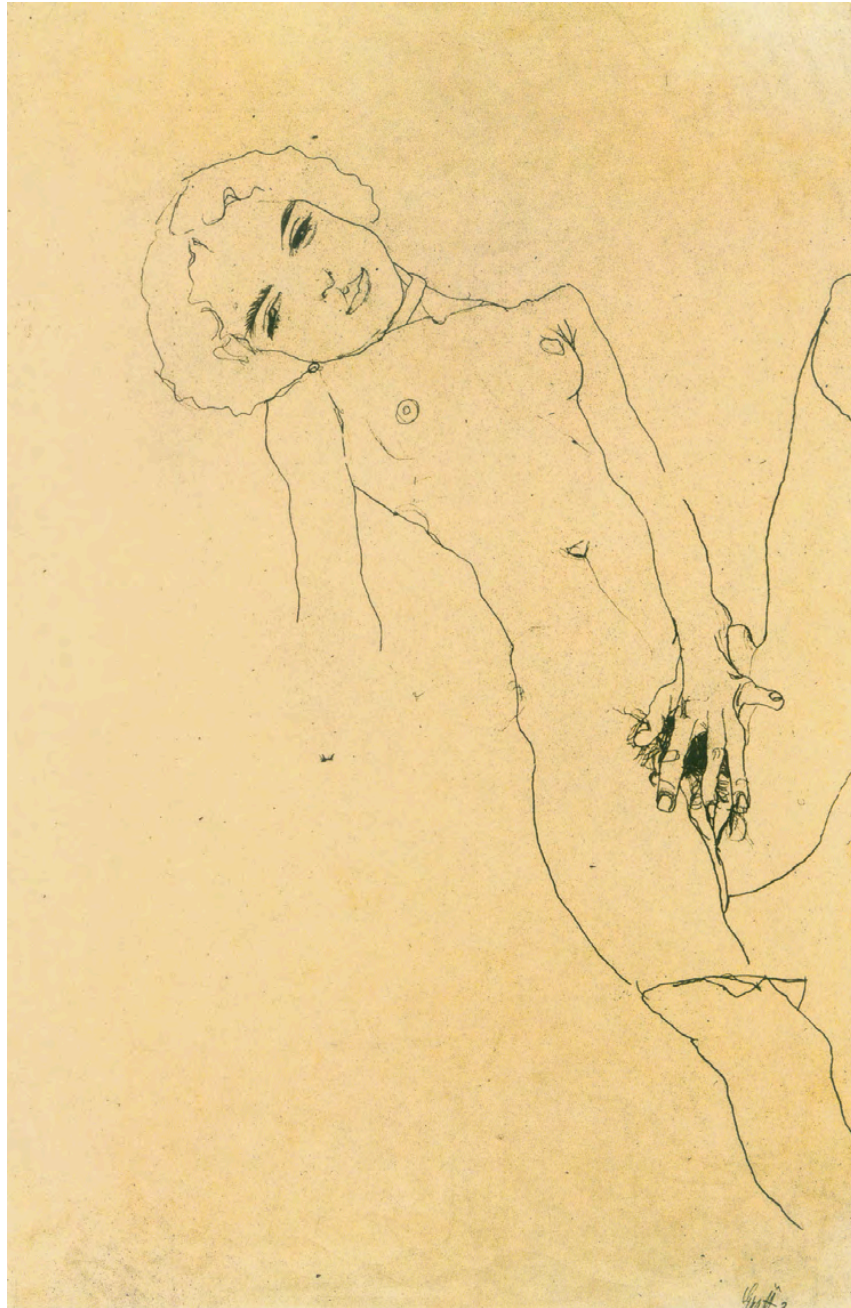


Fig. 6. Egon Schiele, *Masturbating Girl*, 1910. Pencil, 55.7 x 37 cm. Neue Galerie Graz am Landesmuseum Joanneum.

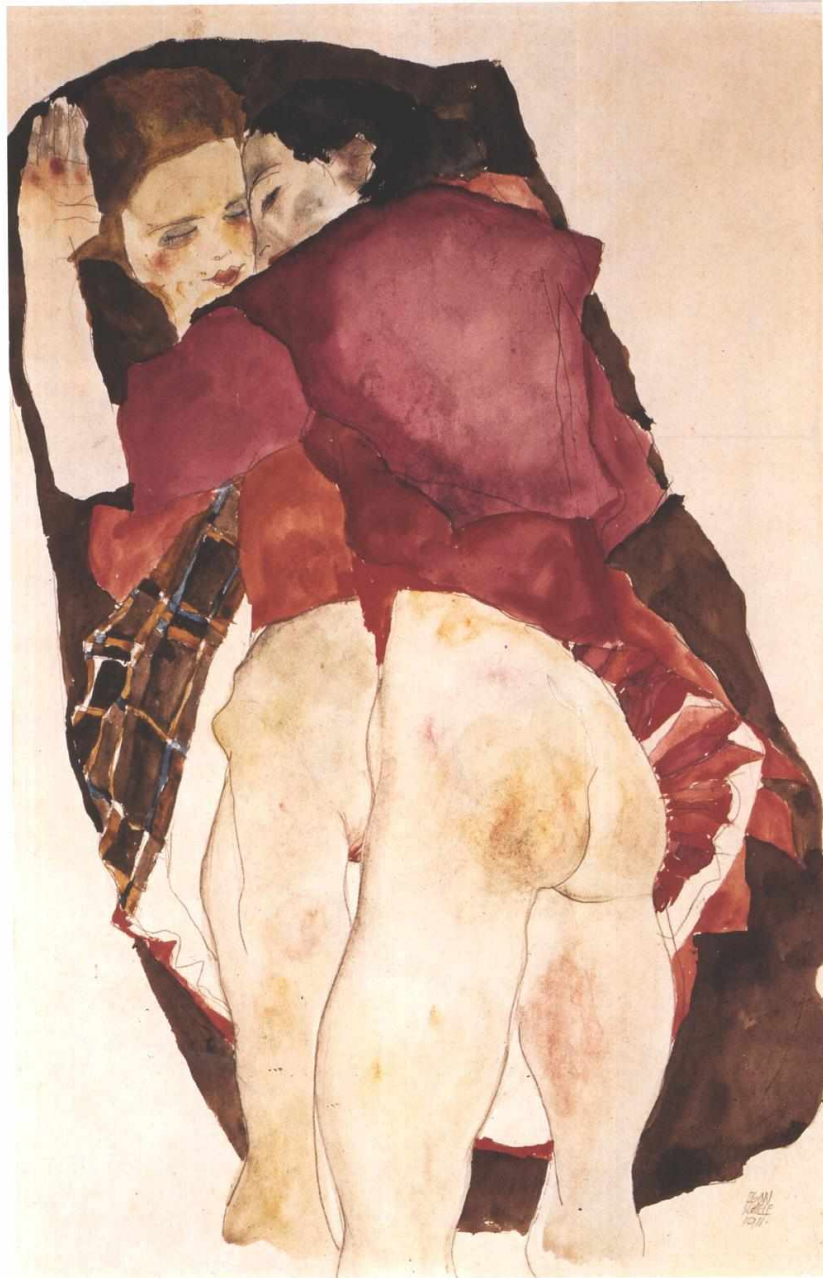


Fig. 7. Egon Schiele, *Two Girls (Lovers)*, 1911. Gouache, watercolor, and pencil, 48.3 x 30.5 cm. Private collection.



Fig. 8. Egon Schiele, *Semi-Nude Self-Portrait in Black Coat*, 1911. Pencil and watercolor with protein-based binder on Strathmore Japanese vellum, 47.9 x 32.1 cm. Albertina, Vienna.



Fig. 9. Egon Schiele, *Eros*, 1911. Black chalk, gouache, and watercolor, 55.9 x 45.7 cm. Private collection.

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DIFFICULT TO AUSCULTATE BLOOD PRESSURE MEASUREMENTS IN COLLEGIATE ATHLETES

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ABSTRACT

Introduction: The occurrence of difficult to auscultate (DTA) blood pressure (BP) measurement has not previously been reported in collegiate athletes. The purposes of this study were to 1) describe the frequency of DTA BP measures in collegiate athletes and, 2) compare differences in BP readings between athletes with DTA BP and those with normal Korotkoff sounds. **Methods:** Following IRB approval, men's soccer, women's volleyball, men's and women's swimming, and cross country collegiate athletes were recruited using a sample of convenience. Validity and reliability of data collectors and equipment was confirmed. Athlete demographics, two BP readings on each upper extremity (UE), and the occurrence of DTA BP were recorded during both a pre- and post-season measurement. Descriptive statistics of athlete demographics and DTA BP measures were analyzed. An unpaired t-test compared mean systolic blood pressure (SBP) and diastolic blood pressure (DBP) between individuals with DTA BP and those with normal Korotkoff sounds. **Results:** Ninety one collegiate athletes (51 males); age 19.4 (1.3) years; were recruited in the sports of men's soccer (n = 21), women's volleyball (n = 7), men's (n = 19) and women's (n = 23) swimming and men's (n = 11) and women's (n = 10) cross country. Three athletes were identified as having DTA BP during pre-season measurement and six athletes during post-season measurement. Athletes identified as DTA during the pre-season measurements had significantly lower right UE SBP ($p < 0.050$) and right UE DBP ($p < 0.004$) compared to athletes with normal Korotkoff sounds. Three month post-season BP readings identified continued lower right UE SBP ($p < 0.010$) among the DTA athletes. **Discussion/Conclusion:** This study identified the occurrence of DTA BP among collegiate athletes. Additionally, lower mean BP readings were identified in athletes with DTA BP compared to normal Korotkoff sounds. Contributing variables to the relationship between lower BP readings and DTA measurement requires further research.

INTRODUCTION:

Blood pressure (BP) measurement is utilized in the health care and fitness communities to prescribe exercise regimens, detect underlying disease processes and titrate pharmacological management of hypertension (HTN).^{1,2,3,4} While invasive BP equipment provides the most accurate beat to beat information, it lacks feasibility when obtaining community based measurements.⁵ Therefore, indirect methods of BP measurement, including auscultatory measurement with aneroid cuffs, are commonly used in these settings despite accuracy being method and equipment dependent.⁶ Unlike invasive equipment, the auditory acuity of the listener to detect sounds at various volumes becomes essential in obtaining the BP measurement. Furthermore, very low sound volumes have been observed among specific populations and medical conditions potentially making it difficult to auscultate the Korotkoff sounds.⁷

The occurrence of a Korotkoff sound with very low sound volume as heard through a stethoscope is defined as a difficult to auscultate (DTA) BP measurement. The occurrence has been reported in infants with cardiovascular disorders including coarctation of the aorta or a

Blalock-Taussig Shunt.⁷ Although literature linking Korotkoff sound quality to low plasma volumes is limited, evidence suggests there is a decrease in systemic blood flow among individuals with dehydration which may additionally support the finding of a DTA BP.⁸ Furthermore, a study by Moreno et al. demonstrated prolonged exercise resulted in dehydration and reduced plasma volume with a direct correlation to a decrease in both the systolic blood pressure (SBP) and diastolic blood pressure (DBP) readings.⁹ Although specific medical conditions and low systemic blood flow may contribute to the occurrence of a DTA BP measures, there is paucity of evidence identifying this clinical finding amongst collegiate athletes.

Cardiac related deaths among collegiate athletes have prompted more aggressive cardiovascular screening.¹⁰ Brachial artery BP measurement is identified in the *12-Element History and Physical Examination* which is endorsed by the American Heart Association as a component of pre-participation screening for all collegiate athletes.^{10,11} Therefore, BP screening of collegiate athletes by health care and fitness professionals could reveal BP with low sound volume and provide evidence for continued medical workup. Therefore, the purposes of this study were to 1) describe the frequency of DTA BP measures in collegiate athletes and, 2) compare differences in BP readings between athletes with DTA BP and those with normal Korotkoff sounds.

METHODS:

Research Design

Following IRB approval for the *Student Athlete Performance Fueling Program: An observational study*, collegiate athletes were recruited using a sample of convenience. This study describes a tertiary finding from BP data collection obtained during the *Student Athlete Performance Fueling Program* study.

Protocol

All 2013-2014 team members of the men's soccer, women's volleyball, men's and women's swimming and cross country rosters from one National Collegiate Athletic Association (NCAA) Division I university in Southeast Michigan were invited to participate. Informed consent was obtained prior to study participation. Athletes were deemed apparently healthy by a physician during a pre-season physical and prior to data collection. Demographics including gender, age and sport were collected for each participant. Additionally, wellness and fitness tests, including BP measurements, were obtained from each athlete as part of the *Student Athlete Performance Fueling Program* study protocol. Only demographical information and BP measurements were used for the purpose of this study. Athletes BP measurement was excluded from the study if the athlete had 1) participated in exercise in the prior 30 minutes 2) consumed caffeine during the prior 30 minutes 3) consumed any form of nicotine within the prior 24 hours or 4) was prescribed medication with BP altering effects to assure non-biased BP readings. Participants rested in a chair for a minimum of five minutes prior to obtaining the BP measurements. Furthermore, participants were positioned with back supported, feet uncrossed and flat on the floor, and arm supported by a bedside table at the level of the right atria for all measurements.^{3,12}

Blood pressures measurements were performed and recorded by two researchers trained in established measurement protocols.^{3,12} Calibration of aneroid (manual) BP cuffs was verified using a mercury sphygmomanometer prior to data collection. Additionally, amplified stethoscopes (Littman Brand Master Classic II and electronic model 3100) ensured acoustic sensitivity of adequate volume for Korotkoff sound auscultation. After verification of maximal cuff inflation level, two BP readings on bilateral upper extremities (UE) were measured and averaged with a minimum of one minute of cuff deflation between each measurement. A finding of DTA BP was documented on the data collection form. For the purpose of this study, a BP measure with decreased sound volume requiring at least two measurement attempts by at least two trained data collectors is defined as “DTA”. Blood pressure measurements were obtained during two data collection dates; the first at the start of the NCAA approved season (pre-season) and the second subsequent to the end of the season or a minimum of 3 months after the first measurement (post-season).

Data Analysis

Descriptive statistics provided information on demographics and the prevalence of DTA BP measures. An unpaired *t*-test was used to detect measurable differences in mean SBP and DBP between individuals with DTA BP and those with normal Korotkoff sounds. Analysis was conducted using STATISTICA 12.0 (StatSoft Inc) with statistical significance set at ($p \leq .050$). All data was presented as mean standard deviation.

RESULTS:

Subject Demographics

Ninety one collegiate athletes (51 males); age 19.4 (1.3) years; met criteria for inclusion in the sports of men's soccer ($n = 21$), women's volleyball ($n = 7$), men's ($n = 19$) and women's ($n = 23$) swimming and men's ($n = 11$) and women's ($n = 10$) cross country.

Frequency of Difficult to Auscultate Blood Pressures

Three athletes were identified as having DTA BP during pre-season measurement and six athletes during post-season measurement. Two athletes had DTA BP at both measurement encounters.

Difficult to Auscultate compared to Normal Korotkoff Sound

Athletes identified as DTA during the pre-season measurements had lower right UE SBP ($p < 0.050$) and right UE DBP ($p < 0.004$) and post-season measures identified significant differences in right UE SBP ($p < 0.010$) compared to athletes with normal Korotkoff sounds. Although statistically significant levels were not identified in all measures, trends toward lower mean BP readings were identified among athletes with DTA compared to athletes with normal Korotkoff sounds (Table 1).

Table 1: Difference in mean blood pressure reading

	Normal Korotkoff Sounds		Difficult to Auscultate Blood Pressure		
Blood Pressure	n	\bar{x} (mm Hg) (SD)	n	\bar{x} (mm Hg) (SD)	p-value
Pre R UE SBP average	87	107.7 (11.8)	3	94.0 (1.0)	0.050
Pre R UE DBP average	87	65.4 (8.9)	3	49.0 (23.5)	0.004
Pre L UE SBP average	87	106.7 (11.5)	3	94.7 (8.1)	0.076
Pre L UE DBP average	87	65.5 (8.9)	3	66.0 (7.2)	0.926
Post R UE SBP average	77	116.8 (10.9)	6	104.7 (8.6)	0.010
Post R UE DBP average	77	71.9 (8.0)	6	72.5 (6.4)	0.855
Post L UE SBP average	77	114.8 (11.0)	6	108.2 (10.7)	0.160
Post L UE DBP average	77	70.8 (8.3)	6	69.7 (6.0)	0.746

SD= standard deviation

\bar{x} = mean

R= right

L= left

UE= upper extremity

SBP= systolic blood pressure

DBP= diastolic blood pressure

Pre = pre-season blood pressure measure

Post= post-season blood pressure measure

DISCUSSION:

The purposes of this study were to 1) describe the frequency of DTA BP measures in collegiate athletes and, 2) compare differences in BP readings between athletes with DTA BP and those with normal Korotkoff sounds. The occurrence of a DTA BP was identified in collegiate athletes during both the pre- and post-season measurements. Additionally, two athletes of the six were identified with DTA BP during both measurements. Although previous literature has reported this clinical finding in children with cardiovascular disorders and in individuals with low systemic blood flow, this is the first study to report the occurrence in collegiate athletes deemed apparently healthy by a physician.^{7,8}

Additionally, lower BP measures among athletes with DTA reached clinical significance for pre-season right UE SBP, right UE DBP, and post-season right UE SBP. One theory that may explain this finding is dehydration or hypohydration among the athletes with DTA. Prior evidence suggests dehydration is associated with decrease blood flow and perfusion pressures to skeletal muscle as well as the systemic circulation.^{8,13} Additionally, a study describing cardiovascular responses associated with human temperature regulation suggests exercise may promote dehydration-induced reductions in exercising limb blood flow.¹⁴ Furthermore, Volpe et al. reported a 66% incidence of some level of hypohydration among collegiate athletes with 13% of those having significant levels of hypohydration (urine specific gravities > 1.031).¹⁵ Although the unilateral significant occurrence of a DTA BP may provide argument against a systemic

causation, the trends in low BP measures of all readings may be affected by the low sample size of individuals with a DTA BP. If indeed the identification of a DTA BP is associated with dehydration in this population, the identification of the low Kortokoff sound volume could provide health care providers with another clinical sign of potential dehydration or hypohydration. However, as this study reports a tertiary finding of a larger study, further research designed for this research question is recommended to support or null this hypothesis.

Study Limitations

A limitation of the study includes the inability to review other clinical indicators such as urine specific gravity to confirm or deny dehydration/hypohydration status of athletes. The small sample size of DTA BP measures may limit the ability to detect relationships in both extremities leading to a type II error. Additionally, equipment to enhance the sound volume of the Kortokoff sound, such as a Doppler instrument or implementation of an overhead technique to increase blood flow to the upper extremity described by Perloff et al. were not utilized when a DTA BP was identified.^{16,17}

Future Research

Studies with sample size and volume measures specifically designed for identification of DTA BP measures and causative factors including dehydration clinical markers including urine specific gravity, heart rate, electrocardiography, unilateral versus bilateral findings, and transient versus chronic DTA BP readings may provide evidence for a relationship between the clinical sign and a medical diagnosis. Utilization of a Doppler instrument or other measurement equipment to eliminate auditory barriers of the listener should be explored. The overheard technique described by Perloff et al. should be examined to determine the possibility of poor tissue perfusion affecting DTA outcomes. Additionally, future studies describing the prevalence of DTA in other populations are warranted along with studies that examine potential clinical sequelae of DTA BP.

