2009 SBR Funding Report For “Somnambulist”  
Bonnie L. Blake (bblake@ramapo.edu)  
Communication Arts  
December 2009

SUMMARY

In 2008-2009 I was awarded an SBR grant to develop a short film narrative, “Somnambulist.” Based on a true story, “Somnambulist” is about an unemployed homeless woman, “Jane,” who is attempting to transform her life by breaking free of her self-destructive path and reclaiming the life she once had (a home, a family, a successful career as a biochemist) prior to her downfall. We meet her after she has made some difficult decisions about what she needs to do in order to accomplish this goal. This includes abandoning her homeless friends, seeking shelter, overcoming addiction, and seeking employment in a field she once thrived in.

Everything in Jane's new life is proceeding as she planned. She is clean and sober, has secured a room to live in, and she is proactively interviewing for jobs. What is, however, hindering Jane's progress, is a sleep disorder she suffers from, known as “false awakening.” A common disorder, false awakening sufferers have various levels of difficulty discerning between waking and dream states. Although Jane is now living a clean life, her sleep disorder appears to worsen. What's worse is, she does not know that these surreal, nightmarish experiences she is having are a result of a sleep disorder, nor does she know how to solve the problem other than to ignore it and get on with her life. Eventually the disorder threatens to destroy her plans for a new life. As the false awakening hijacks her life, Jane goes to extremes to find the intersection between the real and the imagined.

The film questions the mysteries of human perception, the border between reality and unreality. It also comments on the invisibility of the homeless, the loneliness, the difficulties encountered when one attempts to pull themselves up from the bottom, and social insensitivity toward others' misfortunes. The duration of this short narrative is 30 minutes or less.

PRODUCTION TIMELINE/STATUS

June To August
- I completed the script over the summer and circulated it among film editors and professional scriptwriters.
- I assembled a crew of four filmmaking students and one graduate student to assist me in the filming of the project.
- I procured two actors (one, a Ramapo student) for the film. The students also assisted with administrative tasks (scanning, researching articles, light editing, organizing archived pictures and footage, etc.).
- I began scouting out locations for the film and took test shots of locations from multiple angles.

August through October:
- I procured a total of five professional actors and three additional Ramapo student actors for the film.
I re-scouted out locations for the film based on which towns would allow my production to be filmed at their location. I finally located a local municipality, Pompton Lakes, which possess all the qualities of the real location (Hackensack, NJ). I have been granted permission by the town to proceed with my project. As of December 22, 2009, I am in the process of procuring an insurance certificate for filming in this town. As soon as I obtain it, filming will proceed at various locations in Pompton Lakes. My contract with the town stipulates that upon completion, I will screen/premiere the film in Pompton Lakes' local theater.

I worked with two actors and completed both interior and exterior test shots. Since the film is being shot in high definition (HD), I had to determine what setting would be appropriate for this production keeping in mind the target venues.

I completed preliminary test shots to determine which equipment and equipment settings work best for the treatment of this film. Since I decided to shoot in high definition (HD), it's necessary to experiment with different aspect ratios and different frame-per-second shots (technology-related issues) to determine which settings yield the atmospheric effects I am attempting to create. One road-block I have encountered has been the output from the camcorder I am utilizing. The camcorder, a Canon XH1, does not perform well in dimly lit scenes. This adds another technical challenge in the post-production of the film.

I created preliminary storyboards for all scenes.

**November:**
- I adapted different contracts for actors (both union and non-union) and my production crews to make the terms of my project clear. I consulted an attorney who assisted in this process.
- I devised the scene scheduling chart and met with crew and actors 3 times within the month for rehearsal.
- I scouted new interior locations (motels, convenience stores, libraries, restaurants) and took pictures of the locations for revised storyboards. I used the images to refine the storyboards.
- I revised the script again.
- I completed test shots in various venues; completed post-production on the test shots; created and applied several atmospheric presets to experiment with mood of the narrative.

**December**
- The crew shot the first scene with multiple cameras.
- We viewed and critiqued dailies with crew. Footage was captured from scene 1.
- Crew member shot and captured old 8 mm film footage on VHS tapes to use in the first scene.
- I identified another HD camcorder, an old Sony (the quality of which, is better than our other camera), and the crew experimented with it while shooting the first scene of the film. Post-production was also performed on the all Sony film footage as well as the hi8 output including capturing, compositing and visual effects. I am currently deciding which effects work well for various scenes with the goal of creating the most engaging, visual atmosphere.
FUTURE PLANS

Spring Summer 2010
• Finish shooting the rest of the film.
• Capture footage and edit footage.
• Revise storyboards based on the footage.
• Re-shoot problem scenes.
• Organize and apply effects and motion graphics.
• Complete post production of film.
• Print film to master tapes.

Summer-Fall 2010
• Create animated DVD menu.
• Begin authoring a master DVD.
• Design DVD jacket and disk labels.
• Design promotional materials.
• Create promotional website.
• Identify a DVD distributor.
• Selectively identify well-known film festivals and submit work.
• Promote film on web and with my numerous contacts in the film and animation industry.

Equipment Rented:
• Generator
• Dolly
• HD camcorder*
• Lighting kit*
• Boom and mic*
• Production clapboard*
• *from DCTV, New York, NY

Purchased
• DVD tapes
• Production slate
• Electric steamer
• Gaffer’s tape
• Tri-pod roller
• Diana F+ 35mm plastic camera and flash
• Dry markers
This report is a summary of the activities that I undertook as a result of the SBR grant that I received for the 2008-2009 academic year. This grant was in the form of a summer stipend that was used during the summer of 2009. As described below, this grant has helped me to make a significant breakthrough in my research. As a result of my study of the research on magnetism by Franz Aepinus, I became familiar with the Tischgesellschaft of the great 18th century mathematician Leonhard Euler. This was a circle of young scientists who met regularly at Euler’s house in Berlin during the 1750’s. This research has helped me come to a deeper understanding of the Enlightenment and Euler’s role in that significant period.

As a result of this work I have given two conference presentations (one at a major international conference).

**Description of project:**

The purpose of this project was to make an intensive study of the development of the theory of magnetism in the 18th century. This development was largely the work of mathematicians (my expertise is in this field). The point being that magnetism went from a field dominated by qualitative descriptions, which were often metaphorical, dominated by teleological pronouncements, to a science using precise mathematical models. Although there is a fairly substantial secondary literature devoted to 18th century magnetic research, I believe that my research program has an original perspective. I intend to look at magnetism as an example of the use of mathematical principles to give a unifying explanation for natural phenomena (e.g., Halley’s mapping of the Earth’s magnetic field).

The study of magnetism in the 18th century was dominated by Cartesian principles. Rejecting the concept of action-at-a-distance, Descartes posited a model in which magnetism operates through the action of a subtle matter passing through channels in magnetic bodies; the channels being aligned with the axis of the magnet. This model was an advance over the earlier ideas of Gilbert, who asserted that magnets will attract one another because they “take delight in their mutual proximity.” Furthermore, a magnetic needle points out the proper course for sailors just like the “finger of God”.

Euler further developed the Cartesian model using the theory of fluids. The force acting on a magnetic needle is an attractive force, such as gravity, but it also aligns the needle. This is analogous to a floating body being pushed in a particular direction by the action of the fluid.

Euler, Daniel Bernoulli, and others further developed the Cartesian model using the theory of fluids. Then in 1759, while at the St. Petersburg Academy of Sciences, the
German mathematician Franz Ulrich Theodor Aepinus, a protégé of Euler’s, published the first mathematical analysis of magnetism; the Tentamen theoriae electricitatis et magnetismi. Aepinus was also the first to take a unified approach to electricity and magnetism (researchers since Gilbert viewed these as distinct phenomena).

It is important to understand that in this treatise Aepinus broke free of the Cartesian paradigm. He was primarily interested in understanding the properties of the magnetic force, rather than hypothesizing about the cause of that force. It is as vain to inquire why the Earth has a magnetic field as it is to ask why the planets revolve around the Sun in the direction they do, rather than the opposite direction. This “metaphysics-free” approach was to be highly influential on later work of Coulomb and others.

This interest in the metaphysical foundations led me to broaden my research. In the 1750’s Euler became the center of a circle of very distinguished young scholars in Berlin. The mathematician Franz Aepinus referred to this circle as a Tischgesellschaft, a table company. One can only imagine the fascinating discussions that took place around Euler’s dinner table. Many of the members of Euler’s circle became leading figures in their fields. Aepinus wrote a highly influential treatise on electricity and magnetism. Johann Gottlob Lehmann was the first to propose the theory that geological strata correspond to different ages in the Earth’s history. Johann Bernhard Merian’s translations introduced the philosophy of David Hume to the Continent. The Swedish scientist Johann Carl Wilcke introduced the concept of specific heat (sometimes incorrectly attributed to Joseph Black). The physiologist Caspar Friedrich Wolff was a founder of the field of embryology. In this talk we discuss these and other important figures of Euler’s circle. I also examined Euler’s role in obtaining positions for nearly all of these scholars in St. Petersburg during the Seven Years’ War (Merian being an exception).

Members of Euler’s circle confronted fundamental problems, such as the creation of the Earth and creation of life. They rejected models of Descartes, Leibniz, and Christian Wolff. Even more importantly, they rejected religious tenets.

Activities:

I did intensive library research at the Library of Congress, Columbia University, the Science, Industry and Business Library in Manhattan and Yale University. Here is a sample of the works that I consulted:


Bonnet, Charles. Considerations sur les corps organisés, où l'on traite de leur origine, de leur développement, de leur reproduction, Geneva, 1762.


