

42nd Annual Student Symposium

April 19, 2018



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Mathers Room, Pearsons Hall

Moderator: Jennifer Esperanza, Anthropology

9:00	Jennifer Esperanza	Opening remarks
9:05	Semaite Abiy	Internship at Danya Institute
9:30	Daniel Arkes	Cultural Preservation in the Assyrian Diaspora
9:55	Terra Allen	Social Media and Anthropology
10:20	Break	

Moderator: Kylie Quave, Anthropology

10:30	Kylie Quave	Opening remarks
10:35	Mingyi Zhang	Barriers of Confrontation: Political Calculations of Atonement for War Crimes in Post-World War II Japan and Germany
11:00	Brian Glubok , Semaite Abiy , Sharon Grimm , Abby Segal , Carter Skolnick , Emily St. Onge , Ashley Sorensen	Roundtable: Consequences and Remnants of (Post)Colonialism and Current Unfree Labor
11:25	Beatriz Aguilera-Tenorio , Charlie Burks , William Mertens , Holly Novak , Keila Perez , Mustafa Quadir , Lexi Schnitzer , Charlotte Vail , Quinn Tahon , Willa Witkoski-Fields	Roundtable: Migration, Displacement, and Unfair Labor
11:50	Break	

Moderator: Leslie Williams, Anthropology

1:00	Leslie Williams	Opening remarks
1:05	Kara Murphy	Perpetual Care Disparities in the Historic Segregated Cemeteries of Harris County, Texas: A Quantitative Analysis
1:30	AmySue Greiff	Osteometric Analysis of Canid Remains from South Dakota and an Examination of Inter and Intra-Observer Error
1:55	Simon Tomlinson , James McFeeters	Open Energy Dashboard
2:20	Break	

North Lounge, World Affairs Center

Moderator: Matthew Vadnais, English

9:00	Matthew Vadnais	Opening remarks
9:05	Evangeline Schmidt	Counterculture in the Golden Country: Lerner and Loewe's <i>Paint Your Wagon</i>
9:30	Abigail McCully	A Knight's Tale: History and Education in Film
9:55	Mattie Ganson	Emoji Poetry: Writing and Translating in a Pictorial Language
10:20	Break	

Moderator: Sylvia Lopez, Modern Languages and Literatures

10:30	Sylvia Lopez	Opening remarks
10:35	Claudette Breaux	Morrison and Hansberry are Revolutionaries: A Literary and Pedagogical Approach to African-American Authors in American High School Curriculum
11:00	Mickael Raggi	The English-Only Movement: Should the United States Have English as Its Only Official Language?
11:25	Laura Savage , YJ Na , Dianne Lugo , Mickael Raggi , Alondra Guzman , Eva Haykin , Dulce Saenz , Gabriel Perry , Maha Sabbagh , Ava Rockafeld , Samantha Funk , Superior Murphy	Border Awareness Experience in El Paso, Texas: Perspectives and Takeaways
11:50	Break	

Moderator: Matthew Vadnais, English

1:00	Matthew Vadnais	Opening remarks
1:05	Sean Beckford	Revolution, Communities of Struggle and (De)humanization within David Simon's <i>The Wire</i>
1:30	Edward Otto	<i>Serial</i> ; 'True' Crime in an Era of Fake News
1:55	Zoë Koenig	Batman and Deviance in the Silver Age and Bronze Age of Comics
2:20	Break	

Moderator: Susan Furukawa, Modern Languages and Literatures

2:30	Susan Furukawa	Opening remarks
2:35	Emma Dawson	Exploring War and Peace Museums in Japan
3:00	Jasper Ferehawk	State Shinto, Determination, and Willpower: The Evolution of Magical Girl Anime
3:25	Shan Tang	The Relationship between Wang Guowei's View of Enlightenment and Jia Baoyu Psychological Development.
3:50	Break	

Richardson Auditorium, Morse-Ingersoll Hall

Moderator: Beatrice McKenzie, History

9:00	Beatrice McKenzie	Opening remarks
9:05	Georgia Armitage	Legitimizing America's Image: Neo-Gothic as Architectural Rhetoric in 1920s Chicago
9:30	Nadia Mitnick	From the Black Sea to the Great Plains: Germans from South Russia on the Dakota Prairie
9:55	Justin Vetterl	Unorthodox Tactics: Robert Rogers and the Foundation of the American Rangers
10:20	Break	

Moderator: Robin Zebrowski, Cognitive Science

10:30	Robin Zebrowski	Opening remarks
10:35	Brian Dahlberg	Mary's Trial: A Knowledge Argument-Based Evaluation of Active & Social Externalism
11:00	Zane Joiner	Socialization, Engagement, and Presence in Online Game Environments.
11:25	Nisha Bhatta , Matthew Nielsen	Software Analysis Of Blockade Games
11:50	Break	

Moderator: Beth Dougherty, Political Science

1:00	Beth Dougherty	Opening remarks
1:05	Sasha Vorlicky	Troubled Past, Displaced Present and a Secure Future: An Analysis of the Coordinated Emergency Response to the Refugee Crisis in the West Nile
1:30	Laura Savage	Impunity and Consequences of Violence Against Women: Femicide in Mexico and the Northern Triangle
1:55	Caroline Murton	Belgitude: Creating a Culture Around Divided Politics
2:20	Break	

Moderator: Marina Bergenstock, Theatre, Dance, and Media Studies

2:30	Marina Bergenstock	Opening remarks
2:35	Linh T Dieu Nguyen	Western Influences on Vietnamese Beauty Standards
3:00	Sydney Mercado	The Asian Monologues: An Accessible Format for Performance
3:25	Hana R. Hassanpourgol	Beautiful Resistance: Theatrical Justice in Palestine
3:50	Break	

Room 150, Science Center

Moderator: John McMahon, Political Science

9:00	John McMahon	Opening remarks
9:05	Alyssa Mazer	How Anti-Abortion Legislation Limits Meaningful Choice: A Feminist Theory Analysis of Abortion and Institutionalized Sexism in the United States
9:30	Stephen Bauer	Private Prisons and the Supreme Court: Examining Prison Employee Liability for Mistreatment of Inmates
9:55	Charlotte Mayeda	Black Women, Theories of Labor, and Intersectional Social Movements
10:20	Break	

Moderator: Pablo Toral, Political Science

10:30	Pablo Toral	Opening remarks
10:35	Lucas Kempf	Institution Formation and the Military in Argentina
11:00	Alden Blatter	Herding Cats: The Impact of Donor Fragmentation on Foreign Aid Efficacy
11:25	Yiqiang Wang	A Comparison of Two Models of Development in the Boundary Waters Canoe Area Wilderness Region
11:50	Break	

Moderator: John McMahon, Political Science

1:00	John McMahon	Opening remarks
1:05	Stavia Stone-Wylder	The Federalists and Anti-Federalists on Governmental Power
1:30	Willow Wallis	Is Art Work?
1:55	Devin Anderson	Housing Segregation in Milwaukee
2:20	Break	

Moderator: John Rapp, Political Science

2:30	John Rapp	Opening remarks
2:35	Zhang Mingyi	Choosing the "Working" Partners: Preconditions and Outcomes of Coalition Building Under MMP Electoral System
3:00	Hannah Epstein	Freedom of the Press in Japan, South Korea, and Taiwan
3:25	Justin Vetterl	Foreign Policy Options to Counter a Nuclear North Korea
3:50	Break	

Room 249, Science Center

Moderator: Suzanne Cox, Psychology

9:00	Suzanne Cox	Opening remarks
9:05	Eva Mulloy	Social Media Use and the Self: Examining the Relationship Among Self-Objectification, Social Media Use, and Well-Being
9:30	Alissa Ryckert	Long-term Priming of Attachment, Institutional Integration, and Socioeconomic Status: An Intervention with First-year College Students
9:55	Bresasha Duquaine	The Relationship between Cognitive Style and Susceptibility to Primacy and Recency Effects
10:20	Break	

Moderator: Alexis Grosfsky, Psychology

10:30	Alexis Grosfsky	Opening remarks
10:35	Matthew Lee	Addressing the Burden of Diabetes in the United States
11:00	Casey Ryan	How Mental Imagery Impacts Athletic Performance
11:25	Kaija Groom	Tasters and Sniffers: Examining the Relationship between Olfactory and Gustatory Senses
11:50	Break	

Moderator: Gregory Buchanan, Psychology

1:00	Gregory Buchanan	Opening remarks
1:05	Adam Ricks	Factors Affecting the Willingness to Help Opiate Addicts: Social Dominance and Right-Wing Authoritarianism
1:30	Josie Hirsch	In-group and Out-group Empathy in Conservatives and Liberals
1:55	Andi Donnelly	The Prevalence and Mutuality of Non-Physical Abuse in Young Adult Relationships
2:20	Break	

Moderator: Kristin Bonnie, Psychology

2:30	Kristin Bonnie	Opening remarks
2:35	Brianna Mabie	Influencing Gender Occupational Stereotypes through Counter-stereotypic or Stereotypic Image and Semantic Priming
3:00	Laura Jopp	The Effects of Gratitude Journaling on Emotional Wellness
3:25	Arianna Kost	Somatic Psychotherapy
3:50	Break	

Room 349, Science Center

Moderator: Amy Briggs, Biology

9:00	Amy Briggs	Opening remarks
9:05	Sara Guneratne	How to Catch a Shark: Shark and Ray Research in Clearwater, Florida
9:30	Abigail Harms	Mockingbirds of the Galapagos Islands
9:55	Sean Bensinger	The PAMPs flg22 and elf18 Differentially Regulate <i>Arabidopsis Thailand</i> Gene Expression during Plant-pathogen Interactions
10:20	Break	

Moderator: Susan Swanson, Geology

10:30	Susan Swanson	Opening remarks
10:35	Emma Hall	A Hydrologeologic Analysis of Lodi Marsh Springs in Dane County, Wisconsin
11:00	Dexter Kopas	An Investigation of the Influences on the Geochemistry of Streams In Dominica, Lesser Antilles: 2014-2017
11:25	Andrew Koure	Sediment Core Analysis to Inform Human Impacts on the Ikkjefjord of Norway
11:50	Break	

Moderator: Kristin Labby, Chemistry

1:00	Kristin Labby	Opening remarks
1:05	Kaung Shein	Simple Superhydrophobic Coating Process on Copper
1:30	Leah Mellett	Synthesis of AAC(6')-Ib Inhibitors to Combat Bacterial Resistance to Aminoglycoside Antibiotics
1:55	Cameron Kuchta	Understanding Endothelial Cell Gap Growth Using Numerical Simulations
2:20	Break	

Moderator: Britt Scharringhausen, Physics and Astronomy

2:30	Britt Scharringhausen	Opening remarks
2:35	Dakotah Revai	Creation of an Apparatus to Investigate the Flow Characteristics through Artificial Heart Valves
3:00	Nicolette Muldrow	Thermionic Emitter Application in Nuclear Batteries
3:25	Barret Fowkes	The Physics of Theater Equipment Fabrication and Installation
3:50	Break	

Wood Room, Mayer Hall (second floor)

Moderator: Jingjing Lou, Education and Youth Studies

9:00	Jingjing Lou	Opening remarks
9:05	Sami Haubrich	Arts Integration in Elementary Classrooms
9:30	Jamison Huntley	Exploring Growth Mindset in the Beloit School District
9:55	Devin Anderson	Integration, choice, and equality: A recent history of education policy making in the United States
10:20	Break	

Moderator: Carol Wickersham, Sociology

10:30	Carol Wickersham	Opening remarks
10:35	Tegan Rock	Mentoring Future Female Coaches
11:00	Talia Canter	A Story about Failure
11:25	Abigail Fleming	The Past: A Young Professional Prologue
11:50	Break	

Moderator: Joshua Moore, International Education

1:00	Joshua Moore	Opening remarks
1:05	Emrys Hodkinson	Checking In: What Does it Mean to be an Anti-Racist Institution?
1:30	Cruz Dejesus Rico , Cynthia Escobedo , Faviola Ramirez , Yaira Aich , Beatriz Aguilera-Tenorio , Paola Cortes , Diana Flores	Erasure of People of Color in the LGBTQ+ Community
1:55	Elena Cusack	Sexual Orientation, Gender Identity, and Seeking Political Asylum in the United States
2:20	Break	

Moderator: Amy Tibbitts, Modern Languages and Literatures

2:30	Amy Tibbitts	Opening remarks
2:35	Angela Castrillo Vilches	A History of Puerto Rican Independence through Music
3:00	Naomi Clear	A Failure in U.S. Foreign Policy: Illustrating How the U.S. Embargo against Cuba Affects the Cuban People
3:25	Quinton Purves	The Social Innovation Institute and the First Responders' Community Academy
3:50	Break	

Abstracts

Sponsor: Jennifer Esperanza

Mathers 9:05

Semaite Abiy '19

Addis Ababa, Ethiopia

Major: Anthropology

Internship at Danya Institute

During the summer of 2017, I interned at the Danya Institute. The Danya Institute's mission is to provide training, leadership development and technical assistance to health and human services providers and consumers to enhance prevention, health promotion, and treatment services through the use of evidence-based practice. While at Danya, I focused on two key research projects as well as on supporting the coordination of prospective speakers on issues related to critical domestic health issues including the current opioid epidemic and other drug addiction related issues. I also worked on other projects related to the elimination of drug addiction and to influencing government policy. My research focused on the opioid epidemic of the last five years and how certain states such as Ohio sued pharmaceutical companies, as they inherently influenced and created the opioid epidemic. Another research project I was involved in focused on a review of past lawsuits against big tobacco and how these lawsuits influence reforms in the United States as well as globally. In this presentation, I will try to convey what I learned while at this internship and how I was able to use my anthropological background in order to increase my efficiency in the office, and also to find various ways in to combat the opioid epidemic.