CONCLUSION:

Difficult to auscultate BP measures were identified in collegiate athletes. In addition, significantly lower mean BP reading were observed in athletes with DTA BP measures compared to those with normal Korotkoff sounds. Although further research is needed to confirm the causation of a DTA BP, the clinical finding in collegiate athletes could provide an indication for further medical workup to identify potential medical conditions.

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Where the Holes Come From:

The idea behind the Holes and Cuts of Lucio Fontana

Meeting of Minds

May 9, 2014

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ABSTRACT

Lucio Fontana (1899-1968) was an Italian artist born in Argentina. He is especially known for his Spatial Concepts that included monochromatic paintings with holes and cuts in them. These hundreds of works trying to capture space made him well known across the world in the 1950's and 60's. But where did this idea of holes and cuts come from? The concepts behind these works can be connected to his "White Manifesto" and "Technical Manifesto," written in 1946 and 1947, respectively. Even though there is a six-year gap between the making of the first manifesto and the first real canvas with holes that was part of the series, without the manifestos Fontana's holes and cuts would not be the same. This is because of the ideas stated in the manifestos, the art that evolved out of those ideas, and the pictures taken of these art works.

Where the Holes Come From: The idea behind the Holes and Cuts of Lucio Fontana

Since the 20th century, artists started to write manifestos in order to make public statements about their views or inspiration behind a particular art movement. Lucio Fontana (1899-1968), born in Argentina, was an Italian artist, who was best known for his Spatial Concepts.¹ These Spatial Concepts are art pieces that emphasize relationship to space and the experience of the viewer. Some of the art pieces existed out of monochrome painted canvasses with holes, and later cuts, in them. But where does these almost violent holes and cuts come from? Fontana published during the twentieth century, five different manifestos that all contributed to his development of these particular Spatial Concepts, and therefore to the history of art². “Manifesto Blanco” (The White Manifesto), published in 1946, and “The Technical Manifesto”, published in 1947, are the most influential of these manifestos and they form the roots of Spatial Concepts.

The White Manifesto was written by Fontana and some of his students in Buenos Aires and was meant as the basis for his idea of ‘Spazialismo’ (Spatialism). After publishing the manifesto, Fontana developed this idea of Spatial Concepts further in the “Technical Manifesto Given at the 1st International Congress of Proportion at the IX Triennale, Milan, 1947.”³ Fontana’s first attempt of making spatial concepts was by developing “Environmental art”. It wasn’t until 6 years later, that he made a series of canvasses with holes and cuts. These works evolved out of the ideas stated in the manifestos, and are able to show the meaning behind his statements. Even though, there is a 6 year time period between writing the manifestos and Fontana’s holes and cuts, the role of the manifestos is essential in the creation of these holes and cuts, because of the ideas stated in the manifestos and the reasons behind those ideas, the work that came out of those manifestos, and the photographs taken of those works.

Both manifestos are based upon certain ideas of Fontana. How he viewed the world and how this could relate to art. The statements made in these manifestos created the basic concept of Spatial Art and therefore the holes and cuts.

One of the main ideas in the White manifesto, and later in the Technical Manifesto, is the idea of capturing movement in art. According to Fontana, this was necessary to make a connection with the true essence of art: time and space. Fontana states that since “physics managed to explain nature through dynamics,”⁴ art tried to do the same. First it could only capture movement through music (painters went back to a neo-classical period and so lost connection) but when impressionism came to existence, this changed. Different art

¹ Renato Barilli, “Lucio Fontana,” Oxford Art Online, accessed November 21, 2013, http://www.oxfordartonline.com/subscriber/article/grove/art/T028873?q=luccio+fontana&search=quick&pos=1&_start=1#firsthit.

² Bekaert Geert, “Lucio Fontana- Concetto spaziale,” Openbaar Kunstbezit Vlaanderen, no date, accessed November 16, 2013, <http://www.tento.be/OKV-artikel/lucio-fontana-concetto-spaziale>.

³ Charles Damiano, trans., *Ark, Journal of the Royal College of Art*, no.1, (Milan: 1959), quoted in Luca Massimo Barbero “Lucio Fontana: Venice/New York” New York: Guggenheim Foundation, 2006) 226.

⁴ Charles Harrison and Paul Wood, ed., *Art in Theory 1900-2000: an Anthology of Changing Ideas*, “Lucio Fontana (1899-1968) ‘The White Manifesto’,” (Wiley-Blackwell: 2002), 654.

movements developed, such as Futurism and Cubism, all trying to capture movement in their own way. According to Fontana, they did not succeed because the true essence of movement in art, capturing time and space, was still missing, and artists gave up too much in their process of finding it.

The Impressionists sacrificed drawing and composition. The Futurists eliminated some elements and reduced the importance of others as they were subordinated to sensation. Futurism adopted motion as its solitary goal and objective. The Cubists denied that their paintings were dynamic; yet the real essence of Cubism was the vision of nature in movement.⁵

To capture this true essence and make this connection with time and space, art had to go back to nature. Fontana did this in his holes and cuts paintings by going back to the canvas. Also, by stabbing and slashing the canvas, time got a crucial role. The work now involved physical action, in time, and the viewer was able to see this action and the result of it. Therefore the canvas was not `dead` anymore, it contained movement,⁶ and according to Burt Wasserman the holes and cuts even brought “a curious “dynamic” force to realization.”⁷

This idea of going back to nature to capture the true essence of art, is another major concept in Lucio Fontana’s White Manifesto and in the Technical Manifesto and becomes central in the works with holes and cuts. According to Fontana, through time a disconnection occurred between people and the world around them. Mankind changed constantly and it seemed that the world could not keep up. Art could not connect to the people anymore completely because the “Twentieth-century man, shaped by materialism, has become inured to conventional forms of representation and to the constant re-telling of already familiar experiences.”⁸ The best way to find this connection again and to be able to satisfy the “Twentieth-century man” is to go back to nature and therefore to prehistoric times. In these times, the primitive man was driven by different sensations.⁹ Everything was new, and everything had to be discovered. Therefore all characteristics had to be developed. With the holes and cuts Fontana basically does the same thing. Fontana abandoned all other forms and went back to the canvas. In this way he could “stress the reality of the canvas as a material object to be experienced directly and without formal preconceptions.”¹⁰

The idea of going back to nature and primitivism in order to find the true essence of art is based on Bataille’s ideas of primitivism. Georges Bataille, born 1897, was a thinker/theorist from the 20th century whose focus laid around eroticism and death, and based a philosophy upon these two aspects.¹¹ He also researched the historical paintings in the caves

⁵ Idem

⁶ Michael, Glover, “Lucio Fontana, Estorick Collection, London,” *The Financial Times Limited* (July, 2007), accessed December 4th 2013, <http://search.proquest.com/docview/229077318>.

⁷ Burt Wasserman, “Giacometti & Fontana: Art Pierced by Space,” *Art Education*, vol 19, no. 1 (January 1966): 19, accessed November 28, 2013, <http://www.jstor.org/stable/3190760>.

⁸ Charles Harrison and Paul Wood, ed., *Art in Theory 1900-2000: an Anthology of Changing Ideas*, “Lucio Fontana (1899-1968) ‘The White Manifesto’,” (Wiley-Blackwell: 2002), 653.

⁹ Idem

¹⁰ Jonathan Fineberg, *Art since 1940: Strategies of Being*, (Chicago: University of Illinois: 1995), 152.

¹¹ Michael Richardson, *Georges Bataille*, (Routledge: 1994)

of Lascaux, France. In these paintings, Bataille distinguished two kinds of painting, “the ‘well-formed images’ that resemble animals, on the one hand; and the deformed, abstract, sculptural renderings of human beings on the other.”¹² This distinction between the two kinds of figures made Bataille wonder how it was possible that the primitive man was able to draw animals in the “correct” manner, but could not do the same with humans. Lucio Fontana links this to the idea that there has been a disconnect between the human and the representation of its own figure from beginning on and so, by returning to this, Lucio Fontana wants to reconnect with this state of being. In this way, the primitive man can re-create itself and therefore can develop new characteristics that link to its time period. This can be found back in Lucio Fontana’s holes and cuts. The holes and cuts create an emptiness from which every characteristic can evolve.¹³ There is a new space to fill.

In the Technical Manifesto, Fontana adds more to the ideas given in the White manifesto and he defines the idea of Spatial Concept. “Spatial art, in our time, is neon light, television and the fourth ideal dimension in architecture.”¹⁴ This is the first time that he describes the essence of Spatial Concept, stating that it has a very close connection to architecture. Even though he made it sound very simplistic, the idea behind spatial concept was complex. Spatial Concept

was concerned with art in motion, with art as a manifestation of pure energy that would engage with, and somehow come to represent, notions of space and time. Spatialism was a kind of mould-breaking, anti- illusionistic art that managed to synthesise art and science having, along the way, turned its back on figuration and representation while subsuming radio, television and even neon light into its ever-thirsting vortex.¹⁵

When the manifestos were published, avant-garde artists were struggling to transform this idea behind Spatial Concept into art. Nothing seemed to capture the essence of Spatial Concepts or come close to the idea behind it. This was a problem until Fontana came up with his ‘Spatial Environments’. These works are directly linked to the canvasses with holes and cuts in them because in 1949, Fontana produced as a study, a Spatial Environment by making holes into a canvas.

¹² Suzanne Guerlac, “The Useless Image: Bataille, Bergson, Magritte,” *Representations*, Vol 97, No. 1 (winter 2007): 37- 8, accessed December 1st, 2013 <http://www.jstor.org/stable/10.1525/rep.2007.97.1.28>.

¹³ Idea of emptiness is further explained on page 7.

¹⁴ Charles Damiano, trans., *Ark, Journal of the Royal College of Art*, no.1, (Milan: 1959), published in Luca Massimo Barbero “Lucio Fontana: Venice/New York” New York: Guggenheim Foundation, 2006) 231.

¹⁵ Michael, Glover, “Lucio Fontana, Estorick Collection, London,” *The Financial Times Limited* (July, 2007), accessed December 4th 2013, <http://search.proquest.com/docview/229077318>.



Figure 1, Lucio Fontana, *Black Ambiente*, 1948-49. Colored india inks on photograph, 21 x 17.5 cm. Fondazione Lucio Fontana, Milan.

Before coming up with the idea of the holes, the environmental works consisted of floating installations “tying together architecture, painting, and sculpture,”¹⁶ as was the essence of the Technical Manifesto. Fontana’s *Black Ambiente*, created in 1948-49, was one of the first works in this series (see figure 1). Made out of papier-mâché, covered with fluorescent paint, and hanging from the ceiling, it looked like it was able to embrace the space in the room. The room was made pitch black, only allowing ultraviolet light. Even though the work related to the primitive aspect in art by using papier-mâché and so going back to basics as stated in the White Manifesto, and “Fontana initially believed that installation was the most appropriate art form for his new era...he soon began to argue that a truly spatial art would have to be fully integrated with the empty space around it.”¹⁷ This idea of emptiness was already explored in the environmental works by leaving the viewer with an unsatisfying feeling. But it was taken further and became the basic for the holes and cuts. Instead of laying the focus on the painting itself, Fontana drew the focus to the material of the canvas and the space surrounding it. “What one sees of the painted thing is the paint itself, its paste-like texture, the color substance... Yet, the paint does not cover up the canvas but is blended in with it.”¹⁸ This created emptiness and the same unsatisfying feeling as was created in the Spatial Environments. Instead of leaving behind a mark of the artist presence, an emptiness is created, an absence.¹⁹ It looks like there is no artist at all, instead, there is nothingness, an empty

¹⁶ Anthony White, *Lucio Fontana, Between Utopia and Kitch*, (The Mitt Press:2011): 149.

¹⁷ Anthony White, “Art Beyond the Globe: Lucio Fontana’s Spatial Identity,” *Electronic Melbourne Art Journal*, issue 3, (2008): 3, accessed December 8, 2013 <http://emajartjournal.files.wordpress.com/2012/08/white.pdf>. 1- 13

¹⁸ Sonia Van Ballaert, “On the Nullity of Abstractions,” *Qui Parle*, Vol 2, no 2, (fall 1988): VI, 2, accessed December 5, 2013, <http://www.jstor.org/stable/20713727>.

¹⁹ This idea of the absence of the artist can also be found in the work of Abstract Expressionist artists. Abstract Expressionism was a post war movement in America. Even though the main focus of this art movement was on

space, ready to be re-created or refilled by mankind, connecting to the idea stated in the White manifesto.

In one of the studies for Spatial Environments in 1949 called *Untitled*, a “pierced square and triangular panels are shown installed in a room. The long lines connecting these panels to the wall and ceiling depict light traveling through them, and the dots on the wall stand in for the spots of light thus created.” This was the first canvas that Fontana pierced and forms the basis for the rest of the holes and cuts. It was meant as a study but it was a breakthrough for the rest of his career. Because of this work, Fontana was able to see the function of the canvas and how it was able to capture space in that unique, minimalistic way.²⁰ This work is directly tied to the first environmental works he made. “At the Galleria del Naviglio, the fluorescent paint had given the papier-mâché forms the appearance of both solidified light and luminous matter. Similarly, in the projected installation employing punctured panels, the apertures, by introducing light directly into the panels, connected them with the ambient character of light and space.”

After puncturing his first canvas, Fontana kept exploring this idea. He even showed a couple canvasses in an exhibition “displayed together as screens through which light was projected, creating the effect of a planetarium.”²¹ This idea of affecting the light through the holes became essential after publishing pictures of his work in 1952. By making a photograph of the work all of a sudden the flatness of the canvas became the focus of the work. Instead of having the idea of capturing space, the photo managed to make it look like the holes were placed upon the canvas. Also, making photographs influenced the traveling of light through the work. When seeing the work in real life, light created movement and made the work come to life. A photograph is a split second, it only captures what happens at that exact moment and flattens this to a 2d image. These effects of the photo on the works became essential for Fontana for making his actual series of holes and cuts because he was able to use the effects by letting the light influence the works.

Lucio Fontana’s holes and cuts are breakthrough concepts in the history of art, beginning their influence in 1952 and causing “controversy and outrage”.²² The idea behind

the individual psyches and trying to capture that by dynamic, energetic gesture, the viewer was not able to fully capture the artist and its intentions. The proof that the artist had been there and done the work was there, but there was also a void created between artist and viewer. This connection to Abstract Expressionism is a little ironic because “Lucio Fontana was the kind of artist who wished to engage with and comment on the nature of the world, rather than to express his own emotions in a creative form,” while expressing oneself was at the core of the Abstract Expressionist. “Culture Quake: Lucio Fontana,” *Telegraph* (London), August 30, 2004, accessed 28th November 2013, <http://www.telegraph.co.uk/culture/donotmigrate/3623049/Culture-quake-Lucio-Fontana.html>.

²⁰ The idea of minimalism was explored in Europe by artists such as Yves Klein and Otto Piene, representing together this new kind of art. Rober Storr, “How Simple Can You Get?” *MoMa*, Vol 3, No 5 (August 2000): 10-11, 11!! accessed December 11, 2013 <http://www.jstor.org/stable/4420484>.

²¹ Stephen Petersen, “Lucio Fontana, Milan”, *The Burlington Magazine*, vol 141, no 1157 (August 1999): 493, accessed December 4th, 2013, <http://www.jstor.org/stable/888463>.

²² Anthony White, “Industrial Painting’s Utopias: Lucio Fontana’s “Expectations”,” *October*, issue 124, (Spring 2008): 98-124, accessed November 28th <http://web.ebscohost.com/ehost/detail?sid=06e4f84b-6765-4a60-b306->

this concept can be connected to his White Manifesto and Technical Manifesto, written in 1946 and 1947. Even though there is a 6 year gap between the making of the first manifesto and the first real canvas with holes that was part of a series, without the manifestos Fontana's holes and cuts would not be the same. This is because of the ideas stated in the manifestos and the reasons behind those ideas, such as the idea of capturing movement and being able to do this by stabbing the canvas and therefore letting the viewer see the action, the idea of going back to nature and doing this by returning to the traditional canvas, and the idea of primitivism and so recreating mankind by leaving an emptiness to be filled with new characteristics. The works that evolved from the manifestos also have a direct influence on the holes and cuts because they also use the idea of emptiness and one of the studies of those works was a punctured canvas, which allowed Fontana to see the possibility of the canvas and how it could capture space. The photographic pictures of those studies contributed as well to the holes and cuts because they showed the flatness of the canvas and gave him an understanding how light effected the works. So even though there is a 6 year gap between the first manifesto and the actual series of punctured and slashed canvasses, there is a clear link. Without those two manifestos, Lucio Fontana's canvasses would still be intact.

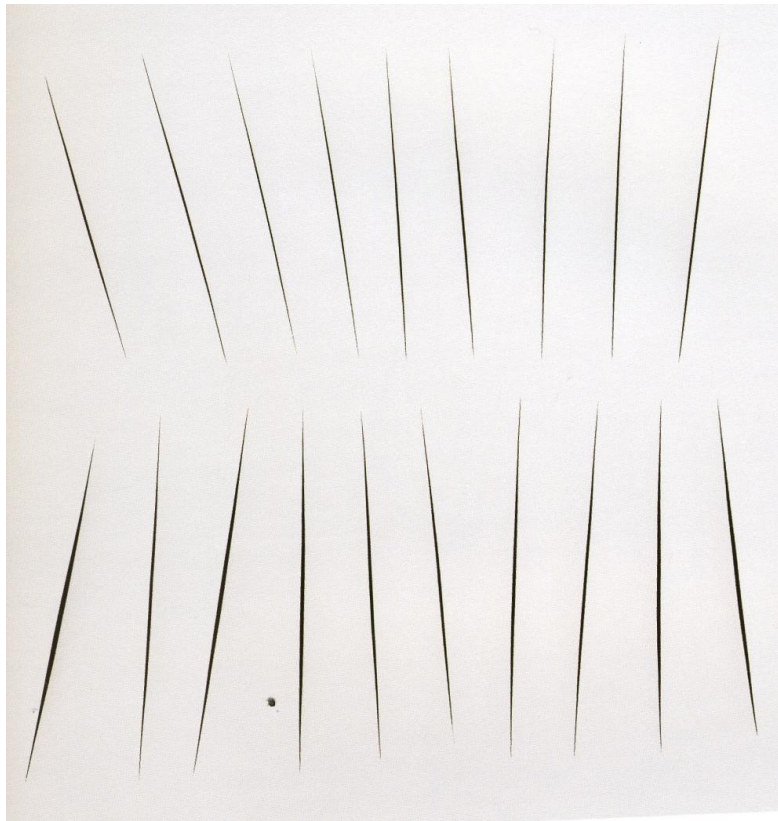


Figure 2. Lucio Fontana, *Concetto spaziale*, Attese, 1964. Water-based paint on canvas, 81 x 100 cm.
Fondazione Lucio Fontana, Milan.

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Children on Boundless Playgrounds: Attendance and Play Activities

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Abstract

Boundless playgrounds provide equipment accessible to children living with and without disabilities. Ten public boundless playgrounds in Michigan were visited. The attendance of children living with and without disabilities was recorded. The play of children was observed. No children with disabilities attended the playgrounds during the observations. The playgrounds promoted social, dramatic, and physical play among the attending children. No bullying was observed. In conclusion, boundless playground offer a variety of play opportunities for children. Interventions are needed to increase awareness of these playgrounds among parents and teachers of children living with disabilities.