Euler, Johann Albrecht. *Versuch die Figur der Erden durch Beobachtungen des Monds zu bestimmen*, Munich, 1768


Gilbert, William. *De magnete, magnetisqvis corpoibus physiologia nova*, London: 1600


Knight, Gowin. *An attempt to demonstrate that all the phenomena in nature may be explained by two simple active principles, attraction and repulsion wherein the attractions of cohesion, gravity, and magnetism are shewn to be one and the same*, London: Nourse, 1754.


Michell, John. A treatise of artificial magnets in which is shewn an easy and expeditious method of making them, superior to the best natural ones, Cambridge: Bentham, 1751.


Whiston, William. The longitude and latitude found by the inclinatory or dipping needle, London: Senex and Taylor, 1721.

Wülck, Johan. Disputatio physica experimentalis, de electricitatibus contrariis, Rostock, 1757.


Outcomes:

I gave a presentation at a conference entitled “1759: An Interdisciplinary Conference,” that was held April 15-17 at Queen’s University in Belfast, Northern Ireland. The presentation was on the work of Aepinus. I feel that the talk I gave was very successful. At this conference I interacted with academics from several disciplines. The majority of speakers came from the fields of literature and history (many of them are renowned in those own disciplines).

At the meeting of the Euler Society, July 12-15, 2009 at Rogers Williams College in Bristol, Rhode Island I gave a presentation on Euler’s Tischgesellschaft. This was perhaps the most successful presentation of my career. I clearly interested the audience in my thesis that Euler’s circle in the 1750’s was one of the most significant intellectual circles in human history. Very little has been written about this circle, but given its clear importance, Frederick Rickey and Ronald Callinger, two of the world’s most famous historians of mathematics, approached me after the talk and strongly encouraged me to turn the talk into a book.

Future work:
My future work is clear. I will begin to deepen my research in the hopes of writing a book on Euler's circle.
Memorandum

To: Joan Capizzi  
Re: 2009 SBR Report

From: Erick Castellanos  
Date: August 25, 2009

During the summer I continued my research with Elizabeth Gilmour, a Ramapo College student, studying the food accessibility for Mexicans living in East Harlem. During the summer months we engage in mapping exercises recording the type and location of food retailers in East Harlem. We also conducted participant observation in GreenMarkets (Farmers' Markets) both in East Harlem and in other locations in the city. At these markets we were also able to conduct informal interviews with sellers, organizers, and consumers. We also established contact with the management of the GreenMarkets in New York and we are in the process of setting up interviews with them. We also continued our outreach to non-profit organizations in the neighborhood that work on nutrition, health, and immigration issues, including the East Harlem Preservation Society, Esperanza del Barrio, and the Asociación Tepeyac. We have published a short informational article in Anthropology News (see attached) and we are working on a longer article to be submitted to Practicing Anthropology. We are continuing our research this fall with the expectation to undertake more in-depth interviews with members of the community.

APPROVED: ☐ YES

Dean Nejad, please sign and forward to Joan Capizzi, Office of the Provost.
September 12, 2009

To: Provost Beth Barnett
   and Dean Hassan Nejad

From: James Hoch, AIS

Re: SBR Funding Summary, August 31, 2009

In accordance with the SBR funding procedures, I am supplying you with a summary of my productivity and accompanying materials. This summer I worked on writing new poems and doing research for Thirst, a new manuscript of poetry, though the title will change. Having the grant allowed me the opportunity and leisure to make some good creative and editorial strides in fulfilling what will be three or four year process that hopefully will result in a good draft by June 2010. I wrote several poems and revised others and have attached them here.

Largely the manuscript has morphed and shifted from, its original intent. It seems now to investigate the question of how we find beauty, joy, pleasure in a time of collapse: war, history, environmental degradation, psychological despair. The poems investigate this question as well as worry the state of things in places as far flung as Rome, Lithuania, Nicaragua, New York and eastern Washington.

The poems are largely meditative on these larger themes, but always include some personal exigence (my brother’s service in Afghanistan, for instance, or commiserating over the death of parents as a friend and I fly over the Palouse in eastern Washington). I am hoping that it will be a fulfilling read for my editor at WW Norton.

Poems from this manuscript have appeared in the following journals: American Poetry Review, Virginia Quarterly Review, New England Review, Gulf Coast, Seattle Review, Poetry Northwest, Meridian and 32 Poems. More are being submitted elsewhere.

Sincerely,

James Hoch
REPORT

This report describes my use of the Separately Budgeted Research stipend for Summer 2009. As described in my application I used the funds supporting time away from teaching to research and work on my book length-project. The manuscript, entitled “Nietzsche is My Marriage Counselor and Other Tales of True Life Philosophy” has made advances. I researched the notoriously obscure philosopher Ludwig Wittgenstein for chapter written this summer.

ABSTRACT OF PROJECT

“Nietzsche is My Marriage Counselor and Other Tales of True Life Philosophy” reveals how philosophy – that bastion of rarefied exclusivity – can be grounded, funny, and uplifting. The manuscript has autobiographical elements, as I blend the wisdom of great thinkers with the contemporary scene and my own life. The title of the book is taken from the opening chapter, which connects the philosophy of Friedrich Nietzsche with marital relations. Each chapter is intended to elucidate philosophy by showing how a thinker pertains to the way we live now.

My work on the Wittgenstein chapter so far compares dating to Wittgenstein’s conceptual analysis. Are there necessary and sufficient conditions which define the perfect mate? Or should we use a family resemblance model, such one’s soul mate ‘resembles’ someone -- and if the latter technique is used, whom should your mate resemble? Here is an excerpt from the new chapter:

My teaching assistant for my first philosophy course at this prestigious university was deeply strange. All his students talked about it, the different sections comparing notes. We enjoyed his class a good deal, as he was an excellent teacher, in
part because he was so peculiar it made for a fascinating hour — like watching arty foreign film with no subtitles. For example, he audibly and unconsciously moaned for no reason. One day he made no eye contact with anyone, but conducted the entire class while staring at his own hand. The next class his fierce blue eyes would scan the room, silently waiting for something to happen. Though he was decidedly handsome, he was always lumpy and wrinkled in ill-fitting clothes. He would seem to be on the verge of sleep in the middle of class, but perk up noticeably and unexpectedly: “What do you mean by that?” demanding clarification from a student over the most innocuous remark. He walked incredibly slowly and carefully, like a gouty old man, even though he was certainly in his mid-twenties. I loved him immediately then and for years to come.

As I would later discover there was a perfectly simple explanation for this bizarre classroom demeanor: he was a Wittgensteinian. Wittgensteinians have a common essence. They are all a little mad.

It wasn’t until my second term senior year that I got to know Ludwig Wittgenstein. I took a chance taking the Wittgenstein class. I had no idea who this philosopher was. My instructor was a small, nervous, pedantic man, and I didn’t get much out of the course itself. I don’t think the professor saw much in me, either. When he learned I was off to get my Ph.D. in philosophy in the fall he kept verifying that he had heard me right. ("You? Philosophy? Not literature or something? Really?") Maybe it was just his speech impediment that made him repeat the question so many times. More likely, though, I didn’t fit his concept of a philosopher because his questions almost sounded like a hurried reshuffling of mental files. I remain moderately insulted.

FUTURE OF THE PROJECT

Work on the book manuscript continues. I am not as close to the completion of the project as I would like, as the upcoming publication of an article on the ethics of fashion consumed more time this summer than I anticipated (see below). Nevertheless, I expect to continue work on the book this academic year, with a possible completion date of 2011.

Finally, let me offer a postscript to my SBR Summer Stipend award of 2009. Two research agendas previously supported by the Foundation are on the verge of publication.
“Women Shopping, Women Sweatshopping: Consumerism as a Moral Dilemma” has been accepted for publication in the upcoming volume *Fashion and Philosophy* (2010, Wiley-Blackwell, Jessica Wolfendale, Ed). In addition, “Sharing Strategies for Success as a Feminist Philosopher” (co-authored with Sophia Wong) will at last be published in the Fall 2009 edition of the *American Philosophical Association’s Newsletter on Feminism*. 
REPORT ON SEPARATELY BUDGETED RESEARCH WORK COMPLETED
IN SUMMER 2009.
Report submitted: September 2009 by Meredith P. Davis
Assistant Professor of Art History
School of Contemporary Arts
Summary:
I applied for SBR funds to support the development to a conference paper that I delivered at Université Haute Bretagne, Rennes France, in April 2009, into a published article. The conference organizers have decided to publish the proceedings of the conference and are submitting a selection of the papers, including mine, to ASHGATE PRESS, a leading British academic press that often publishes on art historical topics, particularly related to British and European art.

My work this summer involved reading more of the secondary literature on British art of the 18th century and on the development of the art market. The focused topic of my research and writing is William Hogarth’s print titled The Battle of The Pictures (above) a small print made by Hogarth as an admission ticket to an auction of his works. My research also dealt with the development of the art auction. My final paper, submitted to the editors on November 13, 2009, includes several comparative illustrations and a developed historical discussion of the print itself, as well as its social, economic and intellectual context. If the book project does not move forward quickly, I will be submitting this article to the U.S. - based journal eighteenth-Century Studies since I am very excited about what I have produced.

This SBR grant has allowed me to further develop the conference paper I gave in April. As a result, I have applied to give the new, fully developed argument at a conference of the Eighteenth-Century Studies Association, a national academic conference in March 2009. Update: this paper has been accepted and will be delivered at this major scholarly conference in March 2010. In addition, I was recently asked to present new work at a conference in honor of a major scholar who was retiring at Columbia University – I presented the new, enlarged work on Hogarth at this conference, and was met with approval, entreaties to publish this work stateside, and further support from scholars such as Pamela Fletcher, professor of Art History at Bowdoin College, who wants to work with me in the future on related topics. I have enclosed the program from that event here.

This scholarship has also motivated me to teach the work of William Hogarth, whose humor, satire and graphic style I think students would love. I am therefore planning to develop a course on Comics, Caricatures and Cartoons that features William Hogarth, among many others, once I can secure some support for the extensive research that this new curriculum would involve.

I want to thank the Provost’s office for this support and express my deepest hope that such support can not only continue, but also expand with our expanding faculty, so as to continue to support research, thinking and learning that enrich the college and community as a whole.
A SYMPOSIUM IN HONOR OF
NATALIE BOYMEL KAMPEN
Professor of Women's Studies and Barbara Novak '50 Professor of Art History
Saturday, October 24, 2009
Barnard College, Julius Held Lecture Hall, 304 Barnard Hall

PROGRAM

9:30 AM
Welcome and Coffee

10:00
Introductions by Barnard and Columbia Art History Department Chairs
Keith Moxey
Robert Hamat

10:30
Keynote Address

11:30
Session One
Elizabeth Marlowe, Colgate University: “Bisogna Misurare” On Interpretation and Not Writing the History of the Velabrum Quadrifrons”
James F. D. Frakes, University of North Carolina at Charlotte: “The Visual Topography of the Porte de Mars in Reims”
Rebecca Mo’holi, Brown University: “Monsters in the Baths of North Africa”

12:45 PM
Break

2:30
Session Two
Celeste L. Guichard, Savannah College of Art and Design: “The Sacrificial Word at Hadranic Karios”
Hercia Valladares, Johns Hopkins University: “What is in a Shoe? Narrative and Desire in Roman Art”

3:45
Session Three
Pamela Feltcher, Bowdoin College: “Gossiping at the Royal Academy”
Meredith Davis, Ramapo College: “Hogarth in Flight”
Laura Aunough, Parsons The New School for Design: “Praecipuus Politics in French Revolutionary Caricature”

5pm
Closing Remarks
Richard Brilliant, Columbia University
Reception to Follow
American Society for Eighteenth-Century Studies

About Us

History and Purpose

The American Society for Eighteenth-Century Studies is an interdisciplinary group dedicated to the advancement of scholarship in all aspects of the period...from the later seventeenth through the early nineteenth century.

Established in 1969, the American Society for Eighteenth-Century Studies advances study and research in the history of a time that has profoundly influenced our world. ASECS is a pioneer in interdisciplinary investigation, and it therefore welcomes as members those working in all areas of scholarly inquiry pertinent to eighteenth-century studies.

Constitution

Annual Meeting

One of the Society's most visible and exciting activities is its annual meeting, held in the spring under the auspices of a host college or university. Meeting sites have ranged across the United States and Canada. A typical meeting attracts more than 600 delegates representing a variety of different academic disciplines.

Annual Meeting

Past Meeting Sites

Fellowships

Participating with eleven leading research institutions, ASECS currently sponsors a fellowship program intended to promote and sustain research in the eighteenth century. In addition, the Society awards several travel-to-collection fellowships.

Joint Research Fellowships

Travel Fellowships

Financial Information

Annual Audit

Great Teachers

http://asecs.press.jhu.edu/aboutus.html
14. **"The Eighteenth Century in Motion"**  
**Suite 4v18**  
Chair: Alistair TALLENG, Colorado College  
1. Lila Miranda GRAVES, University of Alabama, Birmingham, "Walking the Western Circuit: Paradise Hall, Glastonbury Tor and the Arthurian Context of Tom Jones"  
2. Meredith DAVIS, Ramapo College of New Jersey, "Hogarth In Flight"  
3. Michael YONAN, University of Missouri, "Movement, Perception, and Salvation in the Bavarian Rococo Church"

15. **"Bluestocking Philosophy and Enlightenment Thought"**  
**Turquoise**  
Chair: JoEllen DELUCIA, John Jay College, City University of New York  
1. Rachel JURADO, University of Notre Dame, "Elizabeth Carter and Women's Pursuit of Happiness in the Enlightenment Novel"  
2. Deborah HELLER, Western New Mexico University, "Talking a Blue Streak: Bluestockings Practice Enlightenment"  
3. Celia Barnes RASMUSSEN, Indiana University, "Warm Bodies by the Fire-side: Elizabeth Carter's Epistolary Philosophy"  
4. Olivera JOKIC, John Jay College, City University of New York, "What is Enlightenment? Female Characters in a Tale of Improvement, from the Bluestockings to Catharine Macaulay"

**LCD PROJECTOR**

16. **"Economics and Literature"**  
**Suite 218**  
Chair: Reginald MCGINNIS, University of Arizona  
1. Mike HILL, State University of New York, Albany, "The Pleasing Wonder of Ignorance: Adam Smith's Divisions of Knowledge"  
2. Olivier DELERS, University of Richmond, "Prefiguring the 'New' Spirit of Capitalism in Sade's Les Infortunes de la vertu"  
3. Stéphane PUJOL, Université de Paris X - Nanterre, "La Notion de 'Commerce' à L'âge Classique"  

**SESSIONS II**  
9:45 - 11:15 a.m.

17. **"ECCO, EEBO, and the Burney Collection: Some 'Noisy Feedback' (Roundtable)"**  
**Alvarado E**  
Chair: Anna BATTIGELLI, State University of New York, Plattsburgh  
1. Sayre GREENFIELD, University of Pittsburgh, Greensburg  
2. Stephen KARIAN, Marquette University
Summary:
I am applying for SBR support the development to a conference paper, to be given at Université Haute Bretagne, Rennes France, in April 2009, into a published article, to be submitted to peer-reviewed journals by August 2009. The topic of my research and writing is William Hogarth’s print titled *The Battle of The Pictures* (above). With careful attention to such theoretical texts as Marx’s *Grundrisse*, his prolonged meditation on the phenomena of exchange and circulation, I propose that *The Battle of the Pictures* gives concrete form to one crucial and distinct aspect of modernization, namely the new mobility, flimsiness, ephemerality, and ubiquity of pictures. Rather than being a result of commodification, these are the conditions of commodification, which depends, most of all, on pictures, like other commodities, being able to circulate.
Scope/Description of the Project

Statement of Purpose and Intended Outcomes:

This SBR grant would allow me to spend the summer of 2009 turning the paper delivered in April in France into an article to be submitted to peer-reviewed journals in art history and cultural history. As mentioned in the summary, I have already been accepted to the conference in France, hosted by an EU International Research Group housed within the University at Rennes. For the conference, which is in the subject of “Art and Commerce in Britain XVIII – XXI centuries.” I will have completed the fundamental research on my topic, which centers on a specific print by William Hogarth, but the SBR grant would allow me to spend 8 -10 weeks of summer writing the article text of approximately 5,000-7,500 words, with a minimum of 8 illustrations, expanded from a 200-word conference paper. The SBR grant would also allow time for other work necessary for publication, such as securing rights to reproduce illustrations, talking to editors of academic journals, proofreading, editing, and other detail-oriented tasks. This project will expand my field of research in exciting ways, while utilizing my strong background in the historical links between capitalism and cultural modernity.

The Topic: Hogarth in Flight:

Hogarth is well outside of my field of specialization, and my paper, which will focus on a specific print of Hogarth’s titled The Battle of the Pictures (see above) has been welcomed as the work of an outsider with a particular theoretical perspective. My road to understanding Hogarth is via Karl Marx, and in particular his ideas about circulation as worked out in his major study, the Grundrisse. My argument is that Hogarth’s image should be understood as part of a growing aesthetics of exchange and circulation. I will argue that Hogarth’s Battle of the Pictures presages Marx’s famous phrase, that under capitalism, “all that is solid melts into air.”

The fact that this print was originally made as a bidder’s ticket for an auction of Hogarth’s own works makes it particularly relevant to the conference’s topic: it has been read as Hogarth’s indictment of the auction business, but another reading is also possible: here Hogarth’s images take flight, clearly conceived of by him as moving through the world, as commodities. It is their ability to circulate that makes them so.

Hogarth’s image pictorializes the circulation of images that steadily gains in volume and in speed from the eighteenth though the nineteenth centuries. In the British market for pictures, Hogarth is both critic and early adapter to the market, and this image fits into a visual lexicon which, I will propose gives concrete form to one distinct aspect of modernization, namely the new mobility, flimsiness, ephemerality, and ubiquity of pictures. Rather than being a result of commodification, these are the conditions of commodification, which depends, most of all, on pictures, like other commodities, being able to circulate. Before the summer, a great deal of work will already have been done. In order to develop my argument, I will be spending a great deal of time familiarizing myself with the literature on Hogarth, on recent studies of culture and economy of Eighteenth-century Britain, as well as reviewing my own notes on Marx, and re-reading major sections of Marx’s Grundrisse and Capital.
This work offers an exciting opportunity for me to move beyond my field of specialization in American art of the nineteenth century, while it fully utilizes my strong background in political economy, economic history and theory, which as focused on thinkers such as Georg Simmel, Karl Marx, and later theorists of economic modernity.

