SLSA 2016 Program with Abstracts

This is the final version of the program with abstracts, corresponding to the printed program. Any further updates will be indicated at registration.

Session 1: Thursday, November 3, 11:45 AM-1:15 PM

Panel 1A: Thursday, November 3, 11:45 AM-1:15 PM *Ansley 1* (no AV)

Creating Pathology

Literature and science studies reminds us that pathology — far from a self-evident category — is often methodologically, culturally, or discursively produced. This panel explores the processes by which categories of pathology are created; it also addresses how ideas about pathology can be revised through attention to creative forms, particularly narrative. Andrew Gaedtke and Ajitpaul Mangat explore the intersections of mental difference, biography, and narrative, arguing that narrative's emphasis on world-building and plasticity invites us to understand mental difference (schizophrenia and autism) in terms of creativity as opposed to disability or disease. Rebecah Pulsifer analyzes the discursive contexts in which pathological categories (autism and average intelligence) arise. Their papers demonstrate how pathological categories often emerge from creative interplay among disciplinary boundaries, and they argue that attention to these categories' complex genealogies necessitates a more nuanced account of the relationship between the normative and the pathological. Together, the papers on this panel point to the ways in which the nexus of literature and science allows for the category of the pathological to be reimagined as creative, expressive, and different; in this way, they demonstrate how interdisciplinary inquiry puts pressure on pathological categories and the concept of pathology itself.

Chair: Rebekah Pulsifer

Creating Schizophrenia: On The Looping Effects of Human Kinds
Andrew Gaedtke (University of Illinois at Urbana-Champaign; gaedtke@illinois.edu)

Whereas schizophrenic delusions have often been dismissed or disregarded within clinical contexts as meaningless, this paper argues that they often perform critical cognitive operations through which minimal, phenomenological worlds are reconstituted in ways that share much with the world-building operations of fiction. I trace these effects through representations of schizophrenia in memoirs of psychosis and in the experimental fiction of Patrick Hamilton, Muriel Spark, and Will Self. This paper also engages with recent post-cognitive theories of delusion (Gallagher, Zahavi, Sass, Parnas) that identify the cognitive operations that are distorted or disabled in schizophrenia while also suggesting that delusions may perform reparative functions through which patients may create ad hoc, phenomenological worlds from the cultural discourses available to them. Secondly, I argue that these narratives manifest historical "looping effects" (Hacking) between the discourse of the mind sciences and the delusional language of

patients. I show that the worlds and self-experiences rendered in these texts are often adapted from the causal, explanatory models of psychiatry, cybernetics, neurology, and cognitive neuroscience to which these patients were exposed. Conversely, the metaphors patients use to explain or describe their experiences often become naturalized within psychiatric literature. Therefore, while I examine the cognitive and phenomenological operations that are creatively rendered by delusional narratives, I also demonstrate the ways in which a nosological category such as "schizophrenia" has been created through looping effects between patients and doctors.

Pathologizing the Average
Rebekah Pulsifer (University of Illinois at Urbana-Champaign; pulsife2@illinois.edu)

In the 1970s and 80s, Raymond Cattell — one of the most influential and frequently cited psychologists of the twentieth century — published a number of monographs and articles on "Beyondism," which he describes as a "rational religion" based on science. Beyondism argues that exceptional individuals' scientific research is the appropriate guide for humans' evolutionary advancement; it thus seeks to challenge what Cattell views as the sharp decline in average human intelligence. This paper explores the porous border between science and religion in Cattell's work by contextualizing Beyondism in terms of emergent notions of so-called "general" or "average" intelligence in the mid-twentieth century. I suggest that at this cultural moment, many psychologists, including Cattell, register ambivalence about "average intelligence." On the one hand, the purported benefit of Intelligence Quotient tests was to protect average intelligence from dilution from the so-called feeble-minded; on the other hand, Cattell and others pathologize average intelligence on the basis of its perceived fragility and deterioration. For this reason, I argue that mid-twentieth-century psychological discourse on average intelligence — as exemplified by Cattell's theory of Beyondism — creates a new pathological category: the ordinary, the normal, or the average. This observation charges us to revise George Canguielm's argument that the pathological produces the normal, which informs many contemporary approaches to biopolitics. Instead, Beyondism offers a case study that allows us to see how the normal can become the pathological.

Creatively Destructive: Autism, Neuroscience, and the Plasticity of Narrative
Ajitpaul Mangat (University at Buffalo; ajitpaul@buffalo.edu)

Autism necessitates a reconceptualization of the relationship between health and "deficit." Neuroscience understands autism to be a destructive entity arising from a neurological impairment and resulting in a "lack" of "normal" communication skills. By contrast, Oliver Sacks understands autism in more productive terms, as creatively destructive: "No two people with autism are the same; its precise form or expression is different in every case. Moreover, there may be a most intricate (and potentially creative) interaction between the autistic traits and the other qualities of the individual." What Sacks asserts here, I propose, is the plasticity of autism, which actively produces a diversity of forms and organizations. Drawing on the emphasis that Sacks places on writing, I argue that it is biography, or narrative, that best represents the creativity, or plasticity, of autism. I focus on the burgeoning genre of the autistic autobiography, or autie-biography. Where neuroscience relies on the "model," which attempts to delimit the spectrum of autism as a fixed and static entity, the autie-biography attests to the plasticity of autism through the inherent semantic openness of narrative, which allows for

different autisms to emerge. I compare foundational autie-biographies by Temple Grandin and Donna Williams whose respective self-narrations act as means of contrasting self-determinations. In this way, I conclude that narrative offers an alternative form of knowledge to neuroscience, since narrative, in linking pathology and novelty, reveals life to be vulnerable and radically open to change.

Panel 1B: Thursday, November 3, 11:45 AM-1:15 PM *Ansley 2* (projector and screen)

Narration and Authorship 1

Chair: David Horn

Who Writes? Automatism and the Question of Authorship
David Horn (Ohio State University; horn.5@osu.edu)

This paper examines the staging of automatic writing and the problem of authorship in late nineteenth and early twentieth century Europe, considering varied sites (the laboratory, the séance, the artist's studio) at which such writing was produced, and its authorial status negotiated. Writing that was generated automatically—that is, without the conscious control or awareness of the writer—fascinated psychologists, spiritualists, and artists. For psychologists, it promised to reveal something about the nature of personality and the structure of consciousness; for spiritualists, it seemed to offer the possibility of communication with disembodied others; and for painters and poets, it signaled an unfettered, undisciplined creativity. But such writing also raised questions about authorship, about *who* or even *what* writes—a self, an other, a hand, a pencil—and with what kinds of agency, control, and legal rights. The production of automatic scripts was frequently conditioned by the will of others (the scientist, the deceased spirit, the clairvoyant's client) who called it forth, or else by specific forms of training and self-discipline aimed at erasing the self. I argue that the problem of authorship reveals automatic writing to be a complex and social practice structured by relations of power, real and imagined: the relations of the hypnotist/therapist and the patient, of the spirit and the medium, of the clairvoyant and the client, and of the artist and her conscious mind.

Creative Desecration of Realism: Narrative as Self-Creation in *Barchester Towers*
Madison Elkins (Emory University; madison.elkins@emory.edu)

In Anthony Trollope's *Barchester Towers*, an enigmatic omniscient narrator given to self-reflexive intrusions looms large, warmly addressing readers and digressing on the art of writing. Scholars addressing Trollope's narrator, such as John Kahn, Henry James, and Paul Lyons, have either maligned his self-referentiality as a failed, over-indulgent rhetorical device or have examined the narrator on a moral plane, vindicating his interjections as representative of Trollope's professed authorial ethics. Yet these approaches, confined by a theoretical paucity that reduces all self-reflexivity to a desecration of realism, are unable to analyze Trollope's narrator as other than a transgression, an unfortunate embarrassment requiring moral justification or outright denigration. Turning away from a now outdated moralized focus, this essay will offer an alternative reading of Trollope's talkative narrator, drawing on recent advances in narratology and theories of narrative self-construction—especially the work of Paul Ricoeur—to explore this

narrative persona as representative of a particular technique of Victorian social self-creation. Reading through Ricoeur's theory of narrative identity and recent work in psychosocial theories of language and identity (such as Jaspal's "Language and Social Identity"), I argue that Trollope's narrator operationalizes an artistic creation of the social self through language, talking, and self-reflexive narrative acts, echoing the same methods of Mr. Slope and Madeline Neroni, whose own efforts at self-creation are nothing short of artistic performance. In *Barchester Towers*, I argue, artistic self-presentation occurs through narrativistic writing and speech, indicating an essentially linguistic, and perhaps essentially Victorian, method of creating the social self.

'I cannot say, I': Language and the Creation and Loss of Self in *The Strange Case of Dr. Jekyll and Mr. Hyde*

Nicole Savage (State University of New York at Stony Brook; nsavage1988@yahoo.com)

In *The Strange Case of Dr. Jekyll and Mr. Hyde*, although Dr. Henry Jekyll sets out to resolve the struggle between the good and evil aspects of his nature, hoping to stabilize his subjectivity and gain greater agency, his efforts actually diminish his agency when he loses control of Edward Hyde. When his experiment goes awry, Jekyll turns to language to recreate his personal identity and agency. However, as I argue, his employment of language as a foundation for subject formation also makes it a weapon as ungovernable as Hyde himself. Through my analysis, I aim to shift attention away from how critics have traditionally understood the concrete problems of embodiment in the novel and to rethink issues of agency in terms of both language's symbolic power and various written objects in the novel. Based on Michel Foucault's emphasis on the centrality of language to the creation of subjects and power, I analyze Jekyll's language to show how he both identifies with Hyde and attempts to reassert his own subjectivity, an ambiguity that undermines his linguistic strategy. This ambiguity also appears in the various "forged" documents throughout the novel. Then, by examining instances when Hyde is literally indescribable, I demonstrate how the lack of language becomes a tool for Hyde's own self-creation, further threatening Jekyll's agency. I close by considering various written objects in the novel as what Bruno Latour and Rita Felski call nonhuman actors, which unconsciously exercise their own agency.

"Dabbling Like a Plastic Artist": Latour, Thoreau, and Material Creativity

Melissa Sexton (Georgia Institute of Technology; msexton6@gatech.edu)

In *The Environmental Imagination*, Lawrence Buell challenged literary critics to re-evaluate the relationship between literature and the material world. In response to theoretical perspectives that "privilege[ed] structure, text(uality), [and] ideology," Buell drew attention to the influence material environments exerted on texts (86). For Buell's critics, such attention to materiality was potentially limiting to textual creativity. However, recent work in the field of new materialism has complicated critical understandings of the relationship between creativity and materiality: scholars including Bruno Latour and Jane Bennett see matter as vibrant actants rather than as inert objects, imagining the material world as an integral part of creative processes. In this presentation, I will discuss my work on Bruno Latour and Henry David Thoreau in order to explore the relationship between the material world and literary creativity. I argue that Latour's

work on scientific epistemology can be adapted to discuss the ways in which environmental writers such as Thoreau depict their own creative work. Latour conceives of scientific knowledge as the result of processes of human/material interaction; he thus frames scientific understanding as inherently collaborative and creative. Turning a Latourian lens on Thoreau's *The Maine Woods* and *Walden*, I argue that Thoreau's work similarly emphasizes the collaborative role of the material environment in the development of literary creativity. A new materialist approach to Thoreau's work thus emphasizes the qualities Buell first noted in environmental writing: thoughtful awareness of the complicated interplay between creativity, materiality, and textuality.

Panel 1C: Thursday, November 3, 11:45 AM-1:15 PM *Ansley 3* (projector and screen)

Technologized Bodies

Chair: Robert Rosenberger

When Technologies Create Bodily Habits: Lessons from the Experience of Phantom Phone Vibrations
Robert Rosenberger (Georgia Institute of Technology; robert.rosenberger@pubpolicy.gatech.edu)

When we use technologies on a regular basis, we develop deep and specific bodily habits. These habits are often essential to the skilled use of the device (e.g., driving safely, typing quickly), but can also bring about problematic or dangerous side effects (e.g., distracted driving). One contemporary phenomenon that has the potential to shed light on these dynamics is "phantom vibration syndrome," i.e., the experience of your phone vibrating in your pocket when it never actually vibrated. In my own work, I have developed a phenomenological account of the experience of phantom vibrations that draws on a conception of bodily-perceptual habits. And I have contrasted this account with the cognitive and neurological explanations on offer. Also, last year with the help of the public relations folks at Georgia Tech I developed minute and a half video on the subject (https://www.youtube.com/watch?v=wTzqtGIeqT4). It went viral, covered by dozens of sources from the BBC to the New York Post, radio stations in London, Atlanta, New York City, and Chicago, and news outlets worldwide translating the story into a multiplicity of languages. For at least the first half of 2016, it is not an exaggeration to say that on this small topic I was the world's foremost expert. In this presentation I will review and reflect on these experiences, and offer suggestions on what phantom vibrations means for our contemporary technological situation.

Machine Interiority: The Pushbutton at the Limits of the Human
Jason Puskar (University of Wisconsin-Milwaukee; puskar@uwm.edu)

This paper argues that what western liberal subjects have come to understand as purely human interiority has been shaped, and even constituted, by that most mundane mechanical interface, the pushbutton. Since the seventeenth century, westerners have conceived of the human body as a machine, and by probing the body's interior they learned to understand it as a set of mechanical processes. Around the same time, however, westerners also began enclosing their machines, concealing the rational, mechanical system within an invisible interior. Bruno Latour's black box

is thus not just a metaphor for technological concealment, but a technology in itself, the development of which is amply evident in the early histories of clocks, firearms, industrial controls, cameras, and more. The pushbutton marks an extreme version of these dynamics, in that it couples the simplest possible interface, a binary switch, with a black box always concealed behind it. When a person summons an elevator, takes a picture, types on a keyboard, or dials a phone, she encounters a model of herself, a minimally active exterior coupled to a enormously complex but concealed interior. Indeed, by minimizing skill and exertion, the pushbutton assigns the source of action to interior choices. By looking at two supernatural cyborgs who bear buttons on their chests—Darth Vader and the "Genie" who served a mascot for one of the first automatic garage door openers in the 1950s—this essay concludes that human interiority is in fact inseparable from the interiority of machines.

Posthuman Bodies: Creation Through Augmented Synchronization
Judy Ehrentraut (University of Waterloo; judy.m.e@gmail.com**)**

In *Our Posthuman Future: Consequences of the Biotechnology Revolution*, Francis Fukuyama regards the posthuman as an altered version of humanity shaped by transhumanist ends, and suggests that engaging with the world through technology threatens an end to humanity. My research focuses on the social and cultural stigmas surrounding our increased dependence on devices that turn us into observers looking at the world from a distance, desynchronized from our bodies and withdrawn from our immediate presence (Romanshynyn). Despite their popularity, virtual reality devices are criticized as mechanisms of disembodiment, but have inspired the creation of more ubiquitous, unobtrusive heads-up displays that merge digital information with the physical world. While VR devices occlude sight, my work focuses on augmented reality (AR) devices that enhance visualizations of environments rather than replace them. I regard AR as "a form of virtual reality where the participant's head-mounted display is transparent, allowing a clear view of the real world" (Milgram et al). In this paper, I explore the potential of new devices such as CastAR, Meta, Vuzix M-100 and others to argue that wearable technology can aid in the creation of hybrid spaces and expand boundaries of the body through technological prosthesis. I see humans as inherently technological beings, not through the merging of flesh and wires, but as posthuman entites (Haraway; Braidotti) that re-define the notion of "being there" through intentional technological mediation. Through an analysis of reality-augmentation technologies, I show how we can enhance our situated-ness in hybridized environments of our own making.

Panel 1D: Thursday, November 3, 11:45 AM-1:15 PM *Ansley 4* (projector and screen)

Women Rewriting Genres: Science, Horror, and Superpowers

One of the oldest and arguably still most important projects in feminist science studies Is exploring how women creatively intervene into scientific narratives that are not of their own making. This panel explores how women invoke and revise the conventions of 20th and 21st century genre fiction to comment on the most pressing technoscientific and social issues of their days. While the first panelist, Lisa Yaszek, explores the complex and sometimes contradictory relations of science fiction and science journalism in the early 20th century, the second pair of panelists, Sabrina Starnaman and Doug Davis, examine how midcentury women writers

strategically revised weird fiction traditions to read present issues of industrialism and racism in novel ways. Finally, Kristen Koopman demonstrates how women continue these critical aesthetic traditions today in the field of comics and graphic novels.

Chair: Sabrina Sarnaman

Reporters of Tomorrow: The First Women of Science Fiction Journalism
Lisa Yaszek (Georgia Institute of Technology; lisa.yaszek@lmc.gatech.edu)

Science journalism and science fiction and have been entwined since at least the end of the nineteenth century, when science journalist and science fiction author H.G. Wells famously declared that the best science writers are those who take creative inspiration from popular modes of storytelling to engage their audiences. Drawing on her new book, Sisters of Tomorrow: The First Women of Science Fiction, Yaszek explores the imaginative strategies developed by the women who introduced science journalism to the science fiction community in the 1930s and 40s. Many of these women wrote short pieces in the new journalistic style developed at Scripps' Science Service, using eye-catching headings and foregrounding the drama of human discovery and its relevance to everyday life to interest readers in what might otherwise seem to be dry factual material. But others with longer, monthly columns explored subjects in greater depth and reworked science journalism to better suit the needs of a boisterous genre community confident of its intellectual abilities. Such authors produced science columns that scrambled the hierarchical model of reporting made fashionable by Scripps, as they questioned the authority of the professional scientific community, celebrated the insights of laypeople, and invited readers to challenge the relations of fact and fiction as they informed science writing as a whole. In doing so, they anticipated many of the creative challenges that science journalists grapple with today as the general readership of print culture gives way to the multiple, specialized audiences of the digital era.

The Catholic Novelist in the Postmodern South: Flannery O'Connor's High-Tech Reinvention of the Southern Gothic
Doug Davis (Gordon State College; ddavis@gordonstate.edu)

Davis argues that Flannery O'Connor's fiction aligns with the forward-looking subgenre of gothic science fiction than the traditionally agrarian-minded southern gothic genre. O'Connor is commonly treated as a conservative regional writer whose violent and grotesque stories are are informed by an almost medieval Catholic sensibility. The gothic is traditionally seen as looking backwards as well because it is concerned with the copresence of the past and the present. O'Connor however draws upon new technologies and understandings of the post-human to reinvent the southern gothic for the New South. Unlike her southern gothic predecessors, Faulkner and Caldwell, O'Connor sets her violent, grotesque tales in modernized social and technological spaces, ranging from desegregated busses to newly created lakefronts, where her characters struggle with new industrial and postindustrial technologies and the new post-racial, even post-human, social relations, which obliterate the distinctive culture of the American south. O'Connor likewise peoples her stories with a notorious cast of disabled and technologically-augmented characters whose bodies blur the lines between human, machine, and technological system. If these cyborg characters experience grace or salvation at all, it is through the mediation

not of the traditional institutions of faith but the very machines and technological artifacts that are transforming the American south. Resetting the gothic on the edge of the south's future, O'Connor creates a postmodern Catholic literature that re-appropriates Enlightenment narratives of scientific and technological progress by retelling them as stories of apocalyptic techno-horror full of lost, broken, disassembled, violated, penetrated, smashed, and killed beasts, bodies, and things.

Horrific Science and the Specter of Race in Francis Stevens' "Unseen-Unfeared"
Sabrina Starnaman (University of Texas at Dallas; sabrinastarnaman@gmail.com)

Francis Stevens/Gertrude Barrows Bennett's 1919 urban horror story "Unseen-Unfeared" uses the nineteenth-century scientific advance from miasma theory to germ theory in order to uncover unseen horror in everyday life. This development from miasma theory to germ theory relocated the source of disease from the environment at large to biology at the microscopic level, but the two notions existed in the public imagination side by side for years. Unseen-Unfeared" is set in New York City's Lower East Side and employs these scientific ideas to critique racism and anti-immigrant sentiment while delivering a classic pulp tale of dark fantasy. Stevens, like Lovecraft, employs fear of "the Other" to unsettle her characters, but she takes the trope further, through technological insights, to implicate the protagonist as horrifyingly "Othered" as well.

Origin Stories: Science, Agency, and the Creation of Marvel's Superheroines
Kristen Koopman (Virginia Tech; kkoopman@vt.edu)

Marvel Comics newcomer Kamala Khan has gained both popular and critical acclaim, not only breaking new representational ground for Marvel as the first Muslim superhero with a solo title but also winning the 2015 Hugo Award for Best Graphic Novel for her debut, co-created by Sana Amanat and G. Willow Wilson. This presentation will compare Kamala's origin story to previous Marvel superheroines, particularly "legacy" superheroines who take on the mantle of previously existing heroes (typically men), to show how Kamala represents a divergence from previous models of superheroine origin stories. While the incidents that give superheroes their powers can be the result of heroism or the impetus for it, superheroines tend more towards objectification even in their own origin stories. Drawing on literature from both comics studies and feminist science and technology studies, this presentation will show how many superheroines gain their powers through being objects of science, either victimized or saved by it. While men's origin stories show them as active participants in science, women are depicted as passive recipients of their science-given powers, typically through the intervention of men. This trend has implications for how women are positioned in media with respect to STEM fields. Men can use science to get themselves powers and become heroes; women can be used by men through science to be given powers. Yet Amanat and Wilson break this mold in notable ways with Kamala, paving a potential path forward for narratively independent superheroines.

Panel 1E: Thursday, November 3, 11:45 AM-1:15 PM *Ansley 5* (projector and screen)

Historicizing the Health Humanities: Contemporary Legacies of Literature and Medicine in Context

The Health Humanities (also known as the Medical Humanities) has recently emerged as a robust reform and agenda-setting movement in medicine, as well as a scholarly enterprise in its own right. Amid its success and influence, the Health Humanities has come to seem like an original phenomenon--rooted at once in up-to-the-minute science and in current social conditions and institutional exigencies. However, it has deep and diverse historical roots that go well beyond both its internal origin story (whose narrative arc rises only in long 1970s) and its invocations of the transcendent healing nature of literature from ancient times to the present. This panel seeks to contribute to the much-needed project of historicizing the Health Humanities. Each of the four papers focuses on different historical scenes of encounter between literature, science, and medicine. The presenters demonstrate not only that the Health Humanities has a long and relevant history, but they also will argue that these historical roots reveal its unacknowledged assumptions, political commitments, and normative visions. In addition to the panel's individual papers, the panel presenters will moderate discussion among all attendees about the relevance of historicizing the Health Humanities. We also hope to leverage this panel as a way to involve attendees in future efforts to advance this larger project.

Chair: Monique Dufour

Modernist Equipment for Living: Kenneth Burke and the Contemporary Medical Humanities
Jesse Miller (State University of New York at Buffalo; jessemil@buffalo.edu)

In his 1938 essay "Literature as Equipment for Living," Kenneth Burke writes that there is no such thing as pure literature, "everything is 'medicine.'" In his sustained interrogation of the analogy between books and medicine, Burke played an important role in the development of what has come to be known as the medical humanities. This much is evident from his inclusion in the foundational collection of essays Poetry Therapy: The Use of Poetry in the Treatment of Emotional Disorders (1969) edited by psychiatrist Dr. Jack J. Leedy. More recently, health humanities scholars such as Rebecca Garden have used Burke's work to demonstrate that "literature…and other artifacts of creative cultural production can protect and restore our well-being." In this paper, I turn to Burke's only novel, Towards a Better Life, whose self-help-esque title belies his ambivalence about the curative function that literature might play in the modern world. Towards a Better Life is skeptical about the optimistic ideals of health, personal growth, intersubjective communication, and social progress. Rather than providing his reader a model of how to achieve "a better life," the novel charts the decline of the narrator whose antinomian philosophy ultimately leads him to madness. As a counterstatement to the notion that literature might effect a kind of therapeutic redemption in the reader, owards a Better Life reveals a dialectical tension that is instructive not only to the project of historicizing the medical humanities, but for rethinking the role of literature in the medical humanities today.

Generating Medical Professional Ethos: British Female Physicians' Acts of Creative Self-Fashioning from Victorian Novels to #likealadydoc
Kristin E. Kondrlik (West Chester University; kkondrlik@wcupa.edu)

Female physicians have faced resistance since they were first legally admitted to medical practice in the nineteenth century: riots in the 1860s, literature smearing them as prostitutes, and

social media journalists accusing them of weakening medicine. These incidents of resistance, spanning women doctors' history, share a common assumption that women's gendered traits endanger the profession and patients. Analyzing responses to this resistance over time, rhetorical scholars Carolyn Skinner and Sue Wells have argued that women physicians have persuaded their audiences of their medical capacity by writing about medicine – performing the physician's role – in professional genres. Since the nineteenth century, however, female physicians have themselves recognized the power of popular writing for combatting such resistance. This presentation, therefore, analyzes historical and contemporary women physicians' engagement with popular genres as locations of rhetorical persuasion through two examples: Victorian New Women novels and Twitter hashtag #likealadydoc. Both of these interventions allowed women physicians to connect with audiences in ways not possible through professional genres. By making use of generic affordances as well as their own knowledge of these genres, women physicians could not only perform medical expertise but also criticize existing derogations of woman physicians and generate alternate representations of the "woman doctor." Analyzing these historical and contemporary examples not only suggests that contemporary women's responses to resistance are part of a historical tradition in medicine of popular persuasion, but also underlines the importance of acts of generically-aware self-fashioning in combatting the ever-evolving resistance that contemporary women continue to face in medical practice.

"What Is Reading Doing to Johnny?" Forging Connections between Literacy and Health in the US, 1940-present

Monique Dufour (Virginia Tech; msdufour@vt.edu)

In March 2016, the Library of Congress (LOC) hosted a "Symposium on Health and Literacy," The event was sponsored by the LOC's Literacy Awards program, founded in 2013 to promote the premise that "literacy affects personal well-being." Doctors presenting at the symposium asserted that reading is essential to mental and physical health of children and adults alike, thus basing cultural recommendations about reading on medical authority and scientific developments in both brain science and social science. This project of connecting literacy and health on cultural, medical, and scientific grounds is neither new nor neutral. In this paper, I explain how midcentury US literacy educators tried to promote student health through the act of reading, and how literacy researchers examined and assessed the effects of reading in terms of mental welfare. As one leading researcher explained in 1948, "The modern teacher does not ask herself, 'What is Johnny doing in reading?' so often as she inquires, 'What is reading doing to Johnny?'" As a result of this shift, literacy educators and researchers turned their attention away from skills, practices, and texts, and toward the reader's internal experience during reading and toward its after-effects upon the mind and the body. In their focus on the embodied dimensions of reading, they also fashioned a normative vision of the ideal reader: private insofar as he or she should be concerned with personal well-being, but also a public entity, open to scientific scrutiny and malleable to medicalized literary treatments.

Panel 1F: Thursday, November 3, 11:45 AM-1:15 PM *Ansley 6* (projector, screen, and speakers)

Scientific Creativity 1

Chair: Shriradha Geigerman

Creativity in science-making: Effects of physical vs. virtual presence of team members in the lab space

Shriradha Geigerman (Georgia Institute of Technology; shriradhas@gmail.com)

Expertise in multiple topic areas is becoming necessary to solve complex problems that affect humanity today. As a result, the culture in science-making labs is shifting from being largely autonomous towards being more collaborative. Communication is key to productivity in such collaborative lab cultures. Paradoxically, communication technology is disrupting real face-to-face communication among members, some of whom are virtually present, while others are physically present in the lab spaces. As more and more members are telecommuting, the blend and the tension between virtual and physical presence of participating lab members is becoming apparent in the culture embodied by these spaces. In this paper, I draw upon the narratives of members in two research labs (A & B) at a public university. Salient differences between lab A and lab B are: Telecommuting is a part of Lab A's culture, whereas in-person meetings are mandatory for members of Lab B. Lab A does not generally collaborate with other universities, while collaboration with experts at other universities is one of the founding principles for lab B. My goal is to construct how differences in the mode of presence (physical vs. virtual) of lab members affect creativity within the lab culture using discourse analysis methodology. In my analysis, I will seek answers to following questions-How does physical vs. online presence affect creative problem-solving as well as generation of research ideas within the team? How does it affect the willingness of more junior lab members to ask powerful, thought-provoking questions which facilitate the creative process?

Distinguishing Scientific and Artistic Creativity

G. Arthur Mihram (Princeton, New Jersey; danielle.mihram@gmail.com)
Danielle Mihram (University of Southern California; dmihram@usc.edu)

Science is that human activity devoted to the search for the very explanation for (for the truth about) any particular naturally occurring phenomenon. Our Modern Science's 'method' has been described, near-algorithmically, as a six-stage model-building process [Teorema 28/2: 35-44, 2009], yet not just as a 'theory of science', but as a quite biological process (first, chemico-genetic, then chemico-neural), one which accounts for the survival of all Life on Earth to date. Earlier works have identified the basis for the advancement of Human Knowledge as analogy, an exemplar of creativity. Whitehead [Religion in the Making; 1926] noted two characteristics of creativity: that of the mental, but then this secured by the physical (the observed). We expand with two further aspects: (A) His "abstract creativity can procure nothing" underscores the distinction accorded scientific advances (creativity) in Human Knowledge: The underlying premier stage of Modern Science's Method (viz., observation, rather than philosophical speculation) demands that the new natural philosophy's (scientific) creativity be founded on the physical [Cotes's Preface, Newton's Mathematical Foundations for Natural Philosophy, 2ndEd(1713)]; yet, [B] the 'creative' portion of any scientific advance, we noted ["Role of Models, Metaphors, and Analogy," Int'lJGenSyst 1: 41+284, 1974(1971)], is by means of a [mental] analogy, a conclusion reached prior to Konrad Lorenz's Nobel Prize Acceptance Address ["Analogy as a Source of Knowledge"], yet complemented via personal communication

from him ["Everything we can know is based on a model or analogy of real things, built up in our nervous system ."]

"Who Thinks Abstractly?": Emmy Noether and Mathematical Creativity
Arkady Plotnitsky (Purdue University; plotnits@purdue.edu)

The paper will address is the work of Amalie (Emmy) Noether (1882-1935), one of the most original and influential mathematicians of the last century. Described by some of the greatest twentieth-century mathematicians and physicists—Hilbert and Einstein, among them—as the most important woman mathematician in the history of mathematics, she was also referred to by The New York Times in 2012 as "the most significant mathematician you've never heard of." These two assessments are symptomatic of the status of women in mathematics and the status of mathematics in our culture, and this paper will be concerned with the cultural situation defined by both factors. The subject will be addressed with the aim of shedding new light on this role by considering the question of my title, which repeats the ironic title of Hegel's famous essay. Both Hegel in philosophy and Noether in mathematics, makes us radically rethink the nature of the abstract and the concrete, and of the relationships. One can never understand Noether's mathematical abstraction, if one sees it, in Hegel's famous words, in terms of abstract absolute as "the night in which all cows are black." The paper consider Noether's work in algebra and the cultural situation to which it belongs, by exploring the idea of abstraction and abstract thinking as a vehicle of mathematical creative thinking, an "abstract machine," as Deleuze and Guattari called it, referring to the work of Galois in algebra and Riemann in geometry, Noether's most famous precursors.

Transductive Creation: Inventing Living Machines
Tyler Fox (University of Washington; foxt@uw.edu)

Gilbert Simondon uses the term transduction to describe the resolution of disparate orders of magnitude through the restructuring of information, or energy. Simondon identifies transductive processes in multiple domains, but he is arguably at his most salient when he describes the transductive process of invention, or the creation of new technical objects. Technical objects are those that sustain a certain relationship to their milieu. More specifically, one might say that they create new sustaining environments for themselves. Invention, ostensibly a human endeavor, then is the process by which new technical mediations, new transductions between disparate orders, are created. Yet Simondon makes clear that invention is infused with nonhuman potential; it is not a process of human mastery, but a relational process of both human *and* nonhuman creation. One practice of transductive creation can be found in the work of contemporary media art that combines technology and living, nonhuman organisms. These works are experimental forms that create new experiences across digital, physical and organic domains and forge new milieus.
In this talk I will discuss Simondon's concepts of invention and transduction in relation to this specific approach to art making. I will provide an overview of artists working within this organic-technical oeuvre, including myself, wherein living, nonhuman organisms and technology are brought together. As such, I will attempt to show how these works actualize speculative thought, bringing forth new technical objects and, potentially, new understandings of our own technological milieu.

Panel 1G: Thursday, November 3, 11:45 AM-1:15 PM *Ansley 7* (projector, screen, and speakers)

Future Genders

Chair: Allyse Knox

Colonizing the (Creative) Future?: Ambivalent Reproduction in Lynn Hershman Leeson's Conceiving Ada
Allyse Knox (State University of New York at Stony Brook; allyse.knox@stonybrook.edu)

From as early as Shulamith Firestone's 1970 text The Dialectic of Sex, feminists have taken up technology for its promise to change or even enhance reproductive processes. In Conceiving Ada, feminist filmmaker and performance artist Lynn Hershman Leeson uses technology to contemplate the ethics of the reproduction of the past in the future. Released in 1997, the film follows the efforts of a female computer scientist, Emmy, to connect with and eventually reconstitute—in the shape of her unborn child—the memories and genius of the 19th century creator of the first computer algorithm, Ada Lovelace. The film has been criticized as having an ending that valorizes the production of a heterosexual nuclear family unit as women's appropriate aim. In contrast, I argue that Hershman Leeson offers instead an instance of ambivalent reproduction; in fact, Ada herself states she does not want to be replicated, concerned that to do so would "colonize the future." When Emmy moves forward with the process anyway, believing that she knows Ada's true intentions despite her explicit objections, the viewer is left simultaneously charmed and confused by the brilliant girl-child presented in the final scene. Thus, Hershman Leeson utilizes actual physical reproduction as a narrative tool in order to question the more abstract tendency to seek to replicate the past in our visions of the future. By refusing to characterize even the reanimation of a genius feminist figure as unproblematic, Hershman Leeson urges us to consider more open and creative, rather than repetitive, futurities.