Background

Play aids children's physical, neurological, cognitive, social, emotional, and language development (Ginsburg, 2007; Tsao, 2002; Barbour, 1999; Harlte & Johnson, 1993; Ridgers, Fairclough, Stratton, 2010; Baines & Blatchford, 2010). Children's personalities are developed through play by encouraging interpersonal relationships, advancing learning, and allowing children to conquer their fears (Ginsburg, 2007; Tsao, 2002). Social play allows children to build important life skills such as negotiating, sharing, and resolving conflicts (Ginsburg, 2007; Garvey, 1974). Self-confidence and problem-solving skills are shaped through play during childhood (Ginsburg, 2007; Tsao, 2002; Blaines & Blatchford, 2010). Playgrounds and play equipment challenging youth's physical abilities allow children to master their motor skills (Tsao, 2002). Play has been recognized as a right of every child by the United Nations High Commission for Human Rights (Ginsburg, 2007).

Children of all abilities including children living with disabilities benefit from having play opportunities. The Americans with Disabilities Act (ADA) has set minimum guidelines for the design of playgrounds that increase the accessibility to play areas for children living with disabilities. For example, space next to equipment should be available for a child to leave a wheelchair according to the ADA guidelines. If any existing public play area is altered, the play area must comply with the ADA guidelines to ensure accessibility. Playgrounds planners are encouraged to exceed the ADA minimum guidelines (Access Board, 2005; Thompson, Hudson and Bowers 2002).

Mainstream playgrounds often do not provide full accommodations for children living with disabilities. Therefore, public boundless playgrounds were developed to exceed the ADA guidelines (NCBP, 2014). Children using wheelchairs and other devices and those with cognitive, visual and hearing impairments can enjoy boundless playgrounds (NCBP, 2014). Wide access ramps for children with wheelchairs are available on boundless playgrounds. Children do not need to leave their wheelchairs to use the equipment on boundless playgrounds. Children with sensory impairments can enjoy sensory-rich gardens and play instruments on these playgrounds.

Research regarding boundless playgrounds is limited (Kodjebacheva, 2008). While much public and private funding is dedicated to building boundless playgrounds, it is unknown whether boundless playgrounds are widely used by children of all abilities and what types of play the boundless playgrounds encourage. Based on the inadequacies in the literature, the research investigated the attendance and play activities of children on public boundless playgrounds in Michigan. Michigan was chosen because the state has among the highest rates of childhood disability in the nation (U.S. Census Bureau, 2011).

Methods

A total of 10 boundless playgrounds in Michigan were visited and observed. Other researchers have used field observations to study playgrounds (Loukaitou-Sideris & Stieglitz, 2002; Colabianchi, Kinsella, Coulton & Moore, 2009; Farley, Meriwether, Baker, Rice & Webber, 2008). The boundless playgrounds in this study were located in Bloomfield Hills, Detroit, Flint, Lansing, Sandusky, Saginaw, Southfield, Waterford, Wayne, and West Bloomfield. The field observations took place between June and August, 2013. The play activities of children were observed discreetly from a distance. All of the observations were

conducted during a late morning to late afternoon. An application to conduct this study was submitted to the University of Michigan – Flint Institutional Review Board (IRB). The IRB categorized this study as IRB-exempt due to the minimum risk to subjects.

The types of play were categorized as social, dramatic, functional/physical (motor), and exploratory. These types of play were defined according to the definitions used in Ihn's (2004) study:

- Social play was identified as solitary, parallel, and group social play. When a child plays independently, the child engages in solitary social play. Parallel social play involves having a child play beside rather than with another child. Group social play occurs when a child plays with a child or a group of children by seeking to achieve a common goal.
- Dramatic play includes pretend or creative play.
- Functional play occurs when a child performs repetitive muscle movements.
- Exploratory play happens when children walk or wheel through the playground surveying the play equipment and playground.

Bullying and anti-social behaviors were defined as aggressive behaviors where a child would be hurt physically, verbally, or socially. Aggressive behaviors occur when a child uses a form of power over another child. For example, purposely leaving a child out of a play group was categorized as bullying (U.S. Department of Health & Human Services, 2014). In addition to play activities, variability as defined by Winter et al. (1994) was assessed. Variability is referred to as the ability of children to select from a variety of alternatives and find a personally suitable play option. In addition, it was assessed how children living with disabilities, if not present, could potentially use the equipment.

Results

Observation of children's play

Throughout the observation period, no children with apparent disabilities attended any of the boundless playgrounds. Between 5 and 50 children without apparent disabilities aged between 2 and 12 years attended the playgrounds. These children were accompanied by adults. Children seemed to be thoroughly enjoying the play equipment. There was no recorded bullying among children.

Types of play accommodated and variability

To facilitate functional play, children used activity boards, climbing equipment, slides, wheeled toys/bike paths, and swings (Table 1). The most popular piece of equipment for functional play was the climbing equipment. The climbing equipment contained the greatest variety of play options. The climbing equipment contained rock walls, ropes, ladders, monkey bars, slides, and ramps. Dramatic play was very common and was promoted through activity boards, wheeled toys/bike paths, and sandboxes. One playground offered a log cabin, a boat, and a sandbox with hidden fossils that were used by children to discover and thus engage in dramatic play. Many of the playgrounds offered some pretend play options such as a grocery store facades.

Table: Types of play that equipment accommodated among the children in attendance

Type of play elements/designs	Types of play/interaction promoted
Climbing Equipment and Mazes	Functional, Exploratory, Social
Wide ramps and stairs with rails	
Rock walls	
Ropes	
Fireman's poles	
Ladders	
Monkey bars	
Swings	Functional and Social
Harnessed swings with high back support	
Slides	Functional and Social
Single	
Multiple slides connected so that children could race to the bottom	
Roller slides (industrial type slides)	
Sandboxes	Dramatic and Social
Raised sandboxes set at multiple heights on edges of concrete walkways	
Wheeled Toys/Bike Paths	Functional, Exploratory, Social
Wide concrete pathways allowing turn around space	
Activity Boards	Dramatic, Functional, Social
Sign language and braille boards	
Steering wheels at wheelchair height	
Spinning tic-tac toe boards	
Gear cranks at wheelchair height	
Voice pipes at multiple heights	
Musical elements at wheelchair height, such as drums and xylophones	
Grocery store set-ups	
Other Play Equipment	
Play houses with wide entrances	Dramatic and Social
Wheelchair accessible see-saws	Functional and Social
Ground level tunnels for crawling	Dramatic, Functional, Social

There were many different pieces of equipment or areas that promoted social play. A few examples of some common activity boards that were used for social play included voice pipes, tic-tac-toe boards, steering wheels, mirrors, chimes or other musical elements, and binoculars. Enough space was provided so that children using wheelchairs (though not present) and children without wheelchairs could use the elements side-by-side. The swings promoted parallel social play. Harnessed swings were next to regular swings so that children of different abilities could swing together. The climbing equipment allowed for many children to interact with one another because ramps and turns were spacious. Sandboxes raised at the heights of wheelchairs promoted solitary, parallel, and group social play among the children in attendance. Wheeled toys/bike paths accommodated group social play by allowed for children to race one another or engage in other games. Because paths were made of concrete or rubberized material, children in wheelchairs or other mobility devices (though not present) could participate.

In terms of variability, the boundless playgrounds offered children an array of options. The boundless playgrounds would offer children living with disabilities with many options for play. Children with disabilities would not be confined to only a few play options at any of the playgrounds. It is arguable whether children with disabilities were provided with many functional play options. Swings and wheeled toys/bike paths were the primary functional play options for children with disabilities.

Discussion

Overall, the playgrounds accommodated children's right to play exceptionally well. Equipment that was designed to enhance accessibility for children living with disabilities also accommodated children without disabilities. By providing children with a variety of areas and pieces of equipment, children were able to engage in different types of play. Previous studies suggested that playgrounds should be designed with ample choices of installed play equipment (Farley et al, 2008; Sallis et al, 2001). Interventions have demonstrated an increase in physical activity of children on playgrounds after providing additional play equipment (Farley et al, 2008; Sallis et al, 2001). The ability to choose between play options allows a child to gain independence (Furey et al, 2009). Future research may assess the ability of boundless playgrounds to develop independence in children.

This qualitative observational study has several limitations. The number of playgrounds was small. The results cannot be generalized to all of the boundless playgrounds. All playgrounds were visited only once. During the field observations, no children with physical disabilities were observed; therefore, the actual play activities of children living with disabilities could not be observed. Parents and children were not interviewed or surveyed regarding the variability of the playgrounds.

Despite the accommodations that have been made for children living with disabilities on boundless playgrounds, no children with disabilities attended on the days of observation. Future research should investigate whether the lack of attendance could be attributed to low rates of disability in the specific area, transportation barriers among parents, social stigma related to attendance, lack of awareness about the existence of the playgrounds, or other reasons. Including inter-disciplinary groups of workers in the design and promotion of playgrounds may increase visitation of children living with disabilities. A study showed that consulting parents of children with disabilities about play space increased playground attendance (Soltani et al, 2012).

This study may benefit teachers, special educators and social workers in advocating for the play of young children in their communities. Creating programs within special education schools and community centers that provide complimentary transportation to the boundless playgrounds may increase the utilization of the playgrounds. Special education schools may hold outings and events at the playgrounds. In addition, physicians and home care nurses should receive education on the existence, location, and benefit of boundless playgrounds. Another recommendation for increasing awareness of boundless playgrounds is to develop social media campaigns on the playground location and benefits. Developing programs to increase attendance of youngsters living with disabilities may promote the development and social interactions of children with different abilities.

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Close Reading for Students

Research Analysis

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It has become increasingly interesting in a field of literary research and analysis that Close Reading is an educational practice that provides the opportunity for insightful, careful and creative investigation leading to individual theory. Literary analysis allows for individual agency, which makes room for imagination as the reader speculates each word and what it means to them. However, it is vital to remember that straying too far away from the language can be dangerous when making a valid argument.

In this discussion I would like to present the benefits of close reading, how and why this strategy is an excellent tool for becoming a better reader and writer as well as related concepts dealing with literary criticism. Close reading, also known as “New Criticism,” is most definitely a gateway to becoming a successful college student. Here, I will talk about what skills and understandings derive from practicing close reading and why. Some find reading “irrelevant” writings to be wasteful and meaningless for a number of reasons, however, close reading can provide genuine meaning through reaching a deeper comprehension, ultimately, exhausting the possibilities of validating arguments. The purpose here is to bring awareness to this process and promote a self-motivated education.

One of the main purposes of teaching literature is to increase literary appreciation, introducing new cultural genres, understanding different perspectives of literature and perhaps even life itself, and of course, building habits of reading regularly which increases sophistication in vocabulary, spelling, sentence formulation and other educating influences. Close reading, when practiced correctly and periodically, can become a gateway to an improved education overall. Jane Gallop, a well-known English and Comparative Literature professor wrote about close reading as a distinguished reading tool in the article “Close Reading in 2009,” “not because close reading is necessarily the best way to read literature but because close reading—learned though practice with literary texts, learned in literary classes—is a widely applicable skill, of real value to students as well as to scholars in other disciplines” (15). Here, I would like to point out that close reading is educational value in the sense that it is a critical thinking skill that can be distributed among various works and understandings because this practice forces the reader to think. By gaining a skill that helps you to understand language, perhaps even unfamiliar discourse, allows the reader to think about what they are reading in a technical/logical and theoretical manner.

Close reading offers an opportunity to see what is involved in overall learning and success. Close reading can help one to better understand the functions of language outside of the realm of expectation. One of the values this practice has to offer is the act of noticing. Close reading, if followed, forces the reader to read beyond what they expect the writer to be talking about by emphasizing small details that are seemingly insignificant. After those small details are taken into account the reader will find that the text is saying something much different from what they thought initially, because, close reading rules out the self-fulfilling prophecy that non-close readers tend to incorporate when analyzing a text. Jane Gallo points out, “Reading what we expect to find means finding what we already know; learning, on the other hand, coming to know something that we did not know before. Finding what we already know, projecting it onto a text, is the opposite of leaning” (16). If we take into account that non-close readers indeed read what

they expect to read, then, the probability of them running into new information or critical thinking is very small. Close reading can break this learning barrier because it provides the ability to look for, and find, newness and newness is what learning is all about; discovery, finding what is unfounded. Here, the idea of “newness” is to introduce the idea of finding originality. Close reading functions as the guide to understanding how to notice. This gives the reader the necessary tools to becoming a self-motivated learner through good observation, conclusion and insight.

Every student should have a personal “tool box” when engaging in close reading, experienced or inexperienced. This tool box should include the understanding of diagnostic terminology in literature such as: imagery, structure, diction, syntax, literary devices, context, tone and many more. After accruing this information it is vital that the reader analyses the text detail by detail starting with the exact meaning of the words being provided. Here we are looking for what the writing saying in a literal sense (e.g. saying “Two households, both alike in dignity” (Romeo and Juliet) is the same as saying two different people, or cultures, or entities are equal in their worth of honor and respect) followed by an in-depth investigation dealing with less obvious literary elements such as tone, rhythm, structure, metaphor and simile in order to come to a theory and/or argument about what is being said, or, what is meant to be said. With close reading students can begin to understand that they are looking for what the text is doing rather than what the text is literally saying and this is what brings the text purpose. This allows for the reader to set goals while reading, take note of their thoughts, and the thoughts of the author they are reading.

Close reading is a systematic process; an approach that should be used when analyzing textual information. This does not mean that the reader should use this process to write a paper, but only, to come up with a theory/thesis. The act of close reading is a structure designed to guide the reader to thinking critically about the text, ultimately, leading them to valid, and more importantly, insightful arguments and ideas. Close reading teaches the reader to think about what is being said rather than just absorbing information.

Close reading, and reading in general, is an overall tool for individual cognitive development. This practice teaches the reader to observe in a nontraditional fashion, then, make an individual, unique and executive decision on what the text is saying/doing. By making self-induced ideas that are purely one’s own gives the reader a chance to believe that they have made the right decision. Then this opens up opportunity for them to further learn when they hear debate and discussion with other ideas that are different or more in-depth than their own. The reason that this is vital to the learning process is because as soon as they think they have it figured out something bigger comes along. This teaches the reader to learn through learning with an open mind. Close reading introduces readers to a kind of schema for advanced reading and through this schema derives cognitive development by thinking about what they are thinking about. This practice helps them to deliberately pay attention to the conceptual skills and information processing skills. By practicing close reading the reader is exercising general cognitive development.

If close reading is not a frequent practice the reader may be prone to misunderstanding of the text, or, looking at the text in a subjective manner which could pursue a more closed-minded kind of reading rather than reading from an objective standpoint which introduces different kinds of linguistic and abstract possibilities as to what is going on. Peter Parisi, the author of an article titled "Close reading, Creative Writing and Cognitive Development suggests, "In close reading, furthermore, far from resolving the text into a single meaning we can comfortably call "ours," we allow several intelligible readings to stand simultaneously" (60). This is an example of how close reading opens opportunities for insightful thinking, minimizes limitations through the stimulation of cognitive development and openness.

One final point I would like to make about the life long benefit of close reading is that close reading also helps the reader to identify with other readers, writers and foreign discourse by suggesting for the reader to look at different writings through different theoretical lenses. Just by being introduced to the subject of theoretical lenses and how this could be used to interpret information by oneself is a great encouragement and strategy to becoming a successful self-motivated learner. J.B.C Axelrod and Rise B. Axelrod the authors of an article called "Reading Fredrick Douglass through Foucault's Panoptic Lens: A Proposal for Teaching Close Reading" suggest, "Students need to develop a critical vocabulary that enables them to make strategic choices about which theoretical lenses to put on to help them read" (113).

As an individual going into the English departments of education I did this research in search to understand why this practice is not taught to students earlier on in their educational career? It is a fairly comprehensible concept and yet it is not mention until early college. In my opinion, it is important to move this teaching earlier on into a student's educational experience because this could only be beneficial for them and could not hurt in any way. This could be one big change in the education system that will have students leaning in a more efficient and effective manner through self-motivation and practice.

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**Ballet:
Early Development and European Dissemination**

Melanie Schott

Ballet in its earliest form would generally not be recognized as such; it is far different than the ballet that we are familiar with today. Ballet has evolved into the beautiful, precise, challenging art form that it is today through key contributions from a variety of influential people throughout history. Reflecting on what ballet has matured from can lead to a better understanding and appreciation for what it has become. In this paper, I will discuss the origination of ballet and trace its early spread throughout Europe, highlighting some key influential individuals and their specific contributions.

In order to better delineate the development and dispersal of ballet, I have divided this paper into sections designated by country. The country that each individual is discussed under is not necessarily their native country, but rather the country in which their most influential work was done and their careers were developed. This is by no means a complete linear history of ballet, but instead focuses on the general spreading of the art form and a few specific people who played significant roles in its development.

ITALY

Most likely due to its predominantly French terminology, ballet is commonly misconceived as having originated in France. In actuality, ballet as we know it today can be traced back to Italy during the height of the Renaissance. Arising from the confinement of the middle ages and the domination of the Church, this was an era lush with the rediscovery of the arts. People had a genuine, passionate interest in gaining knowledge and emulating the artistic achievements of their Roman and Greek ancestors.

At this time, Italy was divided into several small states which were ruled by wealthy, powerful princes. One of the various manners in which these princes demonstrated their vast wealth was through the magnificence and splendor of their courts. Each prince sought to have the best of everything: the finest court buildings containing the most breathtaking art, providing the most captivating entertainment. These rulers used every happy event (e.g. marriages, engagements, important visitors, military conquests, etc.) as a reason for spectacular events involving many facets of the arts, including dance. Although they also utilized artists for political ulterior motives, rulers genuinely adored the arts and had a steadily increasing slew of emerging artists at their disposal (Clark, Crisp 1).

Court dances, otherwise known as *Baletti* (Balanchine 750) became increasingly popular at these lavish events. In contrast to dance events we encounter today in which there is typically a division between dancers and spectators, everybody participated in court dances. Courts refined familiar Italian folk dances, specifying the steps and creating floor patterns, which everybody attending the party knew. These dances involved the use of prepared sets and endings were performed complete with elegant flourishes and bows. *Baletti* became yet another means of competition and an additional display of wealth and power. The challenge was to have the largest and most spectacular dance party, choreographed and designed by the best ballet master.

Despite the obvious competition involved with court dances, there was also a certain code of conduct to adhere to. Courtiers were more concerned with “courtly dancing” rather than displaying the extent of skill. Baldassare Castiglione, a master of Renaissance manners from the late fifteenth century wrote:

There are certain other exercises that can be practiced in public and in private, like dancing; and in this I think that the Courtier ought to have care, for when dancing in the presence of many and in a place full of people, it seems to me that he should preserve a certain dignity, albeit tempered with a lithe and airy grace of movement; and although he may feel himself to be a very nimble and a master of time and measure, let him not attempt those agilities of foot and double steps which we find very becoming in our friend Barletti, but which perhaps would be little suited to a gentleman. Yet in a room privately, as we are now, I think he may try both, and may dance morris-dances and brawls; but not in public unless he be masked, when it is not displeasing even though he be recognized by all. (Balanchine 750).

It was in Italy that dances first began to be officially documented. In fact, the word ballet is derived from the Italian *ballare*, which means to dance (Balanchine 749). Two important early textbooks involved in the documentation of court dances are *Il Ballarino* by Fabrizio Caroso (1581) and *Nuove Inventioni di Balli* by Cesare Negri (1604). These records indicate advancement in technique plus the use of more complicated rhythms, with the focus remaining primarily on courtly dances rather than on any specific technique of the movement. Although obviously quite different from ballet today, Italian court dances set the framework for what would become a beautiful, timeless, beloved art form.