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<th>Present State of Development/ Timeline</th>
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<tr>
<td>November 08- April 09</td>
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<td>May 09-July 09</td>
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| August 09                           | Article is submitted to one of the following:  
|                                    | *Art Bulletin* (the premier art history journal in the U.S.)  
|                                    | *Art History* (the equivalent journal in Britain)  
|                                    | *The Oxford Art Journal* (a more theoretically-minded journal with international circulation.  
|                                    | *Eighteenth-Century Studies* |

**A note on Student Research Possibilities:**
In spring of 2009 I will be teaching a senior-level capstone class titled Advanced Research in Art History. If awarded an SBR to support turning my conference paper into a larger work, I would participate in this class not only as a teacher, but as a researcher, and share my own research with the class, as I have my students do. I would eagerly hire a student to work with me on this project over the summer, and to that end, I have included a sum for a student research assistant in my budget.

**Budget:**
See attached *Budget Sheet*
SEPARELTY BUDGETED RESEARCH PROPOSAL: 2009
By Meredith P. Davis
Assistant Professor of Art History
School of Contemporary Arts

Stipend:  
This sum will allow me to forego teaching in the summer term,  
Which is necessary to the completion of this project:  
$3,000

Student Research Aide  
$600

Photo rights and reproduction costs:  
$400

TOTAL:  
$4,000
Memorandum

To: Dr. Beth Barnett, Provost
From: Maxim Goldberg-Rugalev, TAS

Re: Summer 2009 SBR Progress Report
Date: September 7, 2009

The following is the Progress Report for my summer 2009 SBR project “Applications of some novel formulas for finite state Markov chains”.

I have explored two novel ideas in the theory of finite state Markov chains. The first one is that the product of the transition matrix interlaced with projections on states of interest gives probabilities along corresponding subsets of paths. The second observation is that after attaching complex exponential factors to each entry in the transition matrix, powers of the resulting “complexified” matrix give sums of products of certain exponential factors multiplied by the corresponding path probabilities: this “makes” matrix multiplication keep track of values attached to each segment of a path, as well as the probabilities of the paths.

My co-author, Seonja Kim, and I have written a manuscript with the same title as the project, describing our results. The following is the abstract from that paper:

We present some explicit matrix formulas for a finite state Markov chain. The first gives sums of probabilities along some general subsets of paths. Another formula yields the probability mass function (pmf) of the random variable which adds costs along subsets of paths. We then discuss how these formulas can be used to efficiently compute expected values of a function of the sum of costs along paths, as well as related applications. We conclude by describing a procedure allowing us to avoid using Monte Carlo simulation in stochastic approaches to solving some general boundary value problems. Instead, we show how to evaluate the relevant expected values exactly for discretizations of the original continuous problem. We illustrate our method numerically for a simple Dirichlet case.

cc: Dean Bernard Langer, TAS
TO: Steve Perry, Dean, School of Contemporary Arts  
FROM: Marta N. Bautis, Associate Professor of Documentary/News Production  
RE: SBR Report for 2009/10  
DATE: September 1st, 2009

The purpose of my documentary film series titled “From Ramapo to Patagonia” is to link some of the issues affecting indigenous groups in the United States with those in various regions of South America. The SBR funds allowed me to do extensive research in various places, and to finalize one of the segments of this series, titled “Sarayaku: Rivers of Corn.”

This feature-length documentary combines scenes from daily life in this Amazonian Kichwa community with archival material of their struggle to protect their ancestral lands from the invasion of international oil companies. This documentary will be screened at Ramapo College in October 15, 2009, as part of the conference “Latinization of the Americas.” It was invited to be screened as a work-in-progress at the First Ethnographic Film Festival of Puerto Rico, and it will be part of the St John Film Festival in February, 2010. The documentary was also shown in Sarayaku, the community where it was filmed, to a large groups of students and professors, with very positive responses. In another screening in Tumbaco, Ecuador, several students asked for copies of the film to show at their respective universities when classes start in September. I am now also expecting confirmation from several international film festivals, as well as organizing a premiere screening in New York City and a distribution plan.

As part of my preproduction efforts for the film series I also established contact with the Ramapough Lenape indigenous community, in Ringwood, New Jersey. Chief Dwayne Perry is very interested in the project and proposed to organize a screening in his community of “Sarayaku: Rivers of Corn.” For many years, the Ford Motor Plant dumped a large amount of contaminants in their land, seriously affecting the population. One of the segments in the film series deals with this issue.

As part of my research I attended a five-day conference at Omega Institute, where the “Thirteen Indigenous Grandmothers,” a group of indigenous women from various regions of the world, spoke about the ecological issues presently affecting their communities as well as the entire planet. My research also included consulting with experts at various locations in the US and abroad, organizing an extensive list of research materials and resources, obtaining contacts to support the logistics of production as well as crew members in various places. I also did research for additional sources of funding and in-kind donations. I already obtained a New York State Council on the Arts Award to support partial production of this documentary film series.
TO: Joan Capizzi
FROM: Marta N. Bautis
RE: Receipts for 2009/10 SBR Grant
DATE: September 22, 2009

Attached please, find the following receipts:

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Thanks to the support of the Separated Budget Research, I was able to travel to the National Library of Uruguay, where I could study the transatlantic correspondence between Spanish and Latin American authors. Given my interest in the Library resources, Dr. Tomás de Mattos, director of the Library invited me to submit an article to the peer reviewed library journal, *Revista de la Biblioteca Nacional*. The article I submitted focused on how Nicaraguan poet Rubén Dario was read by his Spanish contemporaries; specifically, I focused on the debate that Spanish writer Miguel de Unamuno and Uruguayan essayist José Enrique Rodó held on whether Rubén Dario could be the considered the “poeta de América”.

Last year, when I attended the “Transatlantic Conference” at Brown University, I was invited to submit an article to the peer-reviewed journal of the National University of Mexico, *Cuadernos Americanos*. I also submitted this article this summer. The article focused on the debates that Spanish and Latin American writers held on the Spanish “regeneration” movement in the fin-de-siècle period. Explicitly, I focused on what should be the role of Spain in Latin American, once the last colonies (Cuba, Puerto Rico and the Philippines) had become independent of Spain.

Furthermore, after sending a total of three articles based on my dissertation, presented at Harvard University if the Fall of 2007, I started to work on a book project. The project is focused on the figure of the “indiano” at the end of the nineteenth century. The “Indiano” is the name given to the Spanish immigrant who travels to South America and comes back, enriched, to Spain. Specifically, I will study whether the “indiano” is selected as the transatlantic agent for the Spanish regeneration movement in the fin-de-siècle Spanish Literature.

The resources available through the SBR grant have been crucial in the development of my research projects and in the fulfillment of my responsibilities as a professor of Spanish at Ramapo College. I would like to thank the SBR grant committed for their support in all these research initiatives.
Title: Common Ground: Environmental Justice and Chicana Literature

With the time and monies provided by the grant, I continued to study the discipline of environmental studied, ecofeminism, which are new to me, as well as significant reading, writing and planning future projects. Now I see that environmental issues are really at the heart of Chicano political concerns in spite of the fact that only a handful of scholars are writing on the connections. Many of the scholars, I found, are social scientists, anthropologists, sociologists, urban studies scholars, environmental scientists and environmental justice activists. In my previous research, I discovered more scholarship on Moraga from an environmental point of view, which encouraged me to branch out to other Chicana writer in this study.

This summer, I required a great deal of time to study the fundamental work in environmental literary studies. In particular it became clear to me that I needed to understand American environmental writing in order to contextualize the Chicana writing within that tradition. I rediscovered writers I haven’t worked with for 25 years, such as the father of American environmental writing, Henry David Thoreau, Walt Whitman, and John Steinbeck. New authors I had never even heard of such as George Catlin, Susan Fenimore Cooper (wife of the well known author of *The Last of the Mohicans*), and Edward Abbey enriched my knowledge of American literature. I also read early environmental activists such as John James Audubon and John Muir. These works and many others gave me a sense of the tradition of nature and environmentalist writings. I joined the ASLE (Association for the Study of Literature and the
Environment) and have read several articles from its excellent bi-annual journal, the ISLE (Interdisciplinary Studies in Literature and Environment).

Along with writers of the Euro-American tradition, I read early Chicano writers, such as César Chávez, Luiz Valdez, and Rudolfo Anaya to get a sense of their concerns with land rights issues. Finally, I did read Chicana works, works written by Chicana women, beginning with the work of pioneer Estela Portillo Trambley whose plays and prose open the doors for women writers. I also read more recent writers such as Gloria Anzaldúa, Ana Castillo and Helena Maria Viramontes. There are so many more Chicana writers to explore, but I feel I have learned so much about environmental writings and how Chicanas fit into that tradition. No doubt I will want to continue my work in this area and will be asking for funds to do so during this year’s SBR competition.

I drafted a new article out of this work the proposal for which I just submitted to next year’s LASA conference on “Crisis, Response, and Recovery” in Toronto, Canada, 2010. The paper is entitled, “‘...to be seen as the Earth is seen...’: Environmental Crisis in the Autobiographical Writings of Cherrie Moraga.” This paper will be part of a panel entitled, “Contested Contours: Latino/a Autobiographical Writings and the Notion of Crisis.” I also began drafting a second one I intend to submit to the National Association of Chicano and Chicana Studies conference in Seattle, Washington, which has the environment as its overarching theme. This paper deals with Estela Portillo Trambley and other pioneering Chicana writers.

Since her Ramapo visit that I helped organize this January, Cherrie Moraga has agreed to permit me to interview her, which will be a great contribution to scholarship since not much has been done on her work in environmental terms. She told me while visiting Ramapo in January as
Diversity convocation speaker, that her work was indeed becoming more concerned with the environment, so my interpretations are timely. I am hoping that I will receive funding next summer to make the trip to California to do the interview.

Finally, this summer, I presented a paper that I began working on last summer with SBR funds. The paper was presented at the Latin American Studies Association conference in Rio de Janeiro, June 11-14, 2009 and it was entitled, “Environmental Racism and Urban Decay: Salvador, Bahia’s Pelourinho on Film.” Salvador’s colonial zone, known as the Pelourinho, has been depicted in Brazilian film (and literature, most noted Amado’s Tenda Dos Milagres) as a site of racial diversity, bolstering Brazil’s national myth of itself as a racial democracy. While these films are tributes to the ingenuity and creativity of poor favela dwellers, the ideology of racial democracy and the nostalgic logic of the musical further mystify issues of quality of life and accountability in public policy. In this paper, I discuss Anselmo Duarte’s Pagador de Promessas (1962) and Margaret Gardenburg’s Ó Pai ó!, in light of the history of environmental racism present in this UNESCO Heritage site. I have been working on revisions of this work and will continue to do so in order to publish the work in a journal.
Completion Report
Ramapo SBR Grant (summer, 2009)

1. Principal Investigator
Seung-Sup Kim, Ph.D.
Assistant Professor of Biochemistry
School of Theoretical and Applied Science (TAS)

2. Research Summary
The goal of the proposed research project is to understand the functions of bacterial recombinant proteins and mechanisms of their DNA binding modes. At this stage the project is at preparation stage to obtain purified target recombinant proteins. To obtain the target proteins for the studies, we used expression clones of native and mutated forms of DNA recombination repair protein RecR from Escherichia coli (E. coli). The clones were used to over-express HisSUMO tagged forms of the recombinant proteins in bacterial expression system and the target non-tagged proteins were purified successfully. The purity and oligomeric states of the proteins were analyzed and confirmed using protein gel electrophoresis including Native-PAGE and SDS-PAGE.

3. Data and Results
Three different recombinant proteins were produced using bacterial expression system. One is native form of E. coli RecR and others are mutated forms (G39C and A172C). The mutated form has an extra cysteine at amino acid residue #39 (glycine for native form) or #172 (alanine for native form) position, respectively. The extra cysteine residue is supposed to create an artificial disulfide bond between two monomers of E. coli RecR and lock or disturb open-close function of RecR tetrameric ring at their N-terminal (G39C) or C-terminal (A172C) contact. All forms of the E. coli RecR proteins (native and mutant forms) were over-expressed in the forms of HisSUMO tagged recombinant proteins using pET_SUMO/RecR, pET_SUMO/G39C and pET_SUMO/A172C expression vectors (see Figure 1). Each expression vector was transformed separately into BL21(DE3) expression host cell containing T7 RNA polymerase gene and T7 expression system. Each expression cell was used for over-expression of each target recombinant protein by IPTG induction (see Figure 2). The expressed HisSUMO tagged proteins (native RecR, G39C and A172C) were purified using Ni-NTA affinity chromatography and the HisSUMO tag of each purified protein were digested using SUMOase. The non-tagged forms of the proteins were purified further using size-exclusion chromatography.

The purity and oligomeric states of purified proteins were analyzed using Poly Acrylamide Gel Electrophoresis (Native-PAGE and SDS-PAGE) Analyses (see Figure 3). The PAGE analyses with or without reducing agent (β-mercaptoethanol) showed higher degree of dimer formation of G39C and A172C compare to native E. coli RecR. The dimer and monomer show up around 45 kDa and 22 kDa protein size positions on the gel, respectively and G39C shows higher degree of dimer formation than A172C. The dimer formation difference tells us the formation of an extra disulfide bond of G39C mutant indirectly. The data shows successful production and purification of recombinant E. coli RecR and its mutants (G39C and A172C).
Figure 1. Map of HisSUMO_RecR expression vector. The clone contains T7 promoter for T7 expression control by IPTG, HisSUMO tag coding region and the gene encoding target protein (native E. coli RecR or its mutant forms, G39C or A172).

Figure 2. Picture of SDS-PAGE for over-expression of recombinant proteins (HisSUMO_eRecR native, His-G39C and HisSUMO_A172C).

Figure 3. Pictures of Poly Acrylamide Gel Electrophoresis (PAGE) Analyses of purified recombinant E. coli RecR and its mutant forms (G39C and A172C). (A). Native-PAGE: native E. coli RecR (eRecR); Glycine-39 changed to Cysteine (G39C); Alanine-172 changed to Cysteine (A172C); without addition of beta-mercaptoethanol (no β-mer); with addition of beta-mercaptoethanol (with β-mer). (B). SDS-PAGE: native E. coli RecR (eRecR); Glycine-39 changed to Cysteine (G39C); Alanine-172 changed to Cysteine (A172C); without addition of beta-mercaptoethanol (no β-mer); with addition of beta-mercaptoethanol (with β-mer).
4. Student Research Activity and leaning

During last academic year (fall 2008- summer 2009), one Ramapo college student and two high school students (John F Kennedy High school, Paterson NJ) were involved in the proposed research project through TAS research honors program and ACS Project Seed Summer Research Internship Program at Ramapo College of NJ.

Tara M. Drake (fall 2008 - spring 2009) was a senior student majoring Biochemistry and She worked on the project through TAS research honor program and she has involved in cloning, over-expression and purification of \( E.coli \) RecR and its mutant (G39C). At the end of spring 2009, she graduated from Ramapo College and is attending a Biochemistry Graduate Program at University of Delaware at present time. Two junior high school students (Jessica Cruz and Ahklema Haidar) from John F Kennedy High school at Paterson have worked on the project during summer 2009 through ACS Project Seed Summer Research Internship Program at Ramapo College of NJ and they involved in over-expression and purification of HisSUMO tagged proteins involved in bacterial DNA repair pathway.

During last semester (fall 2009), a senior student (Jency Alvarezy) majoring Biochemistry at Ramapo has been involved in the project. She worked on continuation of the project for over-expression and purification of \( E.coli \) RecR and its mutants (G39C and A172C).

Through the research projects, the students were exposed various advanced biochemical research techniques and experienced academic research lab environment. The students learned various research techniques including molecular cloning, site-directed mutagenesis, over-expression of protein in bacterial system, protein purification using column chromatography and agarose and poly acrylamide gel electrophoresis analyses for DNA and protein samples. The research experiences will help the future career of each student in the area of scientific research and other areas require independent research skills.

5. Future Studies

Further production and purification of various \( E.coli \) recombination proteins will be carried out using expression cloning and bacterial expression system. The prepared protein samples will be subjected to biochemical and structural studies to understand the function(s) and mechanism(s) of \( E.coli \) recombination repair system(s). The target systems for the future studies will not be limited to \( E.coli \) bacterial system. The studies will help to expend research projects from our laboratory to different bacterial systems including \textit{Deinococcus radiodurans} which is another bacterial strain has radiation resistance.

6. Supports by Ramapo SBR Grant (summer, 2009)

The Ramapo SBR Grant (summer, 2009) for the proposed research project has been used to support for the start up of the biochemical research laboratory and for the purchase of reagents and supplies for the proposed research project. The support by SBR Grant has been essential parts of successful establishing of our research laboratory and new research project. Furthermore the research project which provided valuable research experiences and opportunities to the students could not have been possible to be carried out without the support during last academic year (2008-2009).
Memorandum

To: Joan Capizzi
Re: 2009 SBR Report

From: Tae Yang Kwak
Date: August 25, 2009

I have just returned from my summer research trip to Seoul, South Korea. My application for SBR funding had been approved per award letter dated 12/01/2008, for $3,250 Summer Stipend, $300 for educational materials, $200 for equipment, and $750 for lodging.

I was in Korea doing research on my project on media censorship and authoritarianism in Korea during the Park Chung Hee regime (1961-1979) for seven weeks, from 06/17/2009 until 08/08/2009. I conducted some preliminary research at the John F. Kennedy Presidential Library in Boston, MA and the US National Archives in College Park, MA.

In Korea, I was able to acquire several thousand pages of declassified documents from the ROK National Archives (Kukka kirogwŏn), as well as scan several hundred pages of redacted (blacked out or cut out) examples of censored news magazines at the Seoul National University Library Archives.

2009 SBR Grant Expense Report Summary

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Exchange Rate on 06/17/2009: 1218 KRW per USD

encl: (1) SBR award letter dated 12/01/2008
(2) Itemized expenses
(3) Original receipts

New Jersey’s Public Liberal Arts College
2009 SBR Grant Expense Report, Itemized

Total Budgeted: $1,250.00  
Total Spent: $1,902.80

Exchange Rate on 06/17/2009: 1218 KRW per USD

#23 Educational Materials: includes printing services, educational, library, and laboratory supplies

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Other Expenses: lodging

Total Budgeted: $750.00  
Total Spent: $1,354.68

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I am submitting the paper entitled "Productivity convergence at the disaggregate levels", which is the research outcome of my SBR project. This paper has been published in a peer reviewed economics journal *Economics Bulletin*. The full information of citation is as follows:


As a requirement for the disbursement process, the dean must certify that my research is completed. I appreciate your time and support in this matter.
ABSTRACT

Project: A Study of Growth and Convergence at the Disaggregate Level

Abstract

This project is a comprehensive study of productivity growth and convergence at the disaggregate level, an important issue largely ignored in the existing literature. This study has established (for the first time in the literature) the empirics on industry-specific convergence for groups of OECD and EU countries. Issues under scrutiny include (i) how international trade and specialization are related to convergence; (ii) how within-industry growth and across-industry labor shifts contribute to convergence for aggregate economies, respectively; (iii) what are the fundamental reasons why convergence exists in particular industries. The purpose is to find a balanced solution to a more suitable growth mode and a better tuned industry structure (studies at the aggregate level are obviously inadequate for this purpose by masking disparities across industries). Meanwhile, this study also addresses econometric issues in convergence regressions. Data envelopment analysis ( DEA) methods and various econometric techniques are used in the analysis.
Productivity convergence at the disaggregate levels

Xiaoyu Wu
Ramapo College of New Jersey

Abstract
Using recently developed industry-specific purchasing power parities (PPPs), we test for β-convergence and α-convergence of labor productivity at one-digit and two-digit industrial levels for 17 OECD countries. We confirm that the principal finding of Bernard and Jones (1996)—that total manufacturing shows little evidence of productivity convergence among OECD countries—is in fact supported by the data, even though their approach is flawed by the use of aggregate rather than industry-specific PPPs. However, we find that many two-digit manufacturing industries do converge. All one-digit sectors except manufacturing exhibit strong convergence trends. Convergence also occurs in all services industries except post and telecommunications. Respective contributions of industrial productivity growth and across-industry labor shifts to trends at the next aggregate level are also analyzed.