Creating Gendered Things: The Anatomy of Automata, Androids, and Robots
Wendy Nielsen (Montclair State University; nielsenw@mail.montclair.edu)

This paper proposes to investigate the role of gender in cultural texts that depict the creation of artificial life forms: automata, androids, and robots. I argue that whereas male androids fail to imitate masculinity, female androids represent the reproducibility (by male creators) of femininity. Many readers know the musical automaton, Olimpia, in E. T. A. Hoffmann's German novella, The Sandman (1817). His earlier short story, The Automata (1814) features the Chess Playing Turk, which accounts one of the first uses of the word android in English. The Chess Player (about whom Edgar Allen Poe and Walter Benjamin wrote) was in fact a pseudo-android operated by a human. My presentation traces the Chess Player's journey through English, French, and German texts, and brings them into dialogue with discourse about women's role in reproduction, birth defects, and gender selection in utero. I illustrate ways in which automata and androids represent a more reliable (and man-made) way of producing humanoids in the 18th and 19th centuries. While automata and androids before 1900 are often female, in the twentieth century, literary robots such as Asimov's literary creations are often male. Nonetheless, gender continues to define the parameters of artificial life. In "Computing Machinery and Intelligence"

(1950) Alan Turing sets up a test between two disguised subjects and an interrogator, who must guess "which of the other two is the man and which is the woman."

How to Train Your Robot: Deep Learning and its Shallow Results
Hilary Bergen (Concordia University; hilary.bergen@gmail.com)
Cody Walker (Concordia University; codylwalker@gmail.com)

In March, 2016, Microsoft released Tay, a Twitter chatbot designed to mimic the language of a teenage girl. Within 24 hours, Tay was tweeting racist, sexually-explicit messages and harassed at least one woman. Virtual worlds have often been represented as the end of the embodied basis for sex difference. However, as Judy Wacjman writes, "the fluidity of gender discourse in the virtual world is constrained by the visceral, lived gender relations of the material world." If, as Latour says, "technology is society made durable," then it follows that our treatment of virtual women like Tay affects the way we treat human women. Our paper examines the ways in which the potential of machine learning is thwarted by simplistic assumptions about gender and confounded by inequalities in programming jobs (92% of developers are men). Montreal's Harm de Vries, for example, has recently published his attempts to automate his Tinder interactions by using machine learning to anticipate the features he finds attractive. Considering projects like de Vries', where machine learning is used to create customizable neural models of physical attraction that exclude actual female subjects and their desires, as well as incidents such as the corruption of Tay, and a recent study of Siri's incomprehension of the statement "I was raped," we ask: What is the future of deep learning? Are there non-sexist, anti-capitalist alternatives for the use of machine learning? How might machine learning, rather than re-inscribe gender norms and patriarchal values, increase the potential for human playfulness and creativity?

Cultivating Creativity: Technology, Toys, and Children's Creative Work in the Twenty-first Century
Meredith Bak (Rutgers University; meredithabak@gmail.com)

Children's creativity has long been of interest to social and cognitive scientists, and recently to scholars in the humanities such as Amy Ogata, whose 2013 book Designing the Creative Child charts the transformation and commodification of children's creativity in post WWII America. Today, creativity is a core value within contemporary children's media and consumer cultures, central to the philosophy of companies like LEGO and informing the design of a range of technologies and toys for children. Products designed to unlock and enhance creativity increasingly emerge from alliances between traditional children's companies such as Disney and Mattel and software and technology firms like Google and AutoDesk. This paper explores the deployment of creativity in contemporary children's consumer culture, investigating how recent creative playthings help define and shape how children's creativity is understood in the popular imagination. Drawing on a series of case studies, such as Mattel's forthcoming 3D printer the ThingMaker and Disney's open world toys-to-life game platform Infinity, the paper demonstrates creativity's prominent alignment with STEM and STEAM initiatives that position children as makers rather than consumers. Moreover, it probes both how corporate stakeholders define creativity and articulates the opportunities and constraints associated with these creative products, such as affording users the chance to build from modular components and customize aesthetic components. Nuancing conventional claims that naturalize the relationship between

creativity and childhood, the paper considers the possibilities and limitations for creative activity built into these toys' material and technological structures.

Panel 1H: Thursday, November 3, 11:45 AM-1:15 PM *Ansley 8* (projector, screen, and speakers)

Cultivating Creativity

This panel both problematizes and probes the paradigm of "creativity" as a historical phenomenon and a contemporary practice, invoked as a strategy and rational for supporting the cross-pollination of disciplines, particularly those of art, science, and technology. Focusing on the perceived promise of innovation, the papers gathered here offer a historical overview, from the early nineteenth century to the present, of the trope of the inception of the new through interdisciplinary exchanges. This panel, then, both investigates the dynamics of the metaphorical "birth" of new ideas, from its conceptualization as a romantic ideal to its manifestation in the mid-twentieth century to its realization in the present day, concluding with a discussion of current techniques for seeding interdisciplinary projects.

Chair: Anne Collins Goodyear

Against Creativity
Michael Maizels (Wellesley College, Davis Museum; mmaizels@wellesley.edu)

This paper will explore the case against "creativity" as it has been traditionally understood in the disciplines of art history and art practice. Tracing a lineage beyond the Romantic era, this paper will argue for a problematic gendered construction at the heart of notions such as creativity, inspiration and genius. While the metaphors of fecundity and fertility lay just beneath the surface, I intend to probe a more specific and strange resonance, reconsidering the "moment of inspiration" as a kind of secular Annunciation. In both cases, an unbidden messenger arrives to implant a transcendent, miraculous potential inside the body of a human vessel, who will—with much discomfort and following an final period of intense labor—bring forth the truly new into the world. Reconsidering inspiration as a kind of pregnancy turns the traditionally heroic male artist into a kind of trans-figure, one made feminine by their process of asserting the masculine privilege.

The Creative Paradigm
Anne Collins Goodyear (Bowdoin College Museum of Art; acg610@gmail.com)

Describing "The Creative Process" in a 1958 *Scientific American* article, mathematician Jacob Bronowski observed: "The growing tradition of science has now influenced the appreciation of works of art so that we expect both to be original in the same way. We expect artists as well as scientists to be forward looking, to fly in the face of what is established, and to create not what is acceptable, but what will become accepted." Perhaps unwittingly, Bronowski's assertion echoed artist Marcel Duchamp's description of "The Creative Act," in a 1957 presentation, which would be published in 1959. Turning to the language of mathematics to describe the "art coefficient" that distinguished artistic intention from the artistic product realized, Duchamp described the

interpretive role of the spectator who could (eventually) make sense of the significance of the work of art. The notion that the true promise of creative vision lies just beyond the threshold for immediate recognition has since become an essential justification for supporting intersections between art, science, and technology. If the products of science and technology have long served as artistic media, from plastics to digital computers, to DNA, this paper suggests that the creative posture of the arts may itself offer an essential ingredient to fostering innovation in science and technology. This paper juxtaposes the perceived promise of creative intersections between art, science and technology demonstrated in late 1950s and late 1960s through organizations such as Bell Labs and MIT and explores the relevance of such undertakings for the present moment.

Cultivating Creativity at the Intersection of Art and Science
Alana Quinn (National Academy of Sciences; aquinn@nas.edu)

This presentation will focus on how the National Academy of Sciences is cultivating creativity at the intersection of art and science. Over the past six years, Cultural Programs of the National Academy of Sciences has created a physical and intellectual space for the cross pollination of arts and sciences through its DASER (DC Art Science Evening Rendezvous) series and other programming. This talk highlights key presentations and discussions facilitated by DASER and looks at elements of its format that have made it successful. DASER is a place where people from diverse academic backgrounds can gather to have intellectually stimulating conversations, become familiar with one another's specialized academic areas, and even collaborate. DASER's goals are to showcase and foster the innovative approaches required to solve twenty-first century challenges.

Panel 1I: Thursday, November 3, 11:45 AM-1:15 PM *Peachtree 1* (larger room, projector, screen, and speakers)

Digging, Driving, Decoding, Describing: Media Historical Methodologies

Practice-based research, digital humanities, critical making, media archeology, research creation, do-it-yourself, maker culture: the turn towards making in the academy highlights those practices which attempt to account for the material and embodied conditions of scholarly research. This panel will focus the techniques of scholars who engage historical writing and research as creative and material practice, as well as intellectual exercise. For each presenter, “doing history” offers an alternative mode of making, one which involves confrontation and collaboration with historical agents, the production of self-made archives, and the implementation of diverse technical and aesthetic practices. Although such techniques have their corollaries in more traditional disciplines—such as oral history, ethnographic interviewing, archival work, and art practice—the technological complexity of media historical research presents unique challenges that require an emergent vocabulary and the circulation of media-specific case studies. From exploring the unwanted archives of digital trash, to the footwork necessary to walk the geographic and social topologies of Oakhurst, California, to the reconstruction and reverse engineering of media art according to the practices of speedrunners, this panel offers examples of media historical methodologies that not only constitute a critical practice, but the digging, driving, decoding, and describing necessary for making history.

Chair: Patrick LeMieux

Making Media Middens
Finn Brunton (New York University; fb42@nyu.edu)

We in the digital history community have a fantastic, lively conversation—and superb institutions—devoted to the questions of what it means to preserve, archive, and study digital and computational artifacts: think Brewster Kahle, Lori Emerson, Jason Scott, Katrin Weller, Matt Kirschenbaum, Megan Ankerson . . . On this panel, I will discuss the digital materials that we don't want to archive, or that don't want to be archived—the trash, cruft, detritus and intentionally opaque hoard of documents and artifacts that constitute our digital middens. I will focus on two from my own research: the archives of spam, which we'd all rather forget, and the records of the communities and marketplaces of the so-called "Dark Web," which would prefer to be forgotten. How best to make them into and understand them as archives? Middens are pits of domestic refuse filled with the discards and byproducts of material life: the gnawed bones, ashes, fruit stones and potsherds, shells and chips and hair and drippings—together, the photographic negative of a community in action and an invaluable record for archeologists. Along with presenting some practical tools and techniques for both finding and making the middens of our subject, I will discuss ways that we can think of digital historiography in terms of these accidental or unwanted archives. Finally, I'll pose some questions about doing research with other kinds of eccentric, troubling, or speculative archives, like blockchains and doxxes.

On Footwork, or: How to Get People Talking in a Town that Wants to Forget
Laine Nooney (Georgia Institute of Technology; laine.nooney@gmail.com)

In 1982, journalist Steven Levy followed Route 41 into Oakhurst, CA and found a fiberglass talking grizzly bear mounted in the town center which would report local land prices at the touch of a button. This strange interaction opens the final third of Levy's legendary book *Hackers: Heroes of the Computer Revolution,* focusing on the early years of landmark computer game publisher Sierra On-Line. Thirty years later, the talking bear still stands, but now it recites the classic holiday poem, "T'was the Night Before Christmas." Oakhurst's Talking Bear is an analog for the complex and crosswired cultural memory the town holds for Sierra: things still stand, but nothing remains the same. Arriving at a time of economic depression, Sierra built Oakhurst's largest buildings, employed hundreds of locals, and promised expansive opportunity—until they closed their operations in the early 2000s and Oakhurst slide back into recession. Amidst these dense civic dynamics, I conduct my research on the social history of Sierra On-Line. This talk will document my methods for locating relevant interviewees, tracking the civic remains of Sierra On-Line's presence, and making sense of the unspoken ways history "lives on" beneath the surface of rural American towns. While much video game history is conducted at a distance—from the haven of on-screen representation, bits on a disk image, or email interviews email—I suggest that closeness to landscape and attentiveness to regionalist interests offers an opportunity to expand the audit of video game history beyond the provenance of the games themselves.

How to Lose: Forensic Reconstructions of *How to Win "Super Mario Bros"*
Patrick LeMieux (University of California at Davis; lemieux@ucdavis.edu)

In 2003, Alexander Galloway videotaped his hands and sampled controller input while playing *Super Mario Bros.* After completing the game, he formatted the serial data as guitar tablature and hosted it alongside the tutorial videos on Whitney's Artport. Titled *How to Win "Super Mario Bros"* or *RSG-SMB-TAB,* Galloway's ASCII satire of a Game FAQ walkthrough also operates as a conceptual artwork in which play is reduced to a single series of inputs and recast as an impossible guide for novice players—a not-so-user-friendly map that coincides with the territory of the Mushroom Kingdom. Despite and because of the exactitude of the historical documentation, the history of play is lost. But is the game over or is there some way to continue? This talk documents the media archeological methods I used to try and learn *How to Win "Super Mario Bros."* Starting from text files and camcorder footage I reverse engineered and remade *RSG-SMB-TAB* based on the technical operations of the Nintendo Entertainment System and the material practices of player communities. From tool-assisted simulations of nonexistent videos to real-time reenactments broadcasted on Twitch TV to a self-playing guitar that plays through Galloway's tabs, in this presentation I demonstrate the role of play as a critical method for historicizing media art. Although some games are difficult to play or cannot be won, methodologies based on a deep material engagement not only reveal the complexity of computational media but also disrupt ahistorical ideologies of immateriality, completion, mastery, and even winning.

Panel 1J: Thursday, November 3, 11:45 AM-1:15 PM *Peachtree 2* (projector, screen, and speakers)

Appetite and Creativity

In keeping with the conference theme of "Creativity," this panel will think about how appetite might instigate novelty. If ingestion transforms us on multiple physical, emotional and cognitive levels, what can be said about appetite? Broadly defining appetite as a destructively and/or productively creative will toward difference, this panel will engage with the sciences and humanities to consider some of the following questions: How does appetite help us (re)think the organism's relation to the environment? How does appetite change our understanding of the metabolic? What is queer about appetite? Does a desire to ingest present a particular opportunity for strange and interesting scenes of rhetorical or performative relation across species lines, or is it always destructive? What does appetite do to our understanding of agency and power? How is appetite classed, raced and gendered and to what extent does it produce divergent categories? Does it disrupt the privileging of the ocular, to what effect? How does appetite change in a time of ecological catastrophe, when the human "overeats" the environment? Interdisciplinary and experimental presentation forms and topics strongly encouraged.

Chair: Iemanja Brown

Wild Enchantment: Taste in Ronald Johnson's The American Table and A Line of Poetry a Row of Trees
James Belflower (State University of New York at Albany; james.belflower@gmail.com)

At mid-century American gastronomy was defined by exploration. Chefs and cookbook authors, such as James Beard, were encouraging home cooks to discover and experiment with the globalized influx of international foodstuffs. During this rich period, New American poet Ronald Johnson wrote award winning cookbooks. However, existing scholarship rarely addresses the ways in which they nuance the many relationships to food that he investigates in his poetry. My paper intervenes in this oversight by examining key alimentary motifs in his gastrophilosophy, namely how he translates the wildness of natural ingredients into performative rhetoric, how his notion of appetite creatively recombines regional and nationalist ideologies of the past, and how he practices taste as a process of embodied discovery. By reassessing the alimentary metaphors in his first book of poetry, *A Line of Poetry a Row of Trees* (1964), through his late cookbook, *The American Table* (1984), I argue that Johnson critiques the destructive tastes of early American colonization and replaces them with an appetite for the differential material relations common to enchantment. Food in Johnson's poetry is a vehicle for sharing the vital substance of material relations across temporal and cultural limits. Food in Johnson's cookbooks performs the ethical relationship to materiality Johnson's poetry evokes by imbricating the cook in the shared unpredictability of culinary practice. In sum, reading Johnson's work as a gastrophilosophy shows how taste can revitalize an essential and ethical dimension of enchantment in the American ethos of expansion.

A Memento Mori Tale: Indra Sinha's *Animal's People* and the Politics of Global Toxicity
Stacey Balkan (Bergen Community College; sbalkan@bergen.edu)

In his 1907 The Literature of Roguery, Frank Wadleigh Chandler comments on the peculiar nature of the picaresque form—a genre that would centralize images of "low life" in the face of novelistic traditions that generally favored more heroic protagonists. Indeed, literary humanism had no place for the vagaries of the everyday. Thus, the picaresque art of survival—rendered through grotesque figurations of hunger and privation—emerges in the sixteenth century as a dark mirror, a means of forcing Spanish decadence into sharp focus. Foregrounding privation, picaresque novels functioned as a sort of aesthetic relief—the pícaro, or rogue, at the novel's center a memento mori for readers content to ignore the disparate terrain of early modern capitalism. Cast against proto-Enlightenment conceptions of the human—that rational subject, who figures in aspirational narratives, which favor the ideal over and against the corporeal—the pícaro in such works anticipates the rogue in the postcolony, whose narrative terrain conjures what we might call the heterotopia of late capitalism. This is precisely the case in Indra Sinha's 2007 novel *Animal's People* in which the titular rogue, a survivor of the 1984 chemical explosion in Bhopal, cultivates a home out of the detritus of the Union Carbide factory. With a particular focus on "Animal's" excessive corporeality, this paper situates Sinha's novel within current discussions about narrative form, the so-called "enabling fictions" of liberal humanism, and the system of global apartheid in which the third world functions as a repository for toxicity and waste.

Eating Dirt in the Anthropocene
Iemanja Brown (City University of New York; iemanjabrown@gmail.com)

In the Anthropocene, the human organism overeats the milieu, making the metabolic a process of devastation. My talk deviates from this model, investigating appetite as creative rather than

destructive. I explore geophagy, the desire to consume dirt, as a jumping of temporal scales, bringing the deep time of soil into the body and positing alternative futurities. Reading Elizabeth Alexander's poem, "The Dirt Eaters," which mourns the waning of geophagy through an appropriation of condescending newspaper reports on the practice, I look to the material and conceptual questions that geophagy presents to us in our current ecological moment. What does it mean for Alexander to express nostalgia for this craving of ground? Geophagy is reported in the US to afflict black women and pregnant people of all races. Converging, in Alexander's exploration of the dirt eater, are numerous questions of race, gender and environmental degradation. Her poem brings the history of slavery in the US into a contemporary longing, rejecting a notion of progressive history that includes a turning away from ground. Instead, Alexander helps imagine ways of recuperating the practice to create new futures. Geophagy crosses temporal scales through an ingestion of deep time as it is accumulated in soil sediment. If, according to Hannah Landecker's exploration of epigenetics, that which we ingest becomes epigenetic signal, what kind of information does dirt impart? How is knowledge being constituted here, through dirt as information? And what kinds of knowing are being resisted through the ingestion of ground?

Session 2: Thursday, November 3, 1:30 PM-3:30 PM

Panel 2A: Thursday, November 3, 1:30 PM-3:30 PM *Ansley 1* (no AV)

Creative Chemistry

Chair: Anna Elizabeth Dvorak

A Better View of Science: Examining Italian Chemistry and European History through Primo Levi's *The Periodic Table*
Anna Elizabeth Dvorak (Oregon State University; dvoraka@oregonstate.edu)

Stanley Aronowitz argues the history of science is best understood, not by studying the "breakthroughs," but instead focusing on the cultural and political influences, which relies on a collection of multiple views and personal experiences. Primo Levi does just that by creating a portrait of the state of science in Italy in the 20th century though his own anecdotes and experiences in *The Periodic Table*. By incorporating his personal experiences, this further serves as a depiction of chemistry in Italian society and culture. Levi is able to make the connections he does by focusing on the individual and unique traits of individual elements, their thingness, and remain a collection of related things, which constantly surprise him and are not what he expected. Therefore using Jane Bennett's concept of "Thing Power" leads to a better understanding of Italian chemistry through Levi's experiences. Primo Levi's *The Periodic Table* is of course just a single account of the history of chemistry in Italy; however, due to the networks he maintained and his interactions with both people and objects in these networks, he representative of a larger whole. By centering his life on specific elements, Levi explores Italian science before and during the Second World War. Therefore, his account is as justified a representative account as any other unbiased description because he places the thingness of the

elements into a larger network of European and world events: the rise and fall of fascism and the Third Reich, anti-Semitism and the Holocaust.

"Formed in Eternal Silence": Creative Mystery in *The Periodic Table*
Christopher Adamson (Emory University; christopher.william.adamson@emory.edu)

During an experiment with hydrogen, Primo Levi's discursive hypothesis gives way to the mystical moment when he realizes that "it was indeed hydrogen…the same element that burns in the sun and the stars, and from whose condensation the universes are formed in eternal silence." One element with the lightest atomic weight leads to whole universes. How could our concept, symbolized by the letter "H" possibly contain the origin of the universe? The letter is not merely a utilitarian symbol with a simple corresponding signification, but a poetic symbol that suggests the capaciousness of the element beyond its attributes. Mendeleev's periodic table is "poetry, loftier and more solemn than all the poetry we had swallowed down in liceo." In this paper, I will link science and the humanities through Jane Bennet's *Vibrant Matter* and the Heideggerian "wonder of all wonders, that anything is at all" to explore Levi's scientific poetics. Like any poem, the periodic table is full of portentous language to be unraveled, and it actually does rhyme as each line ends with a repetition of suffixes in the combination of a halogen and a noble gas. "Every element," as poetry, "says something to someone (something different to each)." The same "eternal silence" of hydrogen speaks to the carbon-containing leaf, prompting photosynthesis. Then, that same carbon is present in the author's brain and writing instrument, so the solar message is contained in the ink of any book we have read: "this dot, here, this one."

Chemical Ethics: Primo Levi and the Practice of Posthumanist Science
Raymond Malewitz (Oregon State University; raymond.malewitz@gmail.com)

In this paper, I argue that while Primo Levi's *The Periodic Table* casts physics as an Enlightenment science that sacrifices particularity to abstraction, the collection's depiction of the accidental qualities of what Levi calls "militant chemistry" undermine the rational, humanist coding of his trade, destabilize the progressive narrative of scientific advancement, and foreground the necessary feedback loop that must be forged between mathematical theories of materialism and practical experiences in the lab. I make this claim because the ways in which *The Periodic Table* characterizes chemistry vary with the educational level of Levi's persona in each of its stories, offering a measure of maturity within the larger work based upon how closely chemistry aligns with classical physics in his mind. I conclude that for the mature Levi, fiction, physics, and Enlightenment universality offer artificial and ultimately unsatisfactory ways of encountering the world, while "militant chemistry," memoir, and a posthumanist focus on the inadequacy of universalist frameworks enable him to chart a narrative and an accompanying ethics rooted in the material conditions of particularity. This conclusion, though limited here to discussions of Primo Levi's work, may be applicable to broader conversations of chemistry within humanist and posthumanist frameworks.

Panel 2B: Thursday, November 3, 1:30 PM-3:30 PM *Ansley 2* (projector and screen)

Wild Learning 1

Chair: Rebekah Taylor

Rewilding the Literature Classroom: Empowering Students to Create through Spontaneity and Confusion with *The Literature Workshop*
Rebekah Taylor (Brenau University; taylorrebekahann@gmail.com)

Sheridan Blau argues that rather than learning to become creators of meaning, students typically only learn to be consumers of meaning in the current lecture-driven model of literature classrooms. Students are too often exposed only to the instructor's interpretation of a text and come to understand that they are not qualified to derive meaning themselves. Blau demonstrates that most students fail to interact with difficult literary texts in any authentic way because they know that the text--typically skimmed haphazardly the night before class meeting--will be illuminated by the teacher the following day. Therefore, the learning experience becomes the instructor's, not the student's, as the instructor diligently prepares to teach the text and the student waits to consume the "right" interpretation. As an alternative, Blau advocates the literature workshop, which demands a radical restructuring of the traditional literature classroom. Drawing from Blau's methodology, this presentation suggests that spontaneity and confusion provide the ideal grounds for learning and creativity in literature classrooms and argues for a "wilder" approach to the teaching of literature. Creative expression in the natural world derives from unpredictable interactions, and the classroom might mimic this so-called "wildness." Following nature's example, instructors might rely less on sanitized simple structures of the lecture-based classroom and instead integrate more opportunities for interaction between all of the parts of the classroom community (not just student-teacher, but also student-student). Further, I argue that teachers must embrace spontaneity and stimulate confusion, which Blau argues "often represents an advanced state of understanding" (21).

“Do You Want to Build a Physics-Lit Class; Maybe Try to Add a Play?”
Steve Zides (Wofford College; zidessb@wofford.edu)

In his 1959 Rede Lecture, C.P. Snow outlined the “two cultures” intellectual division between scientific and humanistic thinking. Although Snow’s lament was not new, dating back to the Arnold-Huxley debates of the mid-nineteenth century, it generated a fervor of academic creativity centered on efforts to bridge the aforementioned intellectual gap. This creative rush of interdisciplinary course design lead to a myriad of humanistic courses covering everything from entropic themes in *The Crying of Lot 49* to the non-Euclidian geometries in the analysis of Braque’s cubist paintings. Unfortunately, most of these endeavors have come from the humanistic side of academia. Where are the reciprocal course offerings within the science community? In this talk, the speaker will present a metacognitive analysis of an experimental introductory physics class that attempts to teach a chronological/philosophical view of the standard physics syllabus through a diverse, optimally selected, set of literary readings. Discussion will include the course goals and objectives, the selection rubric used to identify potential readings, the day to day structure of the course, a special cross disciplinary collaboration with an English Romantic Literature course and a summative assessment of the entire enterprise.

Function and Creativity: Pedagogy and Aesthetic in Dr. Reginald Buller's Botanical Wallcharts

Nicole Fletcher (University of Manitoba; fletchen@myumanitoba.ca)

The history of scientific illustrations has been intensively investigated as a way to convey scientific ideas. However, the use of scientific illustration as a pedagogical tool in classrooms and lectures has been largely overlooked. This paper will examine the use of botanical visual aids in the early twentieth century post-secondary classroom as a practical teaching tool as well as a visual object. Particular attention will be given to the botanical wallcharts hand-illustrated by Dr. Reginald Buller, a British-Canadian botanist and a founding professor at the University of Manitoba. Dr. Buller was an internationally renowned researcher but he prided himself on his artistic ability, creating his own illustrations for his publications, talks, and lectures. Connecting to botany's long history of art and illustration, Dr. Buller placed great emphasis on visual material as a pedagogical resource. Although commercial wallcharts were available, Dr. Buller invested immense time and effort into creating visual material for his lectures using artistic techniques which reached beyond simply communicating scientific information. Because Dr. Buller creatively designed highly visual lectures and talks, he developed a reputation as an interesting and dynamic speaker. I argue that these illustrations were produced carefully with consideration to particular scientific visual language but they are also works of art. Examining botanical illustrations as pedagogical tools as well as works of art offers another perspective to the analysis of how ideas and knowledge were transferred through scientific illustration during this period.

Settling into Wildness: Itinerant Study and Aesthetic Practice in Henry James' Late Novels

Miriam Atkin (City University of New York; *miriam.atkin@gmail.com*)

I find there is a vast and varied significance to the notion of *wildness* in our national mythology, made all the more complex by its particular entanglement with a New World drive to *settle.* In this mythic tension between wildness and settlement I see expressed a particular kind of aesthetic will; the indispensable human activity of seeking form—an instance of Schiller's *spieltrieb*—activated by the appearance of formlessness. It is a way of assimilating to the unknowable by reflecting it in a new shape. If one's relation to wildness thus grounds epistemological acts, what are its implications for pedagogy? Against the teacher's admonition to settle down, I'd like to raise the image of an itinerant intellect, whose excursive starts and stops are directed by the wish to find form. The example I have to offer is a collaborative act of composition, when, in 1906, Henry James accompanied the symbolist photographer Alvin Langdon Coburn on a walk through London in hopes of discovering suitable pictorial subjects for Coburn's frontispieces to James' novel, *The Golden Bowl.* In James' own words, "the problem was thrilling."

Panel 2C: Thursday, November 3, 1:30 PM-3:30 PM *Ansley 3* (projector and screen)

Constructing Death and Disease

Chair: Sofia Varino

Autoimmune Assemblages: Tracing the Agency of Gluten in the Making of Celiac Disease
Sofia Varino (State University of New York at Stony Brook; varino.sofia@gmail.com)

Oriented by the concept of nonhuman actants (Latour) actively participating in volatile biosocial systems, I engage in a materialist analysis of gluten's agency in the context of Celiac disease as a chronic autoimmune condition. I focus on the historical development of the disease, currently manageable only through lifetime adherence to a gluten-free diet, and consider how gluten's agency participates in the Celiac autoimmune assemblage of material and discursive phenomena. Examining everyday dietary practices alongside current scientific research developing gluten-degrading enzymes and engineering gluten-free wheat crops, my presentation traces the trajectories of gluten, from the wheat field to the food-processing facility, and from supermarket shelves into the organism through biocultural processes of consumption, digestion and absorption. Informed by the materialist critiques of theorists like Elizabeth A. Wilson, Jane Bennett, Donna Haraway and Bruno Latour, I posit gluten as a hybrid biosocial entity capable of participating and intervening autonomously in human affairs with self-organizing and disorganizing capacity. I follow the geographical and biopolitical trajectories of gluten to demonstrate the tricky, slippery capacity of matter to resist human manipulation and control, as well as the material agency at work in the production of biomedical knowledge.

Romantic Physiology and the "Physiologic Romance": Creating Diagnoses in Oliver Wendell Holmes' *Elsie Venner*
Lindsey Grubbs (Emory University; lindsey.grubbs@emory.edu)

This paper will take up a literary case study, physician-author Oliver Wendell Holmes Sr.'s 1861 novel *Elsie Venner*, to enrich what have long been commonplace assessments of the social construction of psychiatric diagnoses. Through a reading of this strange novel (which Holmes called a "physiologic romance"), I will make the case that literary and medical language were inextricably linked in the creation and evolution of diagnostic categories throughout the first several generations of American psychiatry: medical case studies, particularly for psychiatry, rely on the narrative techniques and tropes of literature, while authors use "diagnostic" hints and clues to communicate with their readers. Thus, I argue, examining evolving literary form throughout the nineteenth century is central to understanding the development of psychiatric nosology (and vice versa). *Elsie Venner* is a particularly rich source for examining the relationship between these medical and literary genres, because Holmes, who regularly worked in both fields, created a fictional disorder with fictional diagnostic markers. Elsie's mother was bitten by a rattlesnake while pregnant, leaving Elsie constitutionally part-snake. By examining the tools Holmes employs to slowly reveal this diagnostic plot point to the reader, including a narrator straight out of medical training and detailed physiognomic descriptions, I will sketch out Holmes' fantasy of the perfectly legible disorder. Examining the "ingredients" of a fictional diagnosis in this way helps to reveal the workings of psychiatric logic, highlighting too those places where Holmes found literature to provide creative possibilities he could not communicate in his other work.

Bring Out Your Dead
Julie Casper Roth (State University of New York at Cobleskill; julie.casper.roth@gmail.com)

One of the rights afforded to United States citizens is the right of sepulcher or, in other words, the right to choose one's final disposition of a dead human body. This choice leads to numerous creative ends and treatments. Yet this right is lost to particular segments of society: the poor, the disconnected, and those on society's periphery. People without traceable human connections, names, or a Last Will and Testament become the unclaimed dead. Their bodies linger in morgues until county laws prescribe their final disposal. The unclaimed dead are, most often, people of color, immigrants, the children of single-mothers, and forgotten factions of society. They are those who are often disenfranchised by social and political systems in life and are further disenfranchised in death, cast to the potter's fields. The unclaimed dead are not afforded the prestige of memory or the esteem of history. Identities are buried along with the unclaimed body. As a filmmaker and artist, my current body of work ponders the plight of the unclaimed dead and their quiet slip into oblivion. My creative and documentary video work examines what is both lost and found in the bodies of the unclaimed dead.

Panel 2D: Thursday, November 3, 1:30 PM-3:30 PM *Ansley 4* (projector and screen)

Digital Cities

Chair: John Tinnell

City Writing: Placing Digital Creativity in Urban Settings
John Tinnell (University of Colorado at Denver; john.tinnell@ucdenver.edu)

Historians of reading, most notably David Henkin, argue that critical accounts of textuality have traditionally overlooked signs and messages occupying urban locales. In turn, recent scholarship in "city reading" and geosemiotics has spurred transdisciplinary analyses of the relations between discourse and environments, especially print-based signage in public spaces. This presentation aims to extend these lines of inquiry to account for emerging modes of urban inscription now appearing in many European and American cities (including Atlanta). A concise overview of relevant technological initiatives such as ubiquitous computing, augmented reality, and urban informatics provides an essential context for grasping the underlying conditions and design philosophies that inform new urban annotation practices. Moving between commonplace examples and more complex experiments, the presenter illustrates how the continual spread of smartphones, tablets, and wearable interfaces is already changing the place of digital creativity. Responding to this shift, citizens and cultural organizations are attaching multimedia to a variety of locales for various rhetorical, aesthetic, and civic purposes. Whereas previous genres of urban textuality were typically restricted to corporate and municipal authorship, a new wave of city writing is enabling a much wider array of contributors to publish their work at specific sites in the urban fabric. Culminating in case analyses of two Atlanta-based projects (Cycle Atlanta and Sweet Auburn), the presentation will provide attendees with a generative, concrete basis for reflecting on the broader cultural and aesthetic implications raised by budding forms of digital city writing.

***Between C&D* and the Dot Matrix Printer**
Andrew Strombeck (Wright State University; andrew.strombeck@wright.edu)

For a range of reasons, New York City experienced an infrastructural shock in the 1970s and 1980s. My presentation reveals the ways in which the writers and publishers who were working in the Lower East Side during this era crafted an aesthetic around and from within this material sense of ruin. Writers working amidst these ruins, both white bohemians and Puerto Ricans, were publishing in new, innovative literary journals. The most interesting of these was Catherine Texier and Joel Rose's Between C&D (1984-1989), which published work by, among others, Kathy Acker, David Foster Wallace, Miguel Piñero, and Dennis Cooper. Supported by a grant from Epson, Between C&D was produced on a dot-matrix printer and distributed as a fanfold paper with its tractor holes intact. Its printed form invoked the immediacy and ingenuity of its production. Its ensuing lack of binding meant it could be packaged in an unconventional way: Texier and Rose distributed copies of the journal in Ziploc bags meant to invoke those used by local drug dealers. In the context of a failing macro infrastructure, then, Texier and Rose developed a micro infrastructure—apartment, printer, paper, baggie—to articulate a literary culture in the interregnum between the neighborhood's decline and redevelopment. By returning to the physical forms that Texier and Rose created with Between C&D, we encounter a literary history in which small-scale technologies stand in the gaps of arts funding. My presentation will examine the intertwined history of the dot-matrix printer's development and the simultaneous collapse of state funding for the arts.