FRANCE

By the end of the fifteenth century, court dances had begun to branch outside of Italy and had been introduced to France. However, its French proliferation can be largely attributed to one woman: Catherine de' Medici. Catherine was born in Italy in 1519, daughter of Lorenzo, Duke of Urbino and great-granddaughter of Lorenzo the magnificent (Clarke, Crisp 7). Her father and great-grandfather were no exception to the competition of lavish artistic pageantry that existed amongst nobility. It was from them that she inherited her love of pageantry and learned how to use happy events (i.e. marriages, etc.) as an excuse for elaborate, luxurious parties.

Catherine de' Medici came to France from Italy in 1533 in order to marry the Duc d'Orléans, Henry II. King Francis I arranged this marriage in order to gain the support of the pope in his claims in Italy (Paulson 4). Upon the death of King Francis I in 1547, her husband became the king, making her the Queen consort of France, a role which she upheld until 1559. Throughout his reign, King Henry II, mostly excluded Catherine from the political affairs of France and was instead influenced more by his chief mistress. However, Catherine would have the opportunity to have her own influence on France when in 1560, an unexpected turn of events left King Henry II dead: pierced through the eye in a brutal tournament accident. After her husband's untimely death, Catherine de' Medici indirectly ruled France as each of her three sons, Francis II, Charles IX and Henry III, in turn took the throne for the next thirty years (Clarke, Crisp 7).

Catherine was an exceptional, intelligent woman who effectively maintained her role through the use of knowledge and wit despite being labeled as a foreigner. Like the noblemen in Italy, Catherine, utilized art for political reasons, frequently using superfluously lavish events to distract her sons from the political happenings of the country. Also like Italian nobility, she was

genuinely infatuated with the arts, despite her political ulterior motives. Italian pageantry was one of the greatest influences Catherine de' Medici had on France, bringing with her to Paris Italian ballet masters and musicians who staged court spectacles consisting of spoken dialog, instrumental/vocal music, dancing, and pantomime in tandem with elaborate scenery and mechanical effects. These elements formed what was deemed *ballet de cour*, or court ballet (Balanchine 750).

Originally finding favor with the court as a gifted violinist, Balthasar de Beaujoyeulx (born Baldassarino di Belgiojoso in Italy) became Catherine de' Medici's chief ballet master and played a key role in the arrangement and performance of her court ballets (Clarke, Crisp 10). On October 15, 1581, Balthasar and Catherine produced an event that surpassed the extravagance and purpose of any previous entertainment in Europe: *Ballet Comique de la Reine Louise*. No expense was spared for this extravagant spectacle, which cost about 3,600,000 francs to produce and with around ten thousand guests present, the five and a half hour production commenced at ten at night. It employed the typical elements of *ballet de cour*, including reading of verse, singing, dancing, elaborate scenery and mechanical effects; however there was something unique and innovative about this performance. For the first time, these elements were fused together into a dramatic whole that the spectators were able to comprehend. Varying from the previous random artistic performances that typically took place at court ballets, the audience was wowed with the unity of music, dance, comedy and spectacle represented in a conscious design with an ongoing plot (Balanchine 751).

The production of *Ballet Comique de la Reine Louise* was an outstanding success. So much so that a detailed, illustrated description of the performance was printed and distributed to various European courts. Beaujoyeulx was as pleased with the production as the general public,

and in his introduction to the book described ballet as “a geometric combination of several persons dancing together” (Clarke, Crisp 10). In essence, this was the first ballet as we are familiar with it today, consisting of dancing, plot, music, and design. The tremendous success of this event was paramount in the development of ballet because it ensured dance as a form of necessary future regal entertainment.

If ballet originated in Italy and was first officially documented in Italy, why is the majority of the terminology in the French language? We can answer this question by considering the life and reign of Louis XIV. Louis adored dancing and was an accomplished practitioner, appearing in his first court ballet in 1651, at the age of twelve. His favorite role was that of the Sun in *Le Ballet de la Nuit*, which he was performing at the Salle du Petit Bourbon by 1653 (Clarke, Crisp 16). This was the part that gained him the title of *Le Roi Soleil*, the Sun King, which he would later play in real life when he assumed the position of monarch. It was Louis’ love and personal pursuit of dance that caused it to flourish in his courts throughout his reign.

One of the remarkable artists of this time was Jean-Baptiste Lully, an Italian musician and dancer who had come to the French court. Lully originally came to France in order to work for King Louis XIV’s cousin, however the king was taken aback by his talents and Lully became his chief musician, wielding substantial power in the court throughout the rest of his life. Lully had a profound influence on the development of ballet and opera, as he worked closely with their finest collaborators (Clarke, Crisp 17). One of these extraordinary collaborators was Lully’s ballet master, Pierre Beauchamp, a French ballet dancer and teacher. As a dancer, Beauchamp was established and well known for a dignified style and extraordinary pirouettes (“Pierre Beauchamp”) and by the 1660s, he was in charge of King Louis’ court ballets. Regarded by many as the best dancer in France at the time, Beauchamp maintained his extraordinary dance

skills late into adulthood, astonishing audiences with grand leaps after the age of sixty (Powell 169-170).

The most significant contribution to ballet made by Beauchamp is the establishment of the five positions of the arms and feet, which are still the basis of ballet today. The five positions are integral to ballet due to the uniformity and freedom of movement that they create. Each leg is turned out from the hip at a ninety degree angle, causing the feet to form a single straight line on the floor. Reflecting on the five positions, George Balanchine writes:

These positions are absolute in their anatomical authority: the ease with which they are taught to young students, the ease and security they allow the dancer on stage, and, most important of all, the variety of movement made possible by their use. They are as essential to ballet as fundamental techniques of sound structure are to architecture. The Five Positions, with their embodiment of the turned-out leg, distinguished ballet from all other forms of theatrical dance. Ballet dancing had now become a profession, one that could be taught and learned and mastered. (Balanchine 752).

In 1661, the world's first dance academy, the Académie Royale de Danse was founded by King Louis XIV. This institution was designed to 're-establish the art in its perfection' (Clarke, Crisp 18), with their concern primarily being polite, courtly dancing rather than with technique and the theatre. The Académie did not last long, surviving only up to the French Revolution and since its members were only really concerned with social dance, its existence is of no great importance to the development of ballet. However in 1669, Louis also initiated the foundation of

the Académie d'Opéra (which would in time become the Paris Opera) for the performance of opera in French, and of course, for dance as well (Clarke, Crisp 18). Jean-Baptiste Lully was essentially in control of the organization, with his works dominating the repertory. The nobility and gentry that had previously been interested in learning the social and polite aspects of courtly dances did not find it acceptable to appear in a theatre with professional singers and Lully found himself with a shortage of the professional dancers that he needed to perform in his professional establishment. Under the direction of Pierre Beauchamp, the standard of dancing was improved as new dancers were recruited from the classes of teachers in Paris.

The year 1672 was very significant for ballet because King Louis XIV accepted the need for more professional versus amateur dancers (Clarke, Crisp 19). This meant that he allowed trained dancers to perform the parts of nobility in addition to their character parts. This had never before been allowed, with only nobility being able to perform the roles of nobility in the theatre previously. In 1681, women who made dancing their career, ballerinas, began to take the stage in Académie performances. Although they were dancing “above their station” (Clarke, Crisp 19) by playing the roles of nobility, the dancers were trained and playing the roles correctly. Throughout this time period, dance technique was also being codified. Essentially, the French Revolution marked an end of the old regime of noble amateurs and began an era of trained, professional dancers.

RUSSIA

Ballet first appeared in Russia in the eighteenth century, with the first professional performance taking place on January 29, 1736. These dancers had been trained by Jean-Baptiste

Landé, a French dancing-master, who was given permission by the Empress to open a ballet school consisting of the children of servants: Twelve boys and twelve girls (Clarke, Crisp 76). This was the beginning of the Russian school, and subsequently the Russians followed this trend, training under a succession of foreign teachers and visiting dancers, through the Revolution in 1917 (Clarke, Crisp 77).

Marius Petipa, a French dancer and choreographer, became the most commanding influence on Russian ballet in the second half of the nineteenth century and was the “chief architect of its greatness” (Clarke, Crisp 78). His father, Jean Antoine Petipa, was a dance teacher and his mother, Victorine Grasseau, was a tragic actress, and consequently he was exposed to dance and the theatre from a very young age. Marius began technical dance training at age seven and was performing professionally in one of his father’s productions in Belgium by the age of thirteen (Leshkov 7). In 1847, Petipa was invited to and arrived in St. Petersburg in Russia, where he would spend the rest of his life. By this time, the Imperial Ballet was a thriving, well-established organization which was working at different theatres in St. Petersburg as well as in Moscow. There were also schools which were designed to prepare fully trained dancers for two different companies. At this time, the prestige of ballet had become focused on the reputation of the dancer (Gottlieb, 334). Great choreographers and composers framed what the public was truly interested in: the lives and performances of great dancers.

Petipa viewed this opportunity in Russia as a tremendous fortune for him and his family and was advanced a full salary upon his arrival (Moore 25). Initially, Petipa worked as a dancer, producing revivals of past ballets. He had hoped to pursue his career as a choreographer, however another Frenchman, Jules Perrot, had already been installed as principal ballet master. It is important to take into consideration that from the very beginning of ballet in Russia, it had

been dependent on the Tsar: it was his ballet. Petipa did not have the opportunity to choreograph for the Imperial Russian Ballet, which would in time become the Mariinsky Theatre, without the consent of the Tsar and the administration of the Imperial Theatres. Petipa worked with Perrot, dancing in a variety of his productions. Although he had very few opportunities as a choreographer, he assisted Perrot and was able to learn a great deal from him. Unpopular with the administration of the Imperial Theatres, Perrot was dismissed in 1860. Once again, Petipa hoped for the position as first-ballet master, however they had already employed another man, Arthur Saint-Léon. For the next ten years, Petipa's career continued as a dancer and an assistant ballet master (Clarke, Crisp 82). Regrettably, Saint-Léon was a jealous man and was reluctant to give Petipa any choreographic opportunities.

The turning point in Petipa's career came in 1861 when he was given the opportunity to compose a ballet. This difficult task included choreographing and designing a full-length ballet which focuses on featuring the dramatic abilities of Carolina Rosati, an older, guest ballerina. Although he only had six weeks to prepare the production, Petipa had years of experience in ballet-making and knew the tastes of the audience. After a consultation with a colleague (Vernoy de Saint-Georges) in Paris, they devised *The Pharaoh's Daughter*, which was inspired by *The Mummy's Tale* by Théophile Gautier (Clarke, Crisp 81). The general public was quite fascinated by recent discoveries in Egypt at this time, and Petipa put a great deal of effort into creating this production based around this interest.

Having sketched out a plan for the ballet, I left for Paris, to discuss the details with M. Saint-Georges. I spent three weeks there, working every day with the composer, and when we had finished working out the whole programme of my

ballet, *The Daughter of Pharaoh*, I returned to St. Petersburg. On the way back, I visited the Egyptian Museum in Berlin, with the tombs of the Pharaohs, which had Egyptian paintings on them. (Moore 50).

The Pharaoh's Daughter turned out to be a spectacular, complicated ballet that was met with great success.

Despite the success of *The Pharaoh's Daughter*, Saint-Léon maintained his position as first ballet master and none of Petipa's ballets he created in the next few years were well-received by the public. Finally, after twenty-three years of living, dancing and being an assistant ballet master in Russia, Saint-Léon left Russia and Petipa assumed the role of chief ballet master. He was assigned the task of creating a new ballet at the beginning of each season, a task that Petipa handsomely fulfilled. Over the next thirty years, he produced no less than forty ballets, reviewed and revised pieces already in the repertory, and choreographed ballet to accompany opera (Clark, Crisp 82). Some of his most well-known ballets are as follows: *Sleeping Beauty*, *Swan Lake*, *The Nutcracker*, *Don Quixote* and *A Midsummer Night's Dream*.

CONCLUSION

The transition of ballet from the variations of folk dances performed with no training, to the highly precise and challenging art that it is to today took a great deal of time and involved an immense variety of people. In Italy, it was the love and admiration of the arts combined with the vain competition of nobility that initially inspired the court dances that would eventually develop into ballet. In France, the Italian Catherine de' Medici produced a theatrical dance event so

spectacular and elaborate that it was published all over Europe, proliferating the notion of *ballet de cour* with a plot. Together, King Louis XIV, Jean-Baptiste Lully, and Pierre Beauchamp initiated the development of the specific ballet technique as we are familiar with today. The five positions of the feet and arms established by Beauchamp became a prerequisite for a dancer's training at the French Academy, which was established by King Louis and taken over by Lully. This transformed ballet from a dance that any untrained amateur could participate in into an esteemed profession to strive towards which required extensive training and years to master. Petipa produced a vast number of works that formed the framework upon which many great ballets would be based in the future. Many of his works are still popular today. The evolution and progression of ballet is quite astounding. Realizing the magnitude of the boldness and persistence of these individuals evokes even more respect and appreciation of the art of ballet.

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Modern Dance: Anti-Ballet or Anti-Realist?

Emily Sese

Abstract

In this paper, the origins of modern dance in the twentieth century are explored. The pre-existing notion that anti-ballet sentiment forced modern dance into the world is dispelled by evidence of a flourishing of ballet at the time of its supposed decline. Rather than emerging from a rebellion against ballet, modern dance is derived from a manifestation of the Modernist theory during the 1900s. Modernist themes, ideals, and philosophes birthed a yearning for new, experimental movement forms—leading to the creation of modern dance. Using Vaslav Nijinsky's *Rite of Spring*, the paper argues that the beginnings of modern dance borrow these Modernist ideas regarding novelty and anti-realism in choreography, dancing, and performance. The essay also argues that a Modernist mindset provided a responsive audience for the pioneers of modern dance. Dance critics such as John Martin held tightly to Modernist theories, revealing the importance of anti-realism and self-awareness. Their work forged the legitimacy of Modern dance into the mid-1950s.

Modern Dance: Anti-Ballet or Anti-Realist?

Dance is the result of cultural, philosophical, technical, and trending influences. While passion fuels the motivation, the actual substance of dance, however, is born from a much wider array of influences. While some genres of dance can easily be traced to a specific source, modern dance's history proves to be much more controversial. Traditionally, history attributes much of the beginnings of modern dance to a boredom of traditional ballet and a rejection of its principles. However, its true roots stem from a seemingly less related source—Modernism. Despite the supposed rejection of the classical ballet, modern dance emerged from the philosophies, themes, and explorations of Modernism in literature and writing.

Contrasting existing beliefs on the “decline” of ballet during the twentieth century, modern dance grew out of the pioneers' own exploration of revolutionary changes (Reynolds and McCormick 2). Ballet theaters such as the Paris Opera Ballet and the Mariinsky Theater still participated in the elegant tradition of classical ballet. These renowned theaters continued to set works like *Sleeping Beauty*, *Gisele*, and *Le Sylphide*. According to Russian dance historian Elizabeth Souritz, in Petrograd under the direction of Lopukhov, from 1922-1924, “almost all of the repertory ballets from the past were put in order” (Souritz 260). Classical dancers and choreography remained an essential part of concert dance—even now in the present day.

In addition, ballet grew and expanded during this time period. Perhaps the most influential reason for ballet's continued fervor was the success of the Ballets Russes. This company introduced the world of ballet to countless avant-garde adjustments to music, choreography, and the dancers themselves from the years 1909-1929. With the influence of great dance pioneers such as George Balanchine and Vaslav Nijinsky, ballet shifted focus to the pure art of movement rather than emphasizing the story ballet. In the age of the Ballets Russes, ballet sought to retain certain important technical elements of the classical style while at the same time introducing new intentions and qualities of movement (Garafola viii). Moreover, the failure of ballet during the twentieth century did not directly encourage the beginning of modern dance because, I contend, there was no failure. Rather than draw popularity from the “decline” of ballet, modern dance evolved as a direct result of the theory of Modernism itself.

Modernism features a various pool of ideas that share one central feature: challenge of tradition. Taking full form around the opening of the twentieth century, Modernism bloomed out of the advancements of the industrial era and the devastation of World War I. The horrid repercussions of The Great War along with the shocking new technologies of the early 1900s sent society into a panicked reconsideration of values, beliefs, and sheer existence. Due to this lack of certainty, philosophers and artists alike began to develop new ideas in regards to perspectives on life. The Modernist theories developed from a general consensus to throw away the traditions of the past and embrace the new. Perhaps the poet Ezra Pound said it best with his phrase, “Make it New!” Novelty led to the next important feature of Modernism: anti-realism.

Modernist artist took pride in pulling as far away from images of realism as possible. Straying from realistic images, writings, and pieces gave artists the opportunity to venture into the “new” rather than trying to copy the “old.” With a focus on the abstract and unfamiliar, Modernists found themselves allowing for a self-conscious element to their theories. Meaning was no longer required to have some important social quality—instead, Modernism gave people the chance to embrace the self—to freely make choices with the main purpose of satisfying the self without deeper meaning. This redefinition of meaning allowed for a deeper examination into the true aspects of human nature. Consequently, the heap of revolutionary ideas that Modernism brought into the world at the turn of the twentieth century created an endless sea of options for artists—especially for dancers and choreographers.

Perhaps one area of art that fully embraced the elements of Modernism was the field of literature. Some of the greatest writers of the twentieth century include Virginia Woolf, James Joyce, and T.S. Elliot—all of whom heavily relied on the theories of Modernism in their writing. Modernist writers experimented with themes of transcendence and self-aware characters. One aspect of self-consciousness that stuck with various artists of the time was that this self-awareness led to an exploration of human existence. On this journey, many artists found themselves re-tracing the roots of existence—primitive roots. Thus, many writers peered into the primitive aspects of mankind. The work of such literary revolutionaries sparked the interest of choreographers seeking their own version of novelty.

Examining what is considered to be the beginning of modern dance sheds light on the tie between literary Modernism and the age of modern dance. In Vaslav Nijinsky's *The Rite of Spring* (1913), the era of ballet as a lone player on the field of dance came to an end (Jones 109). This "ballet" is seen by scholars as the first actual modern dance piece. The choreography, costuming, and plot completely abandoned classical ballet. Primitivism overwhelms the entirety of this work. Taking the advice of Pound, Nijinsky "made it new"—with the "it" being the ancient human existence. Susan Jones validates Nijinsky's efforts with: "...it represented the archetypal modernist rewriting of the primitive (110)." The writers of Modernist culture laid the groundwork for this deeper examination of the human nature. This examination of the "self" pushed artists to reevaluate the origins of mankind.

Another popular Modernist subject matter for aspiring modern dancers and choreographers was in the realm of philosophy. The early beginnings of Modernism can be traced to a number of philosophers including Friedrich Nietzsche. One of Nietzsche's obsessions sat within the reexamination of Greek culture and mythology. In particular, he became fascinated by the "rediscovery of the Dionysian" (Jones 44). The Dionysian refers to the Greek god Dionysus and it embodies emotion and uninhibited expression. In her book *Literature, Modernism, and Dance* on page 44, Susan Jones argues that Nietzsche's urgency for this Dionysian expression sent modern dance pioneers into a whirl of activity and production. Numerous choreographers adopted the philosopher's ideas regarding Greek culture and thus found themselves led to various pieces of Modernist movement. Isadora Duncan was one such choreographer. While she allowed Nietzsche's rediscovery of the Greek style to inspire her choreography, she took his theories on the ecstasy of the Dionysian closer to heart (Jones 52). Naturally, Nietzsche's dramatic aesthetic also travelled to German expressionist dancers such as Mary Wigman and Hanya Holm. Dances like Wigman's *Witch Dance* (1913) embodied Nietzsche's wildly emotional elements of the Dionysian style (Jones 56). Duncan, Wigman and Holm's work followed the exploration of movement stemming from the inclinations of one's inner emotional response. These early modern dance figures grasped firmly to the freedom and exhilaration found in Nietzsche's theories.

