Commonwealth Honors Program
SECOND ANNUAL POSTER CONFERENCE
3 - 6 P.M.
WEDNESDAY, APRIL 18, 2012
BEDFORD CAMPUS CENTER
New research offers a compelling case for music as an innate biological function.

The Adapted Brain
- Certain physical structures in the brain are wired solely for the processing of music, not for speech or other auditory input.
- Neurobiological deficits, known as prosody, exist which prevent the interpretation of melody, rhythm, and other aspects of music.

Music is used throughout the world as a means of understanding, respecting, and bridging cultural differences.

Orchestras Bring People Together
The West Coast Division Orchestras brings musicians from Israel, the Palestinian Territories, and several Arab countries together where once they prepare for touring the world together. As the orchestra's website explains: "Music grants the individual the right and obligation to feel his or her identity fully while listening to or sharing another's music or song within the cultural context of their repertoire."

Non-Musicians Sure Are Musical
Music is used throughout the world as a means of understanding, respecting, and bridging cultural differences.
A Long History of Distrust

Since it is seldom clear whether intellectual activity involves a mode of being or a vital deficiency, opinions vary as to whether it is a privilege and seeing it as a hindrance. Jacques Barzun

Who are these women?

Anti-intellectualism in America

A history of policies and attitudes toward intellectualism, in an attempt to define qualities of modern American culture

What about TJ?

Born on July 5, 1860 in Hartford, Connecticut. Her father was a well-known Unitarian Frederick Beecher Perkins, a nephew to Harriet Beecher Stowe. Gilman attributed her talent for speaking to her Beecher background. When she was an infant, her father abandoned the family, leaving her mother to tend to her older brother and Charlotte on her own. Because of this, they moved around a great deal and lived in poverty. Her father's infrequent visits were a cause for him to encourage her to read. As a young child and teenager, her school attendance was sporadic, but in her early 20's she attended the Rhode Island School of Design.

She married Charles Walter Stetson in 1884 and in 1888 she gave birth to a daughter, Katherine Beecher Stetson. She had suffered from mild depression during the first months of her marriage, and after the birth of Katherine it worsened. She was prescribed the rest cure, a popular treatment in those times. It involved being closed off from family and friends, long sleep, and fever to no physical activity. The rest cure is one of the main themes in her most famous book, The Yellow Wallpaper, and one wonders if the suffering of the woman in the story was indeed an autobiographical for Gilman, or simply where the idea for the short story was conceived.

Eventually Walter Stetson filed for divorce and Charlotte left him and her child and moved to California to sell her work and world. She became an advocate for women's rights, and a powerful speaker and author. Later in life she married her cousin George Gilman.

When she received well in her time, her writing fell by the wayside after her death. It came back into popularity with the women's movement of the 60's.

Her death came at her own hands, long suffering from cancer, she chose to die from inhaling chloroform rather than suffer from the cancer.

Her work and beliefs have played a tremendous role in women's rights at a time when they had very few, and her outspoken comments and beliefs are as true when women are often.
APPLICATIONS OF THE DERIVATIVE
MAXIMUM AND MINIMUM

DEFINITION

- In mathematics, the maximum and minimum of a function, known collectively as extrema, are the largest and smallest values that the function takes at a point either within a given neighborhood (local or relative extremum) or on the function domain in its entirety (global or absolute extremum).

- More generally, the maximum and minimum of a set (as defined in set theory) are the greatest and least element in the set. Unbounded infinite sets such as the set of real numbers have no maximum and minimum.

- To locate extreme values is the basic objective of optimization.

CRITICAL POINTS OF $f$

- A critical number of a function $f$ is a number $c$ in the domain of $f$ such that
  - $f'(c) = 0$ (stationary point)
  - $f'(c)$ does not exist

CANDIDATES FOR RELATIVE EXTREMA

- Stationary points: any $x$ such that $x$ is in the domain of $f$ and $f'(x) = 0$.
- Singular points: any $x$ such that $x$ is in the domain of $f$ and $f'(x)$ is undefined.
- Relative extrema: any point where a relative maximum or minimum is achieved.

- Candidates for relative extrema must be stationary points.

- The first derivative test is used to determine whether a candidate is a relative maximum, minimum, or neither.

FIRST DERIVATIVE TEST

- Let $f$ be a function concave up on an interval $I$.
- If $f'$ changes sign from negative to positive at $c$ in $I$, then $f$ has a relative minimum at $c$.
- If $f'$ changes sign from positive to negative at $c$ in $I$, then $f$ has a relative maximum at $c$.

OPTIMIZATION PROBLEMS

- Maximum profit
  - A rectangular plot is to be transformed into a line by a straight edge and divided up into other plots by a line. Why 90% of time in your disposal, what is the area which you can achieve?

- Minimum cost
  - A company's cost function is $C(x) = 100 + 2x^2$, where $x$ is the number of units produced. Find the production level that minimizes cost.