Urban Informatics and Cyborg Pulsations: Creating the Inhumanist City
R. Joshua Scannell (City University of New York; joshua.scannell@gmail.com)

In 2012, the Center for Urban Science and Progress opened its doors in New York City. Primarily housed within NYU, the center is partnered with a range of institutions, from academic powerhouses to private sector tech behemoths and the New York Police Department. CUSP exists because NYU won then-Mayor Bloomberg's Applied Science Initiative in the opening days of the 2010s. The initiative offered free public land, $100 million in public capital, and "the full support of [the Bloomberg] administration" to the school that can "best…maintain our global competitiveness and create jobs. These campuses would not only enrich the City's existing research capabilities, but also lead to innovative ideas that can be commercialized, catalyzing hundreds of spinoff companies and increasing the probability that the next high growth company – a Google, Amazon, or Facebook – will emerge in New York City." CUSP developed this mandate into a "new" discipline called "Urban Informatics" (UI). The goal of UI is to "instrument" NYC. CUSP wants to "use existing data from a network of agencies to transform the city into a living laboratory and classroom." Turning the city into a data mine would allow it "to take the city's pulse like never before." This "pulse" would form the material basis for the speculative Google-to-come. This paper will explore the Inhumanist (Negarestani 2011) ontology at the heart of the UI "pulse" and show contextualize it within a post-biopolitical project of generating performative archives from the future.

Panel 2E: Thursday, November 3, 1:30 PM-3:30 PM *Ansley 5* (projector and screen)

Weird Evolutions: Nature, Creativity, Vitality

Nature is intrinsically weird – and its weirdness provides us with the conditions of possibility for both ecological vitality and the creation of the ontologically new. Accordingly, this panel directs

our attention to the strange and surprising speculative resources implicit in underutilized archives ranging from the literary to the philosophical. Making contributions both playful and pragmatic, each panelist highlights the creative potential and counterintuitive evolutions that reside in reflections on the natural, the vital, and the weird. Randall Honold examines the ways in which China Miéville's novels can elucidate our practices of urban ecology in order to expand our understanding of what counts as natural. Brandon Jones turns to the philosophers Alfred North Whitehead and Ernst Bloch in order to suggest practices of literary imagination that provoke possible – and possibly utopian – futures. Christine Skolnik considers the weirdly productive dimensions of creativity that stem from and work within the cultural, material realities of environmental degradation – and how these realities affect and inflect the conditions of narrative construction. Michael Uhall uses a diverse array of figures – Algernon Blackwood, Marion Milner, and F. W. J. Schelling – in order to elaborate a speculative political theory that allows or forces us to tarry with the darker side of the creative, material unconscious and the political implications for our Anthropocene future that follow from such tarrying. Each contribution intends to animate and vivify our sense of what nature can do – indicating the various ways in which creativity reveals itself to us as a fundamentally weird phenomenon.

Chair: Michael Uhall

Environmental Degradation, Creativity, and the Weird
Christine Skolnik (DePaul University; cskolnik@depaul.edu)

Environmental biologists have identified a number of typical responses to the ethical question of reparations. Within the general population, those who value human creativity believe that it frees us from nature's laws or that it will rescue humans from any catastrophe. Those who recognize human dependence on ecological systems support restoration out of self-interest and/or for ethical reasons, but do not link these positions with creativity. One weird aspect of this matrix is the alignment of environmental degradation with creativity; another weird aspect is the disassociation of creativity from vitality. Historically, creativity was associated with biological reproduction. A techno-centric understanding of creativity focused on industrial production is not vital in the same way. This alignment of degradation and creativity will be considered within a critical theoretical genealogy of alternative empiricisms. I will reflect on William James's radical empiricism, Bergson's *Creative Evolution*, and Deleuze's Bergsonian analysis of the real. These theorists help us to explain and critique the strange, contemporary alliance of degradation and creativity. Looking to weird literature, human productivity and consumption now align with fictional descriptions of weird monsters. Aggressive, alien, indifferent. In the story of nature divided against itself, human beings play multiple roles: monsters, victims, and also setting. And the environment becomes a character. If humans have become alien destroyers of their environment, then human antagonists, including aliens, can be heroes. This narrative inversion will be illustrated with reference to Modern and contemporary weird literature and pop culture.

Living Like a City: China Miéville's Urban Ecologies
Randall Honold (DePaul University; rhonold@depaul.edu)

Urban ecology resists separating the natural and cultural. China Miéville's fictional urban ecologies follow suit. He works out what is entailed in imaginary urban ecologies not only for a

variety of sentient beings but also for the cities themselves. In effect, he asks the readers to put themselves in the place of the cities, to live through his cities immanently, in effect modeling living more immanently wherever we are. My presentation will frame two of Miéville's novels, the noir-ish *The City & The City*, and the juvenile lit *Un Lun Dun*, as works on urban ecology. Many recent readings of Miéville are Marxist – certainly a legitimate way of interpreting stories where work, capital, and identity are often contested – but I want to suggest that a less reductionist approach might yield insights into other dimensions of these novels. To be specific, Miéville has us imagine geographies of horizontal immanence with no outlet to a "world" beyond. (Both novels use the conceit of a passageway between dialectically opposed realms, one the "outside" of the other.) Objects at all scales, durations, and vitalities push and pull each other into ever-increasing intimacy. Miéville's cities are creative, vital ecologies; ecotones of great diversity; assemblages of coexisting objects that resist thorough explanation and understanding. They show the reader that a likewise immanent, co-creative, living-through wherever they are is not only possible but necessary for healthy urban evolution.

On the Political Uses of Creative Darkness: Blackwood, Milner, Schelling
Michael Uhall (University of Illinois at Urbana-Champaign; uhall2@illinois.edu)

At first glance, Algernon Blackwood, Marion Milner, and F. W. J. Schelling seem to form an unlikely trio, particularly if you are looking for political insights. However, I argue that these three figures enable access to a dimension of speculative political theory that we often overlook. Principally, they articulate and direct our attention to the affective and ecological dimensions of what I am calling creative darkness. Creative darkness refers to interaction between the emergence of ontological novelty, on the one hand, and the alluring, but often horrifying opacity of nature, on the other hand. I use the term to evoke both the ambiguities of the concept of nature and the darkness or indifference that remains always implicit to the emergence of the new. This is particularly relevant for any attempt to think politics in the Anthropocene, which both implies the remarkable power of human agency and nevertheless implicates the human dramatically in the pervasive conditions of ecological ruin and political decay we face today. Accordingly, the attempt to conjure possible existential alternatives is one of our principal tasks. To do this – to create "new modes and orders" – requires that we attend closely to the seething darkness implicit to nature. In the paper, I reflect on how these figures evoke this creative darkness – and how each figure gives the darkness a voice. Particular attention will be given to the possibility of an Anthropocene politics that derives its vitality by incorporating crucial insights about the material sources of the creative, material unconscious.

Utopian Prehensions: Creating the Future with Whitehead and Bloch
Brandon Jones (University of Illinois at Urbana-Champaign; bdjones4@illinois.edu)

The Jamesonian-Freudian doctrine that the historical past is a deciding influence on artistic production is often a prior assumption of literary reading practices. In this paper, I argue that Alfred North Whitehead and Ernst Bloch together offer us a stark alternative that rivals the unconscious depths of the past and the way it has been said to shape cultural representation. Namely, they provide a mode of reading literature that takes seriously the impact of the future on fictional creativity. By connecting Whitehead's post-1930 treatment of the role of prehension in anticipating future actualities with Ernst Bloch's discussion of the role of the "Not-Yet-

Conscious" or preconscious in anticipating future "real possibles," I suggest that we can consider utopianism as a vital influence on human consciousness and aesthetics. Whitehead is famously credited with coining the modern understanding of "creativity." In his later works, Whitehead is especially interested in how a not-yet-conscious feeling, or "prehension," of the future intercedes in each creative process. Bloch's conception of the preconscious parallels Whitehead's notion of prehension, likewise denoting not only a prior-ness to conscious awareness, but also an anticipatory dimension of experience that conceives of possible futures. Bloch goes further, bestowing a utopian impulse upon creative prehensions of the future. Whitehead's understanding of creativity and prehension can, I argue, nuance Bloch's description of the way utopianism manifests in art, and in doing so offer a more robust account of futurity in a variety of fictional genres.

Panel 2F: Thursday, November 3, 1:30 PM-3:30 PM *Ansley 6* (projector, screen, and speakers)

"Creating Sensation": Making Sense, Making Silence: Digital Tools and the New Sensorium

This panel addresses the techniques, methods, and practices involved in the creation of sensations. The relationship between the senses has been a concern in art history, especially in the early C20th. As Benjamin famously wrote on Baudelaire, 'technology has subjected the human sensorium to a complex kind of training' (2006:191). Accelerated through era of modernity, and after, through art historical engagements with psychology, revolutions in painting techniques, the editing and explorative techniques in early film, video installation, and now VR, there has been a long history of experimentation with sensation, addressing the multisensoriality of the body, with the remixing of sensory channels. Precursors to VR such as the Maréoama (1900) and Heilig's Sensorama (1958) have tried to address multiple senses simultaneously with the intention of increasing the participant's sense of immersion, and therefore to directly produce sensory experience. Early artistic experimentation in VR, such as by Stahl Stenslie and Char Davies, similarly stressed immersion, but also a perturbation or alteration of the normate sensorium by means of custom-made bodysuits and a different bodily interface. With the barrier to entry to consume, and develop for, the new iteration of VR, 4D cinema, sensory substitution devices for the vision and hearing impaired, the proliferation of touchscreens, and techniques within retail psychology to plug into the senses of the consumer in retail spaces (e.g. artificial scent devices, specialized lighting, rhythm and tempo of ambient music), Benjamin's observation is ever more pressing: just what has been happening to the human sensorium all this time?

Chair: David Parisi

Re-sounding Silence: Noise Reduction and Amplification as Sonic Mediation
Jacob Gaboury (State University of New York at Stony Brook; jacob.gaboury@stonybrook.edu)

One method for the production of new sensations is the mediation of the otherwise insensible, a reorientation toward those parts of an environment that escape human perception. This paper explores this reorientation through two historical moments in the production of recorded sound, along with two key concepts that shape the ways in which sound is perceived and mediated:

noise and silence. I begin with an exploration of early digital noise reduction technology in the 1960s, focusing on the removal of noise and subsequent production of silence. In demonstrating the ways in which digital technologies were used to erase their own mediation in the hiss of magnetic tape or the convolution of a voice with the vibrations of a transducer I look to make audible the silencing of ambient sound at this particular historical moment. The paper then turns toward the contemporary through the sound artist Jacob Kirkegaard, whose work makes audible otherwise imperceptible "noise" through the mediation of recording technology. Capturing and amplifying the sound of otherwise imperceptible vibrations – the movement of glaciers, the acoustic emissions of the inner ear, the reverberation of a gallery wall – Kirkegaard points to the ways in which acoustic technologies – including the body itself – make and mediate sound. Ultimately I look to demonstrate the ways in which acoustic sensation is made present through the production of media technology, and the way in which our perceptions are transformed by mediation.

Mark Paterson, Wilder Penfield's Sensory Homunculi: Art-Science collaborations in mapping the motor cortex at the Montréal Neurological Institute
Mark Paterson (University of Pittsburgh; paterson@pitt.edu)

Key experiments involving the stimulation of monkey brains by Ferrier in 1874 revealed a 'motor cortex' which dealt with bodily movement and the planning of movement, and encouraged the American neurosurgeon Harvey Cushing to conduct experiments to map the motor parts of the human brain between 1902-1912. It was through building upon the scientific work of Ferrier, Sherrington, and a surgical apprenticeship with Cushing in particular, that led Canadian neurosurgeon Wilder Penfield at the Montreal Neurological Institute to create maps of the sensory and motor cortices of the brain in the 1930s, including the famous 'sensory homunculus' (1954), for body sensation and motor control, located in the somatosensory and motor cortices, respectively. Penfield's work laid the foundations for what is now called the primary somatosensory cortex ('S1'). This paper builds on archive research at the Institute and a series of collaborations between Penfield and artists engaged in mapping localized brain function, some of which appeared in published books and articles, including Penfield and Bodrey's 'Somatic Motor and Sensory Representations in the Cerebral Cortex of Man' (1937) and culminating in Penfield and Rasmussen's monograph The Cerebral Cortex of Man (1950). The famous sensory homunculus emerged through a series of sketches and collaborations by Penfield with the artist H.P. Cantlie, and provide successive glimpses of the process of mapping the motor cortex.

'You can watch. You can hear. Now you can FEEL!': Creating and Coding the Cybersexual Real
David Parisi (College of Charleston; parisid@cofc.edu)

Since Howard Rheingold popularized the term in the 1990s, teledildonics has been a subject of futurological speculation. Such speculations, however, have treated teledildonic/cybersexual interfaces in generalities, without reference to the specific mechanisms employed in synthesis of remote/virtual sex. Using the RealTouch cybersex system as a case study, I examine the material and commercial processes underpinning the creation of sensations in order to show how this act of creation is animated and structured simultaneously by a logic of algorithmic sensory coding

and a strategy of intellectual property protection. Manufactured from 2008-2014, the RealTouch was designed to combat piracy of Adult Entertainment Broadcast Network's library of pornographic films. The incorporation of data rendered for touch, via the RealTouch's proprietary content distribution system, into the stream of code rendered for the eyes and ears aspired to ensure that AEBN's touch-enhanced content could not be copied. The system's success hinged on the creation of compelling haptic sensations that first had to be designed and coded before they could be sutured onto the audiovisual text. The RealTouch presented haptic data through an orchestration of mechanisms in the device: dual belts spun and tensed, a module timed the release of lubricant, and a heating element regulated its internal temperature. The creation of cybersexual sensations required the coder to enter into a (gendered) bodily identification both with the male actor and with the RealTouch's end user, linking the device's commercial function inseparably to its ability to produce a convincing simulation of the haptic real.

Patterns, Grids and Targets: Simondon's Non-Visual Images and Posthuman Creativity
Jakub Zdebik (University of Ottawa; jzdebik@uottawa.ca)

Gilbert Simondon, the philosopher of technology who was so influential on Gilles Deleuze, theorizes the creative potential of non-visual images that express themselves in patterns, grids and targets. For this paper, I propose to explore the viability of Simondon's non-visual images as an aesthetic theory through which to analyse the idea of multiplicity essential to the definition of digital images. To do this, I will extrapolate an aesthetic theory of intra-perceptive representations (non-visual images) as described by Simondon in his Imagination et invention, a seminal book that has not yet been translated into English. First, I will explore how intra-perceptive images respond to patterns in environmental spatial systems (insect response to prey). Second, I will look at the formation of intra-perceptive grids in systems comprised of a multiplicity of individuals (flocks, swarms, social groups). Lastly, I will look at Simondon's concept of targeting located in his concept of "baroque" contemporary art and architecture (Op Art and brutalist architecture). I will excise an aesthetic theory from Simondon's text with the help of Jean-Clet Martin's notion of the posthuman virtual image, Deleuze's concept of diagrammatic organization and Christine Buci-Glucksmann's view of the posthuman in the context of digital art. I believe this paper will contribute to the budding filed of Simondon scholarship by establishing a posthuman aesthetics that can be applied to digital art environments.

Panel 2G: Thursday, November 3, 1:30 PM-3:30 PM *Ansley 7* (projector, screen, and speakers)

Theorizing Creativity 1

Chair: Melanie Swan

Philosophical Principles of Creativity
Melanie Swan (New School for Social Research; mxswan@yahoo.com)

Creativity is one of the most unique, enigmatic, and sought-after human qualities; an "unrehearsed adventure" as Oakeshott says (Rationalism). This talk articulates a structure and key themes for how we might understand creativity more cohesively from a philosophical perspective. Starting with artworks as a prominent category of novelty which has been considered by many theorists, there are diverse accounts as to what constitutes truly creative and originary works. For Rorty (Contingency, Irony, and Solidarity), what counts as novel is a work that is incommensurable in form, in which a new conceptual schema has been created. Examples include *Remembrance of Things Past* (Proust), *Philosophy of Spirit* (Hegel), *Finnegans Wake*, (Joyce), and *Post Card* (Derrida). Like Rorty, Castoriadis (*Window to Chaos*) posits that new forms are radically novel. For Deleuze (*Proust and Signs*), not form but content constitutes novelty, the content of an original worldview. What counts as novel is when the artist has some sort of encounter with originary time and pure difference, and transmutes this encounter into an externally-visible representation. Historicity is related to creativity for Levi-Strauss (*The Raw and The Cooked*) in that novelty must answer 'compared to what'? We did not have 'nature' until we had 'culture,' such that 'nature' became distinguishable. Likewise, one aspect of novelty is relativity. There are also social dimensions to creativity, for example the existence of 'yes-and collaboration energy' as an identifiable dynamic in improvisational theatre, jazz jam sessions, and brainstorming.

The Philosophical Paradox of Creativity
Thomas Byron (Boston University; tbyron@bu.edu)

One of Henri Bergson's central critiques of human reason was the tendency to reduce the inherently mobile – be it a thought process or the flight of an arrow – to a series of discrete points. In so doing, humans are better able to act on their surrounding environments, but they also remove the essential aspect of the wandering mind or the flying arrow – its movement between the artificially fixed points. However one defines creativity, it would necessarily seem subject to this very critique, as creativity is just such an intangible movement or inspiration, a process or devenir often artificially reduced to the immobility of words on a page or brushstrokes on a canvas. As Jacques Hadamard's survey of notable thinkers reveals, creativity can happen subconsciously or consciously, with or without intention, through the medium of language or completely outside its scope. In its form as embodied artifact, however, the inherent dynamism of creative thought becomes bound, anchored to a vocabulary, a moment in time, and conscious. The creativity which informed the creation of the artifact and which continues to evolve in its wake with its différant author (to adapt Derrida's term), seem to be lost in uncaptured movement. This paper proposes to discuss, primarily from a metaphysical perspective, this paradoxical gap that separates creativity as intellectual phenomenon and creativity as embodied work. Can creativity be adequately traced through a Barthesian view of the text alone? Does it subsist in a vestige just beyond the work's bounds?

A Double Take: René Girard and the Role of Imitation in Creativity
Matthew Packer (Buena Vista University; packer@bvu.edu)

Creativity, it turns out in the digital era, has far more to do with imitation than traditional theories supposed. Not only might the notion "it's better to innovate than imitate" be misguided; innovation, in light of our present copy culture, seems to depend on all sorts of mimetic

behaviors, much as today's mirrorlike business rivalries demonstrate. The present disarray of theories about creativity even suggests that creativity itself, as much as it is a generative process, could be regarded as a premium or value placed on a person, product, or artifact, like that attaching to money, art, and power. This paper examines creativity in terms of René Girard's theory of mimetic desire and argues that, historically, a creator has been elevated as a model, someone to be emulated, even surpassed, leading to all sorts of conflictual problems not typically associated with creativity. Here, in other words, is the innovator, inspiring all manner of copycats to produce imitations in whatever genre—but also inspiring others to break away, to be different, even if only for art's sake, as Seinfeld jokes in the episode "Opposite George." Mimetic desire affords a fresh understanding of creativity and aligns with numerous new takes on the topic, including Adam Grant's theory of originals, where the follower or latecomer today often has the upper hand. It's an understanding which, in contrast to Harold Bloom's Anxiety of Influence, may help make us more creative than ever.

Panel 2H: Thursday, November 3, 1:30 PM-3:30 PM *Ansley 8* (projector, screen, and speakers)

Scientific Creativity 2

Chair: Kathleen Morrison

Foucauldian Biology: Thinking Across Disciplines
Kathleen Morrison (San Francisco State University; kat.morrison12@gmail.com)

Feminist theorists and activists have been strongly critiquing the biological study of sex and gender since the 1970s. While theorists and researchers like Elizabeth Wilson and Joan Roughgarden have begun to integrate biology and the significance of the body back into feminist thinking, the connection between existing evolutionary biology theory and sociocultural theory, and the possible production of new theory based on these connections, has been largely ignored. My paper approaches Joan Roughgarden's social selection theory from a Foucauldian perspective to highlight the similarities between the two schools of thought and to expand social selection further. Specifically, I read Roughgarden's *The Genial Gene* (2009) and Michel Foucault's *The History of Sexuality Vol. 1* (1976) against each other to highlight how the texts (and fields) can help each other creatively interrogate how society understands sexuality. By reading these texts side by side I aim to generate new theory that spans biology, gender, and sexuality studies. This project focuses on the intersections of these seemingly disparate fields in order to highlight the possibilities available to researchers when we cross into other disciplines to accomplish scholarly work.

Creativity and Humanity: Jacob Bronowski, Philip Morrison and the Two Cultures
Brian McAllister (Albany State University; lterry00@gmail.com)

The autumn of 2013 saw a contentious exchange of editorials in the *New Republic* between Harvard cognitive psychologist Steven Pinker and literary critic Leon Weseltier concerning the relative merits of the sciences and the arts and their relationship to contemporary society. Their dispute echoed much of the rhetoric of the famous mid-twentieth century "Two Cultures" debate

between C. P. Snow and F. R. Leavis. The Snow/Leavis debate was itself an iteration of a conversation that began in the late nineteenth century with competing lectures delivered by Thomas Henry Huxley and Matthew Arnold. A review of these three exchanges demonstrates that the rhetorical terms of the "Two Cultures" debate have remained surprisingly stable over the past 140 years and reveal a set of recurrent tropes that have permeated twentieth-century thought and perplex our current discussion about the intellectual life. The "Two Cultures" debate is still ongoing and in the twenty-first century has become increasingly bellicose. Mostly overlooked in this heat are the ideas of two of C. P. Snow's contemporaries: the mathematician Jacob Bronowski and the physicist Philip Morrison. Bronowski and Morrison argued that the sciences and the arts are a shared commitment to the creative imagination. Further, they theorized that the creative faculty and the creative process are identical in all disciplines. My paper proposes to demonstrate that an understanding of Bronowski and Morrison's theories of creativity can reveal that much of the rhetoric of the ongoing "Two Cultures" debate is actually a dispute between straw men.

From Poetry to Responsibility: The Literary Technology of Scientific Philosophy in Rudolf Carnap and Hans Reichenbach

Alan Richardson (University of British Columbia; alanr@mail.ubc.ca)

One of the key goals of logical empiricism in the first half of the 20th century was to bring the methods, goals, and research organization of the exact sciences into philosophy. It sought to do this at the very time that other philosophical movements and other scientific movements made philosophy and science into dialectical opponents. There was thus a key rhetorical problem for the logical empiricists: how to argue that philosophy could and should participate in this new form of *Wissenschaftlichkeit*? In this talk I will look at the literary methods by which Rudolf Carnap and Hans Reichenbach in the 1920s and 1930s sought to argue against literary methods in philosophy. Crucial to our discussion will be the explicit but vaguely described distinction they wished to draw between the new philosopher modeled upon the responsible scientist and the traditional philosopher configured as a "concept poet." The place of poetry in the late 19th- and early 20th-century German philosophy paper will lend some poignancy to this form of metaphilosophical argument.

Methods of Malfunction: Rethinking Glitch as "Research-Creation" Practice

Kyle Bohunicky (University of Florida; kbohunicky@ufl.edu)

This presentation explores the potential of glitch and computational error as a "research-creation" practice for studying visual and digital media. "Research-creation" is an emergent method that harnesses artistic and aesthetic production as a key component of analysis. According to Owen Chapman and Kim Sawchuk's "Research-Creation: Intervention, Analysis, and 'Family Resemblances,'" research-creation methodologies typically fold creative practice into research by experimenting with the media being studied. Contemporary digital glitch art from collectives such as JODI and Arcane Kids as well as artists such as Rosa Menkman and Nick Biz mobilize noise, glitch, and data corruption as research-creation practices that visualize and proceduralize the underlying operations and material limits of digital media (Krapp 2011, Nunes 2012, Emerson 2014). Moreover, glitch as a research-creation practice pre-dates the digital, with links to Dadaist practices that used noise and error to expose how systems such as

logic "perpetuat[e] the bourgeois culture and its war efforts" (Burrough 83). Kurt Schwitters's notion of "merz," for example, often incorporated junk, garbage, and detritus as a way of addressing and studying how artwork is typically disconnected from material "life." Reflecting on historic and contemporary applications of glitch, this presentation discusses several media artifacts that use glitch as a critical research practice for investigating the problems and possibilities of digital media. Additionally, attendees will receive brief tutorials for several image corruption methods including python/processing scripts and image-to-audio conversion to encourage the use of glitch as a method for creating digital research projects.

Panel 2I: Thursday, November 3, 1:30 PM-3:30 PM *Peachtree 1* (larger room, projector, screen, and speakers)

Roundtable: Rethinking the Technosocial Imaginary: Decolonizing Futurities

Recently there has been a significant increase in scholarship focused on speculative fiction, and in particular a focus on understanding how such work participates in and illuminates the way that distinct experiences of colonialism, transnational flows of labour, and minority experiences of diaspora are shaped by various technosocial configurations. Increasingly we see speculative texts taken up by cultural theorists, from the focus on Lovecraft in speculative realist thinkers, to the place of speculative fiction in feminist STS scholars such as Donna Haraway and Susan Squier, to the ways that posthumanist frameworks and new theorizations of time have become central to queer theory and African American studies. While we praise the recent expansion of the canon of speculative texts, especially new attention paid to non-print media and to diverse minority discourses within the field, at the same time we feel that old and perhaps no longer useful paradigms for organizing such enquiry have continued to dominate. Our roundtable discussion seeks to unsettle these rubrics which approach the technosocial imaginary through fixed geographies of nation or region, fixed identities such as race or language, and fixed temporalities of linear development and historical periodization. Our roundtable seeks to start a conversation about new ways that we might study the coproduction of science and the social in the technosocial imaginary through new rubrics. Rather than organizing our enquiry around such established frameworks, we want to think through what it would mean to study the technosocial imaginary in terms of flows, seeking to ask new questions that cross the boundaries that have ossified around study segregated by nation, ethnicity or period. We tentatively propose thinking through new modes of enquiry that organize themselves through the frameworks of the biopolitical, the geopolitical, and the teleopolitical.

Moderator: Sherryl Vint

Contributions:

Aimee Bahng (Dartmouth College; Aimee.S.Bahng@dartmouth.edu)
Anindita Banerjee (Cornell University; ab425@cornell.edu)
André Carrington, Andre (Drexel University; profcarrington@drexel.edu)
Sara Kaplan (UC San Diego; kaplansc@ucsd.edu)
Lysa Rivera (Western Washington University; Lysa.Rivera@wwu.edu)

Patrick Sharp (California State University; psharp@exchange.calstatela.edu)
Sherryl Vint (University of California Riverside; sherryl.vint@ucr.edu)

Panel 2J: Thursday, November 3, 1:30 PM-3:30 PM *Peachtree 2* (projector, screen, and speakers)

Roundtable: Creating Environments as/in the Anthropocene

The Anthropocene, proposed to distinguish contemporary times from the Holocene Epoch, names the creation of a distinctively human-marked form of the planet's environment. A central challenge of thinking about the Anthropocene is scale, since studying the planet as a whole is exceedingly difficult. That challenge will be treated specifically as a theme in this roundtable, and it also leads to a necessary range of foci, from the local (soil in Atlanta) to the planetary (the problem of hyperobjects). Additionally, and more specifically, this roundtable investigates concepts of creative environments by studying toxicity in southeastern U.S. soil following industrialization, the human mind as a kind of theater, computer-generated environments, engagement with hyperobjects, created hybrid environments that are both natural and digital, and posthumanist formal challenges of Edgar Allan Poe's writing. The panel will also address more generally the idea of the Anthropocene in terms of posthumanist notions of creativity, in which the collective actions of our species produce a form or a reality without a creator or a singular agent. We therefore intend to discuss the Anthropocene as a kind of hive or swarm creation.

Moderator: Ryan Hediger

"Stealing from the World: Synthetic Environments and the Anthropocene"
Rebecca Perry (University of Virginia; rap9e@eservices.virginia.edu)

"An 'Inner Theatre' Model of the Human Brain in Relation to its Animal Ancestry"
Mark Pizzato (University of North Carolina at Charlotte; mpizzato@uncc.edu)

"The Problem of Scale in the Anthropocene: A Response to the Panel"
Ryan Hediger (Kent State University; rhediger@kent.edu)

From "Before the Eye of the World" to "What I Here Propound is True:" Edgar Allan Poe's Creation of the Universe
Mo Li (Middle Tennessee State University; bimuyu44@gmail.com)

Creativity as Conjugation: Ethics and Human-Nonhuman Relations in the Anthropocene

Andy Murray (University of California at Santa Cruz; aimurray@ucsc.edu)
Gene Felice (University of Maine; gene.felice@maine.edu)
Sophia Magnone (University of California at Santa Cruz; sophia.magnone@gmail.com)

and Tea Break, 3:30 PM-3:45 PM

Session 3: Thursday, November 3, 3:45 PM-5:45 PM

Panel 3A: Thursday, November 3, 3:45 PM-5:45 PM *Ansley 1* (no AV)

Theorizing Creativity 2

Chair: Regina Yung Lee

On the Creative Event: Speculation and the Fugue in Nancy Huston's *Prodige polyphonie*
Regina Yung Lee (University of Washington; rylee001@uw.edu)

Francophone writer Nancy Huston's fiction text *Prodige polyphonie (Prodigy)* contains the word "polyphonie" where the genre – *roman*, or novel – would normally appear. Critical reception of this text focuses on its literary address of the fugue, a multi-part musical form with repeating themes, and the innovations to musical and literary forms its deployment here represent. What is missing from these readings is an address of how the fugue renders *Prodige* a creative and speculative event. In this paper I read Nancy Huston's *Prodige polyphonie* through feminist new materialisms to argue for a reading which takes seriously its commitments to the mutations of linear time inherent in the fugue. By analyzing the dual endings of *Prodige* as speculations, I reposition them as fugitive commitments to destabilizing the chronological matriline, not to negate its position as a narrative crux, but to reposition it as a creative event through the polyphonic vocalities which define the text. Thus, *Prodige*'s transposition of this musical structure refigures birth and motherhood to co-create speculative chronologies and new forms of life.

Ecocreativity: Inventing the End of the Anthropocene in Richard Jefferies's *After London*

Pascale McCullough Manning (University of Wisconsin Oshkosh; manningp@uwosh.edu)

Richard Jefferies's 1885 novel *After London, or Wild England* has been characterized as "postapocalyptic" (Scott 53), a "dystopic romance" (Plotz 34), and as a work "haunted by extinction" (Beer 133) – characterizations which, while all strictly speaking accurate, implicitly attribute to the novel a negative outlook not fully justified by its overall design. For in envisioning a world jarred by a cataclysmic astronomical event into what Heidi Scott calls "a move backward toward neowilderness" (53), Jefferies enacts a wish- fulfilling fantasy of the end of industrial society, a depiction of resurgent nature designed to ratify his conviction that "Modern progress, except where it has exterminated them, has barely touched the habits of bird or animal" (*Wild Life* iii). Put simply, in *After London* Jefferies envisions the mass extinction he repeatedly refers to as "the event" not as catastrophe but as *eu*catastrophe. Mobilizing this concept of eucatastrophe – first coined by J.R.R. Tolkien to designate the opposite of tragedy, "the true form of fairy-tale, and its highest function" (68) – my paper argues that *After London* arises out of Jefferies's recognition that human activity had irrevocably altered natural processes and his concomitant determination to effect an imaginative end to the Anthropocene. Though evidencing in the novel (and indeed throughout his writings) an awareness of the uniformitarian turn effected by Lyell and his inheritor Darwin, Jefferies roots his fantastical vision of a post-

Anthropogenic England in the superseded catastrophism of Georges Cuvier, whose *Discourse on the Revolutionary Upheavals of the Globe* (1825) theorizes an analogous rebooting of human history. I thus contend that a study of *After London*'s scientific intertexts illuminates the extent to which not only the novel itself but by extension many subsequent portrayals of post-apocalypse are predicated upon chimerical eucatastrophist fantasies that serve to disavow (and thereby, tacitly, to falsely excuse) humanity's momentous altering power, its capacity to recreate the world in its likeness.

Magick, the Brain, and Biopolitics: Embodied Ritual and Technologies of the Resistant Self

Lyttle, David (University of Wisconsin, Milwaukee; lyttle@uwm.edu)
Schifani, Allison (University of Miami; ams611@miami.edu)

Our paper will explore the political affordances of magick (of the Western esoteric tradition) in the contemporary moment as a creative technology of the self. Magick may counter the mandates of the reigning biopolitical regime, even as some of its instantiations mirror certain instrumental tendencies of capital. Following the work of Catherine Malabou in 'What should we do with our brain?', our work takes seriously developments in neuroscience and philosophy that locate radical possibilities in brain plasticity. The embodied practices of Western magick, we argue, not only literally and creatively remake the brain in ways that could prove liberatory, but also can serve as a useful epistemological framework to read the mechanisms of capitalist productions of and care for the self. Our work is invested in, on the one hand, leveraging magickal discourse to critically map the forces at work in global capital, unveiling unique exploits; and on the other, to locate possibilities for engaging strategically with magickal practice, as an embodied way of moving against capital's bio-technical policing. This paper will deal directly with lines of thinking about affect, pre-cognition and embodiment (Paolo Virno, Nigel Thrift and others). We situate our argument within the materialist terms (a la Malabou) of brain plasticity in order to model both alternative, embodied technologies of the self and to charge our fields of inquiry by juxtaposition. Putting political philosophy, neuroscience and Western esotericism in a conversation with each other, we believe, may prove its own kind of magical act.

Panel 3B: Thursday, November 3, 3:45 PM-5:45 PM *Ansley 2* (projector and screen)

No panel scheduled

Panel 3C: Thursday, November 3, 3:45 PM-5:45 PM *Ansley 3* (projector and screen)

Hi Mom! 1 -- Feminism, Psychoanalysis + the Arrival of the Mother in 20th Century Psychology

Julia Kristeva suggests that perhaps the overlooked element of creativity is the "enigma of gestation"--the site where nascent object-ideas form and materialize. According to Maggie Nelson's reading of Roland Barthes, "the writer is someone who plays with his mother's body". Through art, film, sound, graphics and hologram, this series of panels seeks to explore the im/materiality of the mother. Engaging with psychoanalysis, developmental psychology, feminist and affect theories we interrogate the often disregarded (m)other of subject formation and

explore the (re)production of creativity through the mediated imaginaries of the maternal in the 20th centrury. Following the claim that motherhood is the unfinished work of femininsm, how does the arrival of the (m)other in 20th century developmental research re-create and re-present new affordances for critical social theorists? How do we encounter and engage the affective technologies of the maternal body? What role does the maternal play in feminist understandings of subjectivity? How do in/animate objects circulate with the affects of development and what theoretical affordances do new technologies offer for a re-mediation of the (m)other.