Not only did Modernist literature and philosophy prove essential to the cultivation of modern dance, but the existence of Modernism in the writings of critics also served as an invaluable influence. As modern dance began to establish itself as a self-sufficient genre, it still struggled to maintain credibility with the general public. Much of the fame and recognition in the world of early modern dance can be attributed to the reviews of critics like John Martin (Morris 168). Early in his career, John Martin put himself in the heart of artistic ventures and explorations. He wrote for various artistic magazines, journals, and books—many of which focused on the specific art of dance. He even taught at Bennington College during the height of the modern dance pioneers' experiments at the same college (Morris 170). In conjunction with his interest in the changing dance movement, his motivations were also driven by his Modernist beliefs. One of Martin's most important contributions to modern dance was his ability to bring the common people an understanding and respect for the high art of dance. He believed that this revolutionary dance trend was, at that time, overlooked due to a general lack of understanding (Morris 170). Martin viewed modern dance as a complex form of art that was easily cast aside to make way for more accessible and "valuable" use of energy and thought. Martin's believed that it was his duty to reverse this line of thinking. Embracing the Modernist tendency to stress the importance of the self-conscious and self-revealing, Martin argued to his audience that modern dance was the best expression of this. His exposure to this type of dance lead him to the conclusion that "an authentic dance opposed rationalising processes" —keeping in the Modernist theme of the opposition of reason and meaning (Morris 170).

Another element of Modernism applauded by Martin was the rejection of the ever growing emphasis on industry and technology. After World War I, industry boomed and technology was the only focus of capitalist societies. As a Modernist thinker, Martin agreed with this rejection through his approval of modern dance. In his article of Martin, Morris described that Martin believed that one of the values of modern dance was found in its ability to defy "a culture that was increasingly defined by industry and technology" (Morris 180). Because of his convictions in his Modernist beliefs, Martin raised awareness of the invaluable importance of modern dance in his convincing writings. He

served as an ambassador to the general public—an ambassador of both modern dance, and the Modernist theories from which it was born.

In conclusion, Modern dance finds its roots in the theories of Modernism—not simply in a rebellion against classical ballet. The efforts of Modernist writers offered the pioneers of Modern dance perhaps the most potentially stimulating material. Modernist literature gave dance the structure, philosophies, and creative freedom to expand the definition of dance in the twentieth century. Dancers and choreographers itched to explore new territories of movement—they embodied the ideologies of Modernism in their quest to make dance “new.” They embarked on a journey to create a movement vocabulary that pushed past the traditional expressions of meaning and dove deeper into the authentic qualities of human nature.

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Toward A Description Of What Makes A Black Hole Hurl

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Abstract

Supermassive black holes at the center of galaxies grow by feeding on matter that spirals inward in the form of a disk. This disk shines brightly from being heated to high temperatures. Some of the matter is driven away from the black hole at high velocities as an outflow. We can detect the outflow silhouetted against the light from the disk and make measurements of the outflow properties (e.g., velocity, mass, density). Based upon these properties the systems can be classified for the purpose of examining how those properties potentially relate to other properties of the system (e.g., the black hole mass, accretion rate). This classification process can be carried out efficiently using the human eye (i.e., through visual inspection). However, such a subjective scheme should be tempered by more objective criteria. Our main goal is to use measurements of outflows to systematically examine how best to reproduce a classification scheme carried out through visual inspection by experts in the field. In turn, this will lead to better classification of data that will be used to explore how outflows are formed, what governs their properties, and how they potentially impact the host galaxy and its evolution.

1 Introduction

Models of the formation of large scale structure require energy injection (feedback) from “small-scale” processes to prevent over-gorged dark matter halos that result in galaxies that are both too massive and too blue. Feedback from supernovae-driven super winds and from quasars lead the way in providing this feedback. Quasar feedback comes in three varieties: energy from highly-collimated relativistic jets, thermal coupling of a small fraction of the quasar luminosity, and kinetic energy from the quasar mass outflow. It is this last flavor of feedback that we address here. This kinetic energy (or rather power) is often incorporated typically as some constant fraction of the Eddington luminosity. The overall goal of our work is to provide a more accurate prescription for incorporating feedback from outflows into these simulations. The kinetic power is related to the mass-outflow rate and the outflow velocity: $L_k = \frac{1}{2}\dot{M}_{\text{outflow}}v^2$. In terms of observable properties, this power can be recast as: $L_k = \frac{1}{2}\Omega N_H m_H r v^3$, where Ω is the solid angle subtended by the outflow, and N_H , r , and v are the column density, size scale, and velocity of the outflow, respectively. In particular, here we are interested in refining techniques used to gauge the solid angle, and do so as a function of physical properties (e.g. black hole mass, accretion rate). We present a work-in-progress installment of this investigation: a presentation of our visual classification scheme, and tempering our visual classifications with more quantitative classification schemes.

2 Line Classification

To work toward an automated algorithm for classifying features, we first classified all of the spectra through visual inspection and compared our classifications with collaborators at two other institution. Our approach is to use a subsample of objects where all humans agree on the classification, and then to identify more quantitative definitions that can then be applied to the entire dataset. Our subjective scheme contain four classes:

BAL: broad absorption line observed in C IV (see Fig. 1 for examples)

AAL: narrow absorption lines occuring on top of the emission line observed in C IV (see Fig. 2 for examples)

loAAL: narrow absorption lines occuring on top of the emission line observed in Mg II (see Fig. 3 for examples)

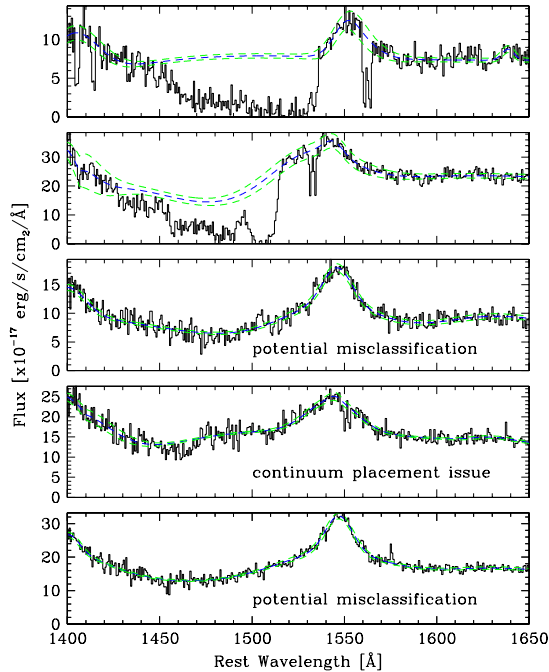


Figure 1: Examples of objects included subjectively in the BAL class.

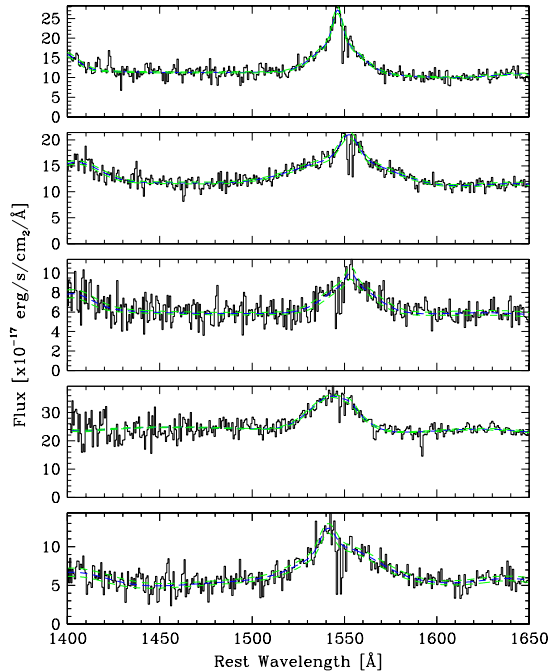


Figure 2: Examples of objects included subjectively in the AAL class.

mini-BAL: narrow-ish absorption lines occurring at large velocity separations from the quasar that appear to broad to be due to interloping material unrelated to the quasar (see Fig. 4 for examples).

3 Continuum Fitting & Measurements

The first step in constructing a catalog of absorption-line properties is to first gauge the unabsorbed “continuum” that the absorbers see. Continuum fitting for each quasar spectrum was done with a combination of a low order Legendre polynomial function and Gaussians to assist with reproducing the shapes of emission lines. Regions of absorption were first marked by eye, and were excluded from the fit. Additional regions of absorption were flagged at the 3σ -level and excluded automatically during the iterative fitting process. The initial visual exclusion is important for heavily absorbed regions (e.g., broad absorption lines), while the automated exclusion is reasonable for narrow features.

After continuum fitting, we automatically detect and measure absorption features in each spectrum, creating a large database. To detect features, we employ the unresolved feature detection algorithm from Schneider et al. (1993), with a 3σ detection threshold. We are 90% complete toward the 3σ -detection of features down to a limiting equivalent width of 0.9 Å.

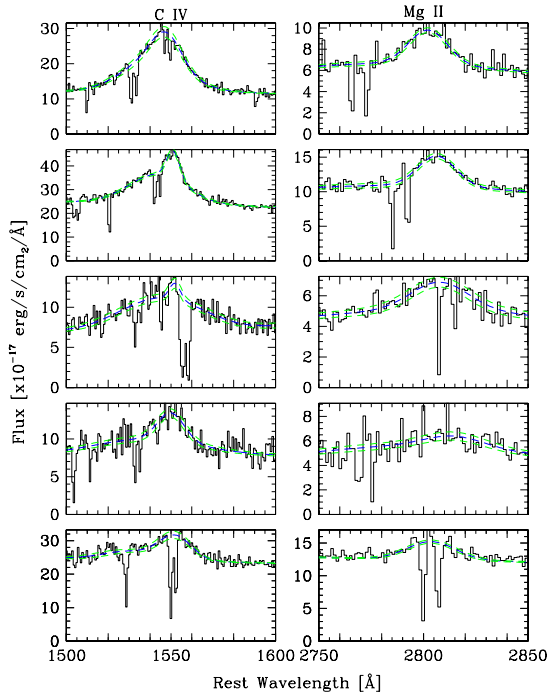


Figure 3: Examples of objects included subjectively in the loAAL class.

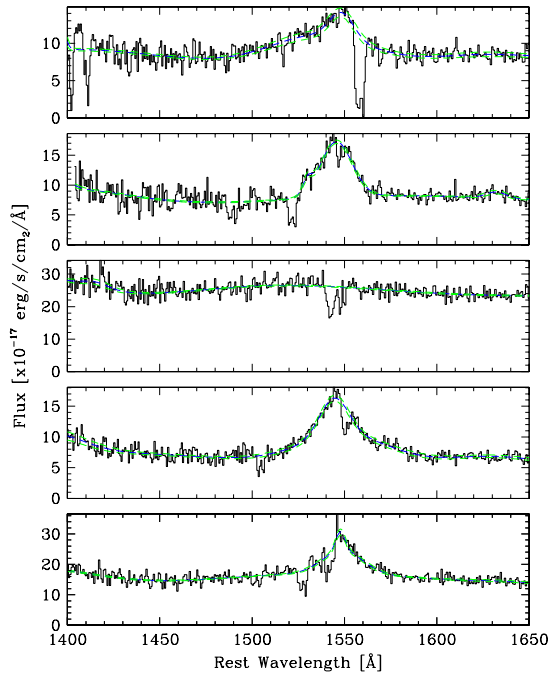


Figure 4: Examples of objects included subjectively in the mini-BAL class.

4 Line Identification

Absorption-line *systems* were identified via an automated technique similar to the *zsearch* algorithm employed by the HST Quasar Absorption Line Key Project (Schneider et al., 1993). This routine steps through redshifts from the minimum redshift that we could detect an absorption-line system ($z = 0.3489$) up to a redshift equivalent to 5000 km s^{-1} redward of the redshift of each QSO examined (for the present work, the steps were $\Delta z = 0.0001$). For each redshift examined, the presence of absorption from the resonant C IV $\lambda\lambda 1548.202, 1550.771$ and Mg II $\lambda\lambda 2796.353, 2803.351$ doublets was tested with supplementary absorption from the slew of UV Fe II transitions, and Mg I ($\lambda 2852.963$). If absorption was detected at the $> 3\sigma$ level for a given redshift, then a weighting was assigned to the line relative to the equivalent width and oscillator strength of the line, and celestial abundance of the atom (for each ion, absorption at the wavelength of the strongest oscillator strength transition was required before absorption at additional transitions were considered). The redshifts with weighting greater than zero were compared to lists of all measured absorption in the spectrum to identify the individual lines.

5 Results

Since the BAL class of quasars is the most readily identifiable through visual inspection, we begin with an effort to quantify this class. In Fig. 5, we consider a bivariate plot of the velocity width of the C IV absorption lines versus their equivalent width. The figure shows all absorption lines in all quasars, with different symbols highlighting different classes. In particular, we show absorption lines appearing in BAL

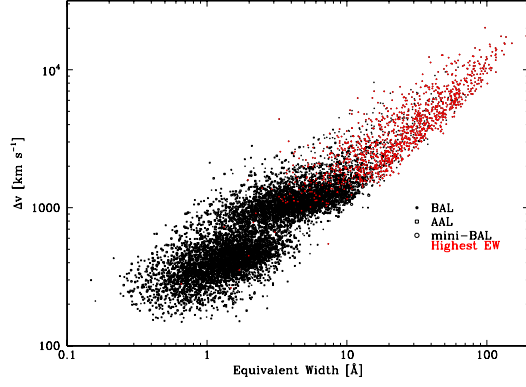


Figure 5: Plot of velocity width (Δv) versus C IV equivalent width. The different symbols correspond to different classifications (see §2). For quasars with BAL features, the strongest feature (presumably the BAL) is shown in red.

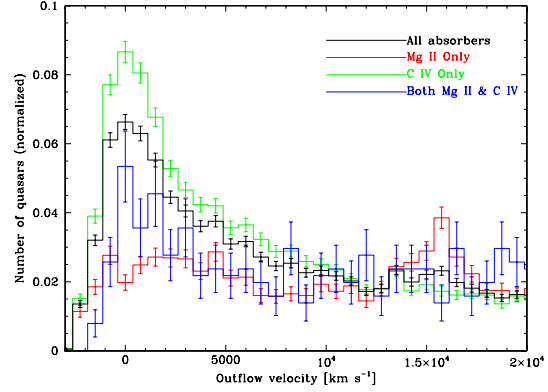


Figure 6: Velocity path density of absorbers. Colors correspond to the following subsamples: black – all absorbers; green – C IV-only absorbers; red – Mg II-only absorbers; blue – C IV+Mg II absorbers.

quasars as filled circles. Of course, not all absorption lines in a BAL quasar are necessarily *the* BAL feature itself. Hence, for each BAL quasars, we further highlight the feature with the largest equivalent width in red in hopes that it is likely the BAL. Here, we see two things: (1) There are red symbols at rather low equivalent widths. These may indicate potential misclassifications (see Fig. 1). (2) There are black symbols at large equivalent widths. These may indicate additional features that should be included as part of the outflow.

In our second result, we examine the distribution of velocities where the absorption lines appear relative to the emission lines. The latter is close to where the black hole lies. Since most absorption lines in the spectrum of a quasar are due to cosmologically interloping gas unrelated to the quasar, there should be an equal likelihood of seeing absorption at any velocity relative to the quasar. The experiment, then, is to take advantage of this property to look for populations of absorbers which do care (presumably due to a physical relationship). Fig. 6 reveals that the curve with Mg II-only (red) is largely flat, implying that Mg II essentially only arises in material unrelated to the quasar. However, all curves involving C IV absorption contain at least two additional populations that are related to the quasar. Both populations are well-fit by a Gaussian distribution. One with a width of 1000 km s^{-1} may arise from the cluster of galaxies of which the quasar is a member; the other with a width of 5000 km s^{-1} may result from an outflow population.

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EQUATIONS OF CURVES WITH MINIMAL DISCRIMINANT

RACHEL SHASKA

ABSTRACT. In this paper we give an algorithm of how to determine a Weierstrass equation with minimal discriminant for superelliptic curves generalizing work of Tate [3] for elliptic curves and Liu [1] for genus 2 curves.

1. INTRODUCTION

Let K be a field with a discrete valuation \mathfrak{v} and ring of integers \mathcal{O}_K and C an irreducible, smooth, algebraic curve of genus $g \geq 1$ defined over K and function field $K(C)$. The discriminant $\mathfrak{D}_{C/K}$ is an important invariant of the function field of the curve and therefore of the curve. Since the discriminant is a polynomial given in terms of the coefficients of the curve, then it is an ideal in the ring of integers \mathcal{O}_K of K . The valuation of this ideal is a positive integer. A classical question is to find an equation of the curve such that this valuation is minimal, in other words the discriminant is minimal.

When $g = 1$, so that C is an elliptic curve, there is an extensive theory of the minimal discriminant ideal $\mathfrak{D}_{C/K}$. Tate [3] devised an algorithm how to determine the Weierstrass equation of an elliptic curve with minimal discriminant as part of his larger project of determining Neron models for elliptic curves. The main focus of this paper is to extend their work to superelliptic curves, full details and proofs are intended in [5].

The paper is organized as follows. In section 2 we give the basic definitions for genus $g \geq 2$ superelliptic curves isomorphism classes of which correspond to projectively equivalent classes of degree d binary forms. For a binary form $f(X, Z)$ and a matrix $M = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$, such that $M \in GL_2(k)$, we have that $f^M := f(aX + bZ, cX + dZ)$ has discriminant $\Delta(f^M) = (\det M)^{d(d-1)} \cdot \Delta(f)$. This property of the discriminant is crucial in our algorithm which is explained in Section 5.

In section 3 we define the discriminant of a genus $g \geq 2$ superelliptic curve \mathcal{X}_g defined over an algebraically number field K . We follow the classical theory and define the discriminant for local fields and then generalize it to global fields.

In Section 4, we summarize briefly Tate's algorithm and a modified version of it by Laska [4]. Since the case of the elliptic curves is the simplest case this hopefully gives the reader an idea of how things work out in higher genus. In Section 5, we generalize the algorithm to all superelliptic curves. This algorithm computes a Weierstrass equation with minimal discriminant for all superelliptic curves. Details and proofs are intended to be described in [5].

2000 *Mathematics Subject Classification*. Primary 20F70, 14H10; Secondary 14Q05, 14H37.

2. PRELIMINARIES

Let \mathcal{X}_g be a superelliptic curve of genus $g \geq 2$ with affine equation

$$(1) \quad y^n = f(x, 1) = a_d x^d + \cdots a_1 x + a_0$$

defined over and algebraic number field K . Obviously the set of roots of $f(x)$ does not determine uniquely the isomorphism class of \mathcal{X}_g since every coordinate change in x would change the set of these roots. Such isomorphism classes are classified by the invariants of binary forms.