Citation: Xiaoyu Wu, (2009) "Productivity convergence at the disaggregate levels", Economics Bulletin, Vol. 29 no.4 pp. 2513-2524.
Submitted: Jul 08 2009. Published: October 05, 2009.
1 Introduction

Since the seminal work of Bernard and Jones (1996, hereafter BJ), increasing attention has been drawn to productivity convergence at the disaggregate levels (see Carree et al. 2000, Margaritis et al. 2007, among others). BJ point out that international transfer and diffusion of technology are likely to vary in nature and intensity across sectors, and thus provide a compelling argument for examining productivity convergence at the sectoral level as well as at the economy-wide level. They examine β-convergence and σ-convergence for six one-digit sectors among 14 OECD countries over the period 1970–1987.1 Their main conclusion is that there is no evidence of convergence in manufacturing and hence that the convergence trend at the aggregate level is driven by non-manufacturing sectors, especially services.

This widely cited finding of BJ, however, is challenged by Sorensen (2001), who shows that the use of economy-wide purchasing power parities (PPPs) to convert sector-specific output quantities to a common currency seriously undermines the BJ international comparisons. Sorensen (2001) argues that, for international comparisons at the sectoral level, producer prices on domestic production related to specific sectors should be used, while aggregate expenditure PPPs are calculated from the expenditure prices of a bundle of consumption goods from all sectors. In particular, he shows that the BJ results are sensitive to the choice of the PPP base year, indicating that the aggregate expenditure PPPs are inappropriate conversion factors for sector-specific productivity levels.

In their response to Sorensen (2001), Bernard and Jones (2001) write that “... future research is needed to construct conversion factors appropriate to each sector, and that research relying on international comparisons of sector-specific productivity and income should proceed with caution until these conversion factors are available”. As part of the EU KLEMS project, Timmer et al. (2007) construct a set of industry-specific PPPs and provide a new database of growth accounts. In this paper, we establish the empirics on productivity convergence at the disaggregate levels using the appropriate industry-specific PPPs.2

Focusing only on one-digit sectors can still be misleading. In 2004, for a group of 17 OECD countries included in this study, manufacturing and services accounted for, on average, almost 90% of total output, with services alone accounting for around 70%. As these two sectors comprise very heterogeneous industries, analysis purely on one-digit sectors fails to account for within-sector disparities, essentially resembling the “comparing apples to orange” problem identified by BJ. Carree et al. (2000) test convergence in 28 manufacturing industries among 18 OECD countries and Margaritis et al. (2007) test convergence in low-tech manufacturing, high-tech manufacturing and several services industries among 19 OECD countries.3 But again, lacking appropriate industry-specific

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1The six one-digit sectors are agriculture, mining, manufacturing, EGW (electricity, gas and water), construction and services.
2Due to very limited data on capital stock, we focus on labor productivity.
3We report in this paper the results from the absolute β-convergence test, which directly examines whether different economies are getting closer to one another. But we also tested conditional β-convergence hypothesis, following Margaritis et al. (2007) in choosing controlling variables. Conditional β-convergence test examines whether economies that are farther from their steady states grow faster than those that are nearer to their steady states. Results are available upon request.
PPPs, these papers use aggregate PPPs, raising, most probably in a severer way, the issue pointed out by Sorensen (2001).

Using appropriate industry-specific PPPs, this paper studies productivity convergence among 17 OECD countries for six one-digit sectors as well as two-digit industries in manufacturing and services for the time period 1975-2004. The notions of β-convergence and σ-convergence are tested. A counterfactual analysis is performed to assess the respective contributions of productivity growth within individual industries and labor shifts across industries to trends at the next aggregate level.

Section 2 discusses convergence notions and testable implications. Section 3 explains the data source. Section 4 presents convergence test results. Section 5 provides results from the counterfactual analysis. Section 6 proposes possible future directions.

2 Convergence Notions and Testable Implications

The β-convergence hypothesis proposes that economies with relatively lower initial incomes per capita tend to growth faster than those with higher incomes. β-convergence can be tested by running the following simple regression:

\[ \bar{y}_i = \alpha + \beta \ln P_{i0} + \epsilon_i \]  

where \( \bar{y}_i \) denotes the mean growth rate of country \( i \) over the sample period and \( P_{i0} \) represents country \( i \)'s initial productivity level.\(^4\) A significantly negative estimate of \( \beta \) confirms β-convergence.

The notion of σ-convergence hypothesizes that income dispersion across economies decreases over time, i.e., \( \sigma_T < \sigma_0 \), where \( \sigma_0 \) and \( \sigma_T \) are the respective cross-country standard deviations of incomes in the first and last period. Carree and Klomp (1997) develop the following adjusted likelihood ratio statistic to test whether \( \sigma_T \) is significantly below \( \sigma_0 \):

\[ S = \sqrt{N} \frac{\hat{\sigma}_T^2 - \hat{\sigma}_0^2 - 1}{2\sqrt{1 - (\hat{\beta}T + 1)}} \]  

where \( N \) is the number of countries and \( \hat{\beta} \) is the estimate of \( \beta \) from the β-convergence regression. This \( S \) statistic has a standard normal distribution under \( H_0 : \sigma_T - \sigma_0 = 0 \).

As summarized in Sala-i-Martin (1996), β-convergence is a necessary but not sufficient condition for σ-convergence. Strong β-convergence and a violation of σ-convergence can coexist under two possible scenarios. The first scenario is overshooting, where the initially poorer countries grow so fast that they not only catch up with the richer ones but overreach them. This is not very common for aggregate economies but more likely to happen at the disaggregate levels. The second possible scenario is the case of regression to the mean (the Galton's Fallacy). As critiqued by Friedman (1992) and Quah (1993), when there is regression to the mean, a significantly negative \( \beta \) can be obtained even though the economies are not converging at all and across-country dispersion is enlarging.

\(^4\)Following BJ, average growth rate is constructed as the trend coefficient from a regression of the log level on a constant and a linear trend.
3 Data

Data are drawn from the EU KLEMS Database, March 2007 release (see Timmer et al. 2007). The 17 OECD countries are the EU-15, Japan and the USA. Labor productivity is measured as value added per hour worked in 1997 industry-specific PPP German Euros.

4 Convergence Test Results

4.1 Results for One-Digit Sector

A gestalt impression of convergence by sector is provided by Figure 1. A convergence trend is fairly evident in several sectors (especially agriculture and EGW), but there appears to be no evidence of convergence in manufacturing. Table 1 provides the convergence test results: the OLS estimates of the $\beta$ coefficients (along with relevant statistics), the standard deviation of the natural log of labor productivity in both 1975 and 2004, and the $S$ statistic. Except for manufacturing, all the estimated $\beta$ coefficients are significantly negative at 1% level. The overall picture, for total industry (the sum of all six one-digit sectors), is that of strongly significant $\beta$-convergence. $\sigma$-convergence is significant in agriculture, mining, EGW, services and total industry. The standard deviation of productivity levels in construction did fall, but the decrease is not statistically significant. Manufacturing again constitutes an outlier as the only sector for which $\sigma$ increased during the sample period. However, despite the fact that the $\sigma$ in manufacturing has increased, its absolute value in 2004 is still lower than that in agriculture, mining and EGW, all of which exhibit strong $\sigma$-convergence. It might well be the case that technological catch-up had already occurred largely in manufacturing. Dispersion of labor productivity in mining is the greatest and this might reasonably be attributable to the differences in the sizes of the mining sector in individual countries, which, in turn, is likely due to differences in natural resources and mineral reserves.

Our results at the sectoral level thus strongly support the BJ conclusion that convergence does not exist in total manufacturing, despite the fact that their results are potentially misleading because of the use of inappropriate PPPs. On the other hand, we find, in contrast to BJ, that all sectors other than manufacturing—including agriculture and mining (in which BJ find no convergence)—are converging.

4.2 Results for Manufacturing Industries

As discussed earlier, total manufacturing is composed of production in rather heterogeneous goods. It is necessary to examine more disaggregate industries to have a better understanding of the diverging trend in total manufacturing.

We carry out $\beta$-convergence and $\sigma$-convergence tests for all the two-digit industries in manufacturing. Tests results are presented in Table 3. Despite the fact that the overall manufacturing sector does not converge among the OECD countries under examination,

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5Due to data unavailability, for some industries, the country group includes less countries or the time period starts from 1977 instead of 1975. Detailed information is available upon request.

6The industry classification is based on ISIC Rev.3.
many manufacturing industries do. A significantly negative $\beta$ estimate is obtained for all manufacturing industries except textile and textile products (ISIC 17 to 18) and rubber and plastics (ISIC 25).

Significant $\sigma$-convergence is not found in several industries (i.e., ISIC 15 to 16, 17 to 18, 20, 22, 24 and 25). More specifically, the cross-country dispersion increased three industries—textile and textile products (ISIC 17 to 18), chemical and chemical products (ISIC 24) and rubber and plastic (ISIC 25)—two of which (ISIC 17 to 18 and 25) are exactly those with no evidence for $\beta$-convergence evidence. For chemical and chemical products (ISIC 24), $\beta$-convergence is not statistically rejected while there is a significant increase in $\sigma$. This is the overshooting case discussed earlier. Ireland, with relatively low productivity in producing chemical products back in 1975, achieved tremendous productivity increase over the sample period and was well above all other countries in 2004. The pattern is similar for food, beverages and tobacco (ISIC 15 to 16) and printing, publishing, and reproduction (ISIC 22), where $\beta$-convergence is statistically significant while the standard deviation of the distribution remains roughly the same. Again, Ireland enjoyed very fast growth from a relatively low position.

Combining both $\beta$-convergence and $\sigma$-convergence tests, we conclude that most manufacturing industries do converge. The non-convergence trend in total manufacturing is mainly attributable to divergence in a few industries (mainly ISIC 17 to 18 and 25).

4.3 Results for Service Industries

As the services sector is the largest one-digit sector in the economies, trend in services can have a substantial effect on that at the economy-wide level. Total services contain many heterogeneous industries. Some services, such as financial services, are fairly tradable, while others, such as community, social and personal services, are local and less likely to be traded. It would be interesting to see whether and how industries in services might differ regarding convergence.

Almost all industries in services are converging, according to results presented in Table 4. The only exception is post and telecommunication (ISIC 64), which does not exhibit statistically significant $\beta$-convergence. Estimates of $\beta$ in all others are strongly significant. The $\sigma$-convergence tests fail to reject the no convergence null for a few industries (ISIC 1, 64 and L), but the standard deviation in all industries, including post and telecommunication (ISIC 64), has decreased. Strong convergence trends in service industries might be attributable to the easy transferability of services technologies.

5 A Counterfactual Analysis

To better understand the mechanism behind the strong convergence evidence at the aggregate level, it is also important to pay attention to changes in industrial labor shares. When labor shifts occur among industries featuring different producibility levels, productivity performance at the aggregate level can be affected non-trivially. For the OECD countries included, the largest sector—total services—is the only sector which expanded in terms of labor share, accounting for, on average, 55% of total working hours in 1975 and
more than 70% by 2004. The average share of total manufacturing, the second largest sector, shrunk from around 30% in 1975 to 18% in 2004. Other sectors generally accounted for many fewer working hours, holding, altogether, only around 10% of total industry in 2004. There is also considerable heterogeneity in the growth rates of labor productivity across sectors. On average, labor productivity in manufacturing, mining, and EGW grow the fastest while growth in services and construction is relatively slow. To assess the separate contributions of within-sector productivity growth and across-sector labor shifts to the aggregate level convergence, we propose two counterfactuals of labor productivity for total industry in the last period.

Denote labor productivity for country $i$’s total industry in the last period as $p_{iT}$. Also denote sector $j$’s initial labor productivity and hour share as $p_{ij0}$ and $s_{ij0}$, and those in the last period as $p_{ijT}$ and $s_{ijT}$, respectively. It is straightforward that $p_{iT} = \sum_j s_{ijT} \cdot p_{ijT}$. We construct two counterfactuals for $p_{iT}$ as $\hat{p}_{iT} = \sum_j s_{ijT} \cdot p_{ij0}$ and $\tilde{p}_{iT} = \sum_j s_{ijT} \cdot p_{ij0}$, where $\hat{p}_{iT}$ is the counterfactual for $p_{iT}$ if there had been no labor shifts across sectors, while $\tilde{p}_{iT}$ is the counterfactual if there had been no productivity growth in any individual sectors. We then calculate the corresponding counterfactual growth rates for total industry under the construction and run the convergence tests. The results show that labor shifts across sectors do not have a significant effect on convergence in total industry. As a matter of fact, if there had only been growth in individual sectors but no labor shifts across sectors, the counterfactual ($\hat{p}_{iT}$) would be very close to the actual value. Correspondingly, the convergence test results based on the counterfactual reveal the same pattern, i.e., there would be both strong $\beta$-convergence and strong $\sigma$-convergence in total industry. However, if there had been only labor shifts but no growth, labor productivity in total industry would not have converged among the countries. Evidently, productivity growth in individual sectors explains the convergence of aggregate productivity among the OECD economies.

We can apply the same exercise to total manufacturing and total services to explore how growth in two-digit industries and changes in labor share composition affect the convergence/nonconvergence trends in the corresponding one-digit sectors. Results show that neither productivity growth in two-digit manufacturing industries nor labor shifts within total manufacturing has contributed to convergence—both cause cross-economy dispersion ($\sigma$) in total manufacturing to increase. Particularly, if there had been no productivity growth in any manufacturing industry, we would obtain a significantly positive $\beta$ estimate, i.e., change in labor share composition within total manufacturing forces the OECD countries to diverge. Convergence in services is mainly driven by productivity growth within two-digit services industries.

6 Future Directions

Using newly constructed industry-specific PPPs, we establish the empiricals regarding productivity convergence at the disaggregate levels. For a group of 17 OECD countries over the period 1975-2004, our results provide evidence for convergence in all one-digit sectors except total manufacturing. However, we find that many manufacturing industries do converge. Within the services sector, almost all industries show strong convergence.
trends. A simple counterfactual analysis that separates the contributions of productivity growth and labor shifts reveals that convergence at the aggregate level is mainly driven by productivity growth.

Data unavailability imposes serious restrictions on research regarding productivity convergence at the disaggregate levels. Lacking internationally comparable capital data, we can only assess labor productivity. When such data become available, the more economically interesting multi-factor productivity should be analyzed. Another interesting direction to pursue, with capital data, is the growth accounting exercise based on data envelopment analysis (DEA) as in Kumar and Russell (2002). Such analysis would help identify the underlying driving forces of industrial growth and convergence, and their respective contributions to aggregate cross-country trends.

Future research may also address questions such as how international trade can affect productivity convergence at the disaggregate levels (especially for manufacturing industries). The fact that convergence does not occur in total manufacturing seems to falsify the conventional wisdom that spillovers from international trade and R&D investment would speed up technical transfer and facilitate convergence. Then could international trade impede productivity convergence among trade partners because it creates specialization in producing different traded goods that might be associated with different production technologies?

The OECD countries in our sample are fairly homogeneous in nature. A natural question to ask is: if more heterogeneous countries (such as those with low productivity levels) are included, will the convergence pattern remain the same for all industries? Will there be “twin clubs” for individual industries that are found by Quah (1996, 1997) for aggregate economies? Data covering more heterogeneous economies will also help the understanding of convergence at the disaggregate levels.
References.


Table 1: Convergence Test Results for One-Digit Sectors, 1975-2004

<table>
<thead>
<tr>
<th>Sector</th>
<th>$\beta$</th>
<th>s.e.</th>
<th>$t$</th>
<th>$R^2$</th>
<th>SD in 1975</th>
<th>SD in 2004</th>
<th>$S$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>-0.021***</td>
<td>0.004</td>
<td>-5.99</td>
<td>0.64</td>
<td>0.85</td>
<td>0.50</td>
<td>4.25***</td>
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<tr>
<td>Mining</td>
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<td>0.010</td>
<td>-2.95</td>
<td>0.57</td>
<td>1.57</td>
<td>1.08</td>
<td>2.33**</td>
</tr>
<tr>
<td>Manufacturing</td>
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<td>0.015</td>
<td>-1.09</td>
<td>0.16</td>
<td>0.37</td>
<td>0.44</td>
<td>-0.73</td>
</tr>
<tr>
<td>EGW</td>
<td>-0.019***</td>
<td>0.004</td>
<td>-4.35</td>
<td>0.57</td>
<td>0.64</td>
<td>0.45</td>
<td>2.42**</td>
</tr>
<tr>
<td>Construction</td>
<td>-0.024***</td>
<td>0.007</td>
<td>-3.31</td>
<td>0.53</td>
<td>0.35</td>
<td>0.30</td>
<td>0.73</td>
</tr>
<tr>
<td>Services</td>
<td>-0.019***</td>
<td>0.004</td>
<td>-5.08</td>
<td>0.51</td>
<td>0.32</td>
<td>0.23</td>
<td>2.28**</td>
</tr>
<tr>
<td>Total Industry</td>
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<td>0.004</td>
<td>-4.43</td>
<td>0.49</td>
<td>0.31</td>
<td>0.23</td>
<td>1.96**</td>
</tr>
</tbody>
</table>

* significant at 10% level; ** significant at 5% level; *** significant at 1% level.
This applies to all following tables.
Table 2: Convergence Test Results for Manufacturing Industries, 1975-2004

<table>
<thead>
<tr>
<th>Industry</th>
<th>β</th>
<th>s.e.</th>
<th>t</th>
<th>R²</th>
<th>SD in 1975</th>
<th>SD in 2004</th>
<th>S</th>
</tr>
</thead>
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<td>D</td>
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<td>0.015</td>
<td>-1.09</td>
<td>0.16</td>
<td>0.37</td>
<td>0.44</td>
<td>-0.73</td>
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<td>-1.14</td>
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<td>0.008</td>
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<td>0.47</td>
<td>0.61</td>
<td>0.48</td>
<td>5.44***</td>
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Table 3: Convergence Test Results for Services Industries, 1975-2004

<table>
<thead>
<tr>
<th>Industry</th>
<th>$\beta$</th>
<th>s.e.</th>
<th>$t$</th>
<th>$R^2$</th>
<th>SD in 1975</th>
<th>SD in 2004</th>
<th>$S$</th>
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<td>0.49</td>
<td>0.26</td>
<td>5.34***</td>
</tr>
<tr>
<td>P</td>
<td>-0.007**</td>
<td>0.0026</td>
<td>-2.64</td>
<td>0.22</td>
<td>1.27</td>
<td>1.13</td>
<td>3.41***</td>
</tr>
</tbody>
</table>
Figure 1: Growth Paths of Labor Productivity (Natural Log) for One-Digit Sectors and Total Industry, 1975-2004
I am pleased to report that I was able to use the summer stipend SBR awarded me for Summer 2009 in order to work on my article "‘Naked as a Nedyll’: The Eroticism of Nudity in some British Medieval Romances." The award enabled me to devote most of the months of July and August to work on this text as I was relieved of the necessity of teaching. I was able to utilize library resources at the University of Minnesota, where I was located during those months. I was able to greatly expand my draft of the article and produce a significant piece of work.

In addition to my major work on this article, I worked on several other projects. In June 2009 I traveled to Wheaton College in Massachusetts to work with Profs. Michael Drout, Mark LeBlanc, and Michael Kahn from Wheaton College. They have developed a computer program (lexomics) that detects patterns in strings of text and we have been looking at several Old English texts using this program, primarily *Beowulf* and the *Christ* and *Guthlac* poems of the Exeter Book. In addition, I completed final revisions (primarily footnotes and bibliographical details) to my essay “The Aesthetics of *Beowulf*: Structure, Perception, and Desire,” which will be published in the upcoming collection entitled *On the Aesthetics of Beowulf and Old English Poetry*, edited by John Hill, author of *The Cultural World in Beowulf* (1995), *The Anglo-Saxon Warrior Ethic: Reconstructing Lordship in Early English Literature* (2000), and *The Narrative Pulse of Beowulf: Arrivals and Departures* (2007). The volume is forthcoming from University of Toronto Press in 2010. Also this summer I submitted a draft of my essay “Making the Connection on Page and Screen in Tolkien’s and Jackson’s *The Lord of the Rings*,” which has been accepted to the volume *Tolkien in Film and Fiction*, ed. Janice Bogstad, forthcoming from McFarland. In July I completed and submitted my essay “Totemic Reflexes in Tolkien’s Middle-earth” to the peer-reviewed journal *Mythlore*; I expect a decision within several months. I also submitted a proposal to the MLA project on *Approaches to Teaching J.R.R. Tolkien’s The Lord of the Rings and Other Writings* and expect a decision shortly. In July I completed and submitted a revision of my essay “Embodiment, Incorporeality, and Transformation in Tolkien’s Middle-earth” in response to readers’ comments; this essay is part of *Bodies of Light and Shadow: The Body in Tolkien*, edited by Chris Vaccaro, forthcoming from Palgrave. Lastly, I submitted my essay “Heads, Hands and Feet: Body Motifs as Components of Structure in *Beowulf*” to *Anglo-Saxon*, a journal focusing on Anglo-Saxon England. Work on this essay was supported by a previous SBR grant.

I would like to thank the college again for this award; it enabled me to devote a significant period of time to furthering my research goals and allowed me to substantially expand an important article.

Sincerely,
Yvette Kisor
SBR Summary Report
Lawrence D’Antonio
AY 2008-2009

This report is a summary of the activities that I undertook as a result of the SBR grant that I received for the 2008-2009 academic year. This grant was in the form of a summer stipend that was used during the summer of 2009. As described below, this grant has helped me to make a significant breakthrough in my research. As a result of my study of the research on magnetism by Franz Aepinus, I became familiar with the Tischgesellschaft of the great 18th century mathematician Leonhard Euler. This was a circle of young scientists who met regularly at Euler’s house in Berlin during the 1750’s. This research has helped me come to a deeper understanding of the Enlightenment and Euler’s role in that significant period.

As a result of this work I have given two conference presentations (one at a major international conference).

Description of project:

The purpose of this project was to make an intensive study of the development of the theory of magnetism in the 18th century. This development was largely the work of mathematicians (my expertise is in this field). The point being that magnetism went from a field dominated by qualitative descriptions, which were often metaphorical, dominated by teleological pronouncements, to a science using precise mathematical models. Although there is a fairly substantial secondary literature devoted to 18th century magnetic research, I believe that my research program has an original perspective. I intend to look at magnetism as an example of the use of mathematical principles to give a unifying explanation for natural phenomena (e.g., Halley’s mapping of the Earth’s magnetic field).

The study of magnetism in the 18th century was dominated by Cartesian principles. Rejecting the concept of action-at-a-distance, Descartes posited a model in which magnetism operates through the action of a subtle matter passing through channels in magnetic bodies; the channels being aligned with the axis of the magnet. This model was an advance over the earlier ideas of Gilbert, who asserted that magnets will attract one another because they “take delight in their mutual proximity.” Furthermore, a magnetic needle points out the proper course for sailors just like the “finger of God”.

Euler further developed the Cartesian model using the theory of fluids. The force acting on a magnetic needle is an attractive force, such as gravity, but it also aligns the needle. This is analogous to a floating body being pushed in a particular direction by the action of the fluid.

Euler, Daniel Bernoulli, and others further developed the Cartesian model using the theory of fluids. Then in 1759, while at the St. Petersburg Academy of Sciences, the
German mathematician Franz Ulrich Theodor Aepinus, a protégé of Euler's, published the first mathematical analysis of magnetism; the *Tentamen theoriae electricitatis et magnetismi*. Aepinus was also the first to take a unified approach to electricity and magnetism (researchers since Gilbert viewed these as distinct phenomena).

It is important to understand that in this treatise Aepinus broke free of the Cartesian paradigm. He was primarily interested in understanding the properties of the magnetic force, rather than hypothesizing about the cause of that force. It is as vain to inquire why the Earth has a magnetic field as it is to ask why the planets revolve around the Sun in the direction they do, rather than the opposite direction. This “metaphysics-free” approach was to be highly influential on later work of Coulomb and others.

This interest in the metaphysical foundations led me to broaden my research. In the 1750’s Euler became the center of a circle of very distinguished young scholars in Berlin. The mathematician Franz Aepinus referred to this circle as a *Tischgesellschaft*, a table company. One can only imagine the fascinating discussions that took place around Euler’s dinner table. Many of the member’s of Euler’s circle became leading figures in their fields. Aepinus wrote a highly influential treatise on electricity and magnetism. Johann Gottlob Lehmann was the first to propose the theory that geological strata correspond to different ages in the Earth’s history. Johann Bernhard Merian’s translations introduced the philosophy of David Hume to the Continent. The Swedish scientist Johann Carl Wilcke introduced the concept of specific heat (sometimes incorrectly attributed to Joseph Black). The physiologist Caspar Friedrich Wolff was a founder of the field of embryology. In this talk we discuss these and other important figures of Euler’s circle. I also examined Euler’s role in obtaining positions for nearly all of these scholars in St. Petersburg during the Seven Years’ War (Merian being an exception).

Members of Euler’s circle confronted fundamental problems, such as the creation of the Earth and creation of life. They rejected models of Descartes, Leibniz, and Christian Wolff. Even more importantly, they rejected religious tenets

**Activities:**

I did intensive library research at the Library of Congress, Columbia University, the Science, Industry and Business Library in Manhattan and Yale University. Here is a sample of the works that I consulted:


*Bonnet, Charles. Considérations sur les corps organisés, où l'on traite de leur origine, de leur développement, de leur reproduction*, Geneva, 1762.


Euler, Johann Albrecht. *Versuch die Figur der Erden durch Beobachtungen des Monds zu bestimmen*, Munich, 1768.


Knight, Gowin. *An attempt to demonstrate that all the phenomena in nature may be explained by two simple active principles, attraction and repulsion wherein the attractions of cohesion, gravity, and magnetism are shewn to be one and the same*, London: Nourse, 1754.


Michell, John. *A treatise of artificial magnets in which is shewn an easy and expeditious method of making them, superior to the best natural ones*, Cambridge: Bentham, 1751.


Whiston, William. *The longitude and latitude found by the inclinatory or dipping needle*, London: Senex and Taylor, 1721.


Outcomes:

I gave a presentation at a conference entitled "1759: An Interdisciplinary Conference," that was held April 15-17 at Queen’s University in Belfast, Northern Ireland. The presentation was on the work of Aepinus. I feel that the talk I gave was very successful. At this conference I interacted with academics from several disciplines. The majority of speakers came from the fields of literature and history (many of them are renowned in those own disciplines).

At the meeting of the Euler Society, July 12-15, 2009 at Rogers Williams College in Bristol, Rhode Island I gave a presentation on Euler’s *Tischgesellschaft*. This was perhaps the most successful presentation of my career. I clearly interested the audience in my thesis that Euler’s circle in the 1750’s was one of the most significant intellectual circles in human history. Very little has been written about this circle, but given its clear importance, Frederick Rickey and Ronald Callinger, two of the world’s most famous historians of mathematics, approached me after the talk and strongly encouraged me to turn the talk into a book.

Future work:
My future work is clear. I will begin to deepen my research in the hopes of writing a book on Euler's circle.