Chair: Lisa Cartwright

Black Fugitive Affect: The Black Maternal as the Loophole of Retreat
Taryn Jordan (Emory University; t.d.jordan@emory.edu)

Black fugitive affect presupposes the radical forms of protest prevalent in our contemporary era. The reproductive capacity of the black maternal by Harriet Jacobs in Incidents in the Life of a Slave Girl is the condition of possibility for the No Somos Delito (We Are Not a Crime) Hologram for Freedom Protest on April 10, 2015. The Hologram Protest is in opposition to the Citizen Security Laws in Spain rendering unpermitted protest illegal. Spokesperson for No Somos Delito, Carlos Escaño, describes the Hologram for Freedom Protest, "[i]t's about art, about going to a place beyond discourse. It's about touching emotion." The primary affect of both events is a bodily politics of disgust. Fred Moten theorizes black affect as sound produced in the ocular aversion to abjection. Jacobs' dual capacity for abjection is motivated by Julia Kristeva's notion of maternal reliance. The maternal can bridge the pathological split between mind and body through maternal desire. Jacobs' flesh becomes abject by hiding in the garret for seven years. Simultaneously, she— produces a fugitive form of resistance proved by hiding in plain sight. I untangle the various paradoxical relations between mind and body, past and present, Fugitive Slave Law, Citizen Security Act, Hologram for Freedom Protest, and Jacob's loophole of retreat through Massumi's reworking of the body. The body made virtual is a location of a living paradox where experience is displaced and feeling is the primary sensorial event. All of these scholars' work permits an exchange between Jacobs and the hologram protestors.

Mediated Mothering: The Radio Broadcast as Holding Environment
Hannah Zeavin (New York University; zeavin@nyu.edu)

To imagine an outcome to World War II that preserved a future for psychoanalytic practice, British psychoanalysts had first to figure out how to practice during it—that is, they had to continue working with the patients they could reach by whatever means and under whatever conditions. If the extremity of the war produced a shortage of fee-paying, couch-reclining patients, at the same time it presented a signal opportunity to expand the discipline: the war shifted psychoanalytic attention from the perpetual individual crises behind closed doors to an immediate national crisis happening in the streets and shelters. Beginning in 1939, D.W. Winnicott addressed the nation over the wireless in a series of discussions on mothering, using the ubiquity of private radio ownership and consumption in the home to perform a kind of house call to the vulnerable population in charge of rearing children. The doctor was literally in, with some consistency, proving reliable in a moment of extended uncertainty. The paper will examine

Winnicott's attempts to establish, and alter, some of the conventions of psychoanalysis on the air. Much of the analytic environment—no matter the medium—is established (by both clinician and patient) by the constant "voice" that creates a space for holding. Didier Anzieu calls this early environment a "sound envelope" or a "sound mirror." Anzieu instead insists that the infant is first "bound to its parents by a system of truly audio-phonic communication." In this case, that holding environment is recapitulated in Winnicott's voice, broadcast to millions.

Placental Ethics: Thinking Maternal Eroticism without the Child in Roman Polanski's Rosemary's Baby (1968)

Ryan Kendall (Emory University; ryan.c.kendall@emory.edu)

This essay will investigate relationships between the maternal body, the child, and abjection by way of a close analysis of Roman Polanski's 1968 film Rosemary's Baby. While mobilizing a primarily literary methodology, this essay will also mobilize psychoanalysis as a conceptual framework for thinking through Polanski's protagonist Rosemary Woodhouse's relationship to her demonic offspring. This essay's psychoanalytic leanings lean specifically toward Julia Kristeva's theories of maternal eroticism and abjection. For Kristeva, maternal eroticism and abjection are alike in that both are negative processes throwing the boundaries of the subject into crisis. In maternity/pregnancy, there can be no subject as there can be no distinction between the subject and its other: they are of the same body. The placenta, then, cleaves the subject and the other: it both joins and separates. Investigating the strange qualities of the placenta, this essay will draw from Kristeva's poetic 1976 essay "Stabat Mater". Here, Kristeva describes the placenta/afterbirth of her own delivery as 'a shadowy shape', 'severed scaly surface', and 'monstrous graft of life on myself, a living dead' (242). Through a close reading of this surprisingly demonic description, this essay sets out to think Rosemary's Baby as, instead, Rosemary's [Abject Placenta]: the living dead. It is through this unusual reading that this essay aspires to make an intervention at the site of ethics, specifically Kristeva's notion of herethics. As Kristeva's herethics depends problematically upon the relationship between maternal body and child, this essay seeks to sidestep the child by way of the abject placenta.

Representations of Birth and the Early Motherhood Experience: Queering Expectations

Ashley Teodorson (University of California at Davis; ateodorson@ucdavis.edu)

There are certain effects and affects produced by contemporary representations of birth and motherhood (i.e. film portrayals, books, memes and advertisements). These received knowledges and stories come to prescribe what our own experiences can be- structuring the range of maternal possibilities. This paper is a critical inquiry into the forces that serve to deconstruct "normative" narratives of the birth and motherhood scene as established through popular representation. Specifically I assert that the contemporary birth doula inhabits a queered space, one which challenges popular representations/constructs of maternity and benefits from privileges not generally afforded to birthing mothers. Doulas are present at the birth site with all of the provisions of the maternal but with a presumed competence and queer authority that is largely absent from traditional psychosocial constructs of the mother. She is "paternal enough" to formidably engage with the bearers of medicalized power-knowledge while remaining the pinnacle of maternity- the function of which is a radical reorientation of the potential of the birth and early motherhood experiences. This paper is engaged with queer theory, affect theory and

psychoanalysis. Specifically, I will be in conversations with Sara Ahmed's work on orientation, Maggie Nelson's, The Argonauts, and Lisa Cartwright's work on representations of childhood.

Panel 3D: Thursday, November 3, 3:45 PM-5:45 PM *Ansley 4* (projector and screen)

Scientific Creativity 3

Chair: Stephanie Callan

Forming Chaos: Scientific Process and Creativity in Connie Willis's *Bellwether*
Stephanie Callan (Spring Hill College; scallan@shc.edu)

Connie Willis's 1996 novel, *Bellwether*, begins with the scientist narrator promising a story of a breakthrough, but one that does not follow the orderly sequence of the scientific method. Instead, Willis portrays scientific research as a chaotic system with its own version of the "butterfly effect," in which an apparently insignificant difference, such as Alexander Fleming's open window, can trigger a major discovery: penicillin. In addition to discussing chaos theory in the novel, Willis uses it to shape the novel's form. For most of the book, it is difficult to tell signal from noise: the details that turn out to be crucial seem about as important as the other details of everyday life surrounding them. The breakthrough occurs when the narrator suddenly sees a connection and radically revises her assumptions about what is significant and insignificant, at the same time as the form of the novel positions readers to rethink their assumptions about the relative importance of details in the narrative. Thus, the novel links scientific and literary creativity: chaos is a metaphor for the causes of scientific breakthrough, and the form of the novel—a workplace comedy—becomes a metaphor that helps lay readers to understand chaotic systems. In both cases, creativity involves seeing an unexpected connection between unlike things. This paper explores the implications of chaos as a metaphor for creativity and calls attention to Connie Willis, an understudied figure whose attention to form rewards deeper analysis.

Materiality, Creativity, and the Early Modern Scientific Epistemology of Margaret Cavendish's Blazing-World
Stacy Wykle (University of Illinois at Urbana-Champaign; wykle2@illinois.edu)

Margaret Cavendish published her Description of a New World, Called the Blazing-World (1666, 1668) both as an "appendix" to her Observations upon Experimental Philosophy and as a separate text. In the centuries that followed, The Blazing-World was largely forgotten. Owing to the advent of "book history," the concern with "materiality," and the rise of feminist criticism, interest in the work has been revitalized. Primarily referred to "science fiction," scholars tend to overlook the extent to which The Blazing-World functions as an epistemic argument. The work's initial, dual, material embodiments and, of course, by the early modern social fact of her gender seem to have obscured the "science" in the fiction of which The Blazing-World is said to be an early example. Although "Cavendish Studies" has developed in interdisciplinary breadth in recent years, scholarship treating The Blazing-World as a philosophical text has yet to focus on the direct relationship between its material formats and its "vitalist materialism" from a "science studies" perspective, however. The work is but one document in Cavendish's overall project to

publicly participate in early modern scientific discourse. It communicates not only with her other published writings, but with the published writings of her contemporaries. Its material instantiations are thematically related to its core philosophical apparatus, and a framework that addresses the generative, material-semiotic capacity of Cavendish's text is needed. Genette's "paratextual thresholds" and Haraway's "situated knowledge" together evince the "vitalist materialism" of Cavendish's particular vision aimed at reorganizing the social, intellectual, and chronological realities of her day.

Creation and the Volatile Imagination: Physics and Literature
Kieran Murphy (University of Colorado-Boulder; kieran.murphy@colorado.edu)

Faraday's discovery of electromagnetic induction transformed the world by providing the blueprint for the mass production of electricity and a new type of motor that would replace the steam engine as the main driving force of the global economy. It also presented a new set of physical problems whose solutions would undermine the theoretical framework of Newtonian physics and prompt a redefinition of the creative process. In this paper, I argue that a new kind of creativity emerged in the wake of the epistemological changes instigated by the phenomenon of electromagnetic induction. Julien Gracq, in his study on André Breton's Surrealism, referred to this electromagnetic creativity as the "volatile imagination." Through literary and scientific examples ranging from Faraday and Einstein to Balzac and Rimbaud, I will show how electromagnetism legitimized the "volatile imagination" in the nineteenth century by rehabilitating its creative and scientific value.

Panel 3E: Thursday, November 3, 3:45 PM-5:45 PM *Ansley 5* (projector and screen)

Play with Me!

Chair: Renée Shelby

"I Incite this Meeting to Rebellion": Radical Feminism in Edwardian Board Game
Renée Shelby (Georgia Institute of Technology; reneeshelby@gatech.edu)

The militant British Women's Social and Political Union (WSPU) formed in 1903 in response to what members saw as slow-moving pacifist tactics of other suffragette groups. Facing police violence they countered with attention-getting strategies including disruption, occupation, and hunger-strikes. The WSPU also created a thirty-woman bodyguard battalion to protect members. Trained in jiu-jitsu, they promoted women's physicality internationally-creating the modern women's self-defense movement, as something "every woman should know." The WSPU's physical feminism reflected both their imagined and idealized relationship to the world. Seeing the body as a critical site where gender and power are inscribed, they aimed to transform normative conceptions of femininity as vulnerable through physical prowess. Corporeal techniques were thought to empower women and challenge the status quo. Grounded in this philosophy, the WSPU created the board game Suffragetto, which features encounters between Suffragettes and police. Based upon archival research, I contextualize and theorize the game's impetus and examine Suffragetto as emblematic of the WSPU's focus on physicality. Althusser argues ideology has a material existence residing in its apparatus and practices, and that ideology

reflects our imagined relationship to the real world. Butler suggests gender is a citational practice that can also be performed in subversive ways. Suffragetto materializes the real and imagined through domestic game play drawing new audiences to the WSPU's physical feminism. This game remains salient today as it offers feminist ideology in a hybrid fantasy-real world environment allowing players to experiment with alternative forms of political resistance.

Childhood and Creativity: Nathaniel Hawthorne's Juvenile Muse
Scott Harshbarger (Hofstra University; engsbh@hofstra.edu)

This paper draws on recent theory and research concerning the relationship between childhood, play and creativity in order to illuminate the importance of childhood to Nathaniel Hawthorne's creative process and characteristic themes. Brian Boyd points to our "uniquely long childhoods" to account for the development of forms of cognitive play that have become part of the human survival repertoire (2009). Longitudinal studies have confirmed the insights of early theorists (Groos 1908, Vygotsky 1933, Huizinga 1938) regarding the connection between play and creativity, with Sandra Russ mapping the many relationships between emotion, cognition, and creativity emerging in childhood (1993, 2004). Although psychoanalytic biographers of Hawthorne (Miller 1991, Herbert 1993, Erlich 1984) have developed a "tale of the completely dysfunctional family, the abandoned child, the cold mother, the absent father" (Coale 2014), ample evidence suggests that, as his sister put it to his first biographer, "his boyhood was very happy" (1870). Far from being scarred by childhood, Hawthorne experienced the opposite problem: a desire to remain in the creative environment of his youth. From the children's books he writes to the child characters he creates, Hawthorne demonstrates a fascination with childhood throughout his life. Early tales which set the thematic trajectory for his career– "My Kinsman Major Molineux" (1831), "Roger Malvin's Burial" (1832), "Young Goodman Brow" (1835) — feature young men who, while not children, exhibit the juvenile's fluctuating identity, something which their author would regularly assume and explore in his most creative work.

Playing with Jouissance and Joyousness in William S. Burroughs
Graham Hall (University of California at Riverside; ghall004@ucr.edu)

This paper aims to explore two forms of play in the life and writing of William S. Burroughs. The first is what I'll be calling a jouissance oriented play defined by what Derrida understands as a Rousseauistic nostalgia for lost origins (though as jouissance is meant to suggest, this form of play is the bread and butter of psychoanalysis). The second form of play corresponds with what Derrida understands as a Nietzschean joyous play defined by the indeterminacy and potential of a world that never had centers or origins to lose. I will unpack the apophenic affect of Burroughs' cut-up practice and argue that as a performance of this joyous play it catalyzes an immanent evasion of the control and limitations of a kind of transcendent capture (capture of/by desire, capture of/by an image of thought, capture of/by signification). Junk use as jouissance play, on the other hand, emerges for Burroughs as an insidious force that always orients itself toward this transcendent capture. For Burroughs, the drive and jouissance of the "death in orgasm [. . .] birth death cycle" are made actual in a social configuration characterized by the dualism of sex and the transcendence of language, which share a fundamental resonance with junk addiction. Cutting up becomes an undoing of transcendent language that reconfigures

becoming on an immanent plane and severs the centripetal force of drive and jouissance. I will draw from a wide range of Burroughs' interviews, lectures, and cut-up writings.

Trickster Science: Creativity and Disruption in Neal Stephenson and Michel Serres
Moritz Ingwersen (Trent University, Canada; moritz.ingwersen@gmail.com)

This presentation will open up a dialogue between the science fiction of Neal Stephenson and the science philosophy of Michel Serres. Anchored in the late twentieth century cultural reception of cybernetics and complexity theory, their engagement with the modern sciences, as I intend to argue, hinges on the concept of mediation. As quite likely two of the most prolific contemporary advocates of the bridge between literature and science, Serres and Stephenson take recourse in strikingly similar metaphors to illustrate the continuity between the scientific revolutions of the seventeenth century and the paradigms of what has been called 'the cybernetic age'. While Stephenson's fiction moves from hackers and skateboard messengers to engineers, cryptographers, and alchemists, Serres's philosophy unfolds under the banner of Hermes and converges on the figure of the parasite. Their subject matter are the physical sciences and their semantics combine the registers of ancient mythology and what might currently be understood as media theory. What their characters have in common is their occupation of a liminal space; they are agents of mediation, transformation, and subversion. Zooming into Stephenson's novels *Snow Crash*, *The Diamond Age* and *Quicksilver*, I will illustrate the ways in which Stephenson's protagonists and scientists function as trickster figures that, like Serres' Hermes, simultaneously embody the principles of creativity and disruption.

Panel 3F: Thursday, November 3, 3:45 PM-5:45 PM *Ansley 6* (projector, screen, and speakers)

Fluxus 1: Interrogating Creativity: The Use and Abuse of Creativity in Fluxus

In April 1957 Marcel Duchamp addressed a meeting of The American Federation of Arts in Houston, Texas. Pushing hard against long-held concepts about art, Duchamp, in his talk "The Creative Act," argued ". . . All in all, the creative act is not performed by the artist alone; the spectator brings the work in contact with the external world by deciphering and interpreting its inner qualification and thus adds his contribution to the creative act. . . ." making the case that the creative act is a transaction between the artist and the onlooker, and in it, the onlooker has the last word.
Fluxus type work is part of a long established tradition of utilizing art as a means of investigation, whether it is of art itself, or of political, social or philosophical concerns. In such a process Fluxus both mirrors as well as rejects numerous practices often associated with the avant-garde. Key among these is a culturally critical stance towards the paradigmatic values and operative structures of the status quo, particularly the nature, function and use of creativity in an art context. Given this, Fluxus activities seemed a perfect landing point for the open-ended prospects of Duchamp's proposition, and in fact many authors have stressed Fluxus and related movements as key conduits in the expansion of the Duchamp-Cage aesthetic tradition. The papers presented in these four linked sessions will consider the importance of that Duchampian exchange on a wide range of artists who would follow and present a number of significant ways in which this line of thought has forever altered our conceptions of creativity.

Chair: Owen F. Smith

Benjamin Patterson: Artist & Spectator
Julia Elizabeth Neal (jeneal@utexas.edu)

Over the last two decades, Benjamin Patterson has periodically explored his artistic relationship to Marcel Duchamp in order to unpack Duchamp's centrality in Fluxus history. Patterson's *Smoker's Rights* (1988), in which he appropriates Duchamp's 1914 Bottle Rack and embellishes it with taped cigarettes, is one example of reconsidering the significance of Duchamp's readymade. In this case, readymades fluctuate unevenly as ordinary and reified art objects. Later, Patterson's visual historiography, A Short History of Twentieth Century Art (1993), culminated in at least three versions where experimental art began with Duchamp and concluded with Fluxus. Each version, either text paired with found objects on paper or wood panel, begin colorfully with the assertion that "SINCE MARCEL DUCHAMP, THIS IS ART."

Smoker's Rights and A Short History of Twentieth Century Art corroborate, and simultaneously reject, a dominant perception about Duchamp's major influence on Fluxus artists. Patterson continues the tradition of challenging bourgeois art values in effort to sustain the openness of Fluxus expression and development. He emphasizes the importance of everyday actions in visual experiences, yet wryly acknowledges how these goals are interrupted by institutional acceptance and embrace. In this paper, I will argue that Patterson's references to Duchamp's artistic identity issues a critique against art history's tendency to consider influence teleologically, in effect complicating Patterson's own artistic lineage. It is a strategy of resistance against fixed interpretations, and an acknowledgement of his role as spectator and artist. I consider his two appropriative strategies, citing Duchamp's readymade and investigating Fluxus genealogy, neither reducible to parody nor satire, to explore tensions related to his and Fluxus's positions towards avant-gardism and history.

Performing the System: George Maciunas and Systems of Organization in Fluxus
Mari Dumett (maridumett@gmail.com)

George Maciunas was the founder of Fluxus, and it was he who made organizational claims for the group. Maciunas tried to organize Fluxus like a multinational corporation, simulating its organization and commodity flows, but it is equally significant that this is how he imagined critical art practice at that time. Along with its criticality, Fluxus also ambivalently shared aspects of the rising corporate culture of the day. My paper addresses the do-it-yourself "business" of Fluxus, but more than this it concerns the discursive issues of organization, mediatization, routinization, automation, commoditization, and systematization that Fluxus artists both manipulated and set in relief. I assert that Fluxus artists were "performing the system" as an artistic strategy. Artists covered in the discussion include yet are not limited to: Maciunas, George Brecht, Robert Watts, Alison Knowles, Nam June Paik, and Mieko Shiomi.

Against Systemic Stupidity: Ecosophy as Method
Natasha Lushetich (N.Lushetich@exeter.ac.uk)

For Hannah Arendt, stupidity is a systematic lack of thought. For Jacques Derrida, it is a slippage into the preconscious. For Bernard Stiegler, stupidity is a technologically reinforced desire for the automated and the clichéd. Although as old as the human race, stupidity is endemic in the age of viral mnemotechnics; many forms of thought – daydreaming, contemplation, (non-teleological) experimentation and playful silliness – have become increasingly obsolete. Ecosophy could be seen as the antidote to these tendencies. As an embodied and environmentally embedded thought, ecosophy does not differentiate between thinking and doing, subject and object, human and animal, nature and the social world. It works with an unspecified continuum, instead.
This paper offers an ecosophical reading of the logic of fluxing. It does not focus on specific Fluxus works but on the creation of situations, attitudes, memes and bio-social choreographies. In an effort to determine the ecosophical method of fluxing, the paper also offers an appraisal of the Fluxus legacy in eco-phenomenological, rather than art-historical terms: as a deeply creative approach to living.

Creativity, Learning and Play in a Fluxcentric World, or how I learned to stop worrying and love art
Owen F. Smith (Owen_Smith@umit.maine.edu)

In the trajectory of concepts from Duchamp, Fluxus and beyond there are a set of ideas about creativity that engage the artist with a concern for first, a centrality of information modeling and exchange, and second, a primacy of the event (or act) with a correlated concern for free-play as an aspect of direct engagement. These aspects are best understood as a fundamental reconsideration of cognitive processes related to art and their extensions into cultural frames such as evaluative processes, cultural structures and meaning systems. This paper will respond to the three other papers in this session and posit that the ideas presented by the panelists suggest a notion of art, significant not only as a category of things, but also as a view into how we come to know our world and give meaning and/or order to our experiences. This belief is also at the heart of many of the artists working in the 1950s and 1960s in their reconsideration of definitions of art, and in particular the separation of art from life. Their insistence on breaking down the barriers between art and not-art is more than just a struggle over a descriptive term. It is instead a concern for a broader, more significant usage, one that is formative in our conception of our experiences.

Panel 3G: Thursday, November 3, 3:45 PM-5:45 PM *Ansley 7* (projector, screen, and speakers)

Wild Learning 2

Chair: Gerry Canavan

Literary Studies after BLACKFISH
Gerry Canavan (Marquette University; gerry.canavan@marquette.edu)

This presentation reports on my recent experience teaching a research capstone course for English majors at Marquette titled "The Lives of Animals" (after the J.M. Coetzee novel). In

particular I discuss the students' unexpected selection of the anti-Sea-World documentary *Blackfish* (dir. Gabriela Cowperthwaite, 2013) as a primary text in the course, and the animated, passionate discussions the film subsequently engendered. *Blackfish* became a fascinating hinge point in the class, gesturing towards multiple possible futures for the relationship between humans and animals, many of them dominated by what one student in the class would later characterize as "debilitating grief." As a paradigmatic text of the Anthropocene, *Blackfish* , and my students' critical and emotional responses to it, points towards the possibility of an English studies that might someday move beyond human-produced, human-centered narratives -- while at the same time positing a hard limit that might forever separate "us" from the animal lives around us who we adore, exploit, endanger, and enslave.

A Case for Closer Reading: Semantic Trends in Small-Corpus Analysis
Matthew Duncan (Clemson University; mdunca3@clemson.edu)

Digital tools represent a powerful opportunity to revolutionize the ways in which literary theory and criticism are constructed. The very use of these tools can be polemic, as is seen in the scholarship of Franco Moretti. Despite this, I see humanities computing emphasizing the importance of close reading rather than imposing the necessity and inevitability of a superior and more distant technique. In Graphs, Maps, and Trees, Moretti argues that “a field this large cannot be understood by stitching together separate bits of knowledge about individual cases, because it isn’t a sum of individual cases: it’s a collective system that should be grasped as such, as a whole.” I will contend that understanding how literature fits together in a large system is trivial without knowing the inner-workings of the texts that make up the categories within that system. In short, I propose to forge a new method designed to digitally investigate semantic trends within a few texts. This method may provisionally be known as closer reading, a technique that privileges smaller corpora and digital tools that emphasize accuracy and precision. The average digital project must accept a significant margin of error simply by virtue of its scale. This leaves the granular findings of close reading out by default. My project seeks to explore a digital reading that can both make use of the awesome analytic power of digital tools and account for the subtle differences between texts that might be swept into large categories in the scheme of larger corpora.

John Oliver's "Real Climate Change Debate": Creatively Using Comedy to Intervene on the Manufactured Scientific Controversy of the Climate Change D
Shelly Galliah (Michigan Tech; sagallia@mtu.edu)

AGW, or anthropogenic global warming has achieved a wide consensus among scientists in the United States. However, according to a recent Pew Research poll, AGW is still not wholeheartedly accepted by the American population. One cause of American resistance has been the "manufactured scientific controversy" (Ceccarelli) of the climate change debate that is perpetuated, in part, by the coverage of the mainstream and right-wing media. I argue that comedy, particularly the satire of new political TV, acts as a creative intervention to reveal and deflate this controversy and inform the public of the actual scientific consensus. This creative intervention works at least two ways. Whereas satire can draw the jaded public's attention to tired or overdone issues, and work better than approaches based on fear, it risks being too creative in its exaggerations and skewing of data. In particular, when it comes to communicating

science, the users of satire can be accused of some of the vices of accommodating science (Fahnestock): exaggeration, simplification, and celebration. To demonstrate how satire intervenes in the climate change "debate," I will draw on the history if the coverage of climate change in new political television as well as analyze John Oliver's "Statistically Representative Climate Change Debate" and at least one other segment. Though the work of Ceccarelli and Fahnestock frame my argument, I will also explore how satire is a creative comic intervention that not only speaks truth to power but also promotes civic engagement.

History After The Human
Daniel Vandersommers (McMaster University; vanded14@mcmaster.ca)

Over the past few years, the Humanities have been confronting a paradigm shift. After the Cultural and Linguistic turns of the 1970s and 1980s, language, meaning, representation, agency, othering, and knowledge-production redefined the Humanities. Now, in 2016, new media, climate change, environmental catastrophe, terrorism, genetic engineering, population growth, and globalization, destabilize the core of the Humanities. These forces (hyperobjects?) are larger-than-human. They are seismic. They are shifting intellectual terrain. And they require a change of perception, a new vision for a new century. As the macro, the "beyond-the-human," quake the ballast of the Humanities, animals have emerged from the fault lines and fissures. Though animals were domesticated, commodified, and ultimately silenced between the late-Paleolithic and the Present, their voices have begun to resound across the Humanities as it turns toward the Anthropocene. This paper will explore the ways in which animal voices are reverberating within the historical profession. After tracking animals through the environmental history of the 1990s and 2000s, this paper will look toward the new horizons of "animal history." Not only will this paper seek to define this emerging field, but it will outline the ways that "animal history" can creatively uncover a livelier, more truthful, and complex past buried beneath an anthropocentric historical tradition.

Panel 3H: Thursday, November 3, 3:45 PM-5:45 PM *Ansley 8* (projector, screen, and speakers)

I Realigned the Cosmos: Lyric Poetry and Science

"Ain't no one can / chart me," says ex-planet Pluto in a 2015 poem by Fatimah Asghar. The remark may well also double as self-reflexive commentary regarding the relationship between lyric poetry and the objects of scientific study, such as the cosmos, ecological systems, the human body, the laws of physics, natural history, technology, and much more. It is often acknowledged that poems take up these subjects—but the work poems do with them is often considered along the lines of "expression" or "representation." While not seeking to discount either of those concepts, this panel nevertheless aims to move away from the conception that they are poetry's sole purchases on these objects of study. Instead, this panel asks: what happens if we take seriously the notion that, like scientific disciplines, lyric poetry and poetics create knowledge about these subjects? What kinds of knowledge in these realms have been created by specific poems, poets, tropes, devices, figures, and so on? If we grant that there are "scientific methods" of inquiry, are there such things as "poetic methods"? On our panel, five brief talks (four of which are by poet-scholars) address, expand, explore, and complicate these questions by

looking at lyric and science during what Michel Foucault calls the modern episteme. Ranging from exploring amorphousness in scientific texts as a concept with its own poetics to discussing how poetry enacts and performs laws of physics, we begin to chart a genre that realigns the cosmos.

Chair: Sumita Chakraborty

"The Lacunary Universe"
Sumita Chakraborty (Emory University; sumita.chakraborty@emory.edu)

Michel Foucault's "Lives of Infamous Men" contains the odd phrase "poèmes vies," which has been translated into English as "poem-lives." He refers here to internment records, calling "these lowly lives reduced to ashes in the few sentences that struck them down" more captivating than "what is ordinarily called 'literature.'" Critics have read this as critique of literary language, since, as Lynne Huffer notes, "literature's freedom to speak unreason is, in biopower, a caged freedom." Yet, this notion of a caged freedom dovetails with Foucault's theorizations of certain forms of language—like the poetic—that are capable of troubling limits precisely because they are imbricated in them. In particular, to Foucault, such transgression takes place in what he describes throughout his body of work as a "lacuna": a space we historically yearn to fill with legibility of interpretation, but instead resists either of these things. This paper argues that far from creating correspondences, convergences, or linkages of any kind, lyric metaphors create precisely these lacunary spaces. While Foucault's phrase has been translated as "poem-lives," his French phrase—"poems lives," literally—implicates a more pivotal role for poetry in such an enterprise. In Foucault's thought, lacunae are responsible for hollowing out from within notions of selfhood and subjectivity. I claim, then, that lyric metaphor itself is a poetic methodology of knowledge-making in which poets invent processes of transgression toward the end goal of problematizing the "I." This paper in particular reads poems by Walt Whitman, T. S. Eliot, and Lucille Clifton.

"'…the mighty world / Of eye and ear--': Lyric Imagination and the Rise of the Techno-scientific Epistemic Regime"
Blake Leland (Georgia Institute of Technology; blake.leland@lmc.gatech.edu)

At the level of process, lyric knowing and scientific knowing share profound similarities – knowledge-production in both having always to do with a subject making and testing models of what appears to be an objective something set off from the subject him/her/itself. The sets of objects modeled by lyric and scientific knowing can, and sometimes do, overlap. Indeed, just as the techno/scientific mode begins to establish its dominance in the 19th century, poetry takes up its grandest object –Nature- as if in response to the rise of the materialist episteme. But the poetic epistemology differs significantly from the scientific. As science, in its ideal mode, commits to establishing and policing the boundaries that define and separate subject and object, lyric poetry responds by exploring the subject's felt relations to such boundaries, and in ways that are new to the poetic tradition. This is, for example, the period in which the faculty of imagination or fancy becomes suddenly the profound, mysterious and powerful force of Imagination. This paper examines some of the various ways (there is no single discourse on poetic Imagination) in which the lyric of the Imagination, in the 19th and early 20th century, attempted to carve out an

epistemic space for poetic knowing in a world in which the materialist epistemology of science grew more and more dominant. It makes use of work by the canonical Romantics (Wordsworth, Coleridge Shelley) and of their Modernist inheritors (Stevens, Williams, Pound, Eliot).

"'Things Discovered in the Deep': Positivism and Prophecy in W.B. Yeats"
Margaret Greaves (Skidmore College; margaret.greaves@gmail.com)

Lyric poetry mixes received categories of knowledge to mark their limitations. W.B. Yeats's line "How can we know the dancer from the dance?" is a conspicuous example. The question verges on seeking propositional knowledge (what is the difference between the dancer and the dance?), knowledge-as-acquaintance (what is it like to be the dancer?), and even knowledge-as-skill (how can we learn to distinguish the dancer from the dance?). Yet the line does not quite ask any of these questions. The kind of knowledge it seeks is unparaphrasable, belonging firmly to lyric. Yeats, indeed, offers a case study of "lyric knowledge." His enmeshed Occult and poetic processes blend positivism and mysticism: famously, he conducted experiments designed to prove the existence of supernatural phenomena that are, by definition, empirically untestable. Similarly, Yeats's poetry teems with assertions in the form of quasi-propositional knowledge that grate against their prophetic content, as in "I know that I shall meet my fate / Somewhere among the clouds above" ("An Irish Airman Foresees His Death") and "I know / That twenty centuries of stony sleep / Were vexed to nightmare by a rocking cradle" ("The Second Coming"). This paper argues that Yeats's work creates a method of knowing that takes the form of a system of movements between positivism and prophecy. But rather than affirming the Yeatsian dialectic of unification through opposites, this movement highlights a disconnection between the form and content of the dialectic, one that gestures toward an exclusively poetic type of knowledge.

"Poetry's Dynamic Equilibriums: Muriel Rukeyser, Stephanie Strickland, and Willard Gibbs"
Stefania Heim (Duke University; stefania.heim@gmail.com)

In *The Life of Poetry*, American poet Muriel Rukeyser describes poetry not by way of its historical traditions or commonly recognized properties, but epistemologically, as "one kind of knowledge." Rukeyser spent her career exploring the contours and limits of poetic knowledge, particularly as it pushed against (exploded into) the domains of "other" fields including the sciences, politics, Renaissance history, and magic. This paper focuses on Rukeyser's long study of 19th-century physical scientist Willard Gibbs and the two primary texts in which she does not so much gloss his discoveries – chiefly his "Phase Rule" – as deploy their central tenets (for example, the equilibrium achieved by heterogeneous substances) by way of her poetic forms (structural leaps, the agreement of parts). The stakes of these literary experiments are huge; as Rukeyser describes, "When one is a woman, when one is writing poems, when one is drawn through a passion to know people today and the web in which they, suffering, find themselves … one deals with the processes themselves. To know the processes and the machines of process: plane and dynamo, gun and dam." Leaping forward 50 years, I investigate another American poet's engagement with Gibbs: Stephanie Strickland's. The more recognizably experimental contemporary poet self-consciously continues Rukeyser's pursuit. I will look at texts by these two poets together, also alongside Strickland's later hypertext treatment of her Gibbs poems, to show how they perform and ramify the power of the scientist's obscure work.

"Poetics of the Amorphous"
Megan Fernandes (Lafayette College; megfern@gmail.com)

From John Tyndall's experiments on radiant heat to the media frenzy concerning the Higgs-Boson particle, laboratories have been contested spaces of epistemological stability, often relying on the language of frequency, cohesion, and vibration to make claims about the subperceptual world. This paper specifically addresses the use of the "amorphous" as a device in scientific (John Tyndall, Mary Somerville) and poetic texts (Katherine Mansfield, Tracy K. Smith, CM Burroughs) to explore spaces of environmental alterity and the consequences of compromised visuality. By investigating the language of the cosmic catastrophic to the potentiality of microscopic black holes, texts that rely on the "smoking gun" effect of amorphous phenomena offer a fatalistic account of an unbridled and inscrutable energy.

Panel 3I: Thursday, November 3, 3:45 PM-5:45 PM *Peachtree 1* (larger room, projector, screen, and speakers)

Roundtable: Digital Creativity: Archiving Experimental Digital (Literary) Media in Journals, Collections, and Libraries

At this Roundtable, Anastasia Salter will review the process of curating and preserving works in the *Electronic Literature Collection Volume 3* (2016), which she co-edited. Works on emerging platforms that pose new challenges for archivists include netprov and bots that exist primarily as performances on Twitter, augmented and physical device-based literature, and cave-based installations. Helen Burgess will consider the (sometimes convergent, sometimes conflicting) desires and challenges that have surfaced while editing and preserving works of e-lit in the online journal *Hyperrhiz: New Media Cultures* over the last eleven years. Mark Sample will explore how developments such as version control and APIs challenge our concepts of stability and originality when it comes to archiving procedurally-generated texts. Kari Kraus will focus on the barriers to preserving transmedia fiction and pervasive games, including the differential survival rate of their component parts and the ethical issues posed by participant data. Stephanie Strickland will serve as moderator and will reflect on the experience of someone whose digital work is being archived.

Moderator: Stephanie Strickland

Contributions:

Anastasia Salter (University of Central Florida, anastasia.salter@ucf.edu)
Kari Kraus (University of Maryland, karimkraus@gmail.com)
Helen J. Burgess (North Carolina State University; hjburges@ncsu.edu)
Mark Sample (Davidson College; masample@davidson.edu)
Stephanie Strickland (Independent Artist; stephanie.strickland@gm.slc.edu)

Panel 3J: Thursday, November 3, 3:45 PM-5:45 PM *Peachtree 2* (projector, screen, and speakers)

Modernisms and Weird Media

This panel approaches the playfulness of modernist texts toward what we call "weird media." Modernist texts incessantly incorporate inhuman apparatuses not necessarily facilitating a scientific quest for truth but rather invoking self-awareness on the status of media in such investigations. As a first move, this panel understands "weird media" as the recurrent play on language and tropes as a form of expanding how we conceive forms of investigation, revealing the politics and sexuality behind such quests. However, recent philosophical trends such as the materialist (re)turn, the Object Oriented Obsession, and the ineffective Affective turn attempt to render this inhumanity in modernism as a way of transcending the human body, of experimenting with what lies beyond the body. Why is modernity — so often posed as a kind of apex of human activity, an event of "peak human" import — also a force field for all matter of thinking without humans? As Lyotard reminds us in his lectures on the Inhuman, "our contemporaries find it adequate to remind us that what is proper to humankind is its absence of defining property, its nothingness, its transcendence." The properly human (body) is sacrificed so that the spirit can live on. This is where this panel evokes the second meaning behind "weird media": the revelation of a suddenly detectable weird mediator—the human spirit, our weird Geist. We evoke the fallacy of the false sense that the media are not there, that such forms of thinking are absolutely unmediated, and criticize their politically naive assumptions.

Chair: Rodrigo Martini

A Foray Into the World of Imaginary Animals (And Humans): "Reverse Mimesis" in Jarry and Wells
Rodrigo Martini (Rice University; rodrigompaula@gmail.com)

In an essay on "Dangerous Animals," Alfred Jarry treats a shuttlecock as a bird evolved from the pigeon and traces the co-evolutionary processes that created them: the organic and artificial technologies in interplay. The shuttlecock, of course, is not actually a bird, but rather an artificial object that is being treated as a bird, an imaginary one. Similarly, in H. G. Wells's "Triumphs of a Taxidermist" a smug taxidermist, retelling his accomplishments over a round of drinks, talks about his biggest triumph: the creation of a non-existent bird. Going beyond what he says is merely "imitating Nature," this taxidermist is able to "beat[] her" and "give [his] little push in the advancement of science." Reverting the process of a scientific investigation, both stories feature a quest for creating nature instead of imitating it. This inverted quest can better be described in Jarry's own term, "reverse mimesis": while we believe science imitates life, in these works it actually creates the life it seeks to imitate. This reveals the essays to be not only about the invented animals, but rather about the process of writing and classifying animals. This presentation compares Wells's and Jarry's invented animals analyzing how they are both reflecting on the act of writing about life and expanding the ways we frame life—a process that media theorist Vilém Flusser calls "symbolization of vision" or discovering the "various meanings which vision gives the world, and thus, by implication, … discovering other possible meanings to give the world."

Science is Fiction is Science is Fiction: The Films of Jean Painlevé
Michael Miller (Rice University; mfm4@rice.edu)

"Does a complete understanding of a natural phenomenon strip away its miraculous qualities? It is certainly a risk," Jean Painlevé (1902-1989) declares in a short essay from 1931 titled "Mysteries and Miracles of Nature," "but it should at least maintain all of its poetry, for poetry subverts reason and is never dulled by repetition." Recently gathered together for the first time in a collection aptly titled Science is Fiction: 23 Films by Jean Painlevé, Painlevé's films seek to capture the poetic and miraculous in an array of underwater fauna while also complicating the basic methods of scientific inquiry. Similar to Flusser's Vampyroteuthis Infernalis use of the (not so imaginary) vampire squid as mediator between the human and nonhuman, Painlevé's films—accompanied by eerie Theremin music and comic voiceover narration that anthropomorphizes the marine creatures—suggest that human imagination will always fail to fully grasp the sheer weirdness of the world. My paper examines Painlevé's films and places them in conversation with Flusser's vampire squid and Alfred Jarry's 'pataphysical musings on "reverse mimesis," wherein the mechanical or inorganic is understood via the basic operations of organic beings. Framing Painlevé's films in this way affords us a new perspective on the methods of scientific inquiry and human imagination. The weird, wet, underwater creatures operate as weird media in the sense that they mediate and ultimately regulate the limits of scientific method, point out the gaps in the human imagination, and highlight just how inadequate is the placeholder "natural" when compared to the poetic.

Days, Nights, Cantos, and Cadenzas: Inhuman Temporalities in the Work of Hollis Frampton and Ezra Pound
Clint Wilson (Rice University; clint.e.wilson@rice.edu)

While the call to challenge anthropocentric definitions of temporality have been strident in recent years, few have noticed the radically inhuman temporal frames first proposed by the Avant-Garde, in particular filmmaker Hollis Frampton and his own inspiration, Ezra Pound. In "Notes on Composing in Film," Frampton draws upon Pound's writings to outline a Modernist definition of the compositional process contingent upon relations of time: the time the artist devotes to creation and the time the observer devotes to the act of witnessing. This paper proposes to read Pound's temporal vision as a lens to view Frampton's Magellan (1972-1984), an unfinished 36-hour film made to fit a 371-day almanac the filmmaker titled the "Magellan Calendar." With its employment of archival footage alongside "new" media, Magellan coincides with and subverts available temporal models, instantiating a form of "weird media" that resists steady-state explanations. In crafting a film sequence around the volatile categories of hours, nights, and days, Frampton toys with the rigid categories of time, and the pronounced mediation of the film's disparate images underscores the impossibility of seamless, organizational phasing. Bearing in mind theories of musical or metrical time embodied in Frampton and Pound's deployment of terms like "Candenza" and "Canto," one perceives the weirdness of temporalities that begin to look like non-orientable Möbius strips. Time—in both Frampton and Pound—is a fundamental paradox, an aporia that imperfectly mediates our understanding of a world that we are all "poor in," to use the infamous Heideggerian inflection. Frampton even acknowledges this paradox when speaking of Magellan: "Now this is probably something that will never transpire," he says, adding, "although of course I will do it eventually."

Cunning, Scale, and Vision of Xenomodernism: Naomi Mitchison's Wager
Aaron Jaffe (Florida State University; jaffe.aaron@gmail.com)

Laboria Cuboniks Xenofeminist manifesto outlines “a feminism of unprecedented cunning, scale, and vision” that makes a “wager on the long game of history, demanding imagination, dexterity and persistence.” For Cuboniks, the game is "an impetus to generate new worlds." Xenofeminism not only departures from the pervasiveness of big-talking nerdcore around conversations about matter and being but also invites a backward glance on the neglected writings of Naomi Mitchison (1897-1999), sometimes described as the Virginia Woolf of sci-fi. Biogenetic preoccupations about weird affordances for touching, talking, observing and knowing stretch across Mitchison’s long literary career. My paper examines the weird fixations with becoming minimal and inhuman in Memoirs of a Spacewoman (1962), especially, where scale of access predispose particular affordances about alien life. Just as bilateral symmetry predisposes a binary rationality, so too, the frontal orientation of human bodies in space determines ideas about the past and present. Extra-terrestrial starfish with five-limbed, inhuman orientations presuppose different medial variantologies and immanent potentialities. Yet, according to the spacewoman, communication with alien life is the work and glory of the women of Earth. The “disciplines of life,” namely, “biology and communication are most congenial to … women,” she writes. The spacewoman’s only caveat is that the woman-child must be afforded a right-sized education - from the nursery till age 35 - and exposed to “amiable fauna […] within reach of normal affection.” My paper connects Mitchison’s project with the survival of prolonged modernist efforts to operationalize alienation into portable laboratories of cultural techniques.

Joint Reception with History of Science Society and Philosophy of Science Association, 7:30 PM-8:30 PM

Session 4: Friday, November 4, 8:30 AM-10:00 AM

Panel 4A: Friday, November 4, 8:30 AM-10:00 AM *Ansley 1* (no AV)

Lush Bodies of Romanticism 1: Scalable Exuberance

The critical perspective on the relationship between Romanticism and science has undergone a thorough transformation over the last 20 years not only as a result of the repositioning of literature within networks of empirical, experimental, medical, idealist, and materialist discourses, but also as a consequence of the reconceptualization of scientific methodologies and self-definitions of the period. A preoccupation with generativity, i.e. with the mechanism for beginnings – of ideas, of life, of energy, or of causal chains – dominated literature, philosophy, and natural history of the time. These inquiries across discipline were not isolated, but in dialogue with each other. Moreover, these dialogues happened transnationally, with exceptional exchange between German and British naturalists and literary authors. This series of three panels will bring together comparative scholars of Romanticism whose work links Great Britain and Germany, while investigating the convergences of science with literature around the issue of luxuriant productivity, in nature, in the human mind, and in textual tropes (both scientific and literary). Panel I: Scalable Exuberance, reflects on reciprocal interaction across scales – between fragment and whole, individual and society – but also across modes – between ecological and social collectives, the haptic and the digital, productive labor and teeming life. The papers suggest an engagement in the Romantic period with social-biological alternatives to the

biopolitical methods and goals of subjectification and maximization. From the cultivation of genius (Mitchell), and of lush socialist ecologies, to a haptic digital (Weatherby), these papers explore abundance and bountiful experience that can be produced through scalable processes.

Chair: Robert Mitchell

Cartilage, Bone, and Exuberant Fertility: Godwin's Biopolitical Approach to Genius
Robert Mitchell (Duke University; rmitch@duke.edu)

In this paper, which is part of a larger study of biopolitics and liberalism in the era of Romanticism, I focus on William Godwin's theory of genius in his 1797 *The Enquirer: Reflections on Education, Manners, and Literature*. Godwin there revived and reconfigured what I describe as a biopolitical approach to genius dominant in the mid-eighteenth century. At stake in this earlier discourse were questions of whether genius was innate or acquired; what political ends genius served; and—perhaps most importantly—the institutions by means of which genius could be increased to its maximum. Godwin revived all of these questions, arguing that genius was not innate but acquired; that the end of genius was the hindrance and eventual elimination of tyranny; and that educational institutions were the keys to maximizing this quality. However, Godwin also employed several images of genius and genius-maximization that had not appeared in the earlier Enlightenment discourse, including the negative image of the transformation of cartilage into bone, the positive image of the genius as like a book (both are able to "hurry us from point to point"), and the claim that Classical Latin authors instantiated an ideal combination of "luxuriant" growth combined with vivacity, grace, and propriety. Godwin's text thus both provides an opportunity to consider how Romantic-era authors took up the biopolitical question of optimizing desired human qualities, and underscores the extent to which Enlightenment and Romantic-era biopolitics were not limited to questions of health and hygenie, but could develop in the case of any human quality that was ambiguously suspended between nature and nurture.

Are Romantic Bodies Embodied?
Leif Weatherby (New York University; leif.weatherby@nyu.edu)

In 1781, even as Kant was busy publishing the *Critique of Pure Reason*, Johann Blumenbach published his treatise *On the Generative Drive*. This little work brought a preliminary end to the 18th-century debate between "preformationists" and "epigenesists," as is well known, arguing influentially that no divine plan guided embryogenesis. Less well-known is that Blumenbach's argument turns on the slight reduction in size of the regenerated limb of the hydra. The body as such became scalable. The logic of fragmentation--of texts, of bodies, of the cosmos--has been the leading prism of the interpretation of German Romanticism for the last half-century. But there is also a logic of scalable manipulation, anticipating the haptic regimes of the digital in which we now live, in the philosophical core of the early movement, especially in fragments of Friedrich Schlegel and Novalis. My paper will detail the overlap of this discourse and its post-Kantian metaphysics with current theories of digital embodiment (Hayles, Hansen), arguing that Romanticism has a complex theoretical contribution to make that cannot be reduced to a putative binary between body and some non-embodied other like mind.

The Divine and the Invention of New Technologies
Courtney Salvey (Independent Scholar; courtneysalvey@gmail.com)

Human creativity has often been connected to the divine. In the Abrahamic religions, the *imago dei*—that humans are created in God's image—textually follows the account of God creating the universe *ex nihilo*. Thus creativity is a significant aspect of humanity, linking it to the divine. This connection is easily palatable for art and beauty, yet it has been difficult to swallow when human creativity produces new technological inventions. The Industrial Revolution's new technologies precipitated responses critical of technological invention. Shelley's *Frankenstein*, for example, illustrates the tragic results of usurping God's creative role, setting human and diving creativity at odds. Alternative formulations of human creativity's relationship to the divine also emerged. Anthropomorphic theology turned the imago dei on its head, guessing at God's character based on human faculties. Changing understandings of human invention transformed understandings of the divine designer, particularly his creation of the universe. Drawing on early nineteenth-century British examples, this paper will explore ways historical texts about the steam engine's invention offered new and conflicting models of human creativity. Instead of the light-bulb moment of instantaneous invention, they described invention as a process that happened over time and through trial-and-error. Projected onto God, this new model of human creativity enabled a shift toward evolutionary views of nature's origin and became a foundation on which nineteenth-century scientists could believe both in God and evolution. Building on a specific historical instance, this paper ultimately reflects on the religious implications of theories of human creativity.

Panel 4B: Friday, November 4, 8:30 AM-10:00 AM *Ansley 2* (projector and screen)

Sex and Technics

This panel examines the intersection of sex, digital technologies, affect, and power. It asks about the role of the sexual subject in a networked age, the affect of the ubiquity of pornography on everyday life, the relation between the visible and power in teenage "sexting," and the politics and economics of massive online pornographic video distribution services. These presentations work to rearticulate sex as the hinge point between digital subject and the networked world by understanding the ways new digital technologies and infrastructures reveal processes and protocols that are not only a zone in which behaviors and actions take place but also a cultural value system.

Chair: Patrick Keilty

Autistic Sex
James Joseph Hodge (Northwestern University; james.hodge@northwestern.edu)

What role does sex play in managing the burden of the stressful, exhausted, busy life of the networked subject? The transformative power of sex arguably diminishes when life itself becomes too exhausting (Berlant). Building on psychoanalyst Thomas Ogden's non-pathological notion of the "autistic contiguous position" (A-C-P), this essay proposes the rise of "autistic sex" as an experiential-discursive concept crucial to the theorization of sex native to always on and

ubiquitous networked computing. Working through a number of scenes of networked "autistic" sex from porn to the typing awareness indicator, the essay works to re-articulate sex as the hinge point between digital subjectivity and the network, or what Foucault articulated as the hinge between the subject and the population. Ogden proposes the A-C-P as a counterpoint to two subjective positions made famous by Eve Sedgwick: the depressive position (the reflexive "I") and the paranoid-schizoid position. For Ogden, the A-C-P is non-pathological. It is an aspect of all human subjectivity. The A-C-P is the "sensory floor" of experience and is characterized by rhythmic, auto-affective, and touch-based habits from hair twirling to toe tapping. The A-C-P is principally concerned with boundedness and embodied actions that work to shore up the individual's sense of sensory boundedness against threats of dissolution. In its constant hailing of sensation, the digital network assails the networked subject with openness. As compensation, the networked subject responds with a number of "autistic" behaviors, many of them obviously sexual (masturbation) and many of them mildly libidinal (checking social media).

On the Technical Organization of Sex, Space, and Adolescence: Digital Video as Sexual Technics in Ma vraie vie à Rouen

Scott Richmond (University of Toronto; scr@wayne.edu)

Digital video recording is now ubiquitous. Its ubiquity provokes particular anxiety where DV upsets norms that regulate relations between visibility and the operation of power. No other us of DV has seemed as troubling as the rise of teenagers' "sexting," involving as it does adolescent sexuality and its regulation, invisibility, and excessiveness. In its deployment of DV, adolescent sexuality has disrupted the technologies of power that both produce and constrain it: moral, juridical, educational, computational, and otherwise. Nobody seems to know, quite, what to do or think about sexting teens. To understand adolescent sexuality and its use of DV in their broader implications for our contemporary technologized sexuality, I turn to the prescient quasi-experimental 2002 coming out film, My Life on Ice (Ducastel and Martineau). Composed entirely of images captured by a DV camera given to its 16 year-old protagonist, Étienne, the film demonstrates how a camera can become a site of sexual investment in the excessive sexuality of a teenager not yet able to identify as gay. Étienne records his stalking men through city streets, interviews with friends about sexual exploits, and himself in various states of undress. Using phenomenology (Merleau-Ponty), media theory (Mark Hansen), and queer theory (Lauren Berlant and Sara Ahmed), I argue that My Life on Ice discloses how our embodied relations with technology, especially the intimate technologies of DV recording, are also crucial sites of sexual investment and regulation, operating distinctly from, but alongside, sexual identity, orientation, and object-choice.

Sexual Interface

Patrick Keilty (University of Toronto; p.keilty@utoronto.ca)

Graphical interface is an artifact of processes and protocols that is not only a zone in which our behaviors and actions take place but also a cultural value system. Every aspect of web content management and display embody values, even if these are largely ignored or treated as invisible. Based on experiments testing short-term memory and capacity to follow cues from one screen to another, Shneiderman's "Eight Golden Rules" offers principles that have come to guide interface design, such as "permit easy reversal of action" and "enable frequent users to use shortcuts."

Working closely with engineers and software developers, interface designers are mostly task-oriented, focused on feedback loops that minimize frustration and maximize satisfaction and efficiency. Interface designers analyze "user needs" into "functional requirements" in which concepts of "prototype," "user feedback," and "design" are locked into iterative cycles of "task specification" and "deliverables." Deliberately mechanistic, this language promotes the idea of a 'user' instead of that of a humanistic 'subject'. By contrast, the graphical interface of pornographic video sites challenge this conception of design by creating an environment for wandering, browsing, meandering, or prolonging engagement. Pornographic video sites create a space of dwelling, not merely a realm of control panels and instruments. They are often disruptive, disorienting, and frustrating in their defeat of expectations. As such, the graphic interface of pornography must be thought beyond representation, toward ecology, a zone between cultural systems and human subjects, the interspace between information space and a task-supporting environment.

Respondent: Brooke Belisle

Panel 4C: Friday, November 4, 8:30 AM-10:00 AM *Ansley 3* (projector and screen)

Creative Animals 1

Chair: Carrie Rohman

Bio-aesthetics and Teleo-searching: Animals, Extremities, and Creativity in 20th Century Dance
Carrie Rohman (Lafayette College; rohmanc@lafayette.edu)

This paper is taken from ongoing work on my book in progress, *Choreographies of the Living: Bio-aesthetics in Literature, Art and Performance*, which is now under contract with Oxford UP. Animals seem to be everywhere in contemporary literature, visual art, and performance. But though writers, artists, and performers are now engaging more and more with ideas about animals, and even with actual living animals, their aesthetic practice continues to be interpreted within a primarily human frame of reference—with art itself being understood as an exclusively human endeavor. My critical wager in this project is that the aesthetic impulse itself is profoundly trans-species. If we understand artistic and performative impulses themselves as part of our evolutionary inheritance—as that which we borrow, in some sense, from animals and the natural world—the ways we experience, theorize, and value literary, visual, and performance art fundamentally shift. This paper specifically describes a "bio-impulse" at the root of the aesthetic itself, connecting human artistic propensities to animality through strategies of excess, display, and intensification. It further examines questions of barefootedness, anti-handedness and a more general "teleo-searching" (William Connolly's term) through bodily appendages that frame broad critical arcs of animal engagements in twentieth-century dance. The paper specifically addresses these questions in the work of Isadora Duncan and Merce Cunningham (the "mother" of modern dance and the "father" of postmodern dance, respectively).

"Why Does the Dog Do the Adho Mukha Svanasana?"
Mary Sanders Pollock (Stetson University; mpollock@stetson.edu)

About half of traditional yoga have animal names—a nomenclature BKS Iyengar suggests originated when sages understood that "throughout the whole gamut of creation. . . there breathes the same universal spirit." Yoga is generally conceived as linking mental states and physical actions through or . Some effects of yoga have been described thus: inversions invigorate; opening joints releases tension; forward folds are calming. (downward-facing dog), a ubiquitous and complex asana, combines these actions. Phenomenological investigations (and perhaps Stanislavsky's acting theory) suggest that yoga effects result from simultaneous focusing on the physical core, the superficial form of the , and the breath (Morley, Zarrilli). Physiological explanations suggest activation of the endocrine system and release of endorphins. Still, the effects of yoga are imperfectly understood. I investigate (humorously/seriously) this problem by observing my dog perform . To illustrate parallel canine/human musculoskeletal actions in this pose, I picture my dog Kiri and humans at my yoga studio performing it. Downward facing dog involves inversion (tail stretched up, hips elevated, head down), opening joints (toes spread), and forward folding (spine suspended from pelvis). Kiri's timing for this pose—when she has to move after having been inactive for a time—is significant. Kiri invigorates herself, releases tensions which result from suddenly activating muscles, and tries to retain her restful state. Humans benefit similarly from this asana. Animal-named may indicate respect, but creative comparative anatomy helps elucidate their effects, as well.

Panel 4D: Friday, November 4, 8:30 AM-10:00 AM *Ansley 4* (projector and screen)

Biopolitics in History, 1500-1800

This panel explores some new directions in the study of biopolitics. The papers in this panel explore, in different ways, how recent work in biopolitics is reshaping our understanding of cross-disciplinary aesthetic, environmental, and medical history. By extending ideas of governmentally and population studies to the more-than-human world, Lucinda Cole explores the problem of insect infestation in the sixteenth and seventeenth centuries. Richard Barney argues for the significant on a bio-aesthetics in Mary Wollstonecraft's work at the turn of the nineteenth century.

Chair: Robert Markley

Quantified Bodies
Al Coppola (City University of New York, John Jay College; acoppola@jjay.cuny.edu)

The mechanism by which the blood circulates, absorbs and excretes is obvious. Kind of like a hook and eye, one particle latches to another, until a third seeps between to detach them. Well, actually, it's a cyclonic accelerator of a panoply of fluids, disaggregated in the lungs only to be reassembled for excretion at their proper ducts, in an order determined by the differential action of an attractive force upon the simple geometric shape of the particle in question. Of course, the Cartesians' claim that the blood particles are forcibly sorted by shape into complementary shaped receptors is of utter nonsense—simple mathematics shows the complete impossibility of that. Armed with the suasive power of geometric demonstration, emboldened by an new episteme that had already resolved the inscrutable ambiguities of the macrocosm according to the logic of simple mechanism and rigorous mathesis, and inspired by a gathering consensus that a

hyper-subtle, attractive force suffuses and sustains all natural processes, early-eighteenth-century Newtonian physicians like Archibald Pitcairne, James Keill and George Cheyne were almost laughably wrong about human physiology. But in their efforts to analyze and quantify the body and its processes, their legacy extends all the way to that FitBit that's manacled on your wrist. This paper is an essay towards a prehistory of the quantified body.

Security, Territory, Infestation: Governmentality and Insect Populations
Lucinda Cole (University of Illinois at Urbana-Champaign; lcole323@gmail.com)

The global 16th and 17th centuries saw frequent infestations of insects and other small creatures. Often, in Western Europe, such events were imagined in terms of biblical plague narratives. I propose in this essay to extend my previous analysis, by outlining a new—or at least re-purposed—theoretical frame for talking about infestation and the kinds of practical responses it engendered. Both Henry VIII and Elizabeth developed national vermin control policies, as did other state leaders across Western Europe and even China. The fact of state-sponsored vermin control policies suggests that infestation is not only represented through a politically-motivated religious rhetoric, but deeply imbricated in what Michel Foucault called a discourse of governmentality. Although Foucault himself had little to say about animals, my essay explores the importance of Foucault in theorizing the mechanisms of control intrinsic to the problem of vermin. In some sense, it follows animal studies scholars such as Chloe Taylor, Dinesh Joseph Wadiwel, Richard Twine, Dawn Coppin, and Matthew Cole, all of whom, in different ways have exposed the relevance of Foucault's biopolitical analyses to livestock, slaughterhouses, and industrial farming practices. In others, it opens new scholarly territory by focusing on the "lesser creatures." Drawing primarily on Foucault's late lectures, I argue for an expanded notion of governmentality that includes rats, caterpillars, beetles, birds, and other creatures usually excluded from critical animal studies. This broader frame brings together animal studies and environmental studies, agriculture and politics, in ways that remain responsive to historical literary analysis.

Wollstonecraft and the Bio-Aesthetics of Post-Revolution
Richard Barney (State University of New York at Albany; rbarney@albany.edu)

This paper examines the link first between Wollstonecraft's interest in medical science (including vitalism) and her representation of the sublime in her Scandinavian Letters, before then connecting that nexus to her formulation of a politics that revises her earlier commitment to revolution. (You might say the argument takes a biopolitical perspective on her work, but by adding the dimension of the aesthetic.) In the first part of the analysis, I link Wollstonecraft's strong endorsement of physical exercise and its vitalizing effects on mind and body (especially as articulated in the Vindication) to her palpably "activist" portrayal of sublime experience in the Letters, where she assertively engages the landscapes she visits, rather than remaining a relatively passive visual observer. The second part considers how this ethos contributes to her description of what could be called a gradualist politics, in which comparatively slow, evolutionary change becomes the model for her approach to sociopolitical reform.

Panel 4E: Friday, November 4, 8:30 AM-10:00 AM *Ansley 5* (projector and screen)

Networks 1: Social Networks and Narrative Form

This panel considers points of intersection between social network analysis and literary studies, in conjunction with "Networks 2: Networks and Ephemerality," proposed by Jennifer Rhee and Nihad Farooq. Our panel takes as its starting point a set of conversations about networks in history and in theory that have posed the network itself as a horizon for thinking about politics, agency, and collectivity in the present. In conversation with both Manuel Castells' analyses of the post-1970s "network society" and the branches of sociology (actor-network theory, social network analysis[SNA]) that take the network as a universal form of abstraction, this panel proposes that contemporary fiction constitutes one of several privileged sites for considering the historical and methodological dimensions of social networks as we understand them today. This panel seeks to chart several modes for moving beyond what Alex Galloway has called the poles of "network optimism" and "network pessimism"—flatly utopian and dystopian visions of the network society's potentials—and toward methods informed by Patrick Jagoda's call to "think through networks," with attention to SNA and narrative form. In so doing, this panel draws on conversations in media studies about network infrastructures (Lisa Park, Nicole Starosielski), network visualizations associated with the digital humanities and the sociology of literature (Franco Moretti, Richard So and Hoyt Long), and historicist literary criticism and theory (Caroline Levine, Wesley Beal, David Ciccoricco, Patrick Jagoda), as well as theories associated with cybernetics, systems theory, and social network analysis (John Johnston, Bruce Clarke, Ronald Burt, Niklas Luhmann).

Chair: Scott Selisker

"Modeling Privacy and Agency in Fictional Social Networks"
Scott Selisker (University of Arizona; selisker@email.arizona.edu)

Scott Selisker's paper, "Modeling Privacy and Agency in Fictional Social Networks," takes a pair of recent novels that deal with questions about privacy in the age of social media and leakers: Dave Eggers's The Circle (2012) and Jonathan Franzen's Purity (2015). Both novels struggle in revealing ways to devise a compelling plot about the value of privacy, and Selisker describes the tensions between their tragic, dystopian, and melodramatic plot structures and the arguments about privacy that their characters advance. Running counter to the logics of the leaker, the Luddite, and corporate social media, the character networks of both novels reveal a mode of understanding privacy as a form of power situated within social networks, what the sociologist Ronald Burt describes as "brokerage." Such a model runs counter to the essentially conservative—in the sense of convention-based—understanding of privacy in legal scholarship and cultural studies, and toward a fuller conception of the "networked subject" within narrative form.

The Length of Network Novels
Lindsay Thomas (University of Miami; lindsaythomasmtt@gmail.com)

Scholars in literary studies across a variety of time periods have recently turned to the network as a heuristic that opens up discussions of novelistic length and complexity. From Patrick Jagoda's "maximal aesthetics" to Caroline Levine's "suspense of the long middle," the network form has

been linked to long novels that enact a sense of totality and of the interconnection of everything while simultaneously demonstrating the impossibility of ever fully knowing the networked social world. Lindsay Thomas's paper, "The Length of Network Novels," takes this connection between novelistic length and the network form as its starting point, asking why long novels are consistently understood in terms of networks. Using Marlon James's A Brief History of Seven Killings (2014) as a case study, Thomas argues that, like long novels, networks are performances of the diachronic process of continuation itself. What long novels and networks have in common, in other words, is that they both produce the experience of lasting on through time. James's novel provides an ideal testing ground for this argument not only because its plot is itself about this experience, but also because the connections between characters that it forms and activates through its plot can only be described as networks because they persist through time. Long novels can help us uncover the lasting effect – or the effect of lastingness – of the network form.

Networks, Objects, and Politics in McCarthy's Satin Island
Gabriel Hankins (Clemson University; ghankin@clemson.edu)

Gabriel Hankins's paper "Networks, Objects, and Politics in McCarthy's Satin Island" examines Tom McCarthy's recent novel as a network novel in two senses: both a phenomenological exploration of the experience of a networked society and also an experiment in foregrounding networks of objects, politics, and aesthetics as fictional protagonists of a novel. The paper draws on Latourian actor-network theory and new media studies to examine the novel's self-conscious exploration of the technological and oleaginous sublime. Hankins argues that Satin Island contributes to our understanding of the aesthetic forms made possible by networked societies, and allows us to trace a category of negative digital experience that has largely been excluded from the contemporary realist novel.

Respondent:
Patrick Jagoda (University of Chicago; pjagoda@uchicago.edu)

Panel 4F: Friday, November 4, 8:30 AM-10:00 AM *Ansley 6* (projector, screen, and speakers)

Fluxus 2: "The Creative Act" and the External World

This panel celebrates the impending 60th anniversary of Marcel Duchamp's lecture, "The Creative Act." In that 1957 statement, Duchamp wrote that "All in all, the creative act is not performed by the artist alone; the spectator brings the work in contact with the external world by deciphering and interpreting its inner qualification and thus adds his contribution to the creative act." This panel examines the implications for audience relations in Fluxus and related movements.

Chair: Hannah Higgins

The Creative Act and the Invitation to Chance
Laurel Fredrickson (Southern Illinois University; laurel.fredrickson@gmail.com)

In 1957, Marcel Duchamp redefined the creative act as one in which the observer plays a fundamental role, activating the efficacy of the idea by translating it into the social sphere. That year Duchamp often took walks with Jean-Jacques Lebel, an artist he met when the latter was a young boy. In the evenings, Lebel explored embodied poetics and hallucinogenic vision with Beat poets Allan Ginsberg and Gregory Corso. These experiences and his dialogues with Duchamp informed Lebel's orchestration of happenings in the 1960s, meant to catalyze psychic and social change through topical allusion, humorous and transgressive acts. Despite the gulf between the Apollonian reserve of Duchamp's methods of shock, as well as his defamiliarization and rejection of the retinal as the essence of art, and Lebel's Dionysian strategies of sensory bombardment and defiance of taboo, each encouraged chance to intervene through the response of the activated observer. For each artist, I argue, the circuit between artist, object, and observer was also erotically charged, if cerebral for Duchamp and corporeal for Lebel. This paper explores Lebel's adoption and transmutation of Duchamp's understanding of the creative act by focusing on two happenings—*Dechirex* (1965), attended by Duchamp, and *120 Minutes dedicated to the Divine Marquis* (1966)—which created situations, framed as art, that encouraged collaborators and observers to experiment with being and seeing in ways that Lebel could neither predict nor control. For Lebel, happenings erase distinctions between observers and observed, promoting "dialogue, circulation, and exchange," to produce what Duchamp might describe as the "not already seen."

Cycles of Teaching Collaborative Creativity: RSVP Cycles and Le Poïpoïdrome
Jessica Santone (California State University at East Bay; jessica.santone@gmail.com)

This paper compares two structures of collaborative creativity in the 1970s, Anna and Lawrence Halprin's *RSVP Cycles* (1969) and Robert Filliou and Joachim Pfeufer's *Le Poïpoïdrome* (1976). The Halprins developed their Resources-Score-Valuation-Performance methodology in San Francisco out of their shared work on dance and environmental design. Filliou and Pfeufer built a model of a multi-room learning space in Budapest; it was part of their ongoing Institute of Permanent Creation and was less of a functional method and more of a visualization of sequences of creative thought and action. Of particular interest are the ways that each structure attempted to articulate the complexity of working together in dynamic and interactive creative processes. Both structures placed some emphasis on how action and reflection relate – seen in the importance of "valuation" for the Halprins and mindfulness as a final stage of the learning process for Filliou and Pfeufer. Both structures have roots in Fluxus procedures for scoring participatory actions, rather than choreographing or lecturing, and the procedures of urban planning and architecture. This paper will consider the social, cultural, and aesthetic circumstances that gave rise to these related approaches, how they served or would serve audiences, and the specifics of their reception in the 1970s. I argue that these structured models of thinking and doing with others fostered new ways of knowing and strengthened the potential for cross-cultural exchange amongst participants.

The Kindness of *Carnavalescos*: Class Relationships in Oiticica's *Parangolé*
Elise Archias (University of Illinois at Chicago; Archias@uic.edu)

Though similarities between Hélio Oiticica's participatory artwork, the *Parangolé*, and the samba formations in the parades of Rio de Janeiro's annual carnival celebration have been discussed, the artwork's imbrication within the class politics around carnival have only been touched upon. As Julie M. Taylor has discussed, carnival in Rio during this period was the culmination of year-round negotiations over whose aesthetic—popular or middle class? –would dominate the spectacle that had come to symbolize Brazil's national identity. Particularly relevant to Oiticica's work is the role that bourgeois, educated artists increasingly played as consultants, or *carnavalescos,* in the organization and planning of entries by Rio's working class samba schools in the parades. The Mangueira school had always resisted such influence from outside the community, however, preferring to maintain the legibility of its art form's Afro-Brazilian roots. What did it mean for Oiticica—white, educated in the European tradition, but also avant-garde—in the making of the *Parangolé* to adopt a quasi-*carnavalesco* relation to the Mangueira school for a samba procession in 1965 that was not part of the official carnival, but aimed at a modern art audience? Was the *Parangolé's* dance from within bulky costumes made of cheap, colorful packing materials an imaginative reach toward what Roberto Schwarz would call, "the workers gaining access to the terms of contemporary life, so that they can re-define them thru their own initiative"? Did it simultaneously duplicate and offer insight into relationships based on "favors" that had long entrenched unequal privilege in the structures of Brazilian modernity?

Marc Quinn's portraits: towards the creation of original material depictions of the human
Liliane Ehrhart (Princeton University; ehrhart@princeton.edu)

Marc Quinn is a Young British artist interested in using new materials as much as traditional ones to create his artworks. He questions the cultural and biological understanding of what a human being is, and wants to meet the untidy, i.e. "the place where the material and scientific worlds diverge". As a result, he proposes to think through how art can approach and translate, as realistically and scientifically as possible, the very nature of the human through the material. He works with conventional and valuable material, such as marble and bronze, but also with unusual media, like bread, blood, and placenta, towards the creation of humanlike sculptures. In the early 2000s, Quinn worked with the National Portrait Gallery in London to design new forms of (self-)representation. Sir John Sulston, who was awarded the 2002 Nobel Prize in Medicine, collaborated with Quinn to imagine the possible features of a portrait or self-portrait made in the 21st century. The outcome was a series of "portraits" made by framing the DNA of the subjects, followed by a sculpture that Quinn made with his own carbon atoms. In this presentation, I explore the close relationship between the medium and the technique that Quinn uses to create his artwork, and interrogate the relationship between iconological representation and abstract portraiture in his art. Quinn's work complicates accepted distinctions between the figurative and the non-figurative, and the boundaries between art and subject.

Panel 4G: Friday, November 4, 8:30 AM-10:00 AM *Ansley 7* (projector, screen, and speakers)

Nonhuman Relational Creativity 1: Crafting Queer Kin and New Kinds

In a posthumously published piece, José Muñoz notes: "queer thought is … about casting a picture of arduous modes of relationality that persist in the world despite stratifying demarcations and taxonomies of being." This sequence of panels takes up this sense of queerness in order to examine various practices of relating among humans and nonhuman entities as modes of building kin that push against and disrupt the more sedimented taxonomies that divide our worlds. In speaking to these connections, these panels not only explore their promise, or the ways that they craft new understandings of how we become kindred (or not), but also the ways that they speak to a queer creativity that engenders different ways of being, doing, and understanding human/nonhuman beings. In panel I, Lypps uses the materiality of slime to explore the possibilities of machine/human and interspecies kinship, revealing a queer zone of contact between the affective states of disgust and pleasure, while Woelfle-Erskine explores José Muñoz's concepts of utopia and the brown commons as grounds for an ecological field practice that would recognize these interspecies affects as formations of kinship. Finally, writing with contemporary dog trainers, Weaver explores how bodily understandings between humans and dogs engender connections and kinships that bely racial, class, and family norms.

Chair: Cleo Woelfle-Erskine

Ecological Desire in the Brown Commons
Cleo Woelfle-Erskine (University of California at Berkeley; cleo.we@berkeley.edu)

In field conversations, ecologists closely observe, care for, and admire species—plants, animals, fungi, and microbes that persist in damaged landscapes. For indigenous scientists, these relations of love and care are often named kinship relations, however non-indigenous scientists rarely consider them as such, and rarely bring these affects into papers and conference presentations. I explore José Muñoz's concepts of utopia and the brown commons as grounds for an ecological field practice that would recognize these interspecies affects as formations of kinship. Muñoz saw musical and performance expressions of queer desire and embodiment as anticapitalist resistance to colonial modes of thinking, and also utopian in that they make new worlds appear, even ephemerally. Through street protest and testimonials in places of power, environmental justice activists enact their collective desire for clean air, water, gardens, and wild things. Eve Tuck and K. Wayne Yang note that such "[d]esire can be a framework, mode, and space for refusal …of settler-colonial logics". As environmental justice's queer ecological desire, the brown commons embodies utopian yearning for, with, and on the part of 'degraded' landscapes. Drawing from ethnographic fieldwork, I focus on ecologists' joy at flopping fish, spreading mycelia, and prolific parasites. Queer love that is ephemeral, in the face of death, as creation coexisting /continuing alongside capitalism's waste and detritus—this is another utopian possibility, an emergence through recognition, a making the new world here and now, one that suggests how ecologists might perform love for dying species in public and collaborative ways.

Queers in the Undergrowth, Slick Machines: Meetings between Human and Inhuman
Heidi Lypps (Independent Scholar; ithyphallic@hotmail.com)

What we call slime—glandular secretions, sticky chemical trails, slippery mucosal lining—connects animal and human in navigating liminal spaces between bodies. For molluscan and mammalian species, slime is a material and a method by which the body buffers itself from the

environment, an extension of the body that is not a body. Slime is protean, and human and mollusk are entwined; yet through a process of enclosure, we have become alienated from the slimy materiality of our own, and other, bodies. Paradoxically, humans reproduce the utility of sliminess in the world of the machine: the slippery high-temperature viscosities of engine oil that roll the camshafts of engines, as well as the thicker, slower lubrication of grease packed into the race of a bearing. "Personal lubricants," too, reproduce slippery materiality in ways that are important to the practice of queer eroticism. Human encounters with slimy animals threaten the self with the contagion of animality; encounters with greasy machines threaten loss, breakdown, and toxic chemical exposure. These threats, in their breakdown of the borders of the self, are also new sites for kinship and affinity. Susan Stryker has written, "I find no shame, however, in acknowledging my egalitarian relationship with non-human material Being; everything emerges from the same matrix of possibilities." Using concepts such as Mel Chen's animacy hierarchy and Eva Hayward's fingeryeyes, this project explores the disorderly crossroads where machines, queer humans, and slimy animals meet, in search of a more open, supple, and responsive system of relation.

Training as Creating in Kind

Harlan Weaver (Kansas State University; harlanweaver@ksu.edu)

Contemporary dog trainers constantly emphasize the role of bodies—as modes of expression, language, conduits of affect—in training relationships: Patricia McConnell remarks that "dogs are brilliant at perceiving minute changes in our bodies and assume each tiny motion has meaning," while Sophia Yin notes that "by understanding your pet's expressions and learning what motivates him, you'll be able to connect with him on a new level and build a trusting relationship." Philosopher and ethologist Vinciane Despret echoes this sense of knowing in her reading of environmentalist Farley Mowat's attempts to mimic the diet of Northern Canadian wolves by eating mice throughout the winter as "embodied empathy," a way of knowing-with other beings by learning through the body. Drawing from Despret, this paper articulates how human/nonhuman connections through bodily ways of knowing emerge through the work of dog training. However, this paper also asks how these training projects participate in and are made possible by stratifications involving gender, class, and whiteness. Drawing from ethnographic fieldwork, I explore how these training relationships move away from normative family formations and craft new and more creative kinships.

Human-Nonhuman Relations in Ecological and Biological Art

Carlos Castellanos (Kansas State University; ccastellanos@ksu.edu)

From its inception, what is called new media art has demonstrated an interested in the relations between humans and nonhumans. Whether this has manifested in explorations of natural phenomena, living systems or artificial intelligence, these works may be characterized as engendering perceptual shifts with regard to the divide between humans and nonhumans, system and environment, observer and observed. Artists incorporating nonhuman elements such as artificial life agents, living and semi-living bodies, and quasi-organic materials into their work bring together novel combinations of disparate entities. Similarly, many artists deploying ecological methods and practices are attracted by the field's interdisciplinary holism and opportunity for environmental activism. Contemporary new media artists often employ new

technologies alongside critical and conceptual analyses of biology, the environment and the landscape. These artists are engaging conceptually and critically with the latest technologies and scientific methods used in the environmental, ecological and biological sciences that are changing conceptions of life, the environment and the planet. I will present a brief overview of these two areas of new media art as well as a discuss some current work of my own. I will discuss how both areas share a desire to explore zones of negotiation and reciprocity between human and non-human subjectivities, often bringing into question the rational clarity of the classical ideal of a dualist ontology that separates people and things. Matter and non-human life are not passive and inert but are lively and dynamic, with agency or lifeworlds of their own.

Panel 4H: Friday, November 4, 8:30 AM-10:00 AM *Ansley 8* (projector, screen, and speakers)

Weird Times

Chair: Ezekiel Crago

Back to the Past: Time Travel Patriarchy and the Politics of Visibility
Ezekiel Crago (University of California at Riverside; ecrag001@ucr.edu)

In the midst of the 1980s, a decade simultaneously marking the waning years of the Cold War and extreme paranoia about nuclear destruction, the height of the Reagan years, in which he ran for reelection on a platform of peace through strength and weaponized satellites in orbit, two time travel films appeared a year apart: *The Terminator* (1984) and *Back to the Future* (1985). At first glance, time travel would appear to be their only similarity, but the narratives share a great deal more thematically and narratively. My paper investigates these similarities, arguing that both films act as ideological statements about the politics of masculinity and the power of the masculine gaze. Both films place the white male into the center of history and resolve a paternal crisis through acts of violence, portraying masculinity as necessary but dangerous. Both films portray the mother as an object of the masculine gaze, but *The Terminator* shows, in hyper-violent depictions including the point-of-view of the robot assassin, that this position places her in danger. *Back to the Future*, with its PG rating and the confluence of Michael J. Fox, Steven Spielberg, and Robert Zemeckis, downplays both the violence and sexuality of its narrative, and in so doing minimizes its ideological critique, although it positions itself as an ostensible satire of Reagan-era values. By contrast, *The Terminator* problematizes the centrality of masculine aggression in this era of American culture. It posits the logical consequences of this rhetoric and the harm that it impends.

"Creating the Past: Mixing Identity and Deep Time in Virginia Woolf's *Between the Acts*"
Tyler Groff (Miami University; grofftr@miamioh.edu)

My work considers the ways in which Virginia Woolf explores competing notions of identity and humankind's relation to the past, particularly through two aging members of the Oliver family in *Between the Acts*. The family patriarch, Bartholomew, presents an identity shaped by national heritage and a dedication to England's imperial mission. His thoughts are shaped by gendered understandings of duty and memories of his youth spent in the English Civil Service in India. He laments what he perceives to be the decline of English masculinity and obsesses over the training

of his pet Afghan hound—a relationship that demonstrates a will to power and control closely connected to his conceptualizations of history. His sister, Lucy Swithin, poses a distinctly different understanding of identity and the past. Her intense interest in H.G. Wells' The Outline of History (a work on deep time and Earth's development) generates an expanded view of history and the imperatives posed by it. I argue this interest causes Lucy to form a connection to the non-human life of prehistory—a connection that, unlike Bartholomew's connection to the non-human, is formed around sympathy rather than a desire to conquer. Lucy's musings on humanity's ties to the deep past challenge the imaginary communities Bartholomew aligns himself with, but the sense of kinship she forms to the nonhuman relies on a creative application of paleontology and Darwinian science. Through these characters, I argue Woolf suggests a creative engagement with the science of deep time to counter the ideologies of empire.

Rendering nostalgia in gameplay: The aesthetics of making and using 3D maps for virtual time-travel.

Ranjodh Singh Dhaliwal (University of California at Davis; rjdhaliwal@ucdavis.edu)

The official website of The 1920s Berlin Project, which is a historical role-playing community in Second Life intended to simulate daily life in Berlin in 1920s, says "'Second Life' gives you the opportunity to travel in time, virtually." In this paper, I shall use case studies such as this 1920s Berlin project, in conjunction with the technical specifics of rendering through hardware and software, and personal anecdotes to investigate the relationship between the generation of temporality and memory in videogames. I shall claim that this moment of visual time-travel is enabled by rendering. The hardware and the software, the machine and the human are all connected through this process of aesthetic instantiation that focuses on converting a mathematical equation into a visual entity. If, for Galloway, the moment of play is the core of a game, then I shall posit that the moment of rendering is the core of that game's perception, reception, and perhaps even generation. Thus, the widespread practice of creating new, real-life maps for virtual environments doesn't generate a new world but only provides the conditions for its generation, and the creative energy is 'stored' in an equation to be released when rendered. Therefore,the practice of creating new worlds for time-travel is enabled and driven by rendering. And because rendering is necessitated by constraints of machinic memory, I shall argue that rendering exercises control over the 'game-time', and connects this virtual time with the real one, thereby invoking nostalgia in human memory, ultimately allowing game-players to 'time-travel'.

The Post-humanist Grotesque: Creating A Visual Rhetoric for Multidimensional Computer Vision

Sophia Pelka (University of Waterloo; stpelka@gmail.com)

Due to the popularization of ubiquitous computing visual epistemologies are shifting away from the screen (Coleman). The images of pervasive media often remain invisible. The unseeable images of pervasive media and ubiquitous computing are what Alexander Galloway et al. refer to as "dark media," what human perception is "'in the dark' about" (Galloway, Thacker, and Wark).

This shift in visual epistemologies is a major challenge to anthropocentric thought, because while humans only perceive in two or three dimensions, computers can 'see' in infinite dimensions.

Digital art and technologies that are beyond the line of vision leave viewers with only conceptual means for interpretation. However, images remain intrinsic to the processes of digiality and are a major aspect of how cultures imagine their worlds.

As a means of moving beyond a conceptual framework, I propose a grotesque approach for embracing and utilizing multidimensional computer vision. Designers can begin to see dark media and taunt computing through the dismembering of code. Code acts as a metaphorical bridge between natural life and digital life. The tearing apart of code is playful, but simultaneously skirts around the unknown and a potentially consequential outcome. Rather than recentering human perception during the dismembering of code, the grotesque aims to center posthumanist approaches to perception before reassemblage. In this paper, I explore the potential of a grotesque rhetoric through the analysis of Timo Arnall and Maruzio Bolognini's digital art work.

Panel 4I: Friday, November 4, 8:30 AM-10:00 AM *Peachtree 1* (larger room, projector, screen, and speakers)

Weird Systems

Following the panel Expanding Systems Aesthetics at SLSA 2015, which investigated cybernetics and systems aesthetics beyond its conventional applications in new media art, electronic arts, and the like, our proposal to SLSA 2016 is to examine the weirder aspects of cybernetics and their expression in post-war artistic and literary culture. Often criticised for belonging, along with operations research and game theory, to a malign triad of what Peter Galison called the 'Manichean sciences', cybernetics nevertheless provided weird models of thought and practice, radically alien to its more technocratic applications. For the 'systems counterculture' of the late nineteen-sixties and seventies, described by Bruce Clarke, cybernetics offered an integrative model of planetary ecology and an epistemology of consciousness ripe for psychiatric and, at times, hallucinogenic experimentation. The 'weirding' of systems also correlated to the transition from first-order to second-order cybernetics and the study of open, non-linear, and observer-dependent systems. The systemic models that emerged from this transition, which include descriptions of bio-feedback, the informational body, genetic variation, distributed observers, and the non-rational purposiveness of recursive processes, remain especially fitting to our present moment. In light of this, the proposed panel will consider what we might still learn from those occasions where systems become weird.

Chair: Tim Stott

Cosmic Weirdness in John Lilly's The Scientist: A Novel Autobiography
Bruce Clarke (Texas Tech; brunoclarke@gmail.com)

The cybernetic orientation and purchase of John Lilly's work has been well documented. Lilly worked through multiple systemic frames, applying information theory and computational analogies to his investigations of consciousness and communication. This affinity was personal as well professional: Lilly maintained a collegial friendship with Heinz von Foerster, the progenitor of second-order cybernetics, visiting von Foerster's Biological Computer Laboratory twice in 1968. One is hard-pressed not to hear an echo of the Biological Computer Laboratory in

the title of Lilly's first extended treatment of the LSD experience, Programming and Metaprogramming in the Human Biocomputer, also published in 1968. A decade later, Lilly published The Scientist: A Novel Autobiography. My talk will investigate the systemic weirdness of this text. The account of a scientific life leading up to a methodical exploration of LSD and ketamine in the isolation tank he had invented in the 1950s,The Scientist operates a permanent vacillation over whether cognition is or is not operationally closed. Stated neocybernetically, it flips back and forth between realist and constructivist commitments, except that when the hallucinatory material is not treated as a psychic construction, a sort of virtual science fiction, it is rendered as the actual reception of telepathic messages from cosmic agencies. The Scientist is an astounding and profoundly disturbing performance, one that eventually collapses under the weight of its own contortions, or perhaps better, implodes from the self-deconstruction Lilly deliberately inscribes into its narrative mode of fictive autobiography.

Occult Systems: 'Thinking the Absolute' in Luhmanns's Systems Theory
Francis Halsall (National College of Art; halsallf@staff.ncad.ie)

Luhmann's social systems theory is generally taken to be a dry, technocratic and instrumentalized view of society as a collection of abstract and impersonal systems. But, in this paper I ask the question: what if it is actually far weirder than it first seems? Might Luhmann use System as a means to think The Absolute or The Real in post-religious terms? If so, there might be a weird, occult strand to his thinking, which would contradict his (mostly negative) reception as an archly instrumental thinker who reduces all social activities to systemic principles. On one hand Luhmann's account of modernity is a sociological one that describes an increasing secularization of society. Luhmann characterizes modernity as a turning away from in order then to describe social systems that are differentiated, autonomous, self-observing and self-describing. On the other hand, Luhmann claims that systems theory, 'avoids any affiliation with academic "philosophy"' and dismisses metaphysics in particular. There might be a system independent reality, but this reality cannot be known in itself: Through Autopoiesis, in particular, systems demonstrate a purposiveness that is non-rational, yet not chaotic. It is, in other words, a form of intentionality that is non-human, whilst also not divine: an occult or alien intentionality. My conclusion is to compare this intentionality to a spirit that inhabits and regulates the systems of modernity with an occult, irrational and, ultimately unknowable force.

William Bateson's Waves of Living Flesh
Phillip Thurtle (University of Washington; thurtle@uw.edu)

In *Steps to an Ecology of the Mind*, Gregory Bateson wrote that his father, biologist William Bateson, "was groping for the orderly characteristics of living things which illustrate the fact that organisms evolve and develop within cybernetic, organizational, and other communicational limitations. It was for this study that he coined the word "genetics."[1] Recovering William Bateson's importance for systems thinking emphasizes two especially important points: the role of variation (as opposed to control) in systems thinking as well as the importance of wave dynamics as an analog for understanding biological pattern formation. For William Bateson, heredity was a science of variation (as opposed to selection) and was inherently creative. Much like how ocean waves create ripples on a sandy shore or the drop in barometric pressure dapples

a mackerel sky, William Bateson envisioned variation creating wave-like patterns from living flesh. The segmented bodies of insects and the pattern of nipples across the chest of a pig, were some of the waves that Bateson identified in animal lives. These insights of William Bateson would be especially important for late twentieth century biologists as they began thinking of genes as catalysts for a complex series events instead of molecular elements of command and control. This view of life is also important in that it embraces the weird and unpredictable as a method for expanding one's understanding of the forms of living things.

Panel 4J: Friday, November 4, 8:30 AM-10:00 AM *Peachtree 2* (projector, screen, and speakers)

Sound Environments

Chair: John Hay

Thoreau's Sound Reasoning
John Hay (University of Nevada at Las Vegas; john.hay@unlv.edu)

In a notorious 1851 Journal entry, Henry David Thoreau gruffly devalues "oratorios and operas," declaring all the instrumental music of Vienna to be worth no more than the "cheap" melodies of an organ-grinder. This dismissal of classical music is surprising given Thoreau's advocacy for attentive listening in the "Sounds" chapter of *Walden*. How could someone so attuned to the aural qualities of life simply brush aside Beethoven's symphonies? Mid-twentieth-century scholars such as F. O. Matthiessen and Perry Miller affirmed that Thoreau's musicological knowledge was "pathetic," but current critics Branka Arsi? and Jeff Titon have maintained that Thoreau understood noise itself as fundamentally musical. By linking Thoreau to John Cage (arguing that the former re-theorized music to include a larger spectrum of sounds), this scholarship vindicates Thoreau's aesthetic and philosophical powers without accounting for his bizarre rejection of the professional concert music that grew increasingly popular among his intellectual New England neighbors. My paper builds upon recent criticism by connecting Thoreau's study of scientific texts on sound, such as David Brewster's *Letters on Natural Magic* (1836), to newer theories in sound studies by Jean-Luc Nancy. Thoreau's attitudes toward sound were indeed revolutionary, and their significance has only begun to be understood. I also address Thoreau's odd distaste for the concert hall. By examining the musical critiques by Thoreau's Concord contemporaries, such as John Sullivan Dwight, I offer a sense of what it meant to be a classical music aficionado in antebellum America.

John Cage had nothing to say. And I am saying it. Complicity/chance/indeterminacy/noise
Aaron Zwintscher (University of Central Florida; billyprophet@gmail.com)

Jacques Attali noted: "We are all condemned to silence – unless we create our own relation with the world and try to tie other people into the meaning we thus create." This is not an easy line to unpack. It is redolent with terms of indeterminate definition: silence, relation, world, other, meaning, create. And yet, this indeterminacy is an opening, this uncertainty a means. Creativity often focuses on outcomes, on goals, on desire, on control. Noise, since Cage, is certainly not ignored, but still does not have widespread usage or an understanding beyond the colloquially

negative. Yet, adapting Michel Serres, noise is the primary human relation to the world, and thus the medium through which we need to work, out of which we need to create meaning. This presentation seeks to create through noise, past the cage of silence. It strives to connect, to relate, and to create meaning not though organized processes with intended outcomes but by embracing the noise that humans are in the world, that marks and mars us and our Anthropocene.

Counting Long Scales of Time: American Transcendentalism and Creative Attunement to our Nonhuman Environment
Christina Katopodis (The Graduate Center, CUNY; ckatopodis@gradcenter.cuny.edu)

For Margaret Fuller, music contained "everything in nature": "In it all and each are manifested in most rapid transition; the spiral and undulatory movement of beautiful creation is felt throughout" (Marshall). According to Megan Marshall, Fuller believed that music "exemplified human perfectability," but what of nonhuman music, the "spiral" and undulating vibration in the undertones of Fuller's musical aesthetics? While Fuller developed her music criticism listening to Beethoven and Mozart, her fellow Transcendentalists, Ralph W. Emerson and Henry D. Thoreau, searched for organic music in nature. Music was the perfection of human creativity for Fuller; however, Emerson and Thoreau de-centered themselves in the symphony, becoming creative listeners for the "mute music" and "terrestrial music" of their environment. Echoing Salome Voegelin's theory of listening as "a reciprocal inventive production," I examine the vibrational epistemologies of these three American Transcendentalists, applying Fuller's embodied music criticism to Emerson and Thoreau's "earwitness" (R. Schafer) accounts of organic music. In harmony with Emerson's assertion that "all I know is reception," I find resonances with musicians David Rothenberg and John Luther Adams, who resist an anthropocentric aesthetics of music. As Charles Lyell extended nineteenth-century perceptions of geological time, Rothenberg considers the 13- and 17-year pulses of cicada music, and the "thousand mile song" of whales, widening the scales of music to include nonhuman rhythms beyond human perception. Likewise, Adams offers "sonic geographies" in his compositions inspired by the Alaskan soundscape. In this ensemble, "silences" between earth-beats are, in fact, active rests in longer scales of time.

Coffee and Tea Break, 10:00 AM-10:15 AM

Session 5: Friday, November 4, 10:15 AM-11:45 AM

Panel 5A: Friday, November 4, 10:15 AM-11:45 AM *Ansley 1* (no AV)

Three New Books in Media Aesthetics

This book release panel brings together three new monographs by emerging scholars working in media aesthetics: Scott C. Richmond's *Cinema's Bodily Illusions: Flying, Floating, and Hallucinating* (University of Minnesota Press), Patrick Jagoda's *Network Aesthetics* (University of Chicago Press), and Stephanie Boluk and Patrick LeMieux's *Metagaming: Videogames and the Practice of Play* (University of Minnesota Press). In its various incarnations such as platform studies, critical code studies, or studies of digital materiality, media studies has often stressed how the operation of digital technologies beyond lies constitutively beyond the grasp of human

powers of representation or perception. These books, by contrast, take up the ways in which the operation of contemporary media technologies—in turn, the cinema, networks, and digital games—play out in various ways that are correlated with human perception, action, and aesthetics. In so doing, they offer accounts of how the operation of such technologies always involves questions that have tended to drop out of many contemporary accounts of media technologies: What is, and is, not graspable in human experience? What is the object of media aesthetics? How do media modulate or transform the conditions of experience? What aesthetic forms are capable of remediating the inhuman operation of such technologies? Where does aesthetic practice take place when the object is itself media? Each of the authors will present briefly about the content of their book, and then each of the respondents will offer a substantial response.

Chair: Scott Richmond

Cinema's Bodily Illusions: Flying, Floating, and Hallucinating **by**
Scott Richmond (University of Toronto; scott.c.richmond@gmail.com)

Cinema's Bodily Illusions is a book about cinema's power to evoke illusions: feeling like you're flying through space, experiencing 3D without glasses, or even hallucinating. In the book, I argue that cinema is, first and foremost, a technology to modulate perception. The book presents a theory of cinema as a *proprioceptive* technology and the cinema as a site of a more general proprioceptive aesthetics: an aesthetics of mediated self-sensation. The cinema's most important aesthetic work lies in its modulation of viewers' embodied sense of space, working not at the level of the intellect but rather at the level of the body. I develop this account of the cinema's proprioceptive aesthetics through examples of direct perceptual illusion in cinema: hallucinatory flicker phenomena in Tony Conrad's *The Flicker*, eerie depth effects in Marcel Duchamp's *Anémic Cinéma*, and, most centrally, the illusion of bodily movement through onscreen space in Kubrick's *2001*, Reggio's *Koyaanisqatsi*, and Cuarón's *Gravity*. To do this work, I combine insights from Maurice Merleau-Ponty's phenomenology of perception and James J. Gibson's ecological approach to perception. The result is an approach I call ecological phenomenology, which allows us to refocus on the cinema's perceptual, rather than representational, power. Arguing against modernist habits of mind in film theory and aesthetics, and the attendant proclamations of cinema's death or irrelevance, I show that cinema's proprioceptive aesthetics make it an exemplary site of inquiry into contemporary media aesthetics.

Metagaming: Videogames and the Practice of Play **by**
Stephanie Boluk (University of California at Davis; boluk@ucdavis.edu) and Patrick LeMieux (University of California at Davis; patrickjlemieux@gmail.com)

Metagames are games about games. They are the games we play in, on, around, and through videogames. From the most complex house rules and competitive tournament trends to the simple decision to press start or even purchase a game in the first place, for all intents and purposes metagames are the only kinds of games we play. And although the term "metagame" has a long history, the concept has taken on renewed importance and political urgency in a media landscape in which videogames not only colonize and enclose the very concepts of games, play, and leisure but ideologically conflate the creativity, criticality, and craft of play with the act of

consumption. In *Metagaming: Videogames and the Practice of Play,* Stephanie Boluk and Patrick LeMieux attempt to uncover alternate histories of play defined not by code, commerce, and computation but by the diverse practices and material discontinuities that emerge between the human experience of playing videogames and the nonhuman operations of technical media. From the perspectival puzzles of *Portal* to speedrunning *Super Mario Bros.* and from electronic espionage in *EVE Online* to virtual economies of Valve's digital distribution service Steam, Metagames transform videogames from a mass medium and cultural commodity into instruments, equipment, tools, and toys for playing, racing, competing, spectating, studying, hacking, modding, breaking, making, and ultimately intervening in the sensory and political economies of those technologies responsible for the privatization of play.

Network Aesthetics
Patrick Jagoda (University of Chicago; pjagoda@uchicago.edu)

The term "network" is now applied to everything from the Internet to terrorist-cell systems. But the word's ubiquity has also made it a cliché, a concept at once recognizable yet hard to explain. *Network Aesthetics*, in exploring how popular culture mediates our experience with interconnected life, reveals the network's role as a way for people to construct and manage their world—and their view of themselves. Each chapter considers how popular media and artistic forms make sense of decentralized network metaphors and infrastructures. *Network Aesthetics* first examines narratives from the 1990s and 2000s, including the novel *Underworld*, the film *Syriana*, and the television series *The Wire*, all of which play with network forms to promote reflection on domestic crisis and imperial decline in contemporary America. The book then looks at digital media that are interactive, nonlinear, and dependent on connected audiences to show how recent approaches, such as those in the videogame *Journey*, open up space for participatory and improvisational thought. Contributing to fields as diverse as literary criticism, digital studies, media theory, and American studies, *Network Aesthetics* argues that, in today's world, networks are something that can not only be known, but also felt, inhabited, and, crucially, transformed.

Respondents: Peter McDonald (University of Chicago; pdmcdonald@uchicago.edu) and Kris Cohen (Reed College; krcohen@reed.edu)

Panel 5B: Friday, November 4, 10:15 AM-11:45 AM *Ansley 2* (projector and screen)

Slow Thought Experiments 1

This stream (2 panels) offers multiple experiments with slow thought. These experiments do not purport to be one more take on the "slow movement," however. Slow fashion, slow food, slow technology, slow religion, slow politics—a veritable marketplace of slowness. Too often such slownesses either reflect the most recent market trends (e.g., the latest DIY craze) or they serve to justify one pace of life at the expense of other, perhaps more consumer-driven paces. But in either case, slowness is mobilized in order to serve as a privileged perspective (that reflects the market, metaphysics, and even politics) capable of disqualifying all those perspectives that do not adhere to it. In this stream, we seek to explore modalities of slowness that are not so quick to draw conclusions. In particular, we're interested in experimenting with techniques that cultivate modes of human and nonhuman attunement that resist the temptation to attach value to one way

of life at the expense of others. We're calling these techniques Slow, precisely because they operate at timescales that are far too stubborn and slow for the quicknesses and speeds of normative human judgment. For this reason, slow thought might be characterized as a particular species of "posthuman" attunement, but one which seeks to reclaim slowness as a modality of living, thinking, and acting that resists the violence of normative judgment propagated by the Modern West in the name of Man and Anthropos. Although the papers on this panel all experiment with modalities of slowness that draw on diverse thinkers and fields, they all push beyond the narrow confines of these disciplines to devise slow tactics that might secure a slow future.

Chair: Adam Nocek

A slow poetics? Christian Bök's Xenotext experiment
Yves Abrioux (Université de Paris 8 Vincennes–Saint-Denis; yves.abrioux@gmail.com)

Cognitive science is all too frequently marred by a rush to judgement that fails to take account of the specific differences between a laboratory set-up and the outside world, an experimental model of (say) consciousness and spontaneous manifestations of the same phenomenon, the reactions of deterministic entities and the actions of beings whose behavior evolves cognitively in response to that of others, etc. Among the most striking instances of this unseemly haste is the careless assimilation of phenomenological states of being, as described by humans, to functional states, as defined by scientific practice. The pertinence of the notion of a state outwith the domain of linear dynamical systems, or at least of systems close to equilibrium, was long ago challenged by Ilya Prigogine. The uncritical mobilization of the same notion in cognitive science or the philosophy of mind ties these disciplines to the realm of common sense–and indeed of opinion, as defined by Deleuze and Guattari to include phenomenology. In consequence, much of cognitive science is of very little use to poetics. In the 1960s, literary theory identified the "codes" of mainstream literary practice as being largely tied to opinion, in the guise of ideology. Earlier still, authors such as those associated with the experimental oulipo group had turned to arbitrary formalistic protocols to break the humanistic literary mold. This paper will argue that a similar step can be taken to slow down the over-hasty assimilation of scientific results and theories by the humanities, and the trivializing acceptancei by cognitive 'poetics' of the public epistemology of science, which it would be wiser to examine critically. To this end, it will consider the case of the Xenotext experiment undertaken by the Canadian author Christian Bök, in collaboration with Stuart Kauffman, with the aim of engineering a primitive bacterium as a useable machine.

Elemental times
Pierre Cassou-Noguès (Université de Paris 8, Vincenne-Saint-Denis.; pierre.cassou-nogues@univ-lille3.fr)

In his novel *Vendredi ou Les limbes du Pacifique*, Michel Tournier opposes the time of the Earth which can be measured, numbered and which accumulates, and the time of the Sun, which does not pass in the same way. The time of the Earth, as Tournier describes it, is the kind of time, which, in Max Weber's essay, The Spirit of Capitalism and Protestant Ethic, it is a sin to waste, a view that Weber considers as being at the origin of capitalism. But there would different ways to

describe both the time of the Earth and the time of the Sun. After all, time was first measured with the help of a sundial. In the same way, in La poétique de la rêverie, Gaston Bachelard refers to water, as an "element", to describe the "dreamer's cogito", a state of being that, precisely, is not a cogito in Descartes' sense and in which there is no time. But water, the river in which we only bath once, can also be the image of time. In his book L'eau et les rêves, Bachelard himself investigates this image and this view of water. These examples raise several questions. Why do we refer to elements, water, earth, fire or, at least, the Sun, when we want to describe these unusual times, times that would not pass as the time of the clock? Why do these elements support such various views of time? To try and answer these questions, I will discuss Bachelard's analysis of "elements", and the role they may be given in an imaginary metaphysics.

On Designing Slow Futures
Adam Nocek (Arizona State University; Adam.Nocek@asu.edu)

This paper intervenes in a mode of design research that has had a tremendous influence on the design world in recent years: futures design. Pitching itself as at once imaginative, critical and socially embedded, futures design has quickly and tenaciously emerged as mode of avant-garde design research, cutting across critical and adversarial design, as well as speculative design, participatory design, and design fiction. Part of the success of futures design is that it is has set its sights on engaging and even solving world problems, such climate change, the refugee crisis, financial meltdown, and so on. In this talk I want to reframe the discourse on futures design somewhat in an effort to uncover a way of thinking about design's purchase on the future that does not cash itself out in terms of one more instance of using creative labor to serve capitalist gain. This talk is itself a speculative experiment, which attempts to reorient the discussion of futures design in terms of "thought experiments" that are not judged according to criteria (such as wealth accumulation, innovation, etc.) outside of the problem to which they respond (Deleuze, Difference and Repetition, 164-165). Looking at specific examples from the fields of speculative and critical design, as well as design fiction, and related fields, this paper recasts futures design in terms of how it might function as an apprenticeship to problems in Deleuze's sense; but more specifically, it would be an apprenticeship that uses design techniques to express how problems do not predetermine the solutions that are adequate to them. I discuss how futures-oriented design techniques might then become specific forms of critical engagement with and apprenticeship to those tendencies within the present—i.e., the interstices—that trouble ready-made cognitive frameworks for devising solutions.

Panel 5C: Friday, November 4, 10:15 AM-11:45 AM *Ansley 3* (projector and screen)

Lush Bodies of Romanticism 2: Fecund Tropes

The critical perspective on the relationship between Romanticism and science has undergone a thorough transformation over the last 20 years not only as a result of the repositioning of literature within networks of empirical, experimental, medical, idealist, and materialist discourses, but also as a consequence of the reconceptualization of period scientific methodologies and self-definitions. A preoccupation with generativity, i.e. with the mechanism for beginnings – of ideas, of life, of energy, or of causal chains – dominated literature, philosophy, and natural history of the time. These inquiries across discipline were not isolated,

but in dialogue with each other. Moreover, these dialogues happened transnationally, with exceptional exchange between German and British naturalists and literary authors. This series of three panels will bring together comparative scholars of Romanticism whose work links Great Britain and Germany, while investigating the convergences of science with literature around the issue of luxuriant productivity, in nature, in the human mind, and in textual tropes (both scientific and literary). Panel II: Fecund Tropes turns to the agency of textual forms both within and concerning scientific discourse. While Rousseau and Blake, in Sha's paper, and Hufeland, in Holland's, reach through the structure of the text to reform the body, or through the body to reform the imagination, Kelley's paper takes on a single trope long central to scientific and literary reasoning, the analogy, to ask how scientific language enacts rather than merely explains similitudes. These papers thus reflect on creative plasticity as a function of text as well as practice.

Chair: Richard Sha

The Embodied Imagination
Richard Sha (American University; rcsha@american.edu)

This paper considers how the body of imagination is imagined consistently in luxuriating terms. How is it localized into a body? Rousseau begins by insisting upon the need to "clothe reason in a body if you want to make youth able to grasp it" (Emile 323), but how then does he give imagination a body? When he does begin to think about how to move his pupil's imagination, he realizes that he must first figure out how it is to be moved. Embodying the imagination gets wrapped up with how one embodies creativity. Blake insistently embodies the imagination within an ever-expanding nervous system that branches forth with nervous energy. In so doing, he invents a kind of nervous plasticity—-his term is "embryon passions"--that is underwritten by both an embryonic language and an electrical economy. By materializing imagination in terms of electricity and energy, Rousseau seek laws that will enable its understanding and discipline. Rousseau explicitly presses his pupil's body into hard labor so that its expenditure of energy will dissipate the imagination's energy. Blake, by contrast, seeks to make the imagination's energy "eternal delight" but then how consistently to perpetuate this energy while avoiding the possibility of deleterious consequences? I pursue these questions in relation to Count Rumford's contemporaneous attempts to make energy equivalent to work, and to Catherine Malabou's critique of today's nervous plasticity as capitalist efficiency.

Overripe Analogy and Wild Reckoning
Theresa M. Kelley (University of Wisconsin at Madison; tkelley@wisc.edu)

Recent scientific and philosophical accounts of analogy ask, as others have earlier asked, how analogy might assist or inhabit argument and scientific inquiry. This paper considers analogy--overripe or strictly limited in its heuristic use--to ask how analogy might be conceptually useful (or not) to scientific as well as literary writing. Overripe analogy runs off in, some suggest, unruly directions that distract readers and scientists from its heuristic function. I ask how, instead, overripe analogy, like those Erasmus Darwin uses, like those deployed in James Bateman's Orchidaceae of Mexico and Guatemala, might usefully extract difference from analogical work. This possibility, instead of a tightly constrained set of options for using

analogy, might offer a more subtle measure what analogy might do and more pointedly, how its operations might belong to creative thought rather than operative only in the service of partial explanation in more accessible language of scientific or philosophical concepts At issue in this argument is a rethinking of analogy, from its 17th century use to insist on similitude of the human to nonhuman, to nineteenth century (and beyond) experiments with analogy on the loose. Less the work of signatures that knit the world tightly, I suggest, analogy works to let loose an array of differences that may constitute wider inquiry as well as wilder thought.

The Art and Science of Longevity: Christoph Wilhelm Hufeland's *Makrobiotik*
Jocelyn Holland (University of California at Santa Barbara; holland@gss.ucsb.edu)

This paper studies the the tension between the production of life – understood as the moral and physical cultivation of the human organism – and the themes of artifice and artificiality in Christoph Wilhelm Hufeland's Makrobiotik. I approach this problem from two perspectives. The first considers connections Hufeland's project shares with the life-sciences and the Romantic-influenced Naturphilosophie around 1800 – how Makrobiotik connects to theories of production and generation. The second perspective emphasizes the themes artifice and artificiality. When life is taken as a whole, according to Hufeland, it is also understood both as "representation" and as a "continuous spectacle". The idea of continuity is important because Hufeland understands life as an ongoing "operation." It has its own temporality but can also be lengthened and shortened, retarded and accelerated. The generative processes of the organism are therefore subjected to the techniques of macrobiotics, which come equipped with their own, corrective notion of temporality. If there is a coherent "opus" at the basis of this operation, it requires acknowledging these different temporal registers and their relation to the fiction of an atemporal perspective. Here, the details of the numerous literary references in the Makrobiotik are important. A close reading of the concepts of time in these references (in particular, Bacon's History of Life and Death) strengthens the idea that Hufeland's sense of the "artificial" in his project as much indebted to literary as it is to scientific sensibilities. In the Macrobiotik, the production of life occurs at the intersection of scientific and literary thinking.

Panel 5D: Friday, November 4, 10:15 AM-11:45 AM *Ansley 4* (projector and screen)

Drones at Home: How the Eye in the Sky Shapes Agriculture, Gardens, and Sex in the American Domestic Sphere

Anyone who has seen recent movies such as *Good Kill* (2014) or *Eye in the Sky* (2016) will recognize a filmic critique of drones as the latest instrument of American imperialism. Much of our national attention has focused on how this technology has been used to wage war, from discussions of President Obama's unprecedented use of drone strikes to military rhetoric about lives saved (ironically) by things called "Reapers" and "Predators." But drones, or, as they are officially known, unmanned aerial systems (UAS), are being researched—or already used—for many domestic purposes as well. This panel examines "drones at home": that is, how they impact "us" as well as the foreign "other." In particular, these papers will focus on how the sensory capacities of UAS accomplish cultural work in the contexts of agriculture, gardening, and sexual behavior. We contend that despite their limited use on U.S. soil drones are already profoundly impacting how we eat, how we inhabit private spaces, and how we conceive of

intimacy. It is no mistake that the sensory pleasures in regards to how food tastes, gardens look, and bodies feel become the subject of the drone's creative force. It is an engineering marvel that can carry aloft any number of sensory devices from photographic and hyperspectral cameras to radar. In doing so, UAS creates new domestic aesthetics which can be parsed through careful reading of its visual and textual products crafted from the data sent to earth from its eye in the sky.

Chair: Kelly Bezio

The Drone's Medical Gaze: The Pursuit of Better Living Through Precision Agriculture
Kelly Bezio (Texas A&M University - Corpus Christi; kelly.bezio@tamucc.edu)

Despite much public concern regarding drones' applications as weapons and tools of surveillance, this paper argues that the way we use UAS has much more in common with medical science than the military arts. Building off Lisa Cartwright's argument in *Screening the Body* (1995) that the invention of the motion picture along with other medical recording and viewing instruments (such as the X-ray and microscope) reimagined "bodies as dynamic fields of action in need of regulation and control," I assert that the sensory payloads designed for use with UAS and the images they help to create of the agricultural field likewise render food production a similarly dynamic field of action. Instead of having a "crop" that can be bombarded with water, fertilizer, and pesticides in hopes increasing its fecundity, drone-aided techniques of precision agriculture can use, for instance, hyperspectral imaging to reveal ailing plants, allowing for a targeted intervention. For researchers working in the field of "precision agriculture," as do many of my colleagues at Texas A&M University – Corpus Christi (one of six nationally-designated test sites for developing drone applications), UAS carrying hyperspectral cameras, radar, and lidar are revolutionizing how farmers produce healthy, bountiful crops. In turn, better produce makes possible a better-fed, more vital populace. This paper offers a close readings of images produced by TAMUCC researchers as they conduct precision agriculture experiments in order to demonstrate the drone's vivifying medical gaze. Ultimately, a biopolitical strategy for controlling the body has found its ecological niche.

Drones and Domesticity
Jennifer Schnepf (Harvard University; jschnepf@fas.harvard.edu)

Most critical accounts of drones have focused on their function as instruments of sovereignty that perpetuate imperial war. Rather than examining drones on foreign soil, "Drones and Domesticity" considers the cultural work of drone optics trained on a different terrain: the domestic soil of the American garden. In 2014, America's domestic authority Martha Stewart turned a UAV on her own backyard, documenting the results for Time magazine and writing the essay, "Why I Love My Drone." Stewart's piece reframed the drone as a tool of domestication, one that brought order to the unwieldy sprawl of her Westchester County estate. The following year, U.S. Vogue staged a fashion editorial in a manicured suburban garden: in some of photographs, drones hovered conspicuously, in others, the camera angle suggested a drone's eye view. How are we to understand the relation between the tamed outdoors of the American garden and the conventionally militaristic visual rhetoric of drones? Following Amy Kaplan's suggestion in "Manifest Domesticity" that the domestic sphere "is related to the imperial project

of civilizing, and the conditions of domesticity often become markers that distinguish civilization from savagery," this paper seeks to make explicit how UAV photographs of garden topography draw attention to the civilizing mission of good house (and garden) keeping in the geopolitical context of late American empire. Using an intersectional feminist lens, the paper will demonstrate how the aerial garden shot links the domestic space of the white American woman to the racialized bodies of the state's drone wars abroad.

Drone Intimacy: The Hum of Transmission and Pleasure
Bill Hutchison (University of Chicago; hutch@uchicago.edu)

In May 2015, the Illinois State Police received approval from the FAA to fly "unmanned aircraft" with remote sensing capabilities. In October 2015, the FAA proposed a $1.9 million fine for unauthorized drone flights by SkyPan International, a company that advertises "bird's-eye views" of major cities via its "proprietary Remote Piloted Vehicles." These events followed the release in late 2014 of two of the first professional drone pornography videos: "Drone Boning," featuring drone-filmed footage of beautiful landscapes in which could be spotted couples having sex; and in a likely PR stunt by popular online pornography site Pornhub, a video filmed through a high-rise window entitled "Couple Caught by Drone Hunter." We are already in intimate relations with drones, and while they threaten both life and privacy, their presence also creates new and surprising moments of intimacy, in which the drone is not only a mediator, but also a key character. This paper locates what I call "drone intimacy" in a number of contemporary texts, from Ruben Ostlünd's 2014 film *Force Majeure* to Sunny Moraine's erotic drone fiction. In these texts, I argue, the figure of the drone serves to transform human conceptions of intimacy, so that intimacy is no longer the exclusive domain of the dyad or family or even the human, but now includes this particular technological intimacy. Despite the anxieties around a term like "drone intimacy," the drone creates new ways of conceiving intimate relations between humans, among families, and across the techno/bio threshold.

Panel 5E: Friday, November 4, 10:15 AM-11:45 AM *Ansley 5* (projector and screen)

Looking in on Microbes

Chair: Scott Curtis

On Magnification and the Microscopic Sublime
Scott Curtis (Northwestern University; scurtis@northwestern.edu)

From the early years of microcinematography (between 1905 and 1935) we find many observers filled with wonder and waxing eloquent about spiraling spirochetes or lazy leucocytes. Scientists had certainly encountered magnified images of cell life in magic lantern slides, but projected motion pictures seemed to be, well, especially moving. In a remarkable number of scientific or popular papers from the period there are paragraphs similar to what we might find in Joseph Addison's description of the night sky or Pascal's discussions of the infinitely small. Indeed, films of cell life seemed to arouse precisely those feelings familiar from encounters with both the infinitely large and infinitely small; in other words, the relatively new condition of seeing very small cells move on a very large screen evoked the sublime. This presentation will provide

examples from the early history of microcinematography to explain the relationship between cinematic magnification and the sublime. I argue that the feeling of the sublime evoked in these experiences was specific to motion pictures. If limits and limitlessness are, per Kant, at the heart of the sublime, then the film frame works in a similar way: the frame provides a limit, yet simultaneously gives a sense of (limitless) activity beyond its borders. So encounters with scientific motion pictures conjured a wonder, amazement, and terror similar to but distinct from what had come before, which also helps account for the importance of scientific cinematography for film theory and aesthetics of the time.

Microbial Allies: Opening up to Microbes in Alice James' Diary and John McAuley Palmer's "The Inoculation of Mr. Skads"
Kym Weed (University of North Carolina at Chapel Hill; kweed@unc.edu)

While scholars like Nancy Tomes and Laura Otis suggest that the germ theory of disease inspired exclusionary practices to protect one's body, home, and even nation from microbial threats, literary works from the late-nineteenth and early-twentieth century present microbes as more than just an enemy. Despite the scholarly narrative of the germ theory producing fear and anxiety, I suggest that there is a "flexible vocabulary," as Justine Murison would call it, in the American popular imagination that simultaneously describes microbes as both friends and foes. In this paper, I will explore creative interpretations of microbes as allies in Alice James's diary (1889-1892) and John McAuley Palmer's "The Inoculation of Mr. Skads" (1904). Already positioning her diary as the product of fermentation, or the product of microbes,–it is an outlet for everything "which *ferments* perpetually within my poor old carcass" (25)–James imagines disease microbes as potential allies in ending her life, if only she could "[sow] a microbe," or aiding the memory of her parents as "ghost microbes" (78). Similarly, Palmer playful explores the utility of ally microbes by depicting a petty theft, robbed of his criminal microbes, pleading Dr. Faddison to give him back his microbes and therefore means of survival. Both texts call into question the unilateral classification of microbes, even disease-causing microbes, as enemies. Moreover, the presence (or absence) of microbes impacts how characters see their own identities, suggesting that, in these cases, individual identity is not shaped by exclusion, but rather permeability and realationality.

Talking, Hearing, Voting: Quorum Sensing as Bacterial Chatter
Melissa Wills (University of California at Davis; mawills@ucdavis.edu)

This talk will explore the recurring pattern in science and science fiction of attributing creative linguistic capability to microscopic life. Throughout the twentieth century, science fiction narratives imagining face-to-face encounters between humans and microbes portray speech adaptations as a means of bridging rifts in scale, species, and culture. I will briefly survey a range of talking-microbe fictions – including authors such as Cummings, Fearn, and Slonczewski – focusing on moments of first contact in which micro- and macro-organisms must negotiate communication barriers. In all cases, the resolution hinges on microbial rather than human innovation as they are shown to master languages, grammar, style, and cultural norms. Their methods are often unconventional, and it is the microbes who surprise with their ingenuity while their human interlocutors stand by, dumbfounded. I argue that the same trope of microbial creativity is instantiated in contemporary microbiology's discourses surrounding quorum

sensing: the process by which bacteria use secreted signaling molecules to assess the density of their neighboring cells as a precursor to taking collective action. This burgeoning field depends heavily on speech metaphors to describe molecular processes, describing bacteria variously as speaking or voting (emitting signaling molecules), hearing (assessing other bacterial molecules), and voting (deciding whether to act). It is my assertion that these metaphors ultimately function in the same manner as in science fiction, turning attention away from human skill and refocusing it instead on the creative potential of the microbial world. This projection of a distinctively human skill is thus reconfigured to render thinkable bacterial multicellularity and collaboration.

Microbes and Posthumanism
Russell Winslow (St. John's College; russwinslow@gmail.com)

Greater familiarity with microbial forms of existence is generating questions about humanist presuppositions of the meaning of individuals. Microbes exist in incredibly complex, tightly interrelated (perhaps inseparable) communities of sometimes thousands of different species (Woese 2005); they reframe the meaning of relatedness, passing genetic material between each other in ways other than reproduction; and they transfer this genetic material across the boundaries of microbial species and genera that, in conventional terms, are unrelated (Doolittle 2005); moreover, they further break down the meaning of simple classifications that separate the domains of life by exhibiting an ability to "communicate" with the genomes of other species, causing genes in organisms--including humans--belonging to even other domains to be expressed for the benefit of all involved (McFall-Ngai, et al. 2013). These microbial modes of being contradict basic humanist assumptions that have long organized our perception and understanding of living organisms, especially the human organism. We see ourselves as distinct, autonomous individuals with a unique physical integrity, an integrity unmixed and unadulterated by others, especially other species of organisms. If we find ourselves infected by another species (say, a virus), we consider our integrity corrupted in some way--we long to be "cured" and restored to our proper autonomy. It is becoming increasingly observed that our existence, our well-being, our own uniquely human orientation and activities (metabolic, sexual, psychological, cognitive) are crucially reliant on the embodied, ecological interaction with untold/unknown numbers of other species, other genomes, other bodies. In this presentation, I will consider some of the posthuman consequences of microbial life.

Panel 5F: Friday, November 4, 10:15 AM-11:45 AM *Ansley 6* (projector, screen, and speakers)

Fluxus 3: Creativity after Fluxus

Chair: Roger Rothman

Infra-Structuralist Revolution in Art
Craig Saper (University of Maryland, Baltimore County; csaper@umbc.edu)

Infrastructure alludes, in the popular imagination, to the foundational needs of a functioning society (i.e., communication, transportation, health care, housing, distribution of food and natural resources, etc.) including the necessary elements for teaching and learning (i.e., brick and mortar

schools, electronic systems, laboratories, buses, etc.). When the infrastructure breaks down completely political scientists describe a society in terms of state failure or economic collapse. Infrastructure is neither good nor evil. As a candidate, in 2016, for president of the United States, Donald Trump spoke of building a wall – and that became a mantra of his campaign. The working infrastructure in the country of Denmark became a trope in that same campaign with Bernie Sanders discussing how their system has made life there better and happier for the people – nothing to be scared of. David Brooks, the conservative pundit, returned to the Denmark trope explaining how their investments in infrastructure have led to a "sluggish" economy. Infrastructuralism is a tool, and to appreciate its meaningfulness, whether for authoritarian militarism or for the common wealth, it is imperative to understand how it makes meaning, what it means, and how we might create meanings.

An infra-structuralist aesthetics or poetics proposed here also alludes to the title of an important and influential book on the Structuralist Poetics. In the preface to a later edition of the book, the author, Jonathan Culler, discusses how the book began as a "doctoral dissertation at Oxford in 1968-9, when the structuralist revolution in France was underway. Structuralism promised an interdisciplinary reconceptualization of the humanities and the social sciences, centered on the notions of sign and structure," and it "raised general questions about what form future work on meaning and culture would take" as Culler explains (vii). His work lucidly explains how this shift away from interpretation of the true meaning to a systematic poetics that makes explicit the rules, conventions, devices, structures, and contradictions that make meanings possible. As is well known to scholars of cultural theory, post-structuralism quickly superseded structuralism as a corrective to the supposedly empiricist and apparently singular determinations of meaning in the earlier theoretical formation.

The main continuity of structuralism and post-structuralism is the ongoing focus on aesthetics and poetics rather than interpretation or evaluation: that is, on how meanings are created, changed, and disseminated rather than only on what is the meaning of a specific text, image, event, or sign. Recent art experiments look back to Fluxus to experiment with this unwittingly doubled context. Fluxus offers an approach to infrastructural performance, especially when that infrastructure and social technology turns against us or fails to protect us. So, these so-called art experiments suggested a model where the Event or Happening depended on infrastructural failures. In terms, of FluxHouse, for example, they sought novel solutions to issues like plumbing and repairs -- they did not seek to gentrify the area or make it a "success story," but instead they sought to see infrasture as a canvas -- to free infrastructure from the normal demand for efficiency, instrumental success, and clear-channels communication. Artists like Eve S. Mosher, Sheryl Oring, and The Social group are investigating aspects of infrastructural failures, utopian potentials, and pastiche. Mosher, draws chalk lines on the streets to mark potential flood zones, Oring arranges for participants to send a typed postcard to the President of the United States, and The Social puts duck decoys in sitting puddles in seemly abandoned lots.

A Fluxus Nomadology: When Creativity is What We Lack Most

Janae Sholtz (Alvernia University; janae.sholtz@gmail.com)

Paul Klee's phrase "what we need is a people, but the people is missing" is interpreted, as least in part, by Deleuze as both a criticism and a challenge for modern humanity related to the waning of creativity and the ability to imagine or invent the future – which is, in effect, to resist

the overbearing and prefigured present. One could say that Deleuze's views concerning this need are only solidified and strengthened when applying his gaze to the contemporary cultural and political scene – warning us of the seemingly inescapable spread of capitalist territorializations and the ubiquity of control societies. His goal has always been to provide us with concepts that resist these totalizing, immobilizing frameworks and which open us to, as he says, lines of flight – which is to say creativity. It is quite significant that Deleuze constantly turns to the realm of the aesthetic in order to articulate this, and more than interesting that he begins *A Thousand Plateaus* with a score from Busotti, Italian member of Fluxus. I have written about the confluence of Deleuze's philosophical project and Fluxus activities as providing a model for Deleuze's aim of creating a fluid model of the concept and thinking in flux, and will summarize the basic indices of this relationship. Then, I would like to extend these considerations to current Fluxus practices as types of nomadological events and examine the effects of Fluxus as a way of understanding the 'resistance to the present' that is for Deleuze so important for revivifying the creative (and political) imagination.

Collage Strategies: A Creative Method to Escape Image Control
Dennis Summers (Artist; cco@stage2001.com)

Collage (and by this term I include montage, assemblage, bricolage, cutup, mashup, etc) is likely the most commonly used creative strategy in the 21st century. However, it has received surprisingly less critical and theoretical attention than one would think, and most scholarship is lacking scope, depth and nuance. Collage as a creative strategy and a conceptual outlook is more complex and powerful than often assumed.

Collage creates psychological and philosophical contested spaces between components. These spaces can lead to new and unexpected understandings. Looking to the roots of collage we find it not in the work of Picasso and Braque, but in mid-19th century photography which established an ongoing debate between the indexicality and the artificiality of that medium. Also during that period, in a kind of proto-Fluxus gesture, Victorian women were creating socially provocative and humorous photo-collage albums.

In spite of advances in computer manipulation of photographs, most people still casually accept its representation of reality, giving that medium powerful control over political and sociological discourse. Reviewing this debate highlights the role that the viewer plays in interpreting and completing even seemingly "neutral" imagery like photographs. The approach of some Fluxus artists exposes strategies that also allow for the critical viewing of photographs in order to escape the control of mass media. Such collaged experiences encourage us to develop an alternative method to see most everything as collage, and we can conceptualize our natural and constructed environments in provocative new ways.

Considering Computation as the Contemporary Fourth Wall
Catherine Griffiths (University of Southern California; griffitc@usc.edu)

The paper will use the framework of Software Studies to think through how computation could be considered the contemporary fourth wall. During the second half of the 20th century, artists working in theater, film and documentary experimented with techniques to reveal and break the invisible barrier between the audience and the production. Often taking the form of an actor's direct address to the audience, or the reflexive nature of revealing structural elements of a

production, it was a means of acknowledging the inherent artifice and subjectivity in many works, including the audience's role in the collusion. Audiences have become very comfortable with such tactics, and they have lost their impact, having been employed widely in entertainment. Today computation is the domain that contemporary reflexive practices need to address. Computation is the meta-medium, the language, technology and creative space that hides cultural bias and power and calls for the same tactics of self-awareness, questioning of user responsibility, conscious contextualization, and material analysis, to empower audiences/users in the 21st century. Beginning with an analysis of cellular automata as a computational system, the paper traces and reflects on how simple grid based rule sets create complex behaviours and inform advanced technology, and its consequent social and cultural effects. The analysis continues to consider how cellular automata logic functions in computer vision applications and the modelling of human visual perception, and the consequent positive and also dangerous and controversial cultural consequences of such software.

Panel 5G: Friday, November 4, 10:15 AM-11:45 AM *Ansley 7* (projector, screen, and speakers)

Emergent Creativity in Systems of Art Co-Production

The notion that individual ingenuity is the most important source of creative acts has been critiqued throughout the 20th century. Since the 1950s and 1960s, artists in different parts of the world (e.g. Gutai artists in Japan, organizers of happenings in the U.S. and Latin American countries, Nouvelle Tendence artists in Europe) have envisioned aesthetic environments and behavioral situations that prime participants to generate the artwork through collaborative and competitive acts. The gradual shift from notions of artmaking based on solitary reflection and autonomous objecthood to an understanding of art production as a contingent process that involves multiple entities has paved the ground for cultivating interpersonal and group creativity in the art world. This panel explores how contemporary artists are laying the ground for new approaches to creativity that account for its emergent nature and the complex interconnections between biological, social and technological systems that enhance the potential for unpredictable creative acts. How have notions of distributed creativity currently associated with social media been anticipated, consolidated and even subverted in the art world? How can closer correlations be established between neo-cybernetic theories and new materialism to account for the active role of human and non-human entities in the emergence of creativity? This panel welcomes submissions from art historians, artists, and theorists who consider the above-mentioned questions in view of the conditions that shape systems oriented approaches to contemporary art.

Chair: Cristina Albu

Approximate Knowledge: Creative Inexpertise in a Third Culture
Dawna Schuld (Texas A&M University; dschuld@arch.tamu.edu)

In the words of critic Clement Greenberg, "From the point of view of art itself, its convergence of spirit with science happens to be mere accident ..." (1960). But against Greenberg's "intellectual" position and that of C.P. Snow, both of whom promulgated the notion that these "two cultures" are destined not to meet, there has been increased convergence, even

hybridization, between these two cultures. In a space where no one is expert—what social critic John Brockman describes as a "third culture"—artists and scientists ask questions and exchange ideas beyond the constraints of professionalism.

This paper examines some of the productive mis-readings that have emerged from third culture exchanges—epistolary, dialogic, and/or practical—between artists and scientists, with particular emphasis on the artist residency. During the heyday of the late 1960s Art and Technology movement, artists were temporary "residents" in American science departments and laboratories, from Bell Labs to the Jet Propulsion Laboratory, MIT to Caltech. This introduction of a scientific "naif" into the professional domain laid exposed the hidden prejudices held by experts on either side of the cultural divide described by C.P. Snow. In a space where no one is expert—what social critic John Brockman describes as a "third culture"—artists and scientists ask questions and exchange ideas beyond the constraints of professionalism. Often what is produced is critiqued as either "non-art" or bad science or both. Despite this, these encounters nevertheless can bear creative fruit for scientists and artists alike. This inclination to act without fully understanding led, for example, to creative visualizations of the new physical reality signified by quantum mechanics at the beginning of the last century, and to productively plastic interpretations of systems theory in the 1960s.

The "New York Collection for Stockholm": Art as Cybernetic Social Network
John Tyson (National Gallery of Art; J-Tyson@NGA.GOV)

Experiments in Art and Technology (E.A.T), founded by artists Robert Rauschenberg and Julie Martin along with engineer Billy Klüver, was an entity promoting expansions of creativity across the art/science divide. E.A.T's diverse projects included performance series, exhibitions, and artworks; they also facilitated encounters between artists and scientists as well as field trips to laboratories. This paper will focus on the group's "New York Collection for Stockholm" (1971/73)—a dual-platform co-production that fused two art networks. Perhaps anticipating the logic of Kickstarter.com, an eponymous portfolio of prints by 30 Manhattan-based artists was sold in order to help fund a 1973 donation of artworks in other media by the same producers to Stockholm's Moderna Museet. As far as E.A.T. was concerned, a spirit of generosity and friendship infused the exchange. However, they were naïvely oblivious to the initiative's potential ideological inflections. The "New York Collection" quickly became entangled with political, diplomatic, and economic interests: Mayor John Lindsay was named honorary chairman; Princess Kristina enthusiastically previewed the exhibition; Volvo, Chase Manhattan Bank, and various New York Galleries were sponsors. Some Swedes viewed it as cultural imperialism—a gift from a nation simultaneously flexing imperial muscles in Vietnam. Based on close readings of works (from both iterations of the collection), I will explore the ways that the portfolio can be considered equally a "dematerialized" double, a virtual collection, and a cybernetic social network. Moreover, following Alexander Alberro's discussions of conceptual art and advertising, I assess the "politics of publicity" of the "New York Collection for Stockholm."

Creativity and Incommensurability: Modes of Differential Instauration
Jason Hoelscher (Georgia Southern University; jhoelscher@georgiasouthern.edu)

Creativity is typically considered in an everyday sense as either the generation of something new in the world, a novel recombination of already-existing elements, or as a shift in perspective that transforms understanding of things already present. Scientific approaches to creativity focus on such ideas as conceptual blending, convergent versus divergent thinking, cognitive restructuring and so on. While most of these approaches carry an implicitly individualistic subject/object dualism, in the 1930s Étienne Souriau proposed a more entwined approach to creation. This approach, which Souriau termed instauration, describes a creative mode in which maker(s) and made respond to each other, reciprocally inviting or drawing one another forth. Though an improvement on other approaches to creativity, I believe instauration nonetheless overlooks an important aspect of creation, namely the role of difference. To create something is to generate, reveal or unconceal a difference—whether a difference within a context or a difference of approach to a context. Accordingly, in this paper I will show how instauration can be applied not only to a creative bringing together of disparate ideas and elements, but can also be set into an oscillatory state of dynamic equilibrium, in which the creative process emerges from an ever deferred, attempted resolution of both mutual and internal incommensurabilities. Building on this notion, I will argue that the differential tensions that arise from iterative attempts to reconcile the irreconcilable catalyzes an unfinalizable creative mode of information generativity, an instaurative différance engine that underlies the open and indeterminate qualities of aesthetic experience.

Meet Market: #class, #rank, and Art World Ecologies
Nathaniel Stern (University of Wisconsin at Milwaukee; nathaniel.stern@gmail.com)

For #class and #rank, New York-based artists Jennifer Dalton and Bill Powhida (and Dalton's gallerist, Edward Winkleman) hold real-world interventions in commercial art galleries and fairs, where artists, critics, academics, dealers, collectors and other participants analyze the way art is produced and viewed, and identify and propose alternatives and/or reforms to the current market system. Per Felix Guattari's call, these artists practice a kind of opening-out of the possibilities between social struggles, one's own psyche, and the physical and embodied spaces they inhabit, so as to counter-invest in Integrated World Capitalism. Dalton, Powhida and Winkleman organize "micropolitical and microsocial practices, new solidarities, a new gentleness, together with new aesthetic and new analytic practices" (Guattari 1989: 51). They do not have a set goal - what participants do and make and learn and “are" in this emergent creativity fuels the strength of their work.

Panel 5H: Friday, November 4, 10:15 AM-11:45 AM *Ansley 8* (projector, screen, and speakers)

New Directions in Digital Culture: Big Data and its Discontents

This panel offers three approaches that explore the history, ecology, and epistemology of big data. Each of the papers, in different ways examines critically seemingly foundational ideas of digital literacy and transparency. Michael Black explores the history of tag usage on Geocities between 1995 and 2009 by making programming languages themselves the objects of critical analysis. In describing a pilot project to study Geocities, he revisits the notion of the internet archive, situating it creatively in new contexts. Rajani Sudan situates digital culture within the

material and ecological contexts of mining and manufacture. Data mining, she reminds us, involves complex and environmentally fraught processes of mineral extraction and chemical and industrial engineering. Robert Markley explores the ways that proprietary software and big data within the university have in many ways shunted aside teaching. In arguing that few scholars within the university recognize the logical premises of proprietary data as a means of evaluating faculty, assessing teaching "effectiveness," and distributing resources, he suggests that the corporatist assumptions and values of data analytics can be grasped by turning to other fields: notably the dominance of data-driven analytics within professional sports.

Chair: Robert Markley

Big Data, Bad Data: The Strange Epistemologies of Analytics
Robert Markley (University of Illinois at Urbana-Champaign; rmarkley@illinois.edu)

Universities find themselves in the twenty-first century in the thrall of assumptions and values about big data that are fundamentally alien to their traditional mission. Proprietary software has become ubiquitous in educational settings in ways that are opaque to students, professors, academic administrators, and, as many of us are finding out, legislators. This paper explores the ways that big data and analytics have reshaped notions of epistemology in and across disciplinary fields and, in the process, have reshaped the very understandings of "value" in economistic terms. If the ubiquity of big data as a privileged analytics within the modern university has tended to supplant traditional defenses of disciplinary knowledge in both the sciences and the humanities, this privileging is defined by the massive, ongoing reallocation of funds from academic labor—professors teaching students—to buying, maintaining, and replacing the hundreds of software programs that universities seemingly now require to function. I make this case through two case studies—the digital analytics of publications in the humanities offered by Google Scholar and the proprietary company Academic Analytics© and the justification of big data analytics by Neil Hinkie, formerly the General Manager of the NBA's Philadelphia 76ers, in his April 2016 resignation letter to the team's Board of Directors.

Digital Literacy at Scale: Measuring HTML Tag Usage in the Internet Archive
Michael Black (University of Massachusetts at Lowell; michael_black@uml.edu)

Digital literacy is often broadly defined to include a variety of productive and critical practices, but computer programming is often left out of these models. An emphasis on user-friendliness, since the 1980s has, urged software designers to minimize or eliminate the amount of programming required to use a computer. Thus, even in fields with an increasing "digital" dimension, programming may not be a required skill. Yet there was a time during the 1990s and late 2000s when digital authors did have to program. Web 1.0 era design required writers to know at least enough HTML to format the text of their pages. This presentation presents a pilot study applying text analysis software to the Internet Archive's copy of Geocities, a free hosting service that existed from 1995 to 2009 and allowed for an estimated 13 million users to compose personal websites. This project takes a big data approach to studying digital literacy by measuring patterns of HTML & CSS tag usage. This presentation will review pilot research being conducted on a branch of this archive over 5 years, focusing on patterns of tag usage as the language underwent several revisions.

Mining, Minerals, and Mimesis
Rajani Sudan (Southern Methodist University; rsudan@smu.edu)

Imperial ideologies of mining and its language of scarcity and abundance--for example, lode, extraction, and work--also define global electronic technology, particularly computers and other forms of wireless exchange that by circulating knowledge and wealth (including Bitcoin) also create it. Rare earth minerals, for example, are in fact quite abundant on earth and in every computer, as one can learn by googling the term. But they are difficult to isolate, used in minimal amounts, and are thus rare, controlled by a few nations and corporations at great human and environmental cost. Notions of scarce and abundant minerals, vital to wireless technologies are largely responsible for the many civil wars waged in Africa and labor abuses in Asia, much as were gold, diamonds, and oil in past colonial settings. While we think the ecological solutions to global problems like climate change rest in more and better digital and computer technology just as earlier societies believed that more gold would solve their problems, our technology comes out of the earth with all the material and ecological implications of the past. Digital technology, in this respect, is a part of the problem, not the solution, to the anthropocene.

Speculative Designs with Big Data News Aggregates
Yanni Loukissas (Georgia Institute of Technology; yanni.loukissas@lmc.gatech.edu)
Lorina Navarro (Georgia Institute of Technology; lorina@gatech.edu)

In this paper we present a series of speculative design proposals intended to offer pundits and/or publics new creative forms of engagement with the news through large online video archives. Existing archives (i.e. Vanderbuilt, GDELT, and the Internet Archive)—which draw together broadcast news from varied temporal, geographic, institutional sources—have long focused on supporting individual queries and providing access to selected media files. They have yet to support more creative and interpretive applications. Our speculative designs reveal untapped opportunities for making sense of the news through hands-on engagements with news data. These designs embody a number of characteristics: 1) They are graphical. Archives of broadcast news are too big to watch. Moreover, regulations prohibit the redistribution of broadcasts in their entirety. Our designs enable participants to dissect news stories by topic and image within a legal, abstracted form. 2) They are interpretive. Although we leverage computational techniques, our work is grounded in the humanities and social sciences. We have a commitment to the interpretive analysis of cultural discourses. 3) They are collaborative. Large collections of broadcast news are best tackled by a team, including both humans and machines. We design 'trading zones' for reflecting on the news from multiple perspectives. 4) They are comparative. Our designs call attention to variations across news sources to illuminate the norms that shape points of view and narrative arcs. Using these features as a foundation, our designs examine how relationships among publics, pundits and producers of the news might be reimagined.

Panel 5I: Friday, November 4, 10:15 AM-11:45 AM *Peachtree 1* (larger room, projector, screen, and speakers)

The Creative Potential of Distributed Cognition

This panel explores the potentials and limitations of distributed cognitive systems that are increasingly evident in developed societies. As computational media are designed to act autonomously (or more precisely, to operate within autonomous regions as delineated by human actors), questions arise about the scope of the decisions they can make, their relationship with the human actors that created them, and the seismic shifts in cultural assumptions that their autonomous agency bring about. As technical cognition increases, human cognition is necessarily affected as well. Mark B. N. Hansen will interrogate the limits of technical cognition in relation to human sovereignty, focusing on decisions points as limits to technical agency. David Rambo will take two technothriller novels by Daniel Suarez to ask how technical agency changes the relation between human mortality and agency after death, using a Marxian framework of capital as a form of dead labor. N. Katherine Hayles will talk about distributed agency between human and technical actors, proposing cognitive assemblages as a concept fundamental to how agency is distributed in the contemporary era.

Chair: N. Katherine Hayles

Tension in the Network?, or, The Trouble with Distributed Sovereignty
Mark Hansen (Duke University; mark.hansen@duke.edu)

My talk will focus on the problem of decision-making in distributed cognitive systems. Focusing on some examples of technically-distributed cognitive systems - the "kill chain" involved in drone warfare, the algorithmic based assemblages informing derivatives trading, and simulation systems for modeling climate change - I shall explore the tension between technical distribution and sovereignty that lies at the heart of these and similar contemporary cognitive systems. While the promise of such systems stems from the complex interplay between the disparate agencies that they enfranchise, such systems seem to reach an impasse, typically in "time-critical" situations, at the moment when decisions must be made. The kill chain can furnish probabilistic models to evaluate the future guilt of enemies of the state; trading algorithms can furnish probabilistic models for evaluating differential future outcomes; climate simulations can assign different probabilities to different parametricized futures. In all three cases, however, the distributed cognitive system cannot "itself" decide how to proceed. Indeed, making a decision - to target for killing, to initiate a trade, to curtain oil consumption, etc. - requires a break with the internal operationality of the distributed system. To the extent that such a break marks an interruption of the latter's operation, it requires that the differential probabilistic scenarios modeled by the system be exchanged for a situation of incalculable undecideability that can only be resolved - or so some recent critics have suggested - by human actors. My aim is to evaluate whether this apparent impasse indeed marks a radical limitation of the scope of distributed sovereignty, or if undecideability can be negotiated systemically.

After-Death: The Distribution of Cognition in Daniel Saurez's Daemon and Freedom
David Rambo (Duke University; david.rambo@duke.edu)

Being-after-death is a Marxian alternative concept to Martin Heidegger's characterization of the essence of human being as being-toward-death. Whereas the latter emphasizes the incalculable, unknowable, yet inevitable end that governs life's termpoality, being-after-death focuses on death as a past that is both temporally transcended as well as sought after as a goal. The model

here is Marx's discussion of labor time congealed into products as past, dead labor, particularly the guiding superintention that is imbued into the dead labor constituting technology. In this talk, I explore the "after-death" depicted in the technothriller novels of Daniel Suarez: Daemon and Freedom. The figuration of certain characters as having agency after death through a collectivized augmented reality game contrasts with the repetition of an idealized life in an afterlife. It enables an economic alternative to an increasingly parasitic finance capital and introduces a source of collective justice seemingly free of corrupt vested interest. This alternative conceptualization of the human's mortality as being-after-death is both more existentially salient for our technoculture as well as a philosophical model for the creative power of network technologies' distribution of cognition.

Cognitive Assemblages as Distributed Systems
N. Katherine Hayles (Duke University; katherine.hayles@duke.edu)

Drawing on the work of Bruno Latour, this talk proposes that cognition is both a biological and technical capacity. Moreover, in the contemporary era in developed societies, humans, nonhuman others and technical systems increasingly interpenetrate, forming assemblages whose structures are determined by the flow of cognitive informtion through them. This model differs from actor-network theory insofar as it distinguished between material processes, noncognitive artifacts that may be enrolled in cognitive systems, and cognizers themselves, the only entities capable of making choices. Cognitive assemblages greatly increase the potential for creative interactions; they also provide a basis for reconsidering questions of ethical and moral responsibilities, including the central question of who may be considered an ethical actor. The talk will be illustrated with a series of examples of cognitive assemblages in action.

Panel 5J: Friday, November 4, 10:15 AM-11:45 AM *Peachtree 2* (projector, screen, and speakers)

Mo-cap, Mold, Crickets, Roombas: Nonhuman Collaboration and Process in Experimental Film and Media

How can we best understand the collaborative creative processes between human artists and the nonhuman elements that help shape their work? This panel investigates theoretical and practical approaches to thinking through these relationships in contemporary film and media art. Matthew Stoddard (University of Toronto) addresses decay, or what he identifies as the "inorganic life of film," in order to recast the ontology of cinema. Through an analysis of experimental films that make use of decaying celluloid as both a material and theme, Stoddard provides a new framework for thinking about cinematic time between the human and nonhuman. Gregory Zinman (Georgia Tech) will then look at a number of handmade films that rely on biological and environmental elements—oceans and landfills—to produce their moving image abstractions. Wrought from nature, these works draw our attention to the role of nonhuman actants in the creation of moving images. Tanine Allison (Emory University) will interrogate the ways motion capture technology, a set of interconnected techniques for applying the movements of a human performer to a digital character, prompts us to rethink categories like authenticity and authorship in the moving image. Finally, artist Katherine Behar (Baruch College, CUNY) will attend to the role of of digital machines in her recent artworks so as to limn a feminist critique of

dehumanized labor in its myriad forms. Taken together, these papers operate at the intersection of new materialism and media studies, offering interdisciplinary perspectives on the ways creativity can be radically rethought through confrontations with the nonhuman.

Chair: Gregory Zinman

The Inorganic Life of Film and Contemporary Avant-Garde Cinema
Matthew Stoddard (University of Toronto; m.stoddard@utoronto.ca)

My paper begins by engaging with recent developments in speculative realism and object-oriented ontology. In particular, I employ Ian Bogost's concept of "alien phenomenology," which connotes speculation into the experience of inanimate things. Applied to cinema, the central question of this method is: what is it like to be a film? To begin to formulate an answer to this question, I draw on the writings of film theorist Paolo Cherchi Usai. My starting point is Cherchi Usai's peculiar ontology: "Cinema is the art of moving image destruction." This "destruction" is the material decay of celluloid. I place this process of decay—what may be termed the "inorganic life of film"—at the center of an alien phenomenology of cinema. A phenomenology of this inorganic life attempts to enter the strange inner world of film as it exists for itself, rather than for us (humans). The paper then shifts to consider recent avant-garde films that employ and foreground decaying celluloid, including work by Bill Morrison and Ju?rgen Reble. I theorize these films as attempts to collaborate with the inorganic life of film. One of my main interlocutors here is Walter Benjamin, particularly his notion of a "playful" (i.e. non-hierarchical, non-destructive) relationship to the non-human world. I argue that this playful collaboration with the inorganic life of film may help reinvigorate Benjamin's utopian hopes for the cinema. Crucial in this respect is the way the inorganic life of film supplies the framework for a confrontation with non-human temporalities.

Echoes of the Earth: Nonhuman Collaboration in Handmade Cinema
Gregory Zinman (Georgia Institute of Technology; gzinman3@gatech.edu)

Handmade films, by definition, would seem to require the corporeal touch of the artist. However, there are an increasing number of artisanal films that rely on biological and environmental elements to produce their moving image abstractions. Wrought from nature, they are the result of organic and inorganic systems interacting with the material properties of the film. In so doing, they draw our attention to the role of nonhuman actants in the creation of moving images, as well as to the myriad ways that handmade film artists engage the subject of ecology. This paper will therefore explore such films, which are more "hands-off" than handmade in their execution, but which nevertheless limn a political consciousness regarding the relationship of filmmaking to ecological issues including the Anthropocene, climate change, and industrial waste. The cycle of natural decay is both materially enacted and mirrored in the making of Jennifer Reeves's *Landfill 16* (2011), which takes up the idea of recycling, waste management, and the death of film. Reeves buried 16mm outtakes from her double-projection celebration of the natural world, *When It Was Blue* (2008), in her hometown landfill in Elkhart, Indiana. She then gave the exhumed film "new life," hand-painting the corroded. In dialog with recent scholarly developments such as the nonhuman turn, speculative realism, affect theory, and new materialism, these films

question the nature of authorship and collaboration while helping dissolve binaries of mind/matter, nature/culture, will/instinct, and human/animal.

Abstracting Bodies in Experimental Motion Visualizations
Tanine Allison (Emory University; tanine.allison@emory.edu)

This paper explores the use of motion capture to extend, distort, and transform the human body in recent experimental videos. "Motion capture" describes a set of interconnected techniques for applying the movements of a human performer to a digital character. Although motion capture has received attention in the popular press for its role in the creation of characters in high-budget films like *The Lord of the Rings* (Gollum) or *Avatar* (the Na'vi), motion capture has been used within a range of visual/performance arts and experimental videography to different ends. I will focus specifically on two videos of bodies in motion that have been abstracted and manipulated by motion capture technologies: "Kung Fu Motion Visualization," created by Tobias Gremmler, and "Galvanize," directed by Adam Smith and Marcus Lyall for projection during The Chemical Brothers' live musical performances. While Hollywood actors and directors like Andy Serkis and James Cameron have emphasized the capacity of motion capture to create realistic movement and to seamlessly transmit emotional performance from an actor to a digital model, these videos prompt us to rethink categories like authenticity, performance, and authorship. Instead of anchoring the performances of digital characters in real-world actions (as in *Avatar* or the like), the videos by Gremmler, Smith, and Lyall instead destabilize the body, dispersing movement into abstract shapes, flows, and vectors. By partially authoring the visualizations, motion capture technologies create new ways of imagining motion unleashed from the physical body.

Lunch on your own, 11:45 AM-1:30 PM

Session 6: Friday, November 4, 1:30 PM-3:30 PM

Panel 6A: Friday, November 4, 1:30 PM-3:30 PM *Ansley 1* (no AV)

Whitehead 1: Revisiting Whitehead's Invention of 'Creativity: A New Name for Some Old Ways of Thinking?

In taking up the conference theme, creativity, the present iteration of the SLSA Whitehead Stream returns home, as it were, since Whitehead appears to have coined the term. Both the fact that he did so and that it was done so recently continue to amaze. Of course, Whitehead's technical usage, introduced in the 1926 Lowell lectures, *Religion in the Making*, and developed in his Gifford lectures, *Process and Reality* (1929), hardly resembles creativity as we know it all too well, near synonym for any innovative practice in business, technology, and the arts. The first order of business of our double panel, then, will be to get at some of the specificity of Whitehead's understanding of the term, especially in relation to the post-Darwinian and post-Jamesian environment of his thought. Besides careful consideration of his own usage, we also suggest subsequent interlocutors (Stevens, Simondon, Guattari, Waddington, Varela, Deleuze) and anticipations ranging from Buddhist thought to Thoreau and James that together enrich our sense of Whiteheadian *creativity* as well as of how he understood it to supplement the term it has

since replaced in common usage, *creativeness*. Why does the creativity/creativeness dynamic prove so useful where the life sciences in particular are concerned? (We understand these broadly to include Guattaro-Deleuzian schizoanalysis and Jamesian psychological pluralism.) To what extent is Whiteheadian creativity a *pragmatist* concept—as suggested by the play of the panel titles on the subtitle of James's classic volume, *Pragmatism* (1907)?

Chair: James J. Bono

Feeling One's Way
Joan Richardson (City University of New York; Jtrichardson@aol.com)

My talk will draw attention to the closeness of Whitehead's philosophy to Buddhism, pointed out almost fifty years ago by Charles Hartshorne and recuperated by Nolan Pliny Jacobson, scholar of American Pragmatism's affinities with Buddhism. In *Buddhism and the Contemporary World* (1983), Jacobson writes: "Creativity, or 'creative synthesis,' as he prefers to say, was first clearly formulated, Hartshorne believes, 'by the Buddhists, with their "no-soul, no substance" doctrine, a doctrine to which modern thought has finally found its way with the growing prominence of Whiteheadian thought…. Actual entities are experiences functioning as objects for subsequent experiences, which may or may not belong to the same personal stream of consciousness.' 'This,' he concludes, 'is Whitehead's profoundly original discovery anticipated only in ancient Buddhism.'" Jacobson elsewhere notes Kenneth Inada's observing that Whitehead's description of "Peace" in *Adventures of Ideas* (1933) could have been written by a Buddhist about Nirvana and quotes from *Adventures*: "Peace carries with it a surpassing of personality. There is an inversion of relative values. It is primarily a trust in the efficacy of Beauty…. The experience of Peace is largely beyond the control of purpose. It comes as a gift…enlarges the field of attention. Thus Peace is self-control at its widest...where the 'self' has been lost, and interest has been transferred to coordinations wider than personality." Wallace Stevens read Whitehead, including *Adventures*, and also read in Buddhism. I will talk about creativity using examples from Stevens, referring as well to William James and C. S. Peirce.

***In the vagueness of the low hum of insects in an August woodland*: Walking with Whitehead"**
T. Hugh Crawford (Georgia Institute of Technology; hughcrawford@mindspring.com)

This paper is something of an extended footnote to Steven Meyer's "Introduction" to the 2005 *Configurations* special issue on Whitehead. There Meyer proceeds in three movements—the first a hike through the *OED* and half dozen other dictionaries in an attempt to pin down the emergence of the word "creativity" (spoiler alert, it was probably Whitehead). Then he works out the implications of Whitehead's inversion of "presentational immediacy" and "causal efficacy," and ends with a discussion of the neural substrate of the unconscious. My gloss is on the second movement, looking closely at how in *Process and Reality* Whitehead sets up embodied action in a humming and buzzing material world with all its vague presentments in order to critique philosophy's privileging of "clear and distinct ideas." I then turn back to Meyer's discussion of creativity connecting it to this notion of "vagueness" and then to a related term, "wild." Deleuze and Guattari's once described Whitehead's philosophy as the "free and wild creation of concepts" (*What is Philosophy?*, a phrase Stengers uses as a subtitle for *Thinking With Whitehead*), and

Thoreau in his essay "On Walking" famously claimed that "In wildness is the preservation of the world." I argue that vagueness and wildness create a philosophical space where thinking (not thought) and, perhaps, creativity occurs. It is ultimately a plea for wandering, wondering, vague reading, and slow thinking.

Anti-Species: Plastic Milieus in Whitehead and Simondon
Thomas Lamarre (McGill University; thomas.lamarre@mcgill.ca)

Whitehead builds on Darwin's theory of evolution in *Science and the Modern World* (1925), and yet, as he produces his distinctive synthesis of post-Newtonian physics and biological sciences, the term species enlarges and transforms. The notion of species extends to electrons and nuclei, and when Whitehead turns to "the other side of the evolutionary machinery, the neglected side [that] is expressed by the word creativeness," he drops the notion of species in favor of "societies." In this paper, I propose to take up Whitehead's shift away from species. In contemporary evolutionary theory, the notion of species continues to enjoy an axiomatic status: it remains the most workable notion, even though its limitations are generally acknowledged, and even though proposals to abandon the "species axiom" abound. As such, Whitehead's transformation of the notion of species merits closer attention. Particularly important is his rejection of "the theory of a fixed environment" in conjunction with a focus on "societies" of "individuals." To situate the implications of Whitehead's theory of plastic environments, I also propose a dialogue with Gilbert Simondon's turn to a theory of external and internal milieus to track the operation of transversal forces in concrete situations. A dialogue between Whitehead and Simondon, highlighting their differences as much as similarities, has the potential to shed new light on recent investigations into both the "intelligent" and "affective" dimensions of ecosystems.

Institutional Creativity and the Consistency of Practices
Andrew Goffey (University of Nottingham; Andrew.Goffey@nottingham.ac.uk)

Exploring together the calmly audacious metaphysics of the later Alfred North Whitehead and the agitated rodeo of thinking expressed in the work of Félix Guattari may seem like a strange way to generate a discussion of creativity. However, Whitehead scholars have for some time evinced an interest in the institutional psychotherapeutic movement out of which Guattari's work developed, and more recently have considered links between both over the question of subjectivity. Isabelle Stengers has implicitly connected Whitehead and Guattari in her consideration of the latter's "axiological creationism," whilst Guattari himself makes reference to Whitehead in his own highly processual account of schizoanalytic cartographies. His co-writer Deleuze, of course, evinced a keen interest in Whitehead as well. Asking what these two very different thinkers might have to offer (each other) on the issue of creativity, then, is more than a simple scholarly conceit. The focus of this paper will be on the question of *institutional creativity*, an expression that comes from Guattari and which encapsulates an approach to the socially marginalised, epistemically traduced experience of psychosis that was crucial to the movement of institutional psychotherapy as it took shape around the La Borde clinic in 1960s France. In relation to what practices or praxes and on the basis of what idea of the institution can we refigure the institution as a creative force? Central to this account will be a consideration of

the Guattaro-Deleuzean notion of *consistency*, whose "translation" into the categoreal schema of *Process and Reality* raises interesting conceptual challenges.

Panel 6B: Friday, November 4, 1:30 PM-3:30 PM *Ansley 2* (projector and screen)

Slow Thought Experiments 2

Chair: Adam Nocek

Romantic Slow Thinking
Dermot Ryan (Loyola Marymount University; dermot.ryan@lmu.edu)

This paper will trace the presence of slow thinking in a series of British romantics writers, establishing a kind of genealogy of this praxis at the dawn of speed up. Unsurprisingly, romantic slow thinking emerges at the very moment when we shift from the formal to the real subsumption of labor under capital, when capital seizes hold of the labor process and starts speeding everything up. Can we offer a new definition of British romanticism as a movement that shares an ethos of slow thinking? Wordsworth, Keats, and Shelley (among others) are all committed to celebrating what happens creatively when you slow thinking down. From Keats's "Ode to Indolence" and his celebration of the urn as the "foster-child of silence and slow time," to Wordsworth's Winander Boy who hangs listening to Shelley's complaint that "our calculations have outrun conception," British romantic writers propose a series of techniques of slow thinking as an explicit antidote to the cognitive, creative, and cultural consequences of acceleration.

Stoned Thinking: The Petriverse of Pierre Jardin
Paul A. Harris (Loyola Marymount University; Paul.Harris@lmu.edu)

The Petriverse of Pierre Jardin is ongoing project that comprises a xeriscape rock garden as well as associated writings about stone in general and the garden in particular. Conceived as a collaboration with vibrant lithic matter, the physical Petriverse functions as an always changing outsider art environment; work in the garden is carried out as a contemplative "composition of place" (from the Spiritual Exercises of Loyola). The Petriverse's designation as a "slow time zone" references both its physical components (stone's geological timescales) and psychological disposition (meditative, mindful). Contemplative collecting and gardening practices germinate Petriverse writings that explore mystical materialism and a petric poetics of deep time in dialogue with discourses including ecotheory and new materialisms, Gaston Bachelard and Roger Caillois, Chinese lithophilia, concrete poetry, and geology. The Petriverse is a ultimately kind of integrated 'life experiment' seeking to open and explore passages between human rhythms, bodies, and minds on the one hand and lithic textures and materials as vital signs of earth on the other. "Stoned thinking" refers specifically to slow thought experiments, philosophical ruminations, conducted in the Petriverse conceived as a lithic time laboratory. Stoned thinking moves through something very much like what Jeffrey Jerome Cohen calls "an affective interspace where the agency of stone and human ardor meet in mutual relation, in cross-ontological embrace," but its ultimate horizon is a more mystical materialism where one pauses to wonder, What is it like to be a stone?

Tact and the Art of Waiting
David Bell (Duke University; dfbell@duke.edu)

The practice of tact emerged in Western Europe during the Renaissance. It is, in essence, an art of waiting, of knowing when to hold back and when to seize the kairos of the moment. It is not a rule-based practice, but an art, mysteriously disseminated, almost a secret knowledge. What might it mean to imagine scientific practice as tactful, as patient, as capable of savoring the moment of wonder (Stengers) before rushing to abstract in mathematical formulas?

Touching Inhuman Time or "Caress the rock like a mistress, and it'll help you and offer you holds
Ron Broglio (Arizona State University; ron.broglio@asu.edu)

We live enfolded in temporalities of the earth that are beyond our capacities to comprehend: geological eras, sidereal time, evolutionary clocks and ecological epics. Traditionally we measure these other times by equipment that reduces their complexity to quantitative sums—calendar years, carbon dating, phenotypical and genomic markers of difference. Such measurements are too quick to judge. They too quickly reduce vast becomings by grasping (prehending) to comprehend. In recent companion works Biogea and Variations on the Body Michele Serres grapples with the inhumanity of the earth, its scale, its forces, its worlding beyond the human. His stories are human stories of touch, vulnerability, engagement with inhuman participants which 'speak just as much and perhaps better than us, they also say, write, sing communicate among themselves, through a kind of reciprocal encoding, a kind of common language, a kind of music, harmonic, disharmonic—I don't know yet—but whose voices I am sure to hear.' Similar to how Alphonso Lingis explores an imperative or call of things through a sensual phenomenology, Serres use the human scale of body, time, and space by which to imagine the more-than-human which finds its way into our lives. This talk will explore how Serres, Lingus, Stengers and other contemporary thinkers push the inheritance of phenomenology toward a comportment with the nonhuman. Using time as a primary figure, how can we think a nonhuman phenomenology critical to a more ecological relationship with Gaia?

Panel 6C: Friday, November 4, 1:30 PM-3:30 PM *Ansley 3* (projector and screen)

Representation and Translation 1: Translation, from Science to Mathematics

That humans have no unmediated access to reality is a common theme in literature-and-science studies: representation plays a central role. Arguably the ability to move freely among the various forms of representation — verbal, pictorial, mathematical —facilitates creativity and communication in the scientific realm, much as the ability to interconvert languages — translation — operates in the literary realm. This sequence of panels explores aspects of representation and translation, and the connections between them, in the creation and communication of knowledge.

Chair: Jay Labinger

Self Translations: Interactions of Mind and World
Luis Arata (Quinnipiac University; Luis.Arata@quinnipiac.edu)

Neuroscientist Rodolfo Llinás noted in *I of the Vortex: From Neurons to Self* that mobile creatures make mental models to navigate safely and with purpose in the environments where they exist. The brain forms dynamic maps in which the mobile creature is able to locate its virtual presence in order to make predictions that enable desired motions. Llinás concluded that in waking life we act as if in dreams that are guided by our senses. Novelist Gabriel García Márquez, a friend of Llinás, wrote a prologue to the book's Spanish translation. This creative prologue to a scientific view, and the slight shift in meaning of the book's Spanish title, *El cerebro y el mito del yo*, reflect literary roots in the scientific concept of self that Llinás developed. Following Borges' essay "Pascal's Sphere," I note that such interactions between different disciplines extend to how we conceive nature and our sense of place in it.

Empiricism in Translation: Discovering New Worlds with Fontenelle, Behn, and Glanvill
Nicole Keller Day (Northeastern University; day.n@husky.neu.edu)

Robert Markley, in his work on Aphra Behn's *A Discovery of New Worlds* (1688), her translation of Bernard le Bovier de Fontenelle's *Entretiens sur la Pluralité des Mondes* (1686), writes explicitly about Behn's modifications of Fontenelle's work in light of global philosophical trends, aligning Fontenelle with contemporary Continental astronomers and arguing that Behn had to appeal to her Newtonian, English readers. This textual refashioning calls for Behn to revise philosophical arguments. Juliet Cummins and David Burchell have written about this move as a "transform[ation of] the inferential logic." If Behn's ability to affect inference has been established, her facility for shaping evidence should also be examined. This paper considers how, if at all, translated scientific writing contributed to the standardization of evidentiary practices in the seventeenth and eighteenth centuries. Barbara J. Shapiro outlines the ways in which, in England, legal and scientific disciplines overlapped as each sought to regularize its own practices in evaluating evidence. As I analyze formations of acceptable evidence, I will also consider the broader context in which it is formed: its relationship to empiricism. *A Discovery of New Worlds* isn't just a translation of astronomical ideas, but also a cultural translation that calls on Behn to recognize the nuances of the text's contemporary and potential audiences; does Behn entirely abandon the notion of "sentimental empiricism," wherein "empirical knowledge was not a matter of impassive adherence to the hard facts of sensory experience, but rather one of sensibility," that Jessica Riskin argues was prevalent in France?

Translating Molecules
Jay Labinger (California Institute of Technology; jal@its.caltech.edu)

Galileo famously proclaimed that "the book of nature is written in the language of mathematics," but most of us are insufficiently fluent in that language to speak it exclusively, and rely on a variety of verbal and pictorial models and representations — in effect, translation into another language — to help us understand that book. I suggest that the sorts of issues that arise in choosing an effective representation are closely akin to those that arise in performing literary translation, and illustrate that assertion in light of a dispute I became involved in over the "best" choice for representing a molecular structure.

Reading Milton and Newton in the Radical Reformation: Mathematics and/as Metaphor
Rachel Trubowitz (University of New Hampshire; Rachel.Trubowitz@unh.edu)

The standard view of John Milton and Isaac Newton is that these two great figures belong to opposing sides of an unbridgeable ancient-modern divide, ushered in by the rise of the New Science. If we acknowledge that both men participated in the Radical Reformation beginning in the 1660's, however, striking convergences between the philosophic systems of these two titanic English contemporaries become immediately apparent. My paper argues that Milton and Newton both use mathematical problems and principles to metaphorically represent their heterodox views of death, the afterlife, and the deity, among other radical religious convictions. Newton specifically maintains that mathematics contains similitudes of divine truths in *Quaestiones quædam Philosophiæ* (late 1660s-early 1670s). He suggests that the continuity of flow and other rigorously mathematical aspects of his new fluxional method metaphorically illuminate God's hidden design of both nature and religion in their original, pristine forms. Not unlike Newton, in *Paradise Lost* (1667, 1674) Milton enlists Zeno's paradoxes (a precursor for Newton's calculus) and the new method of infinitesimals as analogies for his Radical Reformational view of the mortality of the soul. Just as Milton incorporates mathematics into his poetry to provide his readers with powerful metaphors for his mortalism and other radical religious-and-cultural convictions, so, in the "poetry" of Newton's fluxions, we can find the spiritual seed of his more mature writings on *prisca theologia*, religious corruption, Arianism, and idolatry, among other Radical Reformational views.

Panel 6D: Friday, November 4, 1:30 PM-3:30 PM *Ansley 4* (projector and screen)

Lab Culture 1: Viva Bio

This panel is part of a stream that explores "lab culture" in the arts humanities. Practitioners from a variety of laboratories will discuss the politics of creating and maintaining an arts/humanities laboratory. They will also discuss recent research emerging from their labs. This specific panel focuses on bioart, health studies, and interdisciplinary research.

Chair: Marcel O'Gorman

Fabulations: Life in a Bio Art Lab
Suzanne Anker (School of Visual Arts, New York; suzanne.anker@gmail.com)

In many cases, scientific discoveries are coupled with cultural equivalents. Most recently with the rise of tissue engineering, regenerative medicine, and genetic analytic programs, a significant number of artists have turned their attention to the integration of biology with visual art. As an overarching term, Bio Art has become an art practice internationally. Interested in ways in which nature can be and is being altered, many bio artworks employ plants, microbes and even soil in their fabulations. Interested in social outreach, institutional critique and the politics of climate change, these works speak to the ethics towards living forms. This presentation will address the concept of "laboratory culture" as it is experienced and produced within a Fine Arts Department in an art school, namely the School of Visual Arts in New York City. Originating in 2011, SVA's Bio Art Lab is the first of its kind within such a context. What are the differences and

similarities associated with this unique nexus? How does the scientific method intersect with ongoing aesthetic practices? How do artists use the tools of science to create artwork? Examples of work produced within this sphere will augment the philosophical questions underscoring "laboratory life" and its processes of discovery.

HHIVE Lab Culture: Health and Humanities Interdisciplinary Research
Jane Thraikill (University of North Carolina)

In August 2016, a group of English faculty, graduate, and undergraduate students at the University of North Carolina at Chapel Hill established an interdisciplinary health humanities laboratory called HHIVE: Health & Humanities: An Interdisciplinary Venue for Exploration. We propose a joint talk that uses the HHIVE Lab as a case study to explore the benefits and challenges of team research in the humanities and interdisciplinary research in the health humanities. The HHIVE Lab borrows from the scientific laboratory model with one key cultural difference, a horizontal structure. Research teams are comprised of faculty, graduate, and undergraduate students who learn from one another. While team research may complicate the single-author model of scholarship in the humanities, it facilitates ongoing conversations about research methods and modes of analysis that are beneficial to every member of the research team. Students benefit from the mentorship of faculty, while faculty benefit from the interdisciplinary knowledge that bring from their liberal arts education. Interdisciplinary projects can help to re-imagine how we conduct research in both STEM and humanities fields. While both epistemological and institutional barriers can impede interdisciplinary collaboration, navigating these barriers requires disciplinary self-reflection that, we argue, is crucial to developing better research practices and is integral to undergraduate and graduate education in the health humanities. We have found interdisciplinary research to be most valuable and effective when all members of the research team come together with mutual curiosity and generosity to establish a lab culture that values the expertise of all collaborators.

VASTAL - The Vivoarts School for Transgenic Aesthetics Ltd.
Adam Zaretsky (Marist College; Adam.Zaretsky@marist.edu)

VASTAL performs hands on do-it-yourself (DIY) bioart labs in the public sphere. VASTAL continued research aims to enhance public comprehension of the processes and effects of transgenesis through hands-on experience. VASTAL practice emphasizes the relationship between safety, aesthetics, and relational responsibility implicit in popular biological research. VASTAL explores the ethics, aesthetics and actions that lead to novel postshuman transgenic cassette insertion. These transgenic toolboxes for new organismic design are treating all bodies as data to be mined, edited and remined. In fact, VASTAL refers to transgenic (GMO) organisms (including transgenic humans) as sculptures, conceptual time based new media projects or even body art installation. Engineering anatomy as an art studio practice is explored through experiments in the following methodologies: 1.Ecology and EcoArt: Seed Bombing Lab 2.Ethology and Transpecies Art: Art for Non-humans Lab 3.Developmental Biology and Mutagenic Art: Transgenic Embryology Lab 4.Gastronomy and Edible Art: Hybrid DNA Isolation Lab 5.Tissue Culture and Disembodied Flesh Art: Cell Culture Sculpture Lab 6.Bioinformatics/DNA Literary Studies: (De)Mystified Bioinformatics Lab 7.Physiology and Body Art: Biotechnological Alterity Performance Lab Current VASTAL research involves

public labs in artistic uses of the many devices of transfection. Titled 'Methods of Transgenesis, Shoot, Shock and Inject', VASTAL has been holding labs in hands-on microinjection, biolistic gene gun firing and electroporation.

Panel 6E: Friday, November 4, 1:30 PM-3:30 PM *Ansley 5* (projector and screen)

Constraints as Stimuli for Literary Creativity

Throughout the centuries, concepts about literary production has oscillated between two main poles of thought: 1) that it is a product of artistic inspiration; and 2) that it is a carefully crafted form that is subject to fixed rules. Of course, the two are not incompatible, and countless authors have penned works that encompass both. What, however, is the nature of the relationship between creativity and constraint? This panel aims to explore cases in which fixed rules—particular those found in mathematics—are used to produce imaginative literary results.

Chair: Natalie Berkman

The Dogma of the Triple: Dante's Topological Encounter with the Trinity
Arielle Saiber (Bowdoin College; asaiber@bowdoin.edu)

In Canto 33 of *Paradiso,* Dante-the-Pilgrim is at the end of his journey and the Poet, at the end of his poem. Here, the Poet attempts to describe the impossible: what the Holy Trinity looked like to the Pilgrim. In just six verses, the Poet paints a mathematically exquisite depiction of the mystery of God as 3 = 1. In attempting to keep in-line with medieval Trinitarian dogma (particularly, the Nicene Creed), as well as imagine an entity of perfect symmetry and sublime aesthetic properties, Dante envisions three giri (rounds, rings, circles, spheres) in a configuration both entirely constrained and utterly open. His vision of the Trinity suggests what today's mathematical topologists would call either Borromean Rings or a (3,3)-torus link. This paper looks at how Dante used the constraints of mathematical symmetry alongside those of Christian doctrine to create an extraordinary image of one of Christianity's greatest paradoxes.

Narrative Time and the Thyroid: Hormone Secretions and Storytelling in Italo Svevo's "Doctor Menghi's Drug"
Elena Fratto (Princeton University; efratto@fas.harvard.edu)

In the wake of fin-de-siècle discoveries in the field of endocrinology, bodily glands, alongside the hormones they produced, featured prominently in the literary works, visual arts, and popular culture of early 20th-century Europe. Experimