

The Honors School  
FALL Research Conference 2011

**Wilson Auditorium**  
**Thursday, December 15, 2011**  
**9:00 a.m.**

It is with great pleasure that the Honors School  
Presents its Annual Research Conference

*Student presenters include research in the fields of:*

Anthropology Biology Business Economics  
Communication Education History  
Mathematics Music Political Science

*9:00 a.m. Welcoming Remarks – Dr. Kevin Dooley*

*Dean of The Honors School*

**PRESENTERS**

Terence Bodak (HS/PS)  
Tyler Breder (HP)  
Maria Ferrara (MA/EDS)  
Geoffrey Hipschman (MU/EDS)  
Tamari Lagvilava (PS)  
Alexandria Matz (PS)

Nicole Moreira (BUBE)  
Nicole Pfeifer (CO)  
Tara Quigley (HP/EDS)  
Duncan Smith-Sebasto (BY)  
Jennifer Tortorelli (AN/EDE)

**PRESENTERS**

**Terence Bodak**

**Chief Advisor: Dr. Kenneth Campbell  
Second Reader: Dr. Kevin Dooley**

**The Troubles and the Question of Identity in Northern Ireland, 1969 – 2007**

This paper addresses the question of “What caused the polarized division of the people of Northern Ireland?” during the Troubles – a period of great political divide and violence in Northern Ireland that lasted from 1969 to approximately 1998. This paper argues that the key to understanding the answer to the question lay in the self-identification of the Northern Irish people. Others have suggested that due to the difference in religious affiliation between the Nationalists and Unionists, religion was the key factor in the Troubles; however, this paper argues that it was not religion, but Nationalism that resulted in the decades long conflict that was the Troubles. By examining multiple legislative efforts of the parties involved, the conclusion of nationalism was met due to the language of the Belfast Agreement (or The Good Friday Accords) and the success of the agreement in ending the Troubles, as it addressed the issue of national identity and set forth legislation to allow for dual national identity for the people of Northern Ireland.

**Tyler Breder**

**Chief Advisor: Dr. Rekha Datta  
Second Reader: Dr. Thomas Lamatsch**

**A Study In Economics and Peace**

This study seeks to empirically analyze the relationship between economic freedom and peace. The Economic Freedom of the World Report (EFW) and the Global Peace Index (GPI) serve as the data set, and through linear regression, the strongest combination of variables is determined. Linear Regression works by graphing data points for multiple variables and establishes the strength of those relationships. The Economic Freedom of the World Report consists of five main variables: access to sound money, size of government, legal structure, international trade freedom, and regulation of business credit and labor. Conversely, the Global Peace Index score is weighted by ongoing domestic and international conflict, safety and security in society, and levels of Militarization. The GPI score acts as the dependent variable and the EFW indicators serve as independent variables. After running a series of linear regressions, access to sound money, size of government, and legal structure have been determined to be the most influential variables. Alone, they can account for 46% of all variation in peace, with legal structure being the most fundamental. This study supports modern economic peace theory showing that economic freedom has great reach in engendering peace while isolating the most potent variables. Studies like these are valuable as they help substantiate recommendations for policy decision making on both domestic and international fronts alike.

**Maria Ferrara**

**Chief Advisor: Dr. Richard Bastian  
Second Reader: Dr. Wai Kong Pang**

**Applications of Mixed ANOVA**

This project explores the statistical technique known as mixed ANOVA. Mixed ANOVA is a widely used test in many fields of research, and is probably the most complex of the various types of ANOVAs. My thesis will go through the different types of ANOVAs to build up to the Mixed ANOVA. Then the mathematical theory of mixed ANOVA will be discussed in detail. To make the theory more accessible, an example of a Mixed ANOVA in education will supplement the discussion. This example will then be implemented, and its results analyzed and discussed. The dataset was collected by the National Center of Education Statistics in the U.S. Department of Education. Specifically, we will look at eighth grade and twelfth grade math achievement scores between gender (male and female) and the students’ school type in eighth grade (public or private, religious).