For any algebraically closed field k let $k[X, Z]$ be the polynomial ring in two variables and let V_d denote the $(d+1)$ -dimensional subspace of $k[X, Z]$ consisting of homogeneous polynomials

$$(2) \quad f(X, Z) = a_0 X^d + a_1 X^{d-1} Z + \cdots + a_d Z^d$$

of degree d . Elements in V_d are called *binary forms* of degree d . $GL_2(k)$ act as a group of automorphisms on $k[X, Z]$ as follows:

$$(3) \quad M = \begin{pmatrix} a & b \\ c & d \end{pmatrix} \in GL_2(k), \text{ then } M \begin{pmatrix} X \\ Z \end{pmatrix} = \begin{pmatrix} aX + bZ \\ cX + dZ \end{pmatrix}$$

Denote by f^M the binary form $f^M(X, Z) := f(aX + bZ, cX + dZ)$. It is well known that $SL_2(k)$ leaves a bilinear form (unique up to scalar multiples) on V_d invariant.

Consider a_0, a_1, \dots, a_d as parameters (coordinate functions on V_d). Then the coordinate ring of V_d can be identified with $k[a_0, \dots, a_d]$. For $I \in k[a_0, \dots, a_d]$ and $M \in GL_2(k)$, define $I^M \in k[a_0, \dots, a_d]$ as follows

$$(4) \quad I^M(f) := I(f^M)$$

for all $f \in V_d$. Then $I^{MN} = (I^M)^N$ and Eq. (4) defines an action of $GL_2(k)$ on $k[a_0, \dots, a_d]$. A homogeneous polynomial $I \in k[a_0, \dots, a_d, X, Z]$ is called a **covariant** of index s if $I^M(f) = \delta^s I(f)$, where $\delta = \det(M)$. The homogeneous degree in a_0, \dots, a_d is called the **degree** of I , and the homogeneous degree in X, Z is called the **order** of I . A covariant of order zero is called **invariant**. An invariant is a $SL_2(k)$ -invariant on V_d .

Let $f(X, Z)$ and $g(X, Z)$ be binary forms of degree n and m respectively with coefficients in k . We denote the **r-transvection** of two binary forms f and g by $(f, g)^r$. It is a homogeneous polynomial in $k[X, Z]$ and therefore a covariant of order $m + n - 2r$ and degree 2.

A very important invariant is the discriminant of the binary form. In the classical way, the discriminant is defined as $\Delta = \prod_{i \neq j} (\alpha_i - \alpha_j)^2$, where $\alpha_1, \dots, \alpha_d$ are the roots of $f(x, 1)$. It is a well-known result that it can be expressed in terms of the transvections. For example, for binary sextics we have $\Delta = J_{10}$ and for binary octavics $\Delta(f) = J_{14}$; see [5] for details.

Lemma 1. *i) The discriminant of a degree d binary form $f(X, Z) \in k[X, Z]$ is and $SL_2(k)$ -invariant of degree $2d - 2$.*

ii) For any $M \in GL_2(k)$ and any degree d binary form f we have that

$$\Delta(f^M) = (\det M)^{d(d-1)} \Delta(f)$$

3. DISCRIMINANT OF A CURVE

The concept of a minimal discriminant for elliptic curves was defined by Tate and others in the 1970-s; see [3]. Such definitions and results we generalized by Lockhart in [2] for hyperelliptic curves. In this section we briefly generalize the concept of the minimal discriminant to all superelliptic curves.

Let K be a local field, complete with respect to a valuation \mathfrak{v} . Let \mathcal{O}_K be the ring of integers of K , in other words $\mathcal{O}_K = \{x \in K \mid \mathfrak{v}(x) \geq 0\}$. We denote by \mathcal{O}_K^* the group of units of \mathcal{O}_K and by \mathfrak{m} the maximal ideal of \mathcal{O}_K . Let π be a generator for \mathfrak{m} and $k = \mathcal{O}_K/\mathfrak{m}$ the residue field. We assume that k is perfect and denote its algebraic closure by \bar{k} .

Let \mathcal{X}_g be a superelliptic curve of genus $g \geq 2$ defined over K and P a K -rational point on \mathcal{X}_g . By a suitable change of coordinates we can assume that all coefficients of \mathcal{X}_g are in \mathcal{O}_K . Then, the discriminant $\Delta \in \mathcal{O}_K$. In this case we say that the equation of \mathcal{X}_g is **integral**.

An equation for \mathcal{X}_g is said to be a **minimal equation** if it is integral and $\mathfrak{v}(\Delta)$ is minimal among all integral equations of \mathcal{X}_g . The ideal $I = \mathfrak{m}^{\mathfrak{v}(\Delta)}$ is called the **minimal discriminant** of \mathcal{X}_g .

Let us assume now that K is an algebraic number field with field of integers \mathcal{O}_K . Let M_K be the set of all inequivalent absolute values on K and M_K^0 the set of all non-archimedean absolute values in M_K . We denote by $K_{\mathfrak{v}}$ the completion of K for each $\mathfrak{v} \in M_K^0$ and by $\mathcal{O}_{\mathfrak{v}}$ the valuation ring in $K_{\mathfrak{v}}$. Let $\mathfrak{p}_{\mathfrak{v}}$ be the prime ideal in \mathcal{O}_K and $\mathfrak{m}_{\mathfrak{v}}$ the corresponding maximal ideal in $K_{\mathfrak{v}}$. Let (\mathcal{X}, P) be a superelliptic curve of genus $g \geq 2$ over K .

If $\mathfrak{v} \in M_K^0$ we say that \mathcal{X} is **integral at \mathfrak{v}** if \mathcal{X} is integral when viewed as a curve over $K_{\mathfrak{v}}$. We say that \mathcal{X} is **minimal at \mathfrak{v}** when it is minimal over $K_{\mathfrak{v}}$.

An equation of \mathcal{X} over K is called **integral** (resp. **minimal**) over K if it is integral (resp. minimal) over $K_{\mathfrak{v}}$, for each $\mathfrak{v} \in M_K^0$.

Next we will define the minimal discriminant over K to be the product of all the local minimal discriminants. For each $\mathfrak{v} \in M_K^0$ we denote by $\Delta_{\mathfrak{v}}$ the minimal discriminant for (\mathcal{X}, P) over $K_{\mathfrak{v}}$. The **minimal discriminant** of (\mathcal{X}, P) over K is the ideal

$$\Delta_{\mathcal{X}/K} = \prod_{\mathfrak{v} \in M_K^0} \mathfrak{m}_{\mathfrak{v}}^{\mathfrak{v}(\Delta_{\mathfrak{v}})}$$

We denote by $\mathfrak{a}_{\mathcal{X}}$ the ideal $\mathfrak{a}_{\mathcal{X}} = \prod_{\mathfrak{v} \in M_K^0} \mathfrak{p}_{\mathfrak{v}}^{\mathfrak{v}(\Delta_{\mathfrak{v}})}$. In [5] we prove that

Theorem 1. *Let (\mathcal{X}_g, P) be a superelliptic curve over \mathbb{Q} . Then its global minimal discriminant $\Delta \in \mathbb{Z}$ is unique (up to multiplication by a unit). There exists a minimal Weierstrass equation corresponding to this Δ .*

Next we briefly describe how this minimal Weierstrass equation is determined for superelliptic curves. Full details and further analysis of discriminants of superelliptic curves is intended in [5].

4. ELLIPTIC CURVES AND TATE'S ALGORITHM

Let E be an elliptic curve defined over a number field K with equation

$$(5) \quad y^2 + a_1xy + a_3y = x^3 + a_2x^2 + a_4x + a_6.$$

For simplicity we assume that E is defined over \mathbb{Q} , the algorithm works exactly the same for any algebraic number field K .

We would like to find an equation

$$(6) \quad y^2 + a'_1 xy + a'_3 y = x^3 + a'_2 x^2 + a'_4 x + a'_6.$$

such that the discriminant Δ' of the curve in Eq. (6) is minimal. Since we want the new equation to have integer coefficients then the only transformations we can have are

$$x = u^2 x' + r, \quad y = u^3 y' + u^2 s x' + t$$

for $u, r, s, t \in \mathbb{Z}$ and $u \neq 0$. The coefficients of the two equations are related as follows:

$$\begin{aligned} u a'_1 &= a_1 + 2s, & u^4 a'_4 &= a_4 - s a_3 + 2r a_2 - (t + r s) a_1 + 3r^2 - 2st \\ u^3 a'_3 &= a_3 + r a_1 + 2t, & u^6 a'_6 &= a_6 + r a_4 + r^2 a_2 + r^3 - t a_3 - r t a_1 - t^2 \\ u^2 a'_2 &= a_2 - s a_1 + 3r - s^2, & u^{12} \Delta' &= \Delta \end{aligned}$$

The version of the algorithm below is due to M. Laska; see [4].

STEP 1: Compute the following

$$\begin{aligned} c_4 &= (a_1^2 + 4a_2)^2 - 24(a_1 a_3 + 2a_4), \\ c_6 &= -(a_1^2 + 4a_2)^3 + 36(a_1^2 + 4a_2)(a_1 a_3 + 2a_4) - 216(a_3^2 + 4a_6) \end{aligned}$$

STEP 2: Determine the set S of integers $u \in \mathbb{Z}$ such that there exist $x_u, y_u \in \mathbb{Z}$ such that $u^4 = x_u c_4$ and $u^6 y_u = c_6$. Notice that S is a finite set.

STEP 3: Choose the largest $u \in S$, say u_0 and factor it as $u_0 = 2^{e_2} 3^{e_3} v$, where v is relatively prime to 6.

STEP 4: Choose

$$a'_1, a'_3 \in \left\{ \sum_{i=1}^n \alpha_i w_i \mid \alpha_i = 0 \text{ or } 1 \right\} \quad \text{and} \quad a'_2 \in \left\{ \sum_{i=1}^n \alpha_i w_i \mid \alpha_i = -1, 0 \text{ or } 1 \right\}$$

subject to the following conditions:

$$(a'_1)^4 \equiv x_u \pmod{8}, \quad (a'_2)^3 \equiv -(a'_1)^6 - y_u \pmod{3}.$$

STEP 5: Solve the following equations for a'_4 and a'_6

$$\begin{aligned} x_u &= (a_1'^2 + 4a_2')^2 - 24(a_1' a_3' + 2a_4'), \\ y_u &= -(a_1'^2 + 4a_2')^3 + 36(a_1'^2 + 4a_2')(a_1' a_3' + 2a_4') - 216(a_3'^2 + 4a_6') \end{aligned}$$

STEP 6: Solve the equations for s, r, t successively

$$u a'_1 = a_1 + 2s, \quad u^2 a'_2 = a_2 - s a_1 + 3r - s^2, \quad u^3 a'_3 = a_3 + r a_1 + 2t$$

For these values of a'_1, \dots, a'_6 the Eq. (6) is the desired result.

For a complete version of the algorithm see [4].

5. SUPERELLIPTIC CURVES WITH MINIMAL DISCRIMINANT

Let \mathcal{X}_g be a genus $g \geq 2$ superelliptic curve with equation as in (1). The discriminant of \mathcal{X}_g is the discriminant of the binary form $f(x, z)$, hence an invariant of homogenous degree $\delta = 2d - 2$ and $\Delta_f \in \mathcal{O}_K$.

Let $M \in GL_2(K)$ such that $\det M = \lambda$. Then from remarks in section 2 we have that $\Delta(f^M) = \lambda^{d(d-1)} \Delta(f)$. We perform the coordinate change $x \rightarrow \frac{1}{u^n}x$ on $f(x)$. Then the new discriminant is $\Delta' = \frac{1}{u^{n \cdot d(d-1)}} \cdot \Delta$.

Lemma 2. *A superelliptic curve \mathcal{X}_g with integral equation*

$$y^n = a_d x^d + \cdots a_1 x + a_0$$

is in minimal form if $v(\Delta) < nd(d-1)$.

Hence, if we choose $u \in \mathbb{Z}$ such that $u^{nd(d-1)}$ divides Δ , then Δ' becomes smaller. Indeed, we would like to choose the largest such u . In the process we have to make sure that for the u 's that we pick we do get an equation of a superelliptic curve isomorphic to \mathcal{X}_g .

Hence, we factor Δ as a product of primes, say $\Delta = p_1^{\alpha_1} \cdots p_r^{\alpha_r}$, and take u to be the product of those powers of primes with exponents $\alpha_i \geq nd(d-1)$. For primes $p = 2, 3$ we have to be more careful since in our exposition above we have assumed that the characteristic of the field is $\neq 2, 3$.

In [5] we give a description of all the steps of the algorithm which is also implemented for genus 3 hyperelliptic curves and for triangular curves $y^3 = f(x)$ up to $\deg f \leq 8$.

The main result of [5] is the following:

Theorem 2. *Let \mathcal{X} be a genus $g \geq 2$ superelliptic curve defined over an algebraic number field K and P a K -rational point on \mathcal{X} . For the pair (\mathcal{X}, P) the global minimal discriminant $\Delta_{\mathcal{X}, P} \in \mathcal{O}_K$ is unique (up to multiplication by a unit). Moreover, there exists a minimal Weierstrass equation corresponding to this discriminant $\Delta_{\mathcal{X}, P}$.*

The theorem also provides the blueprint for the algorithm which is much more involved than the case of elliptic curves described in [3] and [4] and the case of hyperelliptic curves described in [1].

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The Investigation of Copyrighting and Dance: The Importance and the Consequences

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Abstract

Copyrighting works of art to protect original ideas from being taken or changed without the consent of the artist can be complicated in dance. Violating U.S. Copyright Law can lead to fines and even serving jail time. Can these laws along with those same consequences be applied to choreography? What are the criteria for a dance work to be considered for copyrighting? What are the benefits for choreographers copyrighting their work? Lastly, what can the consequences of not copyrighting choreographic works be for dance artists? Based on popular media articles, law books, and numerous government and legal websites, this paper will address these questions, including the origin of U.S. Copyright Law and how it applies to dance. Finally, I will show how dance artists can benefit from copyrighting their original choreographic works.

The Investigation of Copyrighting and Dance: The Importance and the Consequences

Dance is a way of expression and storytelling. Many choreographers put together entire works of art to tell a story to audiences. These works of art are innovative, breathtaking and one of a kind: the artists deserve recognition and protection for their ideas. In this paper, I will present information on the idea of copyrighting choreographic works, the criteria to be considered for copyrighting, the importance of it, the consequences of violating these laws and, finally, the consequences of failing to copyright original works.

It was not until the 1900s that choreographic works could be considered for protection under the common law of copyrighting. Prior to that time, dance movements were passed down from person to person through memory, word of mouth, and demonstration. Although it was possible to write the steps down or preserve pictures, it was rarely done, and even then it was not clear that the movement could be learned properly and that it would be performed as the choreographer intended. Through the absence of proper records it seemed almost impossible to protect choreographic works under the common law. The development of notation and motion pictures changed this situation. It was not until then that the subject of protection of authorship of dance was even discussed. When dance was recognized as a recordable form of entertainment, it was only a matter of time until protection was requested. (Copyright Law Revision, 1961, p. 93-104)

When the Copyright Act of 1947 was first extended to dance, it was only applicable if the dance was dramatic or conveyed a serious story, not for abstract work. In 1952, Hanya Holm was the first to receive copyright protection for her work *Kiss Me Kate* because it was a dramatic-musical. (Mkrdichian, 2009, p.5) In 1961 that the 86th Congress submitted a revision of copyrighting laws that included choreographic works directly, previously referred to as “dramatic compositions.” In the revision, Congress focused on determining what makes work copyrightable: proper recordings of the work, rights in a choreographic work and the same protection for dramatic works in general. (Copyright Law Revision, 1961, p. 93-104)

The rights to authorship and copyrighting were settled in 1961, but the Copyright Act of 1976 included another factor; it extended protection to abstract choreography as Congress came to understand that choreography was a separate form of art outside of dramatic works. This

Copyright Act also brought about the criteria for choreographic works to be eligible for protection: the choreographer must create a choreographic work, defined above, the work must be original, and the work must be fixed on a tangible medium, meaning it is recorded or written using a machine or device. (Jean-Louis) However, in the Copyright Act of 1976, Congress fell short of defining a choreographic work, so the U.S. Copyright Office provided a supplement definition for choreography, calling it a composition or arrangement of dance movements and patterns intended to be accompanied by music. (Jean-Louis, Mkrdichian, 2009, p. 5-7)

Choreographic work can now be copyrighted with the expectation of meeting three criteria. The requirements for copyright protection seem simple, but are more complicated than one may think. The definition is very clear on what is considered a choreographic work. The hardest part is defining originality. Originality can be defined as a series of established movement organized in a sequence to music by the choreographer. For example, in ballet, though the movements have names that are already known worldwide, and if the choreographer arranges them in a particular sequence and intends it to be done with music, the piece is now an original choreographic work. Other dance forms do not necessarily fall under these criteria. In comparison to ballet where the movements are already coined with names, copyright practices prohibit the copyrighting of dance routines and movements such as the basic waltz step in ballroom dance. "Copyrighting of Choreographic Works" by Julie Van Camp lists the elements of an original piece:

- 1) The use of basic steps that are established in its own vocabulary
- 2) combine them in a sequence of steps
- 3) for one or more dancers
- 4) in a performing area
- 5) to music
- 6) with the purpose of telling a story, communicating, and evoking emotion with the audience
- 7) with the aid of costumes, scenery, and lights. (Camp 1994)

After distinguishing between what is considered a choreographic work and how to go about creating that work while still maintaining originality, the final step is fixating the choreographic work on tangible medium. The only current forms of fixation that meet the Copyright Act's requirements are notation, video tape, and computer technology. This must be done so that your work can be seen by others, reproduced and communicated to others. (Jean-Louis) This final step is useful because it allows people to witness your work and determine if it

meets the requirements to be copyrighted. Under Copyright Law, the artist receives full recognition for her work and others can recreate it with permission.

The possibility for copyrighting has been established, and the criterion are clear, however, many choreographers do not copyright their work, opening up the question of what happens when the choreographer neglects to get protection? An example of this problem is the work of Michael Peters. He is the man behind the famous choreography for the hit song by Michael Jackson, *Thriller*. *Thriller's* choreography is considered one of the most performed and most popular choreography in the world by dancers, choreographers and even the general public. Since the release of the music video in the early 80s the choreography has gone worldwide. You can find videos, commercials, and even spoofs in movies playing off of the popular dance. This is unfortunate as Michael Peters did not copyright the choreography and now that it has been performed all around the world, including a prison in the Philippines. Questions arise: is it too late for him to claim the work as his own original work? If Peters would have submitted his work for protection upon the release of the *Thriller* video, would it have met the criteria? (Mkrdichian, 2009, p. 1-4) Today Peters is recognized as the man behind the famous choreography, but he never submitted his work for protection. If he would have gone through the legal system initially, he could possibly be wealthier than Michael Jackson was.

Sadly Peters missed out on a one of a kind opportunity, but other prominent choreographers such as George Balanchine didn't take any chances with their work. The George Balanchine Foundation is a panel that holds the rights to all of his work, concentrated research, ballet reconstructions, publications, lectures, videos and other projects. The Foundation was established to protect his legacy. Those who knew Balanchine believed he would go down in history and would not stand to have his name or work go unappreciated. Just five months after his death, the Foundation was created. The Foundation is built around the George Balanchine Trust and will take severe legal action if their rights are violated: "The Trust intends to preserve the artistic integrity of the works by providing Balanchine-trained repetiteurs to stage his ballets for qualified companies and by requiring periodic reviews of the productions." (The Balanchine Trust 2002) As a choreographer, I can say that it is a relief to see that some choreographers are aware of the laws that prohibit copyrighting infringement and are cautious enough to carry out their own protection as well.

Another example of a choreographer aware of her rights and Copyright Law is Anne Teresa De Keersmaeker, a Belgian contemporary dance choreographer who was shocked to see choreography from two of her works from the early 1990s in the music video *Countdown* by Beyoncé Knowles. Her response was clear: “Although De Keersmaeker claims that she is neither upset nor honored that Beyoncé copied her dance moves, she made a point to say that ‘there are protocols and consequences to such actions, and I can’t imagine [Beyoncé] and her team are not aware of it’.” (Hayes 2011) De Keersmaeker is correct that there are consequences and she has every right to take action. On *YouTube* there is a side-by-side comparison of the music video and the original work set on the Belgian dance company. Claims by Beyoncé’s lawyers and Sony records state that they were merely inspired, not stealing choreography from De Keersmaeker, but when watching the side-by-side comparison the similarities are inexcusable. The two parties plan to settle out of court, but this situation is not the only one of its kind. There are two sides in this situation. On one side it is a relief that the idea of copyrighting works is becoming more popular and dance artists know their rights and can be sure they are protected as well as their work. On the other side, if the crew behind a high profile, world famous singer and dancer is unaware of protocols and consequences that prohibit them from blatantly stealing someone else’s idea and calling it their own, then Copyright Law can be difficult to implement. Interestingly, in this case, the choreographer behind the music video has gone unnamed and has no further association with Beyoncé or Sony records.

Until the very recent past, choreographic works did not have protection under U.S. Copyright Law. A series of laws have been passed that allow both dramatic dances as well as abstract dances to be protected. This allows dance artists to assume that the legacy of their work will remain intact and that they will receive proper credit and financial gain for their work. These laws will ensure that choreographers will receive the same rights as other artists, allowing their works to be preserved for years to come.

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Supplies:

- A. Printing Screen (can be bought already prepared with the screen stretched over the frame)
- B. Exacto knife
- C. Design to be printed
- D. Packing Tape
- E. Print making Squeegee
- F. Rubber Spatula
- G. Printing clamps adhered to a board or table
- H. Paper or fabric to be printed on
- I. Stencil Material (Easy Mask)
- J. Paper Towels
- K. Ink
- L. Wooden spoon

Method:

1. Cut your stencil
 - a. Choose your design to print
 - b. Trace the design in reverse to the paper backing attached to the yellow vinyl part of the stencil
 - c. Cut the yellow vinyl part of the stencil the fit on your screen leaving a 1 inch border between your image and the edge of the yellow vinyl
 - d. Cut the lines on the yellow stencil with your exacto, being careful to cut only through the vinyl and not the yellow backing.
 - e. Peel off the yellow parts the are the image parts intended to be printed, being careful to leave the non image parts attached to the paper sheet.
 - f. Peel the paper backing off the clear plastic and adhere to the yellow vinyl.
 - g. Peel the paper backing of the yellow vinyl.
 - h. Center your clear plastic with the yellow on the outside of the screen.
 - i. Adhere them both to the screen. To ensure a good adhesion, turn the screen over and burnish the yellow parts firmly to the screen.
 - j. Peel away the clear plastic and the yellow should remain firmly attached.
2. Print your deisgn
 - a. Place screen design side down in the printing clamps.
 - b. Leaving the screen up, apply ink in a beaded line below your design.
 - c. Drag the ink (using squeegee) across the up screen. (flood the screen)
 - i. (Whenever you move the ink, at the end of your move, move it in the opposite direction about an inch to pull extra ink off the squeegee)

- d. Align your media with the registration marks then close the screen
- e. Pull the ink towards you across the screen at a 45 degree angle with the squeegee.
- f. Open up the screen and remove your media.
- g. Repeat steps 2-5 until satisfied.

Remember to avoid letting ink dry in the screen; apply more and/or print some practice paper (like newsprint) if the ink seems to be getting chunky.

For more information on Screenprinting:

<http://www.instructables.com/id/Screen-Printing%3a-Cheap%2c-Dirty%2c-and-At-Home/?ALLSTEPS>

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Printmaking: Why Aren't You Doing This Already?

UM Dearborn - Ashlee Szabo, Khai Krumbhaar, Edward Poulos, Robert Turner and Denise Malone-Harris

Meeting Of Minds - 2014

Demonstration guide for Japanese Woodcut and Screen printing



Japanese Woodcut

Japanese wood block printing is called Ukiyo-e. It literally means "pictures of the floating world." The Japanese learned woodblock printing from the Chinese around the 8th century and it was primarily done by Buddhist monks until the 17th century. The first prints were done in black and white and hand color afterwards. In the 18th century, registration marks, or "kento," enabled artists to accurately align multiple colors on the same print. A single simple print can use ten blocks in fourteen colored layers (some blocks being used for more than one color), and more complex prints consist of 30 to 50 layers.

Japanese woodblock printing is different from Western Printing in a couple of key ways. Western printing uses oil based inks which are applied to the surface of the paper. In Japanese style, water based pigments are used. This makes the colors soak into the fibers of the paper, in affect dying the paper. Sometimes glue is applied afterwards in small areas to give a sheen, for example in eyes or animals' teeth.



Supplies:

- A. Wood (smooth planed; can use plywood, but better wood holds better detail)
- B. Woodblock Carving Tools
- C. Design to be printed
- D. Conté Crayon/Stick of charcoal
- E. Pencil
- F. Printing paste/Rice glue
- G. Water color paint (Liquid)
- H. Sturdy paint brushes
- I. Printmaking paper (mulberry or similar)
- J. Water (in a spray bottle)
- K. Baren

Method:

1. Transfer design to wood block.
 - a. Cover back of design with conté crayon or charcoal
 - b. Place design face up on block
 - c. Trace over the design firmly with a pencil
 - d. Lift paper, design should be transferred to the block. You can go over with a sharpie if you like.
2. Carve out design
 - a. Cut away all parts of the block that are not part of your design. Try to make an inch to inch and a half "border" of removed wood around your design.
 - b. Doesn't have to be deep, a few millimeters will yield a nice clear print.
 - c. Don't forget to carve registration marks. You can use the edges of the block if your design allows.
3. Spray block lightly, shake off excess water.
4. Place dots of pigment on top of design.
5. Place dots of glue around design in carved out area.
6. Mix glue and pigment over design using small circles.
7. Line paper up using marks and drop onto block, keeping one thumb on corner.
8. Holding baren level, move it in circles over back of paper to print design.
9. Lift paper straight off to avoid smearing.
10. Repeat for each layer of pigment, lightest to darkest.

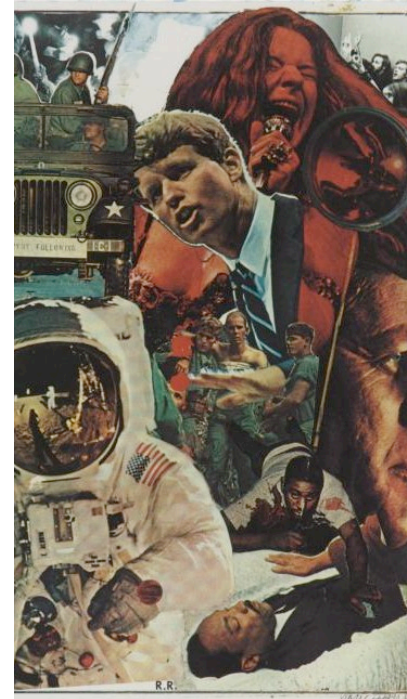
For more information on woodblock printing:

http://www.metmuseum.org/toah/hd/ukiy/hd_ukiy.htm

Hughes, Ann D'Arcy, and Hebe Vernon-Morris. *The Printmaking Bible: The Complete Guide to Materials and Techniques*. San Francisco: Chronicle, 2008. Print.

Screenprinting

Screen-printing is a process that was pioneered around 1000 ad in China. Europe didn't start screen-printing until the 18th century, when silk-screens became more available. In 1910, experimentation with photo-reactive chemicals allowed more sophisticated images to be printed; the increase in quality allowed screen-printing to become the dominant method for printing commercial artwork, such as movie posters, record albums, and t-shirts. Robert Rauschenberg started pushing screen-printing as a fine art medium in 1961; in 1962, Andy Warhol's work "Two-Hundred One Dollar Bills" cemented screen-printing as a proper medium for the creation of fine art.



Gender Differences in Perceiving the Referential and Embodied Meaning Conveyed by Music

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Cultural events are associated with particular types of music. One way this occurs is through the popular media such as film. For example, commercials use a particular type of music to evoke a mood or concept to help sell a product. As a result, specific music becomes associated with moods, concepts, and events over time. Music is one of the key elements of cinematography. The selection of music can create suspense or foreshadow a romance in a film. Boltz (2001) found when ambiguous film clips are paired with positive or negative music the participant's interpretation of character motivations can change from neutral to hostile. Several studies have examined whether music, paired with a stimulus, can activate concepts. For example, Trainor and Trehub (1992) produced a study where children correctly matched photos with excerpts depicting animals from Prokofiev's "Peter and the Wolf". No studies have examined if music alone can activate concepts.

Composers, such as Prokofiev, intentionally try to represent specific events or objects in their music. By doing this, their music can convey meaning to the listener. There are two types of meaning music can convey: referential or embodied meaning. Meyers-Levy and Zhu (2005) suggest embodied meaning arises from the physical or structural properties of moderately stimulating music to convey hedonic/emotional meaning. In contrast, referential meaning arises from a network of descriptive associations such as concepts or schemas activated by the music. Meyers-Levy and Zhu (2010) determined that listeners are more likely to perceive both meanings when one has a high need for cognition. They also found gender differences in the types of meaning perceived in the background music paired with an ad. Women were more likely to attend to both the embodied and referential meaning of the music. Men attended only to embodied meaning unless they had a high need for cognition. In both cases, the meaning of music that was attended to became paired with the product advertised.

Meyers-Levy and Zhu's (2010) research suggests that if music can bring specific concepts to mind, it can influence product perception, consumer choices and worker productivity (Hallam, Price, Price, & Katsarou, 2002). Further evidence of the effect of musical meaning on consumer choices is provided by North, Hargreaves, and McKendrick (1997) that demonstrated French or German music playing in a wine shop influences purchasing decisions. More French wine than German wine was purchased when French music was playing in a wine shop and more German wine was purchased than French wine when French music was playing.

The studies examining the musical meaning conveyed by music all share the characteristic that the music is always accompanied by another stimulus (e.g., pictures, film

clips, wine). One way to examine if music activates a concept in semantic memory without having some other cue to the meaning of the music present would be having people engage in a story generation task after listening to music and later examine the stories for concepts the music should activate. If music can convey meaning, the structural elements of the music alone should activate concepts in semantic memory. Indeed, Sifonis and Fuss (2012) have found support that war-themed and baby-themed music, absent of words, activated war and baby concepts. An extension of the Sifonis and Fuss (2012) study examining how the familiarity of thematic music influences concept activation in a generation task replicated the finding that unfamiliar war-themed music activated concepts associated with war (Sifonis & Fuss, 2014).

Interestingly, Sifonis & Fuss (2014) did not examine if gender differences exist in attending to the embodied and referential meaning conveyed by the war-themed music. Likewise Meyers-Levy and Zhu (2010) did not examine if music can activate concepts without being paired with a stimulus. The goal of the current study is to find out if there are gender differences in attention to the embodied and referential meaning of war-themed music when the music is not paired with another stimulus. This should help us better understand the role music alone has on consumer choices and worker productivity.

Using the existing data from Sifonis & Fuss (2014) the current study examines referential meaning by noting the proportion of concepts associated with the war-themed music in the story generation task. Furthermore, the embodied meaning is examined by the rating of the valence of the story (i.e. positive or negative). Based on Meyers-Levy and Zhu (2010), we predict men will be affected by embodied but not the referential meaning of music. They should be more likely to write stories with a more negative valence rating score if the war-themed music is heard before writing the story. There should be no differences between conditions in their tendency to include war-themed concepts into their stories. We predict women will be affected by both the referential and embodied meaning. Specifically, if music is heard before writing the story we expect women to write a story with a more negative valence. Additionally their stories should have more war concepts incorporated into the story than if they wrote the story before listening to music. We predict no gender effects of music familiarity on the valence and concepts incorporated.

Method

Participants. Two hundred and fifty-one Oakland University students participated in trade of participation credit for an introductory or research methods Psychology course. APA guidelines were complied with. In the before, unfamiliar condition, there were 43 females and 31 males. In the before, familiar condition there were 36 females and 23 males. In the after, unfamiliar condition there were 38 females and 19 males. In the after, familiar condition there were 38 females and 23 males.

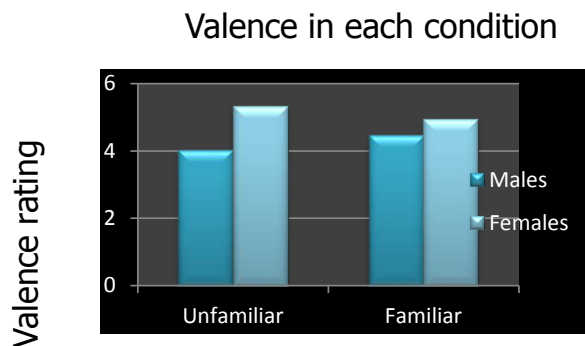
Stimuli and Procedure. Participants selected own computer where they were randomly assigned to 1 of 4 conditions.: before and after unfamiliar music or before and after familiar music. The unfamiliar music was “De LaTerre a la Lune”by Vernian Process, while the familiar war music was “Ride of the Valkyries” by Wagner. Both the familiar and unfamiliar music had a referential meaning of “war”.

Once seated at the computer, participants participated in a remote associate task designed to disguise the purpose of the study. Next, participants either heard a 90 second clip of music before or after the story generation task. Then fifteen minutes were provided to write a short story about “My Adventure on an Alien Planet”. Lastly demographic information was collected on diversity of music collection, Sci-fi interest, and participants creativity rating of self and story.

Coding. Coders blind to condition coded the stories. Several variables were examined. However, for the current study, we look at embodied and referential meaning only. The concepts known to be activated by the war-themed music were “war”, “marching”, and “marching band”. The referential meaning score was the proportion of these concepts incorporated into the stories. The embodied meaning score was the story’s valence as rated by coders on 1 to 7 scale (1=extremely negative, 7=extremely positive).

Results

A 2X2X2 Anova examined the effects of familiarity (Familiar, Unfamiliar), location (Before, After) and gender (Male, Female) on valence rating. We found a marginal Familiarity by Gender Interaction, $p < .10$. Men were more likely to write darker and more unpleasant stories compared to women when unfamiliar war-themed music was played. However for familiar war-themed music, there were no significant differences between genders in the valence of the stories.

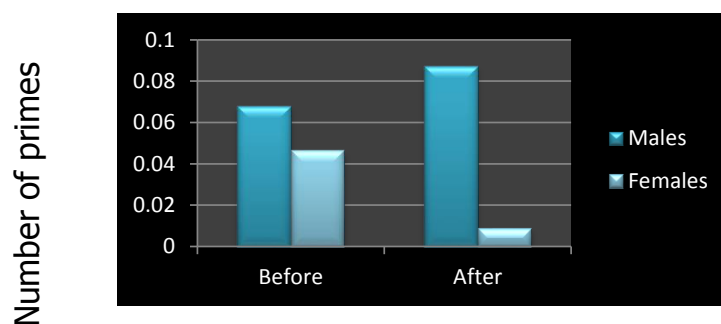


Familiarity X Gender $F(1,250)=3.334, p < .10$

For referential meaning, a 2X2X2 Anova examined the effects of familiarity (Familiar, Unfamiliar), location (Before, After) and gender (Male, Female) on proportion of war concepts incorporated into the story. There was a significant music location by gender interaction, $p < .05$. Women were significantly more likely to include the war-themed items into their stories if they

hear war-themed music before writing the story compared to if they write their story without hearing the music. Men's stories were not influenced by the music. Men incorporated the same amount of war-themed items into the stories regardless of hearing the music before or after writing the story. However, if women wrote their stories after listening to war themed music their likelihood to incorporate war themed music matched the men's tendency. If they hadn't listened to music before writing their story, they were significantly less likely to include war-themed items into their stories than the men.

% War primes incorporated



Music location X Gender $F(1,250)=12.086, p<.05$

Discussion

There is support for the hypothesis that men will pick up on the embodied meaning only, which is congruent with Meyers-Levy and Zhu's (2010) results. Also congruent with their results was women but not men being affected by the referential meaning of the music. Support for women picking up on the embodied meaning of the music was not supported. One possibility is the pleasantness ratings of the unfamiliar and familiar music might have influenced the hedonic meaning of the music and affected the stories. Pilot testing revealed that the unfamiliar music was rated as significantly less pleasant than the familiar music. Perhaps this explains why the predicted effects of valence for males was only seen with unfamiliar music. Another explanation is men are more likely overall to write about war in the story generation tasks, therefore the lack of pleasantness may have affected the valence in men's stories more so than women. Future directions include testing different themes and pleasantness ratings. Perhaps finding a music selection that is equally likely to drive either gender to write a more happier or aggressive story.

The prediction that women but not men would be affected by the referential meaning of the stories is supported. Evidence for attending to the referential meaning was supported by women being more likely to include war-themed items into their stories if they heard the war-themed music before writing their story compared to men. Men were actually less likely to include war concepts into their stories when music was listened to before they wrote their story.

Interestingly, men were less likely to include war themed items yet wrote more aggressive stories overall. Furthermore, the men's ability to incorporate war themed items into stories seemed to be the same whether or not they listened to the music before writing the story. Overall, there is partial support of gender differences in ability of music alone to bring to mind complex concepts in individuals.

Future directions include investigating the implications of gender differences in music being able to activate concepts may have on the work place. If referential music influence concepts activated by music alone this may influence which music is used for both genders to increase productivity. Employers may also want music to activate certain concepts in work environment such as mood or to recall of specific concepts.

Another direction includes investigation of other external stimuli and gender differences for improvement of worker productivity. Music and visual images can be used to examine if a person is processing referential and embodied meaning. Furthermore a high need for cognition is correlated with picking up on both types of meanings in music. Men processed both embodied and referential meaning if they had a high need for cognition (Meyers-Levy and Zhu, 2010). If both meanings are correlated with higher need for cognition this leaves the question of can embodied and referential meaning be predictors of better work performance?

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**Cindy Sherman's Untitled Film Stills:
The Domestic Woman**
Meeting of Minds
May 9th, 2014

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Cindy Sherman's Untitled Film Stills: The Domestic Woman

Jaclyn Wicker

Cindy Sherman, the photo-based artist, created her *Untitled Film Stills* series from 1977 to 1980. As a recent graduate, Sherman tapped into her love of 1950s B-movies to capture the essence of womanhood, as it was defined in the 50s and still today.

The *Untitled Film Stills* #12 (1978), #14 (1978), and #35 (1979) are a small portion of Sherman's photographs that are representing domestic scenes (others include: film stills #3, 1977; #10, 1978; #11 1978; #84, 1978; #50, 1979; etc.). The focus of my research is based on these three photographs being representative of the feelings a number of women have towards their predetermined "role" in society. The negative emotions expressed through Sherman's three film stills mirror those of most modern women in today's society. Sherman's strong influence of 1950s film, amongst other experiences, shaped the characters she portrayed within the frames of her *Untitled Film Stills*.

Throughout history women have struggled with the strong grip of society's power. With this struggle comes an obvious range of negative feelings and emotions. While viewing Cindy Sherman's *Untitled Film Stills* series the thought that the photos are simply pictures of women is not the only thought that should come to mind. Particularly, the film stills #12 (figure 1), #14 (figure 2), and #35 (figure 3) are more obviously representations of women within domestic scenes. After I was personally captivated by these three photos I began to ask myself questions, one of the most reoccurring being: how do the *Untitled Film Stills* #12, #14, and #35 all represent women's feelings towards their predetermined "role" in society? These photos commonly symbolize the negative feelings most women hold towards domestication as a lifestyle. Elisabeth Bronfen describes Sherman's stills as "wom[e]n pretending to be somebody else, but never quite getting fully into the role."¹

Cindy Sherman is a well-known photo-based artist, born on January 19, 1954, who uses photography as her only medium. After studying painting at the State University College at Buffalo, Sherman realized that she had lost interest in the subject and its limitations, so she turned to photography.² After graduating Sherman began experimenting with make up in a way similar to the previous experiences she obtained through sketching. Wanting a way to document her different characters, generated through make up, Sherman began turning the camera onto herself; she would then use her prints to make cutout doll characters as part of a narrative, but Sherman's practice of doll making was short-lived because she soon became disturbed with the femininity involved in the process. In the 1970s she began to create what is now called the *Untitled Film Stills* series, a collection of black and white photographs of herself as different female characters. The characters being depicted in the photographs are different types of women from diverse lifestyles, serving as just one piece of the narrative's puzzle. Even though Sherman is usually the only character inside the frame, a majority of the film stills are intended to indirectly refer to someone else being present outside the frame.³

There is no question that film was a major influence on Sherman and her work, more specifically the influence of B-movies created by directors such as Douglas Sirk, Ross Hunter, and Alfred Hitchcock.⁴ These particular films certainly shaped Sherman's personality and thoughts, beginning as a child growing up in the 1950s and "see[ing] the world from the vantage point of a TV-saturated childhood, with clearly mandated (not womandated) social and sexual roles."⁵ The power of the male over the female has been reinforced time and again in the films of the 50s era. "Media spectacles demonstrate who

¹ Elisabeth Bronfen, "The Knotted Subject: Hysteria, Irma and Cindy Sherman," in *Generations and Geographies in the Visual Arts*, ed. Griselda Pollock (London: Routledge, 1996), 51.

² "Biography," *Cindy Sherman*, accessed November 7, 2013, <http://www.cindysherman.com/biography.shtml>.

³ The biographical information in the paragraph is taken from the following source: Cindy Sherman, *Cindy Sherman: The Complete Untitled Film Stills*, ed. David Frankel (New York: The Museum of Modern Art, 2003), 5—8.

⁴ Marvin Heiferman, "In Front of the Camera, Behind the Scene: Cindy Sherman's 'Untitled Film Stills,'" *The Museum Of Modern Art*, no. 25 (Summer 1997): 16, accessed November 7, 2013, <http://www.jstor.org/stable/4381356>.

⁵ Catherine Morris, *The Essential Cindy Sherman* (New York: Harry N. Abrams, 1999), 17.

has power and who is powerless...the[y] dramatize and legitimate the power of the forces that be and show the powerless that they must stay in their places or be oppressed.”⁶ Although Sherman was fascinated with the genre of film as a whole, she was again captivated by a less popular concept of the women in these same films who did not abide by what was acceptable but still were successful and strong with a rebellious side.⁷ The women regularly characterized in these films are classically posed, and exposed, as delicate beings, dim-witted and easily swayed by the male’s profound tone and demeanor. In *Visual Pleasure and Narrative Cinema* Laura Mulvey describes the act of looking as being associated with pleasure, but separated by the active male and passive female, where the male gaze acts as an empowerment over the female.⁸ This technique is similarly used in Sherman’s *Untitled Film Stills* #12 (figure 1), #14 (figure 2), and #35 (figure 3), each of the three women stand inside the frame, victims of the male gaze that is so obviously falling upon them, their makeup, hair, and clothing naively labeling themselves as a commodity to their male counterparts.

It is fairly easy to come to the conclusion that Sherman’s *Untitled Film Stills* #12, #14, and #35 are about domesticity, all three taking place inside homes, although the three photographs do depict different social classes associated with domesticity.⁹ Sherman describes the characters she chose for her photographs as “struggling with something” and as “perhaps being forced into a certain role.”¹⁰ Film still #12 (figure 1) seems to have been snapped in the middle of an intense disagreement between the woman and most likely a male counterpart. The small piece of artwork hanging on the large, otherwise bare, wall would lead one to believe that the woman is of the middle class. The thin bedspread and inexpensive vertical blinds also play into the idea of a middle class scene. The woman’s facial expression shows a mixture of emotions, anger and fear being dominant through her tense facial muscles; she tightly squeezes her eyes shut to allow herself to disconnect her gaze from the other character’s, almost forbidding objections to her flight or in fear of her repercussions for attempting to leave. Her hands and back are up against a wall as if she has tried to move as far away as possible from the figure outside of the frame. The emotional woman is frantically packing her suitcase, seemingly running from something or someone. The intensity of the scene allows for the notion that this packing is not a split-second decision, but rather a decision she has been pondering for some time. *Untitled Film*

⁶ Douglas Kellner, “Cultural Studies, Multiculturalism, and Media Culture,” in *Gender, Race, and Class in Media: A Critical Reader*, 3rd ed., ed. Gail Dines and Jean M. Humez (United States: SAGE Publications, Inc, 2011), 7.

⁷ The term “acceptable” is used here in a context of getting married and having a family, these rebellious women were often killed off at some point in the film.

Cindy Sherman, *Cindy Sherman: The Complete Untitled Film Stills*, ed. David Frankel (New York: Museum of Modern Art, 2003), 9.

⁸ Laura Mulvey, “Visual Pleasure and Narrative Cinema,” in *Film Theory and Criticism: Introductory Readings*, ed. Leo Braudy and Marshall Cohen (New York: Oxford University Press, 1999), 837.

⁹ There are other photos that also represent domestic scenes, such as *Untitled Film Stills* #10, #11, #3, #50, and #84; the three photos I chose to discuss are more specific to the purpose of my research.

¹⁰ Sherman, *Complete Untitled Film Stills*, 9.

Still #14 (figure 2) is a photograph of a woman that looks closer to upper class; she stands in a black silk dress with touches of lace, a pearl necklace, and a trendy, well composed, hairstyle. She holds an unidentifiable blunt object in her hand as if she intends to use it if she finds necessary. Her face expresses a look of disgust and unrest, her gaze is looking into the distance leading the viewer to believe that someone has arrived home in such a state that causes her to react in this way. *Untitled Film Still #35* (figure 3) is more obviously a woman of the lower middle class, her inexpensive cotton dress and apron, as well as head wrap, guide the viewer to this conclusion. The quality of the paint on the walls and the scuffmarks on the door allow the idea of lower class to truly set in. Her gaze holds strong to the person suggested outside the frame as if she is trying to tell him something through her look because she has used it for many occurrences. With hands pressing firmly on top of her hips she pouts as if she is dissatisfied with the situation at hand. With the strong gaze and body language looking almost natural on this woman the viewer assumes that this photo displays the woman's only ability to defy her male counterpart. The scuff marks on the door tell a story of their own, one of anger and frustration, someone leaves during a feud and the person left behind takes their emotions out with their foot on the door. Vera Dika describes Sherman's characters, in *Recycled Culture in Contemporary Art and Film: The Uses of Nostalgia*, as being "confronted with a past that is also present."¹¹ After studying the three film stills and deciphering their subject matter, it is not all that challenging to associate the domesticity of the images with the negative sentiments so blatantly demonstrated; "the woman's expression is like an imprint of a situation, there is some action and her face registers a reaction."¹²

The *Untitled Film Stills* embody the well-known stereotype of the 1950s women's dress along with the female desire that shaped the idea of womanhood because of the way that Sherman was predisposed to this cultural concept during her younger years.¹³ The photographs represent the conflicting emotions women face when pressured into a role that may not fulfill their life goals. "It is via this tactical strategy of mimicry, by actively playing out the stereotype of the passive female, that Sherman attempts to expose 'femininity' as a fictitious social construct."¹⁴ With this idea of the fictitious social construct must come the notion of the male dominance throughout history, putting women's actual thoughts and feelings on the back burner. Maura Reilly depicts Sherman's characters as being shown "in gendered spaces...representative of the 'woman's place'- in a kitchen, in front of a mirror, or on a bed," she continues to explain their "unreadable facial

¹¹ Vera Dika, *Recycled Culture in Contemporary Art and Film: The Uses of Nostalgia* (Cambridge, UK: Cambridge University Press, 2003), 46, accessed October 15, 2013, <http://hdl.handle.net/2027/heb.07578.0001.001>.

¹² Judith Williamson, "A Piece of the Action: Images of 'Woman' in the Photography of Cindy Sherman," in *Cindy Sherman*, ed. Johanna Burton (Cambridge, Mass: Massachusetts Institute of Technology, 2006), 42.

¹³ Dika, *Recycled Culture*, 46.

¹⁴ Maura Reilly, "Cindy Sherman's *Untitled Film Stills*: Reproductive or Transgressive Mimicry?," in *Women Making Art: Women in the Visual, Literary, and Performing Arts since 1960*, ed. Deborah Johnson and Wendy Oliver (New York: Peter Lang Publishing, 2001), 119.

expressions- entirely ambiguous, blank, and empty as if they, the silent women, have already been spoken for; or [as] if they...are voiceless.”¹⁵

The domesticity represented in the film stills #12, #14, and #35 may seem to be the settings of everyday scenes to someone who agrees and abides by societies’ rules. In today’s culture, overall, there is still a well-defined set of conventions that are considered the most acceptable to follow. These women in the photographs, at a glance, seem to be abiding by these rules created by society, but Sherman consciously portrays her “images of women [as]...models of femininity projected by the media to encourage imitation, identification; they are, in other words, tropes, figures.”¹⁶ This is to say that, specifically, these three photos are meant to put on display the stereotype that a woman’s purpose is domestication, as it was supported in the 1950s and still today. These women also serve as models in such a way that they show their opposition to their lifestyles that were predetermined for them.¹⁷ During Sherman’s childhood the idea of the woman as only the housewife was greatly supported, although strong resistance was beginning to come into play. During the 60s and 70s (when Sherman was a young adult) the feminist movement began to take off and women were starting to more commonly speak for themselves. Sherman’s *Untitled Film Stills* use “the performance of the body [because it] was increasingly, by the 1960s, seen to be a way to interrogate the social situation of the subject and was...taken up as a key strategy for feminists and other artists...[as an] intent on addressing the particularities of their bodily codings.”¹⁸ There is no way to hide from the negative emotions that each of the three women are expressing, but their emotions could be considered a glimpse into Sherman’s personal experience with the social construct of domesticity and the feminist push away from it.

Although most scholars agree that the *Untitled Film Stills* are not thought of as being autobiographical, Sherman’s desire to emulate domesticity in our culture while comically mocking it is a desire shared with many modern women.¹⁹ Sherman is stating, through her photos, that she is aware of the domestic stereotype and is not denying its presence, but that she is not going to allow it to define her (or the women portrayed in the photos). In *Improvisation within a Scene of Constraint: Cindy Sherman’s Serial Self-Portraiture* Michelle Meagher writes:

Significantly, Sherman’s description of her aesthetic practice...suggests that the work is motivated by improvisation, not by politics, intentions, or plans. Taking up the language of habit, memory, and embodied experience, it is possible and productive to consider the ways in which these characters were not consciously

¹⁵ Ibid., 123—25.

¹⁶ Craig Owens, “The Allegorical Impulse: Toward a Theory of Postmodernism,” in *Art After Modernism: Rethinking Representation*, ed. Brian Wallis (New York: New Museum of Contemporary Art, 1984), 233.

¹⁷ This term “predetermined” is used as societies’ choice to determine that a woman’s only duty is to her family and home.

¹⁸ Amelia Jones, “Performing the Other as Self,” in *Interfaces: Women, Autobiography, Image, Performance*, ed. Sidonie Smith and Julia Watson (Ann Arbor: University of Michigan Press, 2002), 75.

¹⁹ Reilly, *Reproductive or Transgressive*, 133.

chosen but rather emerged from culturally embodied memories and knowledge.²⁰ To continue this idea of Sherman's unconscious experience with domesticity one must acknowledge, once again, that a majority of scholars share the same opinion that Sherman's film stills are not at all representative of herself and are certainly not self-portraits. Although I do agree that the photographs are not self-portraits, I also have to consider the idea of the unconscious influences on Sherman, throughout her entire life. "To the extent that these photographs refuse the discourse of authenticity that self-portraiture conventionally arouses, they are often said to affirm that the self is a fiction, that the accoutrements of selfhood are socially constructed, and that selfhood is an ongoing project on which individuals embark."²¹ Sherman hints at negative emotions in the films stills #12, #14, #35 and there are many reasons why she may have done so; be it her own experiences, the experiences of someone close to her, or even simply exposure to the opposition. No matter the reasons Sherman may have had, one thing is for certain; many women agree.

Womanhood has been defined through housework, even though the line of work does not facilitate women's-esteem or even men's for that matter; most women throughout history and today do not appraise their adult lives through meals prepared, items cleaned, or dishes washed.²² In simpler times (before the 20th—21st centuries) it is true that women may have based their life's fulfillment through these types of tasks, although most women of the 21st century now strive for the opposite.

Most women enjoy the idea of domesticity for a portion of their life, but not as a lifelong (or only) goal. In *Domesticity and Dirt* Phyllis Palmer explains that the "links between housework and psyche depend on the home as the center for intimate and sensual existence...[the] housework [task] took care of those things that [historically] society found most unappealing, embarrassing, and tainted."²³ Due to the fact that women are the key producers of children it was easy to allot them the responsibilities of housework, while raising the children. It is understandable that anyone who is forced to do something they do not enjoy will soon feel negatively about doing so, a perfect example of women's unpleasant feelings towards domesticity. It is also believed that "the women's liberation movement of the 1970s spawned numerous analyses of how...female-centered housework functioned to maintain women's isolation and men's power in the public arena."²⁴ This idea of men attempting to hold the power would soon be realized and would result in angry, bitter, and resentful women who would be prepared to take a stand. A type of "new consciousness"

²⁰ Michelle Meagher, "Improvisation within a Scene of Constraint: Cindy Sherman's Serial Self Portraiture," *Body & Society* 13, no. 1 (February 2008), 2, accessed November 22, 2013, <http://bod.sagepub.com/content/13/4/1>.

²¹ Michelle Meagher, "Improvisation within a Scene of Constraint: Cindy Sherman's Serial Self Portraiture," *Body & Society* 13, no. 1 (February 2008), 4, accessed November 22, 2013, <http://bod.sagepub.com/content/13/4/1>.

²² Phyllis Palmer, *Domesticity and Dirt: Housewives and Domestic Servants in the United States, 1920—1945* (Philadelphia: Temple University Press, 1989), xi.

²³ Palmer, *Domesticity and Dirt*, 145.

²⁴ Palmer, *Domesticity and Dirt*, 157.

would be discovered in result of the changing social role of the domesticity of women.²⁵

Palmer continues to state that,

Feminist theorists of the past two decades have emphasized the pervasiveness of images of women that link them to an untrustworthy mortal body and how these images are contrasted with the image of men as thinking beings who master their bodies as well as all else in the natural world...[and] that all women suffer equally from identification with the elements unconsciously associated with the fact of being a woman.²⁶

There are other options besides a whole lifetime of domesticity. Studies show “that employed wives have better physiological health than [strictly] housewives,” although some of the jobs involved with being a housewife can be a source of satisfaction to some.²⁷ Regardless of the amount of exposure, domesticity does affect women in different ways. “The experience usually has at least some effect on the personality, changing perceptions of the self, modifying behavior.”²⁸ Every woman’s experiences with domesticity plays a role on their personal decisions. During the 1920s-1940s many well-off families would hire out middle to low class women to fulfill their household’s needs, because it was such an undesirable vocation.²⁹ As time passed, women began to contemplate their lifestyle options more freely. In 1970 the Women’s Movement took place and many people were not supportive, they called the feminists man-haters, selfish, and unfulfilled; feminism was formed (and continues to be formed) through expectations and experiences in addition to the exposure to different lifestyles and ideologies.³⁰ Women’s negative feelings towards domesticity resulted in the feminist movement, which took place around the same time Sherman began to create her *Untitled Film Stills* series.

It has been assured that most women do not necessarily support the idea of being domesticated as a life long goal. Sherman’s *Untitled Film Stills* #12 (figure 1), #14 (figure 2), and #35 (figure 3) represent these negative feelings women feel towards the pressure to domesticate. The three scenes are condensed versions of the trials and tribulations women have faced and continue to face. “In picturing themselves photographically, they speak...as subjects (creating their own visual narrative or autobiography of sorts) and thus unhinge the age-old tendency to lapse any image of a woman’s body into the status of [a]

²⁵ Ethel Klein, *Gender Politics: from Consciousness to Mass Politics* (Cambridge, Mass: Harvard University Press, 1984), 33.

²⁶ Palmer, *Domesticity and Dirt*, 150.

²⁷ Constance L. Shehan, Mary A. Burg and Cynthia A. Rexroat, “Depression and the Social Dimensions of the Full-Time Housewife Role,” *The Sociological Quarterly* 27, no. 3 (Autumn, 1986), 403, accessed November 7, 2013, <http://www.jstor.org/stable/4106002>.

The women of this study that reported the least satisfaction in being a housewife had higher depression scores than those who reported satisfaction in being a housewife.

²⁸ Helena Znaniecki Lopata, *Occupation: Housewife*, (New York: Oxford University Press, 1971), 139.

²⁹ Palmer, *Domesticity and Dirt*, 138.

³⁰ Klein, *Gender Politics*.

speechless and dominated object.”³¹ In another light, Sherman has successfully displayed women in a way that most people are accustomed to viewing them, but she uses her female characters as weapons of disapproval. “[Each woman’s] identity slides in and out of focus, depending on whether “she” is a woman whose knowledge and experience are bodily and innate, a “free-floating sign” continually reinvented by images, or a woman trapped by gender and race.”³²

³¹ Amelia Jones, “Performing the Other as Self,” in *Interfaces: Women, Autobiography, Image, Performance*, ed. Sidonie Smith and Julia Watson (Ann Arbor: University of Michigan Press, 2002), 70.

³² Linda S. Klinger, “Where’s the Artist? Feminist Practice and Poststructural Theories of Authorship,” *Art Journal* 50, no. 2 (Summer 1991), 41, accessed November 21, 2013, <http://www.jstor.org/stable/777161>.



Fig. 1. Sherman, Cindy, *Untitled Film Still #12*, 1978. Gelatin silver print, 19.1 x 24 cm. Museum of Modern Art, New York.



Fig. 2. Cindy Sherman, *Untitled Film Still #14*, 1978. Gelatin silver print, 24 x 19.1 cm. Museum of Modern Art, New York.



Fig. 3. Cindy Sherman, *Untitled Film Still #35*, 1979. Gelatin silver print, 24 x 16.2 cm. Whitney Museum of American Art, New York.

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