Beatriz Aguilera-Tenorio '20

Waukegan, Illinois

Majors: Anthropology; Critical Identity Studies
Minor: Spanish

Charlie Burks '18

Gainesville, Florida

Major: Anthropology

William Mertens '20

Merino, Colorado

Major: Anthropology

Holly Novak '19

Chicago, Illinois

Major: Anthropology

Keila Perez '18

Beloit, Wisconsin

Major: Philosophy

Mustafa Quadir '20

Karachi, Pakistan

Majors: Biochemistry; Anthropology

Lexi Schnitzer '19

Ann Arbor, Michigan

Major: Anthropology

Charlotte Vail '18

Cleveland, Ohio

Majors: Critical Identity Studies; Theater, Dance, and Media Studies

Quinn Tahon '21

New York City, Unknown

Major: Anthropology

Willa Witkoski-Fields '19

Los Angeles, California

Major: Critical Identity Studies

Roundtable: Migration, Displacement, and Unfair Labor

This roundtable brings together various research projects on migration, displacement, and unfair labor to examine case studies from a variety of time periods and locations. Case studies include, but are not limited to: bonded labor in the Middle East, prison labor in the United States, the mit'a system in precolonial/colonial Peru, and labor migration in Latin America. A common thread linking these research projects is the forced migration and displacement of peoples, and the ways in which migration is directly related to unfair and unfree labor practices. Moving people from their native communities makes them more susceptible to being coerced and exploited. Being removed from social structures, such as family, friends, religious practices, and cultural identity, diminishes agency and makes resilience more difficult for laborer populations. Though there were always forms of resistance, the effects of unfree and forced labor practices continue to be pervasive, as these histories have informed much of our present. Understanding how migration, displacement and unfair labor interact can help us better understand ways to help those in similar situations today. Identifying common methods of exploitation and coercion can help us to dismantle those systems.

The roundtable will be comprised of five students relaying information that has been researched throughout the course of the Spring 2018 semester. The aim of the collaborative presentation will be to convey the ways in which migration, displacement and unfair labor have concurrently impacted development in various contexts.

Terra Allen '18

Pineville, Louisiana

Major: Anthropology
Minor: Studio Art**Social Media and Anthropology**

During the summer I worked as a Social Media Coordinator for the Southern Food and Beverage Museum(SoFAB) in New Orleans, LA. My primary responsibilities were split between photographing events, maintaining the Facebook page for the museum, and greeting guests.

My primary responsibility that summer was to bridge the gap between museum administrators and the general public. This presentation will examine the role of social media in connecting communities with local food culture. Using observations from my internship, as well as integrating anthropological analyses, I will discuss how food communities rely increasingly on social media to promote and maintain public engagement.

Sponsor: Jingjing Lou

Wood 9:55

Devin Anderson '18

Racine, Wisconsin

Majors: Education; Political Science

Integration, choice, and equality: A recent history of education policy making in the United States

The United States is only 64 years removed from Brown vs. Board of Education, which was a landmark decision that signaled a change in education. Integration was suppose to be the law of the land. That has not been the case. The United States has seen the trend of resegregation of schools. This presentation will highlight three words: integration, choice, and equality to understand prevailing education policy in the United States. I will discuss the tension these words place on each other by defining and providing origins of these terms and critiques of each of these words. I hope to provide insights of why racial inequalities and inequities still persist in our education system and how equity has lead us to this point. This presentation seeks to highlight the different interpretation of the words integration, equality, and choice. This presentation also seeks to provide some of the most prevalent arguments proponents make in regards to equity.

Sponsor: John McMahon

SC150 1:55

Devin Anderson '18

Racine, Wisconsin

Majors: Political Science; Education

Housing Segregation in Milwaukee

Fifty years after the NAACP Youth Council and another youth activist group, the Commandos, protested in Milwaukee for 200 days for fair housing, racial segregation and discrimination are still present. Milwaukee has consistently been ranked as one of the most segregated cities in the United States. Historically, African-Americans live on the northside and whites on the southside and suburbs. Moreover, Milwaukee and Wisconsin lead the country for incarceration rates of Black men (12.8%), nearly twice the national average. Milwaukee has also been ranked as one of the five worst places to raise a black families. Racial disparities in incarceration, education, health, and housing are all stark in Milwaukee.

My paper analyzes how housing discrimination in the 1960s-1980s has impacted African-Americans'

opportunities to accumulate wealth today. My argument is that fair housing opportunity, which entails fair pricing and fair lending practices, could be the vehicle to improve other racial disparities. Milwaukee will be used as a case study because of my familiarity and connection to the area. This paper will explore the racial wealth gap and factors that go into attaining wealth, how Black people have not been able to attain wealth due to racist policies and practices, and how the inability to attain wealth has infiltrated all other parts of Black life.

Sponsor: Jennifer Esperanza

Mathers 9:30

Daniel Arkes '19

Chicago, Illinois

Major: Anthropology

Cultural Preservation in the Assyrian Diaspora

This presentation will discuss the preservation of culture in the Assyrian Diaspora in metropolitan Chicago. Based on a two month period from June to August of 2017, I examined the preservation of culture through the use of Assyrian language, practice of Christianity, and observation of traditions and customs among different generations in the diaspora.

Assyrians are an ethnic group native to northern Iraq, southeastern Turkey, northwestern Iran, and northeastern Syria. They are a distinct ethnic group from Arabs, Persians, Turks, or other dominant ethnicities in the region. Assyrians do not have their own nation state, so cultural preservation is vital for maintaining Assyrian identity. Christianity and the Assyrian language are very much intertwined with the Assyrian identity.

One finding that will be discussed is that there is a significant gap in cultural preservation among generations in the Assyrian community. There are also a different perceptions on the state of cultural preservation in the Assyrian diaspora across different generations.

Sponsor: Ellen Joyce

Richardson 9:05

William Davis and Eric Perramond (Colorado College (Newberry Seminar: Rese))

Georgia Armitage '19

Salem, Oregon

Majors: History; International Political Economy

Legitimizing America's Image: Neo-Gothic as Architectural Rhetoric in 1920s Chicago

This presentation uses Chicago's First Presbyterian Church as a case study to investigate the purpose of Neo-Gothic architecture in early twentieth-century Chicago. I will argue that First Presbyterian Church – and other organizations such as the University of Chicago and the Chicago Tribune – validated their positions in the community through Neo-Gothic architecture's ties to religion, history, and nature. Ultimately, this use of architecture perpetuated a hegemonic image of America. Specifically, it legitimized white, Anglo-Saxon, and Protestant values, declaring them critical to American democracy. First Presbyterian and other groups used Neo-Gothic as a form of architectural rhetoric. It gave their opinions a greater sense of gravitas and authority because of its connections to older medieval traditions. Overall, the congregation used their new church to symbolize the necessity of Protestant spirituality in their community and in American democracy.

The paper presented for this symposium was written as part of an off-campus study program at the Newberry Library in Chicago, the Newberry Seminar: Research in the Humanities. I hope to give students a sense of the program and the library as part of my presentation.

Stephen Bauer '18

Chevy Chase, Maryland

Majors: Political Science; History

Private Prisons and the Supreme Court: Examining Prison Employee Liability for Mistreatment of Inmates

Private and public correctional facilities are constantly accused and sometimes found guilty of major human rights violations, particularly in relation to how they treat prisoners and their rights. This paper will examine multiple court cases to analyze how the differences between the rights of a prisoner in a private correctional facility legally vary compared to those in a state/federal facility. In this paper, I will examine multiple court cases, such as *Minneeci v. Pollard*, 565 U.S. (2012), which deals with prisoners in a private facility, and state cases such as *Estelle v. Gamble*, 429 U.S. 97 (1976), which deals with a Texas State prison. Both cases are centered around the argument about whether a prisoner is granted protection under the Eighth Amendment.

There has been academic work on the role of private prisons in our society and both the constitutionality and policy of delegating prisons to for-profit groups. But this work does not clearly answer the question of why American citizens incarcerated in private prisons do not have equal Eighth Amendment protections. I argue that prisoners must be afforded and guaranteed the same rights against cruel and unusual punishment, regardless of whether the mistreatment occurs in private or public prisons. If the law denies prisoners their Eighth Amendment rights, First Amendment rights, or any rights guaranteed in the Constitution, then the laws and doctrines do not fully preach liberty and freedom for all.

Sponsor: Matthew Vadnais

WAC North 1:05

Sean Beckford '18

Pittsburgh, Pennsylvania

Major: Creative Writing

Revolution, Communities of Struggle and (De)humanization within David Simon's *The Wire*

David Simon's *The Wire* was so much more than a cult classic: it was revolutionary. Never before had the police procedural used individualized narratives to inspect systems of power and institutions of hegemonic white supremacy. Universally loved by critics, it's been codified as the autopsy of an American city. Critics have also praised how the show utilized the current events around which its episodes are set, namely the residual carnage of Bill Clinton's carceral war on drugs and the subsequent Bush years. While *The Wire*'s ability to challenge institutions of power, racism, and violence during the early 2000s is undoubtable in its ingenuity, a richer perspective may be found in asking, how has *The Wire* aged in Obama's and now Trump's America? As a show that takes on the burden of depicting the systems that commodified black bodies while simultaneously humanizing them through narrative, in what ways did *The Wire* forecast the coming of BLM and communities of struggle in a post-Ferguson and post-Freddy Gray era? This symposium begins to take on these questions and much more through critical lenses that center black bodies, capitalism, and systems of power.

Sean Bensinger '18

Genoa, Illinois

Major: Molecular, Cellular, and Integrative Biology
Minor: Philosophy

The PAMPs flg22 and elf18 Differentially Regulate *Arabidopsis Thaliana* Gene Expression during Plant-pathogen Interactions

The infection of plants by various pathogens results in a decrease in their crop yield. As such, diseases in plant populations have caused numerous famines throughout human history. In an effort to reduce the negative effect of disease on crop yield, researchers spend a great deal of resources investigating the immune system of plants and developing disease-resistant crops. One aspect of the plant's immune system is known as the basal response, in which the detection of pathogen-associated molecular patterns (PAMPs) by receptors on the surface of a plant cell triggers an immune response. The most well-known PAMPs are flg22 and elf18, and they are often used interchangeably because the majority of genes they regulate during an immune response are the same. However, a recent study shows that numerous *Arabidopsis thaliana* genes are differentially regulated by flg22 and elf18. In my research, I used gene ontology (GO) term enrichment analysis to identify the broader cellular processes that these differentially regulated genes are involved in. I found that elf18 activates a plant cell's immune response in a way unique from flg22 through the ethylene signaling pathway. Additionally, flg22 and elf18 inhibit plant growth by interfering with the auxin signaling pathway in diverse ways. These results highlight the molecular mechanisms behind inhibited plant growth during infection and may provide researchers with the information needed to develop treatments to prevent growth inhibition.

Sponsor: Darrah Chavey**Richardson 11:25****Nisha Bhatta '18**

Kathmandu, Nepal

Major: Computer Science, Economics

Matthew Nielsen '19

Glen Ellyn, Illinois

Major: Computer Science, Physics

Software Analysis Of Blockade Games

Blockade games represent a category of abstract strategy board games in which the goal is to take turns moving pieces on a board until one's opponent lacks a legal move. Various examples of blockade games have existed, seemingly independently, in numerous human cultures since ancient times. Some of the most noteworthy ancient examples are those of Mū tōrere from New Zealand and Pong Hau K'i from East Asia, but there are also recent examples of blockade games being created, such as the seemingly independent invention of a blockade game called "Lost in the Berry Patch," intended for children to play on the back of a cereal box.

The purpose of this research project was to use computer simulation and modelling to identify criteria by which certain candidate blockade game boards could be recognized as being usable for interesting, human-playable games. Not surprisingly, these criteria correspond to elements such as fairness, visual appeal, and game depth/complexity, criteria which appeal to and are important for human players. If such criteria were identified they could be used to generate blockade games that have not been previously created, in ancient or modern cultures. The comparison of existing games with computer-generated games, based on these criteria, can also be used to verify the quality of those existing blockade games.

Alden Blatter '18

Seattle, Washington

Majors: International Relations; Spanish

Herding Cats: The Impact of Donor Fragmentation on Foreign Aid Efficacy

In 1961, John F. Kennedy made a speech about America's moral, economic, and political obligations to improve the welfare of the developing world through the distribution of foreign aid. Since that speech half a century ago, aid has grown and evolved to become an international norm which wealthy countries are expected to participate in. In 2016, the top 30 bilateral donors allocated \$145.6 billion dollars of official development assistance (ODA) to recipient states. However, foreign aid remains less effective than it could be in improving the welfare of recipient state populations, even as the amount of development aid continues to grow. The question that my research aims to answer is "how can the donor community improve the efficacy of development aid?" Fragmentation among the numerous multilateral, bilateral and non-governmental actors that make up the donor community is a central issue that detracts from aid efficacy, making aid more volatile, and increasing the transaction costs and bureaucratic workload placed on aid recipients. Foreign aid would be more effective in improving the welfare of recipient populations if donors coordinated and harmonized their development efforts instead of acting as individuals. A number of case studies will be employed to illustrate the positive effects of donor cooperation.

Sponsor: Tamara Ketabgian

WAC North 10:35

Claudette Breaux '18

Luling, Louisiana

Majors: English; Education and Youth Studies

Morrison and Hansberry are Revolutionaries: A Literary and Pedagogical Approach to African-American Authors in American High School Curriculum

In this symposium presentation, I consider the often misinformed reception and interpretation of Toni Morrison's novel *Beloved* and Lorraine Hansberry's play "A Raisin in the Sun" by younger readers within a secondary school context. The purpose of high school English language arts (ELA) is to prepare students for higher-level learning and to look beyond the surface of a piece of literature. What students read greatly affects how they look at literature and the world, and works by African-American writers in ELA classrooms are frequently underrepresented or misconstrued within American high school curricula. In my talk, I will analyze Morrison's *Beloved* and Hansberry's "A Raisin in the Sun" within a historical context--a context often ignored within American classrooms. Individual choice, intersectionality, and genre all add nuance to the themes of the works, but they have the potential to be misinterpreted.

Sponsor: Amy Briggs

Wood 11:00

Talia Canter '18

Chicago, Illinois

Major: Biochemistry

A Story about Failure

What actually happens when you fail--whether it's an exam, or a class, or even just completely failing out of college? Can you recover and move forward? This presentation is my personal story of failing out of college and the steps I took to get back on track.

People always ask me how I have managed to complete my undergraduate degree in three years. And now I can finally talk about it. My experiences with failure and my motivation to move through that part of my life enabled me to be the success that I am today. I had to truly reflect on my personal values, move through

the shame of failure, and recommit to my academics. Becoming involved with the Student Engagement and Leadership Office at Beloit as well as my involvement with the school's Baseball Team helped me gain skills that further motivated me to be successful. My experience can be used as an example of the Liberal Arts in Practice model in real life. I will share my story and lessons learned in this symposium presentation.

Sponsor: Amy Tibbitts

Wood 3:00

Ernesto Dominguez, Yeniela Cedeño (Autonomous University of Social Movement)

Naomi Clear '18

Madison, Wisconsin

Majors: Environmental Studies (justice and Citizenship); Spanish

Minor: Latin American and Caribbean Studies

A Failure in U.S. Foreign Policy: Illustrating How the U.S. Embargo against Cuba Affects the Cuban People

As a final project for my semester abroad in Cuba, I and three of my peers conducted interviews of Cuban citizens from varying sectors and backgrounds, focusing on how they personally feel the effects of the U.S. blockade (or embargo). I will be presenting a paper on the research that we did and discussing some of the more salient topics in our studies through the Autonomous University of Social Movements.

I will first present our paper, which consists of five main sections. The first is our objectives in executing this project in both the contexts of Cuba and the United States, and our justification for why our research matters. The second is the historical context of the topics that we focused on in the interviews, which explains a general history of the island-nation since colonization, including the Revolution of 1959-present and the Special Period of the 1990s. This section also explains U.S. policy towards Cuba and the usage of the word "blockade" in place of "embargo." In the third section we review the methods that we used in conducting our research. The fourth acknowledges our limitations in this project and discusses how those limitations may have affected our research. The fifth and final section contains justifications from each project member for interviewing who they chose to interview, which is necessary in a project of this nature in order to understand what perspectives and backgrounds the interviewees may be coming from.

I will conclude by presenting our findings in the form of a short video we put together with audio clips of the interviews.

Sponsors: Catherine Orr and Marina Bergenstock

Wood 1:55

Elena Cusack '18

Olympia, Washington

Majors: Critical Identity Studies; Theatre, Dance, and Media Studies

Sexual Orientation, Gender Identity, and Seeking Political Asylum in the United States

My interest in immigration policies was sparked by a course in Gender Perspectives on Human Rights that I took while studying abroad in Copenhagen, Denmark. As a result, I chose to examine the current system for seeking political asylum in the United States, specifically in cases where gender identity and/or sexual orientation are considered.

In order to seek political asylum in the US, one must demonstrate past persecution or the likelihood of future persecution due to race, religion, nationality, or membership in a particular social group. Since the late 1980s, there have been a number of successful petitions for asylum based on sexual identity or orientation. These include the cases of Toboso-Alfonso, a gay man from Cuba; Jorge Soto Vega, a gay man from Mexico; and Leyla, a transgender woman from Chechnya. Each one demonstrates a different path taken by a refugee to successfully obtain asylum or prevent deportation. The earliest of these cases, that of Toboso-

Alfonso, began in 1986; Leyla received asylum from a Chicago court in 2017.

As immigration and refugee policies continue to shift and change, both in the United States and internationally, we must look to the history of identity-based asylum cases like these to inform our advocacy for current and future asylum cases based on persecution related to gender identity or sexual orientation.

Sponsor: Robin Zebrowski

Richardson 10:355

Brian Dahlberg '18

Geneva, Illinois

Majors: Cognitive Science; Environmental Chemistry

Mary's Trial: A Knowledge Argument-Based Evaluation of Active & Social Externalism

There has been substantial debate among philosophers as to the nature of the mind - the brain is obviously physical, but is the mind as well? Or is it a different kind of substance? In 1982 Frank Jackson shifted the landscape of this debate with the knowledge argument, which claims that the mind is non-physical because not all knowledge is physical in nature - in other words, it cannot be described strictly in physical and objective terms. Those who believe the mind is physical have struggled to counter this argument, but a new brand of physicalism promises to change this.

Externalism is the physicalist belief that *what the mind is* extends beyond the confines of the skull and includes the environment. Social externalists believe that this environment includes other people we communicate with and share meanings with through language, whereas active externalists believe the physical environment functions as a part of the mind itself. Both offer a convincing reply to the knowledge argument, but in doing so, social externalism must make concessions that leave it vulnerable to other classic arguments against physicalism. Active externalism encounters no such problem and, according to this paper, deserves greater consideration as a result. If widely adopted, active externalism could revolutionize neuroscience by emphasizing the importance of the environment as a functional component of the mind, helping scientists form better, more informed research questions.

Sponsor: Susan Furukawa

WAC North 2:35

Emma Dawson '18

Portland, Oregon

Major: Japanese
Minor: Music

Exploring War and Peace Museums in Japan

This symposium will look at War and Peace Museums in Japan, and explore how stories of victory and defeat are displayed. By looking at how exhibits in Tokyo, Kyoto, Hiroshima, and Nagasaki portrayed events of the Asia-Pacific War, we can see shifts in culture and militarism through Japanese history to the present.

Are any of the themes universal? What stories are being censored or glorified? How do the exhibits of private and public museums differ? This symposium aims to address these questions through the experiences gained conducting research in War and Peace Museums during the summer of 2016 with Beloit College students and faculty.

Andi Donnelly '18

Seattle, Washington

Major: Psychology

The Prevalence and Mutuality of Non-Physical Abuse in Young Adult Relationships

While working in a partner abuse intervention program with court and state ordered partner abuse offenders, many clients reported mutual non-physical abuse in their relationships, in addition to an internalized normalization of emotionally abusive behavior seen both in the media and within the relationships of those around them. As I learned more about non-physical abuse I became more cognizant of the moderate normalization of non-physical abuse that permeates our culture, from heavily shared memes on Facebook to our most beloved sitcoms. The existing research around non-physical partner abuse, however, is scarce in comparison to physical partner abuse, while the consequences can be similarly long-lasting and damaging.

The prevalence rate of non-physical intimate partner abuse is highest between the ages of 21 and 29, and tends to correlate with increased levels of alcohol consumption. Additionally, there is evidence that non-physical partner abuse is often a dyadic process, where both partners are non-physically abusive towards each other. The separation of non-physical partner abuse and the rate of mutuality seen in the existing research leaves a gaping hole in the resources designed for prevention and intervention.

This symposium aims to inform young adults of the commonality of non-physical abuse with the presentation of my research on the prevalence and mutuality of non-physical abuse in Beloit College students between the ages of 18-25. Participants in this study were Beloit College students who were invited to complete the Multidimensional Measure of Emotional Abuse.

Sponsor: Lawrence T. White

SC249 9:55

Bresasha Duquaine '18

Tampa, Florida

Major: Psychology

The Relationship between Cognitive Style and Susceptibility to Primacy and Recency Effects

Cross-cultural psychologists have discovered that people who grow up in different parts of the world develop different cognitive styles. The default cognitive style for most Westerners is analytic thinking. Analytic thinkers focus attention on salient objects in the foreground, are field independent, reason logically, and tend to make dispositional attributions.

The default cognitive style for most Asians is holistic thinking. Holistic thinkers focus attention on relations among elements, are field dependent, reason dialectically, and tend to make situational attributions.

Holistic thinkers are more likely to have a high tolerance for contradiction. They are able to reason that two conflicting ideas could be compatible with one another. In contrast, analytic thinkers are more likely to have a low tolerance for contradiction, relying on logical reasoning that states two conflicting ideas cannot be reconciled.

Studies have found that the order in which information is presented can affect one's overall impression of another person or object, with initial information receiving more weight than subsequent information. It is reasonable to think that holistic thinkers would be less susceptible to a primacy effect since they are more likely to have a higher tolerance for contradiction.

The purpose of my study was to determine whether one's cognitive style is an indicator of one's susceptibility to primacy and recency effects. I hypothesized that (1) holistic thinkers will be more tolerant of contradiction than analytic thinkers, and (2) individuals who have a high tolerance for contradiction will be less susceptible to order effects when forming an overall impression of a person.

In my study, 268 persons in the United States and India completed questionnaires designed to measure cognitive style and tolerance for contradiction. They also completed two tasks to determine their susceptibility to primacy and recency effects. The data supported the first hypothesis but not the second.

Sponsor: John Rapp

SC150 3:00

Hannah Epstein '18

Gastonia, North Carolina

Major: Japanese Language and Culture

Minor: Political Science

Freedom of the Press in Japan, South Korea, and Taiwan

One of the most fundamental rights guaranteed by democracy is the freedom of speech and press. This right has been integrated into the constitutions of countries that have transitioned into democracy over the past several decades. These countries have taken the concept of the freedom of press and turned it into something that is a product of each individual country's dark militaristic past. Notably, the citizens of Japan, South Korea, and Taiwan were victims of authoritarian or militaristic regimes that vastly restricted the media. Now those regimes have been replaced by democratic societies. Since the 1947 Constitution was adopted after World War II, Japan continues to reflect the American attitude on press freedom on the surface while still maintaining much of its old system. Korea's history of annexation and then the division into two countries took its toll on the development of democratization even up to the present. Finally, Taiwan celebrated the end of martial law with increased press freedom, but the sensationalism that developed in its modern media begs the question, where is the line when it comes to limitations of media and press? Despite all the legacies of severe press restrictions that Japan, South Korea, and Taiwan have overcome on the surface, many echoes of past militaristic regimes nevertheless remain, hidden in the modern interpretations of the public's right to freedom of the press by these regimes.

Sponsor: Susan Furukawa

WAC North 3:00

Jasper Ferehawk '19

Los Angeles, California

Majors: Japanese; Creative Writing

State Shinto, Determination, and Willpower: The Evolution of Magical Girl Anime

In anime, the genre of *mahou shoujo* (or magical girl) is one deeply entrenched in the Japanese cultural identity. By looking at the evolution of this genre through its views on determination and problem resolution, as well as its connection to nationalist and ethnocentric ideas like *yamato damashii* that arose as a result of State Shinto in the 1940s, this presentation will attempt to determine the lasting impact that these philosophies have had on the anime industry as a whole.

This symposium will also examine influential *kokugaku* scholars like Motoori Norinaga and Hirata Atsutane in order to zero in on the definitive characteristics of State Shinto that were dominant during the 20th century and if these same tenets can still be seen in *mahou shoujo* anime, and, more broadly, in the greater anime medium as a whole in the 21st century.

Abigail Fleming '18

Evansville, Indiana

Major: History

The Past: A Young Professional Prologue

How can the writing of a business plan for a food truck and the writing of a history paper be so similar? This summer in Memphis I did more than eat BBQ and visit Graceland. Through my internship at the Assisi Foundation of Memphis I found how my study of history and historiography can be directly applied to a career in non-profit development and leadership. In this presentation I will outline how the research, critical reading and concise writing skills of history directly applied to the reading and processing of grant applications and also how those skills applied in the assistance given to organizations on projects I worked on this summer.

Sponsor: Britt Scharringhausen

SC349 3:25

Barret Fowkes '18

Pittsburgh, Pennsylvania

Majors: Physics; Pre-engineering

The Physics of Theater Equipment Fabrication and Installation

I gained insight into fabrication and installation of theater rigging, lighting, and acoustical manipulation when I worked at Pittsburgh Stage Inc. for 4 summers. Making sure the tensile strength of the cabling was high enough such that it could support heavy loads, determining the right lighting components to project specific shapes at different distances and choosing the proper angle for sound panels to project a voice throughout an auditorium all involve physics. This presentation will cover these aspects of the theater and stage design.

Sponsor: Francesca Abbate

WAC North 9:55

Mattie Ganson '18

Mundelein, Illinois

Majors: Creative Writing; Literature

Minor: Spanish

Emoji Poetry: Writing and Translating in a Pictorial Language

As a pictorial language, emojis are governed by usage rules that differ greatly from those of standardized, written English. By their nature, emojis impose limits on writers and translators - who are always working with emojis as a second language - while simultaneously expanding the process of writing or translating to include visual elements such as color, form, directionality, and specific and often unwieldy cultural associations.

I will begin by exploring the history of emoji use in artistic contexts, using examples of emoji poetry, such as Stephanie Berger and Carina Finn's translations, and visual art, such as Carla Gannis' emojiification of Bosch's *The Garden of Earthly Delights*. I will give an overview of emoji grammar and syntax, before fleshing out some of the possibilities and idiosyncrasies of this form using my own emoji poetry. In addition, I will examine my emoji translations of Emily Dickinson's poetry to think critically about the decisions I made as a translator while switching from poetic English to the limited, abstract pictorial icons of emoji.

Through these examples, I hope both to illuminate the context within which emojis function in an artistic/literary sense, as well as inform discussions of grammar, syntax, language and translation more broadly.

Sponsor: Kylie Quave

Mathers 11:00

Brian Glubok '18

Major: Anthropology

Houston, Texas

Semaite Abiy '19

Major: Anthropology

Addis Ababa, Ethiopia

Sharon Grimm '18

Major: Anthropology

Downers Grove, Illinois

Abby Segal '19

Major: Anthropology
Minors: English; Art History

Los Angeles, California

Carter Skolnick '20

Majors: Anthropology; Critical Identity Studies

Williams Bay, Wisconsin

Emily St. Onge '18

Major: Environmental Studies
Minor: Anthropology

Milwaukee, Wisconsin

Ashley Sorensen '18

Majors: Political Science; Critical Identity Studies

Vermillion, South Dakota

Roundtable: Consequences and Remnants of (Post)Colonialism and Current Unfree Labor

In this roundtable discussion, students from Dr. Kylie Quave's ANTH 375/CRIS 360 Coercion and Exploitation class will examine various case studies drawn from ongoing student research projects in postcolonial settings. These research projects compare and contrast situations of unfree and unfair labor across societies. This panel is particularly focused on consequences and remnants of colonialism and how colonialism affects current unfree labor in global perspective. Students will share their individual research trajectories, comparing and contrasting with the work of peers, and taking questions on their work and its relevance.

We will connect our case studies by comparing methods of control over laborers, instances of laborer resistance, and the economic pull factors that make unfree and/or unfair labor seem necessary in different societies. We will show how contemporary industries are shaped by past unfree labor practices and will highlight how these practices still exist in a postcolonial world. Particular case studies include transnational surrogacy, the influence of Caribbean slave infrastructure on tourism, prison labor, environmental and health impacts of unfair labor in the United States, and forced labor in the Shining Path revolutionary group in Peru.

Sponsor: William Green

Mathers 1:30

AmySue Greiff '18

Major: Anthropology

Danbury, Wisconsin

Osteometric Analysis of Canid Remains from South Dakota and an Examination of Inter and Intra-Observer Error

Before the adoption of the horse, dogs were used as pack animals in Plains Indian societies. Even after horses were domesticated, dogs were still used in simple, short distance tasks, such as collecting water and

firewood. Wild canids played a large role in Plains Indian societies and were often used in a variety of ceremonial contexts. Hybrids were sometimes bred between wild and domestic canids so as to maximize the productivity output of pack dogs. In this study I examined canid remains from the Cheyenne River site (39ST1), a Post-Contact Coalescent (probably Arikara) site located in Stanley County, South Dakota, dating to CE 1700-1725, to identify species and other salient characteristics. I conducted a craniometric analysis of 22 canids excavated by Alfred W. Bowers in a Beloit College expedition in 1931. Preliminary results suggest domestic dogs were prevalent, and the assemblage also includes gray wolves and coyotes. Data collected were analyzed to better understand the impact inter-observer and intra-observer error had on results. Future research includes stable isotope testing and possibly DNA testing of remains.

Sponsor: Alexis Grososky

SC249 11:25

Kaija Groom '20

Brooklyn, New York

Major: History

Tasters and Sniffers: Examining the Relationship between Olfactory and Gustatory Senses

The olfactory and gustatory senses have often been studied separately. Olfaction is important in detecting possible danger (e.g., smoke, spoiled food, a factor in selecting a mate). Gustation is important as it is the last step before ingesting food, but, most likely, you will smell your food before putting it in your mouth.

Gustatory research has identified “super tasters,” “normal tasters,” and “nontasters.” Olfactory research has focused mainly on normal levels of smell as well as anosmias. While enhanced olfactory abilities exist, to the best of our knowledge there is no test to measure them. Because olfaction and gustation are both chemical senses, we hypothesized there should be a relationship between tasting ability and smelling ability. Preliminary results suggest that this is not the case.

Sponsor: Rachel Bergstrom

SC349 9:05

Sara Guneratne '20

Saint Paul, Minnesota

Major: Biology(eeb)

How to Catch a Shark: Shark and Ray Research in Clearwater, Florida

When catching a shark, one of two methods is usually used: baiting a longline or setting out a tangle net. Getting a large shark on the boat is a process that requires good teamwork.

The most important thing to do when handling a shark is to make sure it's properly restrained, as it will thrash around and snap at everything in an attempt to get off the boat. In order to restrain a large shark, one person must sit on its back while several more people apply weight to its tail. If it's a small shark, one or two people can hold it down. The second most important thing is to put a hose into the mouth of the shark, so that it has water to pump over its gills.

Once the shark has been properly restrained, it must be measured. The first measurement to be done is the precaudal length, the second is the fork length, and the last is the total length. Other important information to get on the shark is whether it's a male or female shark. If it's female, it should be noted whether or not it's pregnant; if it's male it should be noted whether or not it's immature.

Once the shark has been measured, it will be tagged with a dart tag, or if it's too small, with a double T-bar tag.

The research was done in order to get an estimate of the shark and ray population around Clearwater, Florida. This is important because sharks and rays play a vital role in the marine ecosystem, and knowing how many of them are in an area can give us a good idea of the ecological health of that area.

Sponsor: Susan Swanson

SC349 10:35

Emma Hall '18

Champaign, Illinois

Major: Environmental Geology

A Hydrogeologic Analysis of Lodi Marsh Springs in Dane County, Wisconsin

Groundwater springs serve important ecological and anthropological functions. Being able to fully understand the contributing factors for why large springs occur is essential to their protection. In Wisconsin, groundwater springs with a flow rate greater than 1.0 cubic feet per second (cfs) are protected by the Wisconsin Department of Natural Resources. Lodi Marsh Springs is an example of a large spring system with a flow rate greater than 1.0 cfs. The purpose of this study was to determine why the spring is there and why it is discharging at a high rate at this location. Groundwater chemistry and geologic properties were utilized, such as bedrock elevation, thickness of unlithified materials, and bedrock stratigraphy. Cross-sections created from contour maps of bedrock elevation and material thickness show that the groundwater flows through the Tunnel City Sandstone, which is a heterogeneous sandstone with high porosity and permeability. Major ion concentrations from the Lodi Marsh spring were compared to results from a previous study at another wetland with springs in Dane County. These water chemistry results are less clear, and suggest that groundwater flows through the Wonewoc or the Tunnel City Sandstones.

Sponsor: Ken Yasukawa
Jaime Chaves (USFQ)

SC349 9:30

Abigail Harms '19

Greencastle, Indiana

Major: Ecology, Evolution, and Behavioral Biology

Mockingbirds of the Galapagos Islands

In 1835, Charles Darwin traveled to the Galapagos Islands and discovered various physical traits of organisms there that led to his theory of evolution. Many associate the Darwin finches with this theory, but in actuality the tortoises and mockingbirds of the Galapagos started this naturalist down a path of discovery. There are sixteen species of mockingbirds, four of which inhabit the Galapagos Islands. The phylogeny of mockingbirds is nonstop action from breaking the Island Biogeography Theory, to possibly colonizing islands that are younger than their divergence. Learn about Bayesian analysis and the computer programs used to analyze phylogenetic traits. It'll be an exciting adventure, and I hope you will join me!

Sponsor: Marina Bergenstock

Richardson 3:25

Hana R. Hassanpourgol '20

Anaheim, California

Majors: International Relations; Religious Studies

Beautiful Resistance: Theatrical Justice in Palestine

This project explores the various ways in which theater becomes a peaceful mode of resistance for both indigenous and diasporic Palestinians, amidst the violence and oppression that has fueled the Israel-Palestine conflict since 1948. This presentation is an analysis of a variety of plays, most of which have been written and performed by Palestinians in an effort to display their narratives and identities in a variety of contexts. Some commonly recurring themes range from the notion of establishing roots, life during

occupation, mobility, and agency over one's land and body. This symposium will also present an analysis of the functions of theatre that centers the narratives of Palestinians, in comparison to conventions of Western theatre.

Sponsor: Jingjing Lou

Wood 9:05

Sami Haubrich '18

Grayslake, Illinois

Major: Education and Youth Studies

Minor: Studio Art, Literature

Arts Integration in Elementary Classrooms

My presentation will explore the use of Arts Based Instruction (ABI) in elementary classrooms. Arts Based Instruction is an educational practice that combines such things as music, drawing, drama, etc., with core curriculum in order to better engage students in the classroom. Its main focus is on encouraging creativity in the classroom to improve retention and prepare students for the evolving future. This study is in conversation with Howard Gardner's Theory of Multiple Intelligences and how it applies to the practice of ABI for the benefits to student development. I surveyed selected elementary school teachers in the Beloit area to gain their perspectives regarding ABI's application in their classroom. The findings of my research will aim to make learning in schools more adaptive to each student's individual learning style.

Sponsor: Gregory Buchanan

SC249 1:30

Josie Hirsch '18

Portland, Oregon

Major: Psychology

Minor: Biology

In-group and Out-group Empathy in Conservatives and Liberals

Research has shown that conservatives and liberals do not differ in the absolute amount of empathy they show but rather whom they extend their empathy toward, with conservatives extending more empathy to those in their in-groups, and liberals extending their empathy more broadly (Waytz, Iyer, Young, & Graham, 2016). Conservatives are also more reluctant to extend help to people personally responsible for their problems, which implies a focus on dispositional attributes rather than external circumstances when deciding whom to help (Skitka & Tetlock, 1993). This study examined the relationship between situational and dispositional social attributions and empathy. Specifically, it was predicted that conservatives would be more likely to make situational attributions about someone whom they feel empathy toward, which would be indicated by conservatives giving more situational attributions to those in their in-group than to their out-group, according to the findings of Waytz et al. (2016). An online survey was administered, which had participants make judgments and attributions about people in various negative scenarios; the subjects of these scenarios were either in the participants' in-group or out-group, and these results were compared to their political ideology. I predicted that conservatives would be more motivated to make their attributions situational when they perceive the subject of the scenario to be in their in-group, and that they would extend more empathy to these individuals. That is, I hypothesized there would be significantly greater levels of empathy and situational attributions for in-group scenarios versus out-group scenarios for conservatives in comparison to liberals.

Emrys Hodkinson '18

Libertyville, Illinois

Majors: Anthropology; Cris
Minor: German

Checking In: What Does it Mean to be an Anti-Racist Institution?

In the Spring of 2015, Beloit College set the goal of becoming an “anti-racist” institution. Utilizing ethnographic research conducted in the Fall of 2017, this presentation will look at how racism interacts and functions in complex and ever-changing ways at Beloit. Racism is institutionalized and systematic, and as I will argue in this presentation, it takes a lot more work to see it, let alone combat it if you are white. What does a small liberal arts college in Wisconsin mean when it claims it wants to be an “anti-racist” institution? How do administrators define “anti-racism,” and how do their identities impact their definitions? How do their identities impact how they view their role in the institution? What motivates a college administration to deem itself an “anti-racist” Institution? Based on data learned from interviewing high-level administrators at Beloit College, this research aims to dismantle and understand discourse that impedes/hinders our goals of being anti-racist as well as provide answers to what can be done in order to continue our path to becoming an anti-racist institution.

Sponsor: Jingjing Lou

Wood 9:30

Jamison Huntley '18

Woodstock, Illinois

Major: Education and Youth Studies: Youth and Society

Exploring Growth Mindset in the Beloit School District

The term growth mindset is described by educational psychologists as follows: "In a growth mindset, people believe that their most basic abilities can be developed through dedication and hard work--brains and talent are just the starting point. This view creates a love of learning and a resilience that is essential for great accomplishment" (Dweck et al. 2006). This is an extremely important topic as it pertains to the low-achieving Beloit School District. If students are judged based on progress and growth rather than standardized test scores, there could be a higher likelihood for long term success within their educational careers. Throughout my fieldwork at Hackett Elementary School, along with conversations that were held with administrators and practitioners within the district, I saw some elements of the growth mindset that are currently present in Beloit's schools. There is no guarantee that an emphasis on this mindset will result in more future success, but the evidence shows that it can certainly help.

Sponsor: Robin Zebrowski

Richardson 11:00

Zane Joiner '18

Oak Park, Illinois

Major: Cognitive Science
Minor: Computer Science

Socialization, Engagement, and Presence in Online Game Environments.

Online gaming has become more ubiquitous with the widespread use of the internet. Video games have become an extremely profitable multi-billion dollar entertainment industry, particularly ones played online with others. This symposium aims to examine criteria for successful/unsuccessful online games, including player count, retention of players over time, player satisfaction and money earned. I will also examine positive/negative online socialization, looking at the degree of toxicity and friendliness (in broad terms), alongside what influences these interactions, as well as felt presence in online environments (including

feelings of immersion in these virtual spaces). In addition it will consider the driving factors for online players' participation and engagement. In short, why do players play online, what makes a good online game a good online game, and how can developers promote positive social interactions between players?

Sponsor: Kristin Bonnie

SC249 3:00

Laura Jopp '18

St. Paul, Minnesota

Majors: Psychology;
Minors: Studio Art; Philosophy

The Effects of Gratitude Journaling on Emotional Wellness

Gratitude journaling is a popular practice within the realm of positive psychology. Gratitude is a positive, social emotion that is often associated with features of healthy relationships. Gratitude journaling is a way of keeping track of the positive things that life brings, instead of focusing on the self. Previous studies about gratitude journaling have looked at the effects of journaling on romantic relationships, overall well-being, adjustment to college life, life satisfaction, overall gratitude, optimism, and more. For this study, I primarily focused on the effects of gratitude journaling on symptoms of anxiety, and expected that some symptoms would be reduced after journaling, due to the positive, external-focused nature of the practice. Participants were randomly divided into a journaling group and a control group. Participants in the journaling group were instructed to keep a gratitude journal every night for three weeks. At the end of the three weeks, the journals were submitted anonymously, and both groups were asked to complete a post-test survey that assessed symptoms of anxiety, gratitude, and life satisfaction. The journals were matched to the surveys through a participant number, so the content of the journals could potentially be matched to the participant's survey results. The post-test surveys of the control group were compared to the surveys of the journaling group, so differences in anxiety levels, gratitude, and life satisfaction could be assessed. If there are significant differences between the emotional wellness of the journaling participants in comparison to the control group, then this study further supports the efficacy of gratitude journaling.

Sponsor: Pablo Toral

SC150 10:35

Lucas Kempf '18

Saint Louis Park, Unknown

Majors: International Relations; Spanish
Minor: Latin American Studies

Institution Formation and the Military in Argentina

Between 1930 and 1976, Argentina experienced six military coups that overthrew democratically elected governments and created authoritarian governments. Despite this pattern, Argentina has not had any military coups since the fall of the last military dictatorship in 1983, while other Latin American governments have struggled since their own transitions. Most remarkably, the trend of military interference appears to have reversed as the military never hinted at interfering during Argentina's worst economic depression and political crisis in 2001, which in the past would have certainly led to a coup. More significantly, the military has become a force used to support human rights and aid internationally, contrasting with its previous violations of human rights. What measures have kept the military in the barracks? My research investigates the extent to which institutions such as the Federal Courts and Defense Ministry have successfully provided strong checks and executive control over the military apparatus. Using institutionalist theory, social and political indicators, rationalist interest theory, and constructivist literature, I evaluate Argentina's progress in the last thirty years to show how the democratically-elected government brought the military under civilian control.

Zoë Koenig '18

Madison, Wisconsin

Major: Literary Studies, Creative Writing
Minor: Critical Identity Studies**Batman and Deviance in the Silver Age and Bronze Age of Comics**

In 1940, Dr. Fredric Wertham published his campaign against comics *Seduction of the Innocent*, which argued, using Batman's relationship with his sidekick Robin as a primary example, that comics were a corrupting force rife with homoeroticism. The creation of the Comics Code in 1954 sought to rectify the crisis in the comics industry that followed Wertham's accusations by establishing a strict moral framework that comics were required to adhere to. Examining DC comics from the Silver Age and Bronze Age, this essay charts spaces, characters, and narratives that served to affirm Batman's non-deviance in the two decades after the establishment of the code while also uncovering parallel resistant readings enabled by Batman's delineation as non-deviant rather than normative. Wertham conceptualized queerness as a pathology that arose out of temptation and, rather than have Batman explicitly perform straightness, the Silver Age worked to eliminate available subjects of homoerotic interest. The introduction of Arkham Asylum in 1974 at the beginning of the Bronze Age marked a shift in the way the queer anxieties seeded by Wertham were addressed. Through their containment, Arkham Asylum marked Batman villains as a "mad" monolith. By locking up the dangerously deviant, Arkham reaffirmed that the free Batman was not the deviant that *Seduction of the Innocent* claimed him to be. Batman's lack of "madness" replaced his lack of queerness as the primary signifier of his compliant morality.

Sponsor: Susan Swanson

SC349 11:00

Dexter Kopas '18

Seattle, Washington

Major: Geology

**An Investigation of the Influences on the Geochemistry of Streams In
Dominica, Lesser Antilles: 2014-2017**

The chemical makeup of stream waters is a reflection of the environment upstream. Two important tools in determining water provenance are stable isotopes ($\delta^{18}\text{O}$ and $\delta^2\text{H}$) and major ion concentrations, both useful for determining environmental influences in tropical climates. Located at the center of the Lesser Antilles archipelago, the volcanic island nation of Dominica presents an interesting study area to investigate the environmental influences on stream geochemistry in the tropics. The island features active volcanism, high rainfall, dense stream systems, and periodic tropical storms, such as the 2015 Tropical Storm Erika, which dropped over 500 mm of rainfall in a single day. Synthesizing annual stream water quality data over the last four years, this study aims to characterize the impact of environmental factors to stream water chemistry. Possible influences are precipitation patterns, including rain shadow, elevation, and tropical storms, and hydrothermal activity related to volcanism, considering multiple and potentially complex interactions of these factors.

Based on the results, precipitation and weather factors do not play a significant role in stream chemistry. However, more sampling is needed throughout the year to examine the effects of seasonal variation. During our sampling period, hydrothermal sources are the dominant control on stable isotope composition. Streams draining hydrothermal sources are isotopically and ionically enriched. Input of hydrothermal waters to streams may not be limited to surface features such as springs but may also be contributed from deeper groundwater sources, which receive input more directly from the underlying hydrothermal reservoirs, possibly through faulting related to calderas.

Arianna Kost '20

Brooklyn Park, Minnesota

Major: Dance

Somatic Psychotherapy

I will give a quick overview of the professional field of somatic psychotherapy involving what it is, where it comes from, and how it grew into what the practice is today. Exploring how somatic psychotherapy compares to neighboring professions in holistic healing, I will identify ways in which the practice is used and how effective it can be.

Through interviews with therapists in the field, I have discovered the types of schooling and connections that are needed to pursue a career in somatic practices and will present those findings. I will also call on my own experiences in somatic psychotherapy as well as the interviews to elucidate what it means to be active in the field. I will elaborate on where we can observe connections to the practice of somatic psychotherapy in our daily life and will give examples of the discipline in practice with the hope of inspiring others to find their own connections.

Sponsor: Susan Swanson
Matthias Paetzel (Høgskulen på Vestlandet)

SC349 11:25

Andrew Koure '19

Natick, Massachusetts

Major: Environmental Geology

Sediment Core Analysis to Inform Human Impacts on the Ikkjefjord of Norway

A small community in the Ikkjefjord of Western Norway has been experiencing a declining fish catch since the 1970s. They felt that the construction of a local hydropower plant was to blame, as it had included construction of a series of dams that routed water away from the Ikkjefjord. Very little to no research had been conducted in the Ikkjefjord area of Norway. Therefore, the goals of this research were to determine the effects of dam and bridge construction, to investigate the physical attributes of the fjord itself, and to determine when the Ikkjefjord became anoxic at the bottom of the fjord, resulting in a decreased fish catch. I participated in this research while I was studying in the "From Mountain to Fjord Program" through the Western Norway University of Applied Science (HVL). The aspect that I directly worked with revolved around the sedimentology of the fjord basin. For this part of the research, three sediment cores were collected from the fjord basin, two of which were sent for geochemical analysis. The third was analyzed utilizing smear-slide analysis. Data from the third core were also dated using rainfall-diatom data. The core shows two layers that indicate disturbance. The disturbances are likely associated with a landslide event and an overflow event from the dam. Once the data were interpreted, it was combined with results from the other student groups. The end goal was to determine the status of the fjord according to the European Union Water Framework Directive (WFD). The group concluded that the water body was most likely "heavily modified" under the WFD, and therefore in a poor state.

Sponsors: Britt Scharringhausen and Paul Stanley
Emanuela Del Gado (Georgetown University)

SC349 1:55

Cameron Kuchta '19

Boulder, Colorado

Majors: Physics; Mathematics; Computer Science

Understanding Endothelial Cell Gap Growth Using Numerical Simulations

I investigated the gap growth in the endothelial monolayer via a computer simulation of a model cell layer under strain. To mimic the mechanics of the cell-cell junctions, we introduce, in addition to a bonding

interaction that depends on only on the cell-cell distance, a resistance for bonded cells to change their rotation. The intensity and range of such resistance have an effect on the gap growth and can help preserve the monolayer's mechanical integrity.

Sponsor: Gregory Buchanan

SC249 10:35

Matthew Lee '18

Oak Park, Illinois

Major: Health and Society

Addressing the Burden of Diabetes in the United States

This symposium will review the burden of diabetes in America and the current determinants, treatment options, and overall physiological mechanisms of the condition. In 2012, the total estimated cost of diabetes in the U.S. was \$245 billion, including \$176 billion in direct medical costs and \$69 billion in reduced productivity. Early identification of diabetes could potentially save the U.S. millions of dollars in health care costs. Diabetes represents a significant challenge due to the many factors that predispose an individual to the condition, including ethnicity and genetics and the fact that systematic screening for the condition is minimally effective. Emerging preventative options for type 2 diabetes have the potential to reorient health services and save the U.S. millions on diabetes-related expenditure. The Ketone diet, diabetic health mentors, and telemedicine have all proven to be effective strategies for reducing the burden of diabetes, while a growing body of literature suggests genetic, environmental, and lifestyle factors play a role in the development of the condition.

Sponsor: Kristin Bonnie

SC249 2:35

Brianna Mabie '18

Green Bay, Wisconsin

Major: Psychology

Influencing Gender Occupational Stereotypes through Counter-stereotypic or Stereotypic Image and Semantic Priming

Many careers are staffed predominately by either females or males. When thinking about who nurses are, for example, a woman may come to mind more easily than a man. Because many occupations are split along gender lines, stereotypes about certain occupations emerge that go beyond a single occupation and permeate entire domains of careers, which inform (and are informed by) gender roles. Occupational stereotypes and gender roles are learned at a young age and are, therefore, difficult to challenge. Although stereotypes are powerful, they do not have to dictate behavior, but should be considered in situations in which gender stereotypes are a factor, such as in hiring decisions.

The purpose of this study was to further the understanding of the effects of stereotypes in how occupational gender roles are viewed. Using an online survey, 161 Beloit College students, faculty, and staff were primed with images and descriptions of either gender stereotypic or gender counter-stereotypic individuals in ten different, familiar occupational roles. Participants were then asked to estimate the percentage of women or men in ten less familiar occupations. By priming participants with images and sentences of people in counter-stereotypic occupational roles (e.g., a male nurse), it was expected that the level at which they stereotype occupations will be lower than those who are primed with people filling occupational roles stereotypically (e.g., a female nurse).

Charlotte Mayeda '18

Oxnard, California

Major: Political Science
Minor: Law and Justice**Black Women, Theories of Labor, and Intersectional Social Movements**

Over the course of United States history Black women have always been viewed as laborers. Stereotypes such as “mammy” and “jezebel” are rooted in the racist and sexist rhetoric that was used to justify the exploitation of female slaves’ manual and reproductive labor. In 2018 these stereotypes and the more recently added “angry black woman” trope continue to plague Black women in their everyday lives. As Black women engage in politics these stereotypes are brought up time and time again, despite them being inaccurate and narrow representations of their behavior. But what happens to Black women who occupy identities that are not represented in these stereotypes? How is their political engagement understood as labor, and in what ways do the dominant stereotypes of Black women devalue and erase the labor of those who fall outside of those stereotypes?

In analyzing the Black Lives Matter Movement, Black Youth Project 100 and the #SayHerName Movement, all of which center around the intersectional identities of Black women, I hope to better understand how Black women’s political engagement is perceived through the theory of Antonio Gramsci and Black feminist theories of labor. These theories, although very different in nature, have concise views of what labor is and should look like. Using them side-by-side, I will uncover which one better represents the realities of Black women’s political engagement as labor. In understanding how Black women have engaged and continue to engage with labor, it is important to incorporate the vast array of identities that Black women can occupy. Although this complicates the ways in which concepts of labor interact with Black women, it also allows Black women the space to define their own idea of what it means to be Black, a woman, and a laborer.

Alyssa Mazer '18

Pasadena, California

Major: Political Science

How Anti-Abortion Legislation Limits Meaningful Choice: A Feminist Theory Analysis of Abortion and Institutionalized Sexism in the United States

Women across the United States have a constitutional right to access an abortion, yet American legislators propose dozens of pieces of legislation every year to try to limit that right. This paper seeks to understand the most effective arguments in favor of a woman’s right to choose an abortion, as well as why legislators work so hard to stop abortions from happening. My research relies on feminist scholars, most of whom identify the struggle not as a matter of whether a woman is legally allowed to access an abortion, but rather as a set of roadblocks that stand between her and that abortion. To analyze legislation that limits a woman’s choices, I first explore prominent feminist theory on autonomy, women’s rights, and masculinity in politics before examining three pieces of state-level anti-abortion legislation from Indiana, Oklahoma, and Ohio. My research ultimately argues that institutionalized sexism in the United States is a leading force in these pieces of legislation, focusing on issues of victim-blaming and consent. I conclude by discussing how historical legacies of patriarchy impact the future of reproductive rights for women.

Abigail McCully '18

Clinton, Wisconsin

Major: Theatre Performance
Minor: History**A Knight's Tale: History and Education in Film**

Three years after the birth of the Historical Society, *A Knight's Tale* (2001), a purposely anachronistic period film, graced the screen. The film received many poor reviews, with history film critics expressing that the movie failed to represent history properly, was a movie about the present thinly veiled as a movie about the past, and writing it off, at best, as a piece of fluff pop culture.

In Matt Vadnais's Shakespeare and Wilson course last semester, we explored what it means for an artist to tell history. I chose this particular movie for my final project as I wanted to explore what it means to tell history without the focus being on getting it right and keeping everything accurate. Are there other ways to think about the past?

Through my work on the film, I questioned the criticism of the film and how it related to the pedagogy of history. Is there actually a proper way to present history? Is any work done on the past ever not about the present? And why is pop culture immediately discredited as historic research? This presentation looks at the answers I came to for these questions and the importance of a *A Knight's Tale* to period films.

Sponsor: Kristin Labby
Kristin Labby (Beloit College)

SC349 1:30

Leah Mellett '18

Chicago, Illinois

Major: Biochemistry
Minor: Physics**Synthesis of AAC(6')-Ib Inhibitors to Combat Bacterial Resistance to Aminoglycoside Antibiotics**

Antibiotic resistance occurs when bacteria adapt to withstand the effects of antibiotics due to overexposure, and over 2 million individuals are infected with antibiotic resistant bacteria each year. Aminoglycosides (AGs) are a class of antibiotic used to treat infections caused by gram-negative bacteria and mycobacteria, such as tuberculosis. AGs fight bacterial infections by binding to the A-site of ribosomes, which disrupts protein synthesis and eventually leads to cell death. Bacteria have adapted to combat the mechanism of AGs by modifying the chemical structure of the antibiotic using aminoglycoside modifying enzymes (AMEs). This modification prevents the antibiotic from successfully binding to bacterial ribosomes, and allows the bacteria to proliferate. AAC(6')-Ib is one of the most clinically relevant types of AME, and it modifies the structure of AGs by adding an acetyl group to AGs at the 6' position. Our goal is to synthesize a potential small molecule inhibitor of AAC(6')-Ib, named KJL-5. We have developed and optimized the synthetic route for KJL-5, which involves the synthesis and combination of two small molecule fragments, MP-2 and LM-7. Developing this synthetic route will lead to synthesis of other analogues. Once tested and found to be successful, and AAC(6')-Ib inhibitor would be taken alongside current AGs, and would modify AAC(6')-Ib, preventing it from altering the structure and disrupting the function of AGs.

Sydney Mercado '19

Chicago, Illinois

Major: Media Studies

The Asian Monologues: An Accessible Format for Performance

The Asian Monologues was a one-hour show that was written, produced, and performed by people of Asian identity during the fall 2017. It was performed in the Bunge Performance Studio on December 2, 2017 after 20+ hours of rehearsal time and planning. I started this project because it was a manifestation of frustration of not having enough "theater people" to do plays centered on Asian identity. The problem is a combination of the small community and interest of the campus. I started this project because it was an accessible format that centered the piece around identity, without necessarily having "theater people." My task was to recruit students, ask them to be vulnerable, write and memorize a personal monologue, and perform it in front of an audience, which wasn't an easy task for any of us. Focusing on self-reflections from journals, rehearsal notes, and overall reflections of the show process, I will demonstrate my writing process, rehearsal exercises, and how I managed to get "non-theater" people to perform.

Sponsor: John Rapp

SC150 2:35

Zhang Mingyi '18

Shandong, China

Major: Political Science

Minor: German, European Studies

Choosing the "Working" Partners: Preconditions and Outcomes of Coalition Building Under MMP Electoral System

Countries using the Mixed Member Proportional (MMP) electoral system, which has the proportional feature in common with Proportional Representation (PR) systems, tend to have multi-party systems that have two dominant parties and a few small parties in their national legislatures. Previous comparative politics literature on coalition formation patterns often puts MMP countries under the PR category. Nevertheless, the difference in the design of these two systems and their resulting slightly distinct versions of party systems may have differing impacts on the coalition choices of the governing parties.

Even though constrained by the amount of data, since few advanced democratic countries have adopted MMP, this research is conducted under a quantitative approach in order to demonstrate the statistical correlations of coalition building. It tests the hypothesis that under the MMP system, centrist parties will more often tend to form coalition governments with parties having opposite ideologies on the political spectrums than in pure PR systems. In addition, parties that are involved in coalition bargaining are more restrained in their policy priorities than in their coalition votes or in office-seeking behavior in comparison with parties in PR countries, which will thus more likely form a "working" rather than "talking" government. The outcome of this research should trigger further debates regarding the distinctions between MMP and other electoral systems used by democratic countries.

Sponsor: Beatrice McKenzie

Richardson 9:30

Nadia Mitnick '19

Los Angeles, California

Majors: History; Russian

From the Black Sea to the Great Plains: Germans from South Russia on the Dakota Prairie

This paper examines a specific aspect of United States immigration history – the influx of German immigrants from Russian colonies to the Great Plains in the late 19th and early 20th centuries. By 1920, there were around 300,000 German Russian immigrants in the U.S., primarily farmers who settled on the prairie. Even so, the impact of this settlement on U.S. westward expansion has been generally overlooked by U.S. scholars. This paper attempts to rectify that, focusing on Germans from South Russia who claimed homesteads in the Dakota Territory around the turn of the 20th century, and the rapid assimilation of successive generations. Legislation, census data, and contemporary publications illuminate the logistics of South Russia German immigration, while numerous oral histories and photographs emphasize the personal experiences of the immigrants and their descendants. Using these sources in addition to the existing scholarship, this paper argues that Germans from South Russia played a significant role in America's agricultural development and elucidates how the hard work of early generations on the prairie contributed to the success of later generations across the U.S. – albeit at the cost of total assimilation.

Sponsor: Paul Stanley

SC349 3:00

Nicolette Muldrow '18

Highland Park, Illinois

Major: Physics
Minor: Music

Thermionic Emitter Application in Nuclear Batteries

During the summer of 2017, I worked with Atlas Energy Systems LLC on developing portable nuclear power supplies for military, space, and commercial use. By chemically separating radioisotopes from spent nuclear fuel and medical isotope byproducts we are able to use the resulting ionizing radiation to produce a cold plasma. Extracting energy from the cold plasma allows us to produce a power. While with Atlas I worked on research for a patent-pending direct energy conversion mechanism as well as for how we could incorporate different technologies for use in our power supplies.

Sponsor: Suzanne Cox

SC249 9:05

Eva Mulloy '18

Minneapolis, Minnesota

Majors: Psychology; Creative Writing

Social Media Use and the Self: Examining the Relationship Among Self-Objectification, Social Media Use, and Well-Being

With the rising presence of smartphones and online social interactions, it is increasingly important for researchers to study the developmental effects of internet use on adolescents and young adults (Underwood & Ehrenreich, 2017). Different psychological theories can help shape our understanding of the mechanisms by which well-being might be influenced by social media use. In particular, objectification theory (Fredrickson & Roberts, 1997) is a way to discuss the psychological impact of women being viewed as sexual objects. Researchers have recently examined the relationship between self-objectification and well-being (Mercurio & Landry, 2008), as well as the relationship between social media use and self-objectification (Feltman & Szymanski, 2017), but the relationship between self-objectification and well-being in the context of multiple social media has yet to be thoroughly explored.

The current study examined levels of trait self-objectification, smartphone use, and well-being. We measured trait self-objectification in an intake survey, and then asked participants to use a phone use tracking app for one week. At the end of that week participants were emailed out a second survey which asked about recorded phone use and assessed well-being.

We hypothesized that (1) individuals with high levels of trait self-objectification would spend more time on image-based social media platforms, (2) that levels of well-being would be lower in those participants who

spent more time on image-based social media platforms, and that (3) there would be gender differences in the various measures among participants. Results will be discussed in light of trends in media use and the promotion of psychological well-being in young adults.

Sponsor: Leslie Williams

Mathers 1:05

Kara Murphy '18

Crosby, Texas

Major: Anthropology

Minor: Biology

Perpetual Care Disparities in the Historic Segregated Cemeteries of Harris County, Texas: A Quantitative Analysis

Cemeteries are valuable sources of cultural and demographic information for anthropologists and historians. Historic African-American cemeteries have a long history of erasure and neglect due to lack of constant maintenance (perpetual care), despite being important cultural touchstones and valuable avenues for individual and community identification. To measure this phenomenon, a photographic survey of five African-American and Anglo-American cemeteries in Harris Co., Texas, was conducted between Summer 2016 and Fall 2017. I tested the hypothesis that there will be a statistically significant difference in perpetual care between African-American and Anglo-American cemeteries. A chi-square analysis comparing gravestone damage, legibility, and overgrowth was conducted between the two groups to measure the disparity in perpetual care. Upon analysis, African-American cemeteries exhibited significantly more damage and overgrowth than Anglo-American cemeteries. Legibility analysis showed that while African-American cemeteries exhibited more partial to complete illegibility, there was no significant difference between the two groups. Historic problems concerning access to cemeteries, the geographic differences in the cemetery locations, and legal issues that challenged cemetery legitimacy are possible causes for these results. Cemetery analysis of differences in cemetery care allows researchers to better understand historical inequality. Further, measures of perpetual care can help identify cemeteries in need of conservation, ensuring the survival of these mortuary landscapes for living communities.

Sponsor: Joshua Moore

Richardson 1:55

Caroline Murton '18

McLean, Virginia

Major: Political Science

Minor: European Studies

Belgitude: Creating a Culture Around Divided Politics

I studied abroad at Vesalius College in Brussels during the spring of 2017. Belgium was created in 1830 by merging Wallonia and Flanders, which were French and Dutch territories, respectively. As such, there is no historical concept of a Belgian people, and many Belgians identify more with their region than their country. Rather than becoming more unified after its creation, Belgium enacted a series of state reforms which delegated more powers to the regional governments. During my time in Brussels, I was introduced to the concept of “Belgitude” – the phenomenon in which Belgians acknowledge the disjointed culture of the country that is rooted in its history as an artificially created state. I will first explain how the political history of Belgium centers around the recurring theme of linguistic conflict. I will then discuss the origins of Belgitude and its representation in popular culture. Finally, I will draw upon my own experiences studying abroad to further show examples of Belgitude.

Linh T Dieu Nguyen '20

Haiphong, Vietnam

Majors: Media Studies; Critical Identity Studies

Western Influences on Vietnamese Beauty Standards

Vietnamese culture is heavily influenced by the colonial war it fought with France. There are signs everywhere: language, cuisine, lifestyle, and especially women's beauty standards. During and after the war with the Americans, Vietnamese women's beauty standards saw a divergence between North and South Vietnam. Today, women present their beauty in more creative ways than ever. If one has to ask "What Does It Mean To Be A Beautiful Woman in Vietnam?" there would be various answers, depending on the period.

As one part of this project, today I will focus on French influence on Vietnamese women's beauty ideals during French Colonialism (1887 - 1954). By looking at different classes of Vietnamese women, I will highlight how the notion of beauty varied, and how French colonization contributed to that difference. I will also emphasize the constraint to which women's beauty was confined and explore ways they attempted to challenge these said beauty standards.

Sponsor: Matthew Vadnais

WAC North 1:30

Edward Otto '18

Milwaukee, Wisconsin

Major: Literature, Creative Writing

Minor: Journalism

***Serial*; 'True' Crime in an Era of Fake News**

For decades, true crime has been an entertainment genre that has captivated audiences with stories of crooked cops, murder, alibis, and deceit. But what happens when we take the true crime genre and modernize it to work in the context of 2014? What happens when the investigation is predicated on one reporter's bias? This presentation will examine the effects of Sarah Koenig's 2014 podcast, *Serial*, as she constructed (or reconstructed) the case of Adnan Masud Syed. I will be discussing my continued research and findings surrounding the controversies of *Serial*'s release; this subject had been initially explored by me in Matt Vadnais' 301 Capstone course in the fall of 2017. In my symposium I will be focusing on how this podcast's serialized release impacts concepts of historical record, confirmation bias, and credibility in investigative journalism. Additionally, *Serial*'s place in the context of 2014—a landmark year for distrust in the American legal system—will be examined and extrapolated upon.

Sponsor: Rongal Watson

Wood 3:25

Quinton Purves '19

Stoughton, Wisconsin

Major: Business Economics

Minor: Political Science

The Social Innovation Institute and the First Responders' Community Academy

In spring 2018, I took part in the newly launched Social Innovation Institute (SII), designed to bring students and faculty together to devise creative solutions to tackle important societal problems. In this presentation, I discuss the origins of SII and my role in developing its first assignment - the design of a First Responders Community Academy (FRCA) as a long-term solution to combat police misconduct and reduce the payouts that cities are liable for in such cases. After an outline and discussion of the FRCA itself, I highlight key challenges that emerged from this process, the professional skills acquired along the way, and how I hope to apply the lessons learned to similar projects and life beyond Beloit.

Mickael Raggi '18

Montpellier, France

Majors: Applied Foreign Languages; English

The English-Only Movement: Should the United States Have English as Its Only Official Language?

Did you know that the United States of America does not have an official language even though English is most commonly used? Some people would like to keep it this way. Others would not. In this symposium, I discuss the debates in favor and against English as the only official language by looking at the English-only movement and English Plus concept. I also discuss how languages are closely linked to immigration, as not every immigrant speaks English, and how implementing a single official language could lead to further discrimination and racism.

Debates around language use have their roots in the westward expansion. By some U.S. Americans, English was and is seen as a symbol of patriotism. They believe that if English were the only official language, it would motivate immigrants to learn English and assimilate more easily. I will address just how true this is. Currently, though there is no official language at the national level, states have passed different legislation regarding official languages. Some of them recognize various languages, others only English, and some of them specify no official language.

A speaker of French, Spanish, and English, I end my presentation by doing some myth-busting and addressing how valuable it is to speak more than one language.

Sponsor: Paul Stanley

SC349 2:35

Dr. Jeffrey LaMack (Milwaukee School of Engineering (MSOE))

Dakotah Revai '18

Waupaca, Wisconsin

Major: Physics

Minor: Computer Science

Creation of an Apparatus to Investigate the Flow Characteristics through Artificial Heart Valves

More than five million Americans suffer from moderate to severe heart valve disease, creating the need for proper tools that allow for not only learning about how heart valves function, but also for testing and further developing them. This research produces a device to visualize flow through inserted aortic valve prototypes between a simulated left ventricle and aorta. It was first decided that replicating human heart values of 70 mL for stroke volume, 120 mmHg for blood pressure, 1.47 mL/mmHg for aortic compliance and 70 beats per minute (BPM) for heart rate would be realistic as these are typical values for a human heart. A pump was designed using polyvinyl chloride (PVC) piping to move water through the apparatus in a way that mimics the outflow waveform produced by the human left ventricle. Tests were conducted to determine the compliance of various elastic materials to find one that has a similar value to that of the aorta. Then, solid modeling and additive manufacturing (AM) were used to manufacture a left ventricle which produces realistic flow patterns. The apparatus was then assembled resulting in a device which realistically pumps water through artificial heart components, allowing for the visualization of the process to be used as a teaching device as well as to assist in the development of novel artificial heart valve designs.

Adam Ricks '18

Dallas, Texas

Major: Psychology

Factors Affecting the Willingness to Help Opiate Addicts: Social Dominance and Right-Wing Authoritarianism

The purpose of this research was to determine which factors influenced individuals with differing levels of social dominance orientation (SDO) and right wing authoritarianism (RWA) to personally help individuals addicted to opiates and to increase public funding for addiction treatment centers. The factors that were examined were: 1) whether or not the opiate addict lived in the participant's neighborhood; 2) the way in which the individual became addicted to opiate; and 3) the way in which the treatment was framed in reference to the participant and the economy. As previous research has indicated, I hypothesized that participants who scored high on SDO would be both less willing to personally help individuals addicted to opiates and less likely to support an increase in public spending for drug treatment programs, and that individuals who scored high on RWA would be more motivated to personally help individuals who are addicted to opiates but not willing to fund a drug treatment program. Individuals with high scores on the SDO scale were predicted to be less affected by the origin of the addiction as these individuals are generally not empathic to those whom they see as inferior, whereas individuals who score high on the RWA scale would be affected because these individuals act based off their moral system. Similarly, individuals who scored high on the RWA score were expected to be influenced by the origin of the addiction, while individuals who scored high on SDO would not be.

Sponsor: Joshua Moore

Wood 1:30**Cruz Dejesus Rico '19**

Chicago, Illinois

Majors: Molecular, Cellular and Integrative Biology; Health and Soci

Cynthia Escobedo '19

Chicago, Illinois

Majors: Anthropology; Critical Identities

Faviola Ramirez '20

Chicago, Illinois

Majors: Health and Society; Spanish

Yaira Aich '20

Chicago, Illinois

Major: Health and Society

Beatriz Aguilera-Tenorio '20

Waukegan, Illinois

Majors: Anthropology; Critical Identity Studies

Minor: Spanish

Paola Cortes '20

Dallas, Texas

Majors: Mathematics; 3-2 Engineering

Diana Flores '20

Chicago, Illinois

Majors: Education; Art

Minor: Spanish

Erasure of People of Color in the LGBTQ+ Community

The Gloria Anzaldúa Borderlands Conference for Queer People of Color in Decatur, GA, focused on the racism people of color in the LGBTQ+ community face in an already marginalized group. A group of Beloit

College students attended the conference in hopes of learning about how to address this issue on campus among administration and the student body.

We will highlight Gloria Anzaldúa's queer theory and her significant analysis of what it means to be a queer person of color (specifically in the Latinx community). The conference consisted of various workshops centered on people of color, and we will be focusing on the erasure of queer people of color in the LGBTQ+ community. We will also provide ways to address this issue within our own spaces through active dialogues with the goal of being inclusive of the marginalized bodies of color that have been existent in the LGBTQ+ community.

Sponsor: Jingjing Lou

Wood 10:35

Tegan Rock '18

Kansasville, Wisconsin

Major: Education

Minor: Biology

Mentoring Future Female Coaches

Mentoring is an understated need in the world of sports for females. Hands-on work and the lifetime of knowledge from other coaches is how I was able to form my own coaching and recruiting style. My mentor also helped me apply for jobs and graduate assistant positions. Finding resources and using the shared experience of someone else who has gotten to where I want to be is one of the most beneficial opportunities that I as a student-athlete was able to get. Throughout this essay I take you on my mentoring journey, showing how much work was put in where and finding the ideas that worked and did not work. My study is based on my own experience participating in a mentoring program called Midwest Conference Female and Ethnic Minority Mentoring Program. I also interviewed eight other coaches from Beloit College. I explored in my thesis both the benefits of mentoring programs as well as areas that can be improved. I also would like to raise awareness for myself and others in the limited opportunities that females have when trying to be competitive in the workforce.

Sponsor: Gregory Buchanan

SC249 11:00

Casey Ryan '18

Libertyville, Illinois

Major: Psychology

How Mental Imagery Impacts Athletic Performance

Many athletes visualize the actions they are going to do in a game or practice. Mental imagery is an exercise that helps athletes visualize themselves in a positive light before they actually act upon the thought experience. The act of imagining an athletic skill helps people stay motivated throughout a physically demanding task. Many studies that have found that mental imagery is helpful to athletic performance, and a variety of hypotheses have been generated to explain why it is that athletes who visualize their own success perform at a higher level than those who don't. This symposium will present research as to how and why the mental stimuli of imagining scoring a goal can help an athlete actually score that exact goal.

Alissa Ryckert '18

Kansas City, Missouri

Majors: Psychology; Sociology
Minor: English

Long-term Priming of Attachment, Institutional Integration, and Socioeconomic Status: An Intervention with First-year College Students

Adult attachment style is a multidimensional measure characterized by low or high avoidance and anxiety, leading to one of four attachment types. The transition period to college is more difficult for young adults who score high on avoidant or anxious measures of attachment. Recent research on adult attachment has shown the potential for long-term priming techniques as an effective intervention for stressors affecting varying aspects of psychological well-being. The current research study uses long-term priming of attachment representations as an intervention so as to enhance academic success and overall well-being in college, defined in this study as institutional integration. Socioeconomic status is positively correlated with academic success in college, and institutional integration has been shown to be a measure of well-being in college and a predictor of academic success in future educational endeavors. For this reason, socioeconomic status is explored as a mediating variable. Data were collected from twenty-four first-year undergraduate students at a small liberal arts college in the Midwest. Participants were a part of a six-week study during which they either received positive priming materials or neutral stimuli. The McArthur Scale of Subjective Social Status, The Experiences in Close Relationships - Revised - Adult Attachment Scale, and an Institutional Integration Scale were completed at the beginning and end of the experiment. Participants completed pretesting during the first week of their participation, and posttests were conducted at the conclusion of the study. Results will be discussed in light of campus initiatives to enhance institutional integration, student well-being, and retention.

Sponsor: Pablo Toral**Richardson 1:30****Laura Savage '18**

Minneapolis, Unknown

Major: International Relations
Minor: French

Impunity and Consequences of Violence Against Women: Femicide in Mexico and the Northern Triangle

According to a Small Arms Survey report, El Salvador and Honduras suffered from thirteen murders of women per 100,000 women while Guatemala was reported to have eight murders per 100,000. Individual cities like Ciudad Juárez had rates as high as nineteen murders of women per 100,000 between 2010 and 2015. This presentation analyzes femicide, the murder of a woman because she is a woman, in a modern day context, to explain the conditions under which it is committed. Understanding femicide today is relevant to better understanding rule of law in the Northern Triangle and Mexico (NTAM), which can be instrumental in improving the realities for women and men alike in these countries. Topics such as the origins of femicide, how impunity has allowed femicide to perpetuate itself as a common reality in the NTAM, as well as how the migration of unaccompanied minors may be an overlooked consequence of femicide in this region of the world are the main topics that will be explored. This presentation proposes that impunity, as a result of the weak state institutions and gender biases, is a major contributor to the perpetuation of femicide in this region of the world and that the ongoing femicides have contributed to the migration of unaccompanied minors fleeing the Northern Triangle.

Laura Savage '18

Minneapolis, Minnesota

Major: International Relations
Minor: French

YJ Na '20

Seoul, South Korea

Major: Health and Society

Dianne Lugo '19

Los Angeles, California

Major: Mci Biology
Minor: Journalism

Mickael Raggi '18

Montpellier, France

Majors: Applied Foreign Languages; English

Alondra Guzman '20

Jesus María, Mexico

Majors: Health & Society; Spanish

Eva Haykin '21

Portland, Oregon

Majors: Environmental Studies; Art

Dulce Saenz '20

Chicago, Illinois

Major: Biochemistry
Minor: Spanish

Gabriel Perry '19

Eugene, Oregon

Majors: Chemistry; Health and Society

Maha Sabbagh '21

Dubai, United Arab Emirates

Major: Undeclared

Ava Rockafeld '20

Chicago, Illinois

Major: Art
Minor: Spanish

Samantha Funk '20

Kenosha, Wisconsin

Major: Theatre Arts & Performance
Minors: Spanish; Religious Studies

Superior Murphy '21

Milwaukee, Wisconsin

Major: Political Science

Border Awareness Experience in El Paso, Texas: Perspectives and Takeaways

During this past spring break, we all traveled to El Paso, Texas, for a Border Awareness Experience with Annunciation House. Annunciation House is an organization that accompanies and serves vulnerable groups, but mostly migrants, in the El Paso border area. We spent the first half of the semester preparing for this trip and familiarizing ourselves with border issues in the U.S. and around the world, though we all came into the trip with different levels of knowledge and experience regarding migration issues. During the trip, we hiked Mount Cristo Rey, visited the border wall between Juárez and El Paso, engaged in a Q&A with a Border Patrol officer, attended a talk with a refugee services organization, visited a detention facility, and went to the Municipal Court where migrant's cases are handled. The court visit was on our last day, and we were all well aware the undocumented immigrants we were seeing were most likely going to be deported.

Some activities were heartbreaking, like seeing innocent migrants with chained hands facing a judge; sometimes they were angering, like hearing the warden at the Detention Facility talk about people being put in solitary confinement cells. However, sometimes the activities were inspiring, like hearing a lawyer discuss fighting cases for asylum seekers and seeing volunteers at Annunciation House work hard to give migrants hope. Witnessing first-hand the border region changed many of our perspectives and made us realize what type of work needs to be prioritized.

Sponsor: Matthew Vadnais

WAC North 9:05

Evangeline Schmidt '18

Seattle, Washington

Major: Creative Writing, Critical Identity Studies

Counterculture in the Golden Country: Lerner and Loewe's *Paint Your Wagon*

This presentation will take up issues surrounding the historical context of Lerner and Loewe's 1951 musical *Paint Your Wagon*, as well as the 1969 film adapted by Paddy Chayefsky and directed by Joshua Logan. Set in Gold Rush era California, both texts utilize tropes of California as the "golden country" and the freedom of the Gold Rush, albeit in different ways. By comparing plot and thematic differences in the two works, produced nearly 20 years apart, one can gain insight into how the narrative of the California Gold Rush was used in different time periods in order to represent not the original historical period of the mid-18th century, but instead the time period the works were created in. Using analysis of how the Gold Rush has been constructed historically, as well as scenes from the 1969 movie and songs from the original stage production, I will discuss how the historical context of the late 1960s affected the narrative of *Paint Your Wagon*. I will specifically focus on the ways in which the film uses the narrative of the Gold Rush in order to address anxieties surrounding cultural and social upheaval in America, ultimately using the trope of the "golden country" in order to condemn 1960s counterculture.

Sponsor: George Lisensky

SC349 1:05

Kaung Shein '19

Beloit, Wisconsin

Major: Biochemistry, Studio Art

Simple Superhydrophobic Coating Process on Copper

Hydrophobic materials can be found in nature with self-cleaning and drag-reducing abilities. Leaves self-clean by having water roll-off the surface, dragging dirt and other particles with the water. Lotus leaves and rose petals, in particular, are well-known for their hydrophobicity. Inspired by this, water-repelling features can be applied to man-made materials. We coated $\text{Cu}(\text{OH})_2$ and CuO on a copper plate for an environmentally-friendly process of obtaining a superhydrophobic surface. Coated copper surfaces were examined using scanning electron microscopy and x-ray powder diffraction. The water contact angles were captured with a microscope and measured using a low-bond axisymmetric drop shape analysis. The copper surfaces had contact angles up to 168 degrees indicating a superhydrophobic condition.

Sponsor: John McMahon

SC150 1:05

Stavia Stone-Wylder '18

Decatur, Illinois

Major: Political Science

Minor: Philosophy

The Federalists and Anti-Federalists on Governmental Power

This paper aims to compare the Federalists' and Anti-Federalists' varied understanding of the federal government's legitimate reach of power, mainly through their positions on the existence and power of the judiciary branch. Looking beyond the battle over the powers the state governments would retain, this paper plans to look solely on the powers either given or denied to the federal government itself. Every logistical battle fought in the United States' founding year came from a disagreement about how much power the new federal government should have over the American citizens. Victories were won on opposing sides, ultimately resulting in an inconsistent national ideology of the role of the federal government which continues to haunt the United States today. This paper will define the amount of power the groups of thought believed a federal government could legitimately wield over the life of a citizen through their varied essays and speeches of prominent members, and then will highlight the way that broad philosophy directly shaped their opinion on specific and high profile government debates. By analyzing some of America's earliest debates through the debaters' political philosophies, it becomes possible to understand the compromises reached and their ongoing effects.

Sponsor: Daniel Youd

WAC North 3:25

Shan Tang '18

Xi'an, China

Majors: Self-designed Major Chinese Studies; Economics

The Relationship between Wang Guowei's View of Enlightenment and Jia Baoyu Psychological Development.

Wang Guowei (1877-1927) belonged to the last generations of Chinese scholars of the Qing dynasty who received traditional academic training. He was also an expert on the *Dream of the Red Chamber*, China's most famous classical novel. Because he lived during that period when China was forced to open intellectually and academically to the West, he, at the same time, had access to Western philosophical thinking, which he integrated into his own world view. As a result, his analysis of the *Dream of the Red Chamber* utilizes what he learned from both Arthur Schopenhauer (1788-1860) and Immanuel Kant (1724-1804) and applies this to his understanding of Cao Xueqin's (1715-1763) novel. In this paper, I will use Wang Guowei's well-known thesis on the *Dream of the Red Chamber* as a starting point to my own analysis of the novel and its message.

According to John Minford, one of the novel's English translators, "The novel narrates the journey of a sensitive soul towards enlightenment." This "soul" is Jia Baoyou, the novel's protagonist. He is also the "stone" of the novel's title, incarnated into human form. Entering into mundane existence, he struggles with whether he should break free of the welter of daily life or live within it. One of Wang Guowei's central concerns is what constitutes authentic enlightenment. He expresses dissatisfaction with the life choices of those in the novel that lead them either to retreat from the world for the wrong reasons or to commit suicide. He contrasts these characters with Baoyu, who gradually succeeds in breaking free of the idea that he is the center of the world. Through psychological analysis, I carefully chart Baoyu's development at crucial turning points along this journey.

Sponsor: Steven Huss-Lederman

Mathers 1:55

Simon Tomlinson '18

Birmingham, Alabama

Major: Math, computer Science

James McFeeters '18

Silver Spring, Maryland

Major: Math, computer Science

Open Energy Dashboard

Beloit College computer science students have spent the last two years working on Open Energy Dashboard (OED), a web application that aggregates and displays information about energy usage gathered from energy meters. In this talk, we will describe both the features and the implementation of OED, with an emphasis on the architecture and technology involved.

This talk will be geared towards an audience that is minimally experienced in computer science, but it will be interesting to a more general audience as well.

For a sneak peak at the current state of OED, go to <http://oed.beloit.edu:3000/>.

Sponsor: Beatrice McKenzie

Richardson 9:55

Justin Vetterl '18

Gilbert, Arizona

Majors: History; Political Science

Unorthodox Tactics: Robert Rogers and the Foundation of the American Rangers

The American military has a long and storied heritage of improvising, adapting, and overcoming obstacles to meet new challenges and complex issues. Considering the construction of the American military from a band of ragtag volunteers in the American Revolution, to a worldwide power, it is important to analyze what units and tactics were truly revolutionary. The establishment of the United States Army Rangers owes a great deal to its ability to learn from early interactions with and adopt similar tactics to Native American forces. These early special forces, while small in numbers, came to have a tremendous impact on the battlefield. Using letters from George Washington during the Battle of the Monongahela and Robert Rogers's 28 Rules of Ranging I offer a better understanding of how these units were able to have a tactical edge in combat and why their effectiveness was considered superior to the point that many lessons are still used by today's armed forces.

Sponsors: Pablo Toral and John Rapp

SC150 3:25

Justin Vetterl '18

Gilbert, Arizona

Majors: Political Science; History

Foreign Policy Options to Counter a Nuclear North Korea

It has been a goal of the United States over the last 70 years to prevent the vast growth of nuclear proliferation and to block the pathways for terrorist actors to acquire nuclear weapons. North Korea has provided the United States and its strategic partners an immense challenge. Despite great international pressure, the North Korean regime has remained remarkably resilient in overcoming domestic and foreign pressures and has defied the international community in its acquisition of nuclear weapons and missiles capable of reaching the U.S. mainland. This presentation reviews different policy options for the U.S. and recommends deterrence policies of punishment and denial, but not military action. U.S. policymakers must negotiate a policy that manages the situation in North Korea without the expectation that it can eliminate all North Korean nuclear weapons. The U.S. can use the denial strategy of the "Iran Deal" as a framework to buy much needed time in freezing warhead miniaturization. It must pressure the Kim Jong-un regime to refrain from selling its technology to terrorists by threatening punitive sanctions, both military and economic. Since China plays a major role in successful implementation of economic sanctions, the U.S. must convince Beijing that the strategic breakout of the North Korean nuclear program would have far greater consequences for China than a potential collapse of the North Korea regime.

Angela Castrillo Vilches '19

Framingham, Massachusetts

Major: Political Science

Minor: Critical Identity Studies

A History of Puerto Rican Independence through Music

This presentation will involve analyzing political music in Puerto Rico spanning the 1930s until present day, using the country's anti-colonial context as a backdrop for understanding the music of that period. Utilizing existing literature on the topic, interviews, and critical analysis, my presentation will demonstrate that Puerto Rican music has been a major and ongoing vehicle for political rhetoric in the nation, particularly in light of its history of colonization. Since Puerto Rico was first colonized by the US in 1889, most of the work will be a critique on American colonization, and how the islanders have learned to cope with the constant threat of cultural annihilation through music.

Sponsor: Beth Dougherty

Richardson 1:05

Charlotte Mafumbo (School for International Training)

Sasha Vorlicky '19

New York City, New York

Major: International Relations

Troubled Past, Displaced Present and a Secure Future: An Analysis of the Coordinated Emergency Response to the Refugee Crisis in the West Nile

I participated in the School for International Training's (SIT) Uganda Development Program based in Kampala, Uganda from August - December 2017. As part of my program requirements, I shadowed a UNICEF Child Protection team on the border of South Sudan and Uganda as a student researcher. During this time, I participated actively with the UNICEF Gulu Zonal Office through field visits, interviews, and activities engaging with refugees directly. In December, I presented my research findings to SIT and the Office of the Prime Minister through an oral presentation and a written report.

The West Nile Region of Uganda has faced an influx of over 1.3 million Southern Sudanese refugees and asylum seekers as of December 2017. In response to the crisis, the Ugandan government has sought aid from the United Nations and over 50 implementing partners. Local institutions in the West Nile have had a difficult task to provide adequate support and services for the incoming refugee population while balancing the needs of the host districts.

My research seeks to understand the ways that implementing partners have provided aid to the Government of Uganda to handle the refugee influx, what measures the local districts and personnel are implementing to respond to the refugee influx with respect to the host population and its needs, and the preparations made by all the coordinating partners to shift policy and field implementation from an emergency context to district-led coordination focused on sustainability.

Sponsor: John McMahon

SC150 1:30

Willow Wallis '18

Wauconda, Illinois

Major: Political Science

Is Art Work?

Art is often a plot hole in Marxist theories of labor and in neoliberal theories of capitalism. The difficulty of commodifying something that not only varies immensely person to person, but also varies in form, poses

challenges to theories of labor similar to those of social movements. In this paper I will look at the relationship between art and work, and how different theoretical approaches (Marxism, black feminism, queer theory) tackle the connection. Is the art a graphic designer does at his 9-5 valued the same as the paintings he does at home on the weekends? Is art so romanticized that when someone is receiving a paycheck for it it ceases to become art?

Looking at post-work theories, I will investigate how art could be one of the few labors that machines cannot effectively take over, and must be maintained by humans. The focus will stay within the last hundred years in North America, with a few ancient touchstones (i.e. cave paintings). Additionally, I will examine how neoliberalism creates a necessity for artists who want to survive to pursue a four-year degree or more and how that problematizes the potential separation between art and work. I will argue that art is always work and that neoliberalism and capitalism have robbed that title away from well-deserving workers who labor over their art.

Sponsor: Pablo Toral

SC150 11:25

Yiqiang Wang '20

Beijing, China

Majors: Political Science; Cognitive Science

A Comparison of Two Models of Development in the Boundary Waters Canoe Area Wilderness Region

Ely, Minnesota, and Atikokan, Ontario, are two towns of less than three thousand people on different sides of Boundary Waters/Quetico wilderness areas. Iron mining was their economic pillar until the mines closed in the 1980s. In the summer of 2017, I participated in an environmental justice course at Coe College Wilderness Field Station in northern Minnesota. I conducted field research to explore the towns' development strategies since the end of iron mining. I used qualitative research methods, including visual sociology, participant observation, and interviews, to learn from the stakeholders. My presentation will offer a comparison of the post-mining economic models followed by each town. While Ely emphasized tourism as a sustainable alternative to mining, Atikokan focused on biomass energy production. I will explain the reasons for the different paths taken by each town and will point out the challenges of each model.

Sponsor: Daniel Brueckenhaus

Mathers 10:35

Mingyi Zhang '18

Shandong, China

Major: Political Science

Minor: German, European Studies

Barriers of Confrontation: Political Calculations of Atonement for War Crimes in Post-World War II Japan and Germany

The conclusion of the Nuremberg and Tokyo Trials, the two most symbolic and influential international tribunals following the end of World War II, did not mark the end of the injustices of war crimes conducted by the Axis powers. Instead, the struggles against Holocaust denial and the fight for proper reparations to the survivor groups have continued for more than 70 years after the war. There have always been revisionists who have refused to acknowledge crimes such as the Holocaust and the Nanjing Massacre in Germany and Japan, respectively.

Nevertheless, the extent of revisionism in Germany has been more contained due to the legal restrictions in that country, whereas Japan experiences the top-down approach led by the government in terms of whitewashing the war history. This research focuses on the influence of the political sphere in these two countries on the issue of confronting the war crimes. Comparing the postwar restoration measures, the domestic party politics, and the changing trends of foreign relations in these two countries, this research

concludes that the different intensity of foreign occupation and reorganization by the Allies, especially the U.S., laid the foundation for opposite attitudes towards envisaging the past. Adding to the disparity of domestic political institutions and the need for international diplomacy, these two countries have diverged further and further on the path of confronting the war crimes over the course of the past century.

Politicians always faced the constraints of national interests on their policy decisions, even on issues that require more compromises due to a moral conscience. Based on this research, a broader question that will be discussed regarding the issue of atonement for war crimes is how politicians should reconcile their political interests with their basic moral conscience, in order to maintain the decency of humanity.



[Link to the online program](#)