- Maximizing profit
  - Suppose that the revenue of a company can be represented by the function $R(x) = 100x - 0.1x^2$, and the company's cost function is $C(x) = 100 + 2x^2$, where $x$ represents thousands of units and revenue and cost are represented in thousands of dollars. Find the production level that maximizes profit. What is the maximum profit?
The Impact of the U.S. Outsourcing on Cambodia's Garment Industry

Garment workers are paid low wages, only 0.21 cents per hour. It is equal to $1.68 per day and $58.40 per month, and they get paid at the end of the month ("Watching Brief on Quota-Free Trade in Textiles and Clothing"). Whereas, the United States floor wages is $7.45 per hour, and the owner is responsible to pay health insurance, holiday, sick days, and federal and local government taxes ("Minimum Wage Worker").

Working in Countryside Verse Working in City

Countryside
- Work in field grow crop or rice
- Plantations
- Animals

City
- New environment
- Entertain with city music
- Work in industry
Asbestos

What is Asbestos?

Asbestos is the name given to a group of naturally occurring minerals used in certain products, such as building materials and vehicles. These minerals, such as chrysotile, amosite, crocidolite, tremolite, anthophyllite, actinolite, and any of these minerals that have been chemically treated or altered. (2009)

Introduction

China has long been a major country in asbestos mining and production. For decades, Chinese workers have been exposed to asbestos fibers in the workplace. The government has been aware of the health risks associated with asbestos exposure, but it has taken steps to control the use of asbestos in recent years. This has led to a decrease in the number of new cases of asbestos-related diseases in China.

Hypothesis

The hypothesis of this study is that air quality is the result of poor health in China.

Conclusion

Further research is needed to determine the long-term effects of asbestos exposure on the health of Chinese workers. It is important to continue to monitor the health of workers in the asbestos industry to ensure their safety and well-being.
Benefits

The Amazon Rainforest has supplied mankind with thousands of species of plants and animals that have had an enormous impact on curing many human diseases and ailments. One current example is the Mexican magic mushroom that is proving to be a long awaited cure for cluster headaches. These headaches are far worse than migraine headaches and can last for weeks. Other plants of the rainforest have provided cures for malaria, ulcers, hepatitis, fevers and even the compounds that go into ‘the pill.’ Our current form of anesthesia is also derived from the Amazon rainforest. Researchers are currently looking to the rainforest in the fight to overcome some of mankind’s more devastating diseases such as cancer, Listeria and HIV/AIDS. Some of the animals of the rainforest, including the Amazon leech, Vampire bat, fire ant and poison dart frogs, are all providing medicinal drugs as well. A recently new field of study into endophytes is also creating a new source of medicinal drugs.
The Music and Culture of Byzantium:

An Analysis of Its Musical History and Influence on Western Liturgical Music

Points of Influence on the Western Tradition
The Influence of Confucianism on Eastern Asian Families

CONCLUSION

The teachings of Confucius changed the way people in East Asian family structure and relationships. Confucius taught absolute obedience to elders. Obedience is a characteristic that was emphasized in family life. The younger siblings were expected to obey any orders given by their elders. The male is considered the head of the family. The roles and responsibilities of children were expected to follow the social hierarchy. Confucianism became popular in Eastern Asia and continues to influence the countries’ culture. As a result, many families desired a male child to continue their family’s lineage. Confucianism focused on the need for stability and order within a family and society.

REFLECTION

“Even though you sleep intimately in the same bed and...”
President Jose Manuel Balmaceda's protection policies that were aimed at creating the country's own nitrate export market, led to a war that saw the loss of power to the opposition, a factor that gave way to the country's complete dependence on foreigners.

**Impact of Nitrate Economy to Chile**

- British Control of Nitrate
  - After the war, Britain had complete control of Chile's nitrate economy. They received the nitrate deposits in the northern deserts. Britain's nitrate deposits were used to produce ammonium nitrate and nitric acid, which became essential for the production of fertilizers, explosives, and other chemicals.

- Chile before the Nitrate Boom
  - The nitrate boom in the late 19th century and early 20th century brought about a period of economic growth. The country's nitrate deposits were highly valuable, and the nitrate industry became the backbone of the Chilean economy.

- British Nitrate Workers
  - The British nitrate workers were involved in the extraction and processing of nitrate. They faced challenging conditions and worked in hazardous environments.

**Conclusions**

The nitrate economy was a significant factor in Chile's economic growth and development. However, it also had negative consequences, such as environmental degradation and social inequalities.

- **Present Tense**
  - The modern-day Chilean government is working towards sustainable nitrate mining and the development of alternative energy sources.

- **Future Tense**
  - The Chilean government plans to invest in renewable energy, such as solar and wind power, to reduce its dependence on nitrate.

**References**

The Evolution of Gender in China

Marriage and Politics

In recent history, gender roles have been evolving, China's Cultural Revolution with "The Silver Flower Curtain" of literature has dramatically altered previously established roles and made roles in these major categories: the workplace, marriage and family, and politics.
The Evolution of Gender Roles in China

Work

In recent history, gender roles in China have been evolving. China's Cultural Revolution along with "The Silver Flower Contest" of 1956 has dramatically altered previously established female and male roles in three major categories: the workplace, marriage and family, and politics.

Marriage

China's "One Child Policy" was introduced to control population growth but has also affected traditional gender roles. Women are expected to marry early and have a single child to ensure the survival of the family line.

Family

In modern China, the extended family system is becoming less common. Couples are more likely to form nuclear families with their children. This shift has led to changes in gender roles within the family.
Argentine Jews: Jewish Identity in Latin America
**Fragments of the Chachapoya**

*By Gabrielle Davis*

Latin American Literature & History

*Martin Tschirner*

Spring 2011

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**Remembering the Chachapoya**

- Today the Chachapoya are remembered through the sites of their sacred homes and shrines. The few records of the early Spaniards, and their burial tombs.

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**The Chachapoya People**

- Adriana von Hagen explained where the name for the Chachapoya comes from. Chachapoyas are derived from the verb *chachapoy* meaning "a deceitful or impudent illiterate." A word which comes from the Tupi language.

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**Some of the Chachapoya**

- The Chachapoya were preserved in graves made from clay and grass that were beneath an overhanging rock. In a cave that period most likely the Ochoco Valley. (Tschirner, 15)

- Other Chachapoya Elite were found in brightly painted coffins that contained ritual offerings. Some of these burial sites are marked with signs and symbols that represented the sacred beliefs of the Chachapoya ancestors.
The Hundred Acre Wood Psychiatric Hospital Patient Files

By: Anastasia Dickenson

Introduction
One in four people suffer from some form of mental illness in a given year. The World Health Organization stated that the characters in our favorite children's stories could be plagued by mental illness.

Meanwhile, deep within the Hundred Acre Wood, Christopher Robin and his friends find the key to decoding their own minds. As they embark on an exciting adventure, they learn valuable lessons about life and how to cope with mental illness.

Reflections
In childhood, we were more accepting of behaviors that, in adulthood, are considered inappropriate or abnormal and can be discovered in many other children's books.

Conclusion
For all animals of the Hundred Acre Wood, each other's differences are important. Helping each other work through difficulties with humor and empathy.

Works Cited
- Winnie-the-Pooh by A.A. Milne and E.H. Shepard (1926)
- The Bear in Mind: A Study of Behavior and Personality in Wild Beasts and Man by John B. Watson (1928)
- The Many Adventures of Winnie the Pooh by A.A. Milne (1927)
How Culture Around the 7th Century A.D. Created Standards for Islamic Women

Marriage

The Birth of Islam

The Qur'an

Treatment of Women in the Qur'an

Women's Rights and Gender Inequality
The Cultural Legacy of Asoka

Missionaries as a Vehicle for the Spread of Buddhism

Shaper of the World

Asoka's reign (273-232 BCE) was characterized by its patronage of Buddhism and its influence on the spread of Buddhist texts and practices throughout Asia. Asoka's edicts, inscribed on pillars and steles, were distributed throughout the Buddhist lands, facilitating the dissemination of Buddhist teachings and promoting the growth of Buddhism in various regions.

Asoka's edicts were inscribed in the early Buddhist communities, serving as a testament to his commitment to Buddhism and his efforts to spread its teachings. The edicts contained important texts and proclamations, reflecting Asoka's dedication to the welfare of his subjects and his support for the growth of Buddhism.

The impact of Asoka's reign on Buddhism was profound, as his policies and initiatives contributed to the expansion of Buddhist communities and the diffusion of Buddhist ideas throughout the region. Asoka's legacy continues to influence Buddhist traditions and practices, serving as a reminder of the power of religious leadership in shaping cultural and spiritual developments.

Prehistoric Museum

Empires of the East

Religious Conversion

Enlightenment at the Bodhi Tree

Truck or Fiction?

Great Books

As in the case of Asoka's influence on Buddhism, the spread of ideas and knowledge has been facilitated by various factors. In modern times, the use of books, electronic media, and other means of communication has played a significant role in the dissemination of knowledge and the sharing of ideas across different regions.

The cultural heritage of different regions is shaped by the diverse influences that have shaped their development. Asoka's reign serves as a reminder of the power of religious leadership in fostering cultural and spiritual growth, and the role of knowledge in shaping human societies. The impact of Asoka's reign on Buddhism and his influence on the spread of Buddhist ideas continue to be felt in various regions, reflecting the enduring legacy of this historic figure.
RIO DE JANEIRO'S CARNIVAL AND ITS CONTRIBUTION

THEESIS
The central attraction, samba, draws the rhythm to the carnival, and the economy falls in tune.

Samba Schools

Samba

Carnival Society

CONCLUSION
I discovered that the carnival has different traditions in the Brazilian and in the Haitian. The Brazilian, centered about dancing, makes great use of music, including the samba music, and the drums. The samba dance and music were developed about the same time. However, the images cannot be compared with the nonsense party as much as it is centered on music.