**Geoffrey Hipschman**

**Chief Advisor: Dr. Richard Veit  
Second Reader: Prof. Ron Frangipane**

**The Effects of Music on the Evolution of the Human Brain**

This paper begins with an explanation of why humans developed the ability to produce music as a result of sexual selection. Following this, it proposes that in time, music took on an additional role as something that was beneficial to our cognitive development. Music was then preserved and passed down to subsequent generations through culture not only because it was useful for courtship, but because its practice reaped benefits for the practitioners and the society at large (and also because it was enjoyable). The final section applies the music-evolution theory to modern humans and examines the possibility of a future in which the musical ability of the species is allowed to regress, and the consequences of this taking place.

**PRESENTERS (cont.)****Tamari Lagvilava****Chief Advisor: Dr. Kevin Dooley  
Second Reader: Dr. Marina Vujnovic****A Structural Realist Approach to Understanding State-legitimacy**

The following thesis will attempt to determine the international factors that contribute to the perceived legitimacy of an aspiring state. In doing so, a structural realist model will be developed for explaining international recognition. The states that will be examined as case studies are: East Timor, Kosovo, and South Ossetia. The model that will be utilized will evaluate the response of the most powerful actors in the international community towards each aspiring state (China, Russia, and the United States). This will demonstrate that power, rather than the criteria set forth by the United Nations is the ultimate determinant of state recognition. In other words, a model will attempt to determine the likelihood of a state gaining legitimacy. This model will evaluate aspiring states by placing them into one of three categories: very likely, unlikely, and possible.

**Alexandria Matz****Chief Advisor: Dr. Kenneth Mitchell  
Second Reader: Dr. Thomas Lamatsch****University Tuition Fees in the United Kingdom and Germany**

The general research area of this project is post-Cold War welfare state reforms in Europe. All European states are struggling to finance traditional welfare state policies. This project focuses on higher education, a specific area of the traditional European welfare state. In this area, the United Kingdom (UK) and Germany represent two important case studies. Both are influential members of the European Union, and their experiences in welfare state reform will weigh on other European states. Prior to the mid-1990s, neither Germany nor the UK required private individuals to pay university fees. Since the mid-1990s, the two countries have adopted university fees but not uniformly. German fees, for example, are much lower than UK fees. This project will explain why fees charged to the individual student vary in our two national case studies. To answer these questions, this project analyzes three independent variables: (1) configuration of national political institutions, (2) cross-national variation in economic returns to university education, and (3) cross-national public opinion data relevant to university education. A narrow study of university fees can shed light on the incentives that will shape public policy processes in other areas of the traditional European welfare state.

**Nicole Moreirra****Chief Advisor: Dr. Andreas Christofi  
Second Reader: Dr. Barrie Bailey****Energy Trends in the Economy and the Stock Market**

This project will use the implied growth rate of various stocks in the energy sector to determine if any trends exist. It will use the methodology that has been established by Dr. Andreas Christofi and Dr. Petros Christofi. In their paper titled "Implied growth fundamentals in stock prices: Pedagogical perspectives" the professors present the notion that stocks can be valued based on their growth prospects rather than the traditional relative valuation criteria. This project highlights stocks specifically in the energy industry to draw conclusions about energy sub-sectors and to forecast the future of the energy sector overall. If strong trends indeed exist potential investment recommendations will be made. Influential economic factors will be discussed and there will be a focus on the evolution of the industry with regards to alternative energy sources.

**Nicole Pfeifer****Chief Advisor: Dr. Sheila McAllister-Spooner  
Second Reader: Prof. Kristine Simoes****Social Media's Effects on Public Relations and Marketing**

The fields of public relations and marketing are continually changing in response to trends in communication methods. Social media is one of the most recent facilitators of these changes. This project analyzes the multitude of ways in which social media are presently changing the fields of public relations and marketing. The objective is to highlight that overall, traditional public relations and marketing professionals are embracing and adapting to the influence of social media tools. This presentation will also discuss the challenges that practitioners of these fields are facing throughout this transition to integrating emerging technology into the practice.

**Tara Quigley****Chief Reader: Dr. Joseph Patten  
Second Reader: Dr. Enoch Nappen****Post 9/11 Airline Security Measures: Invading Civil Liberties or Vital to Our Safety?**

The purpose of this study is to analyze post 9/11 airline security measures and to determine whether the newest form of security, the full body X-ray scanners, are intruding upon the civil liberties of Americans. Since 9/11, liberty and security has been a hot topic of debate. Millions of Americans use airlines for travel each day, and become subjects of the new controversial scanners, which will undoubtedly be brought to the Supreme Court. This study will determine the Supreme Court's decision on the scanners based on an analysis of the scanners and past Supreme Court cases involving civil liberties.

**PRESENTERS (cont.)****Duncan Smith-Sebasto****Chief Advisor: Prof. John Tiedemann  
Second Reader: Dr. Ursula Howson****An Examination of the Relationship Between Age Structure of Queen Conch, Strombus gigas, Middens and Live Populations in Cape Eleuthera, Bahamas**

The queen conch, *Strombus gigas*, is highly valued for its meat and shell. Competing claims regarding management and inadequate enforcement of harvest restrictions are contemporary issues. In the United States, regulations have been created to include prohibitions; for example, in Florida the harvesting of juveniles is banned. In contrast, the Caribbean Sea is international territory and its resources are managed by separate organizations. The queen conch is protected by the Convention on International Trade in Endangered Species of Wild Fauna and Flora, which prohibits its international trade without a permit. Despite this protection, there is evidence that it is being overharvested and illegally traded throughout the Caribbean. Overharvesting is a major concern because queen conch is one of the Caribbean's most ecologically and economically important species. It controls seagrass bed density and maintains widely suitable coral reef ecosystems through grazing, thereby, contributing greatly to biodiversity. Increased harvesting has been of particular concern in Cape Eleuthera, where declining tourist trade has caused significant dependence on local fisheries. Research was conducted in 2007, 2010, and 2011 in conjunction with the Cape Eleuthera Institute at Eleuthera, Bahamas. Five middens (3 old and 2 active) and five locations around these middens (2 active harvesting, 3 non-active harvesting) were surveyed. Siphonal length, lip thickness, and spine erosion were assessed to determine age. Midden findings were consistent over the years and there was a statistically significant similarity between the age distribution of queen conch found in active middens and those in live populations and a statistically significant difference between old middens and live populations in the waters surrounding Cape Eleuthera in 2011. Old middens were composed mostly of adults, while there were elevated percentages of juveniles in both active middens and live populations, which indicated levels of harvesting beyond the capacity for populations to sustain.

**Jennifer Marie Tortorelli****Chief Advisor: Dr. Richard Veit  
Second Reader: Dr. Mary Lee Bass****A Cross-National Evaluation of American Education: Examining a Need for Change and How to Use Anthropology to Achieve it**

The purpose of this paper is to adopt an educational-anthropological framework to evaluate American education in a cross-cultural and cross-national manner. American education over the last decade or so has been subjected to numerous criticisms, prompted by the low levels of achievement in American students in comparison with that of students from other developed countries. In order to understand the disappointing achievement levels in the world's richest country, one must evaluate the current practices and frameworks in American education. Specific attention should be focused on exclusive tendencies, the role of globalization, and the quality of teacher education and the role that cultural responsiveness plays in each of these areas, as these characteristics directly relate to student achievement all around the world. To ensure that accurate representations of these areas are portrayed, extensive research has been conducted in terms of books, peer-reviewed journals, and ethnographies from both anthropological and educational journals published within the last 20 years. In order to restore the United States' position as a strong leader in the globalized world, the current education system needs not only to be reformed, but also restructured, to include elements of anthropological practice that will produce competent 21st century citizens.

***Save the Date:******Honors School Spring Research Conference******Friday, April 27, 2012***

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**MONMOUTH UNIVERSITY**

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WHERE LEADERS LOOK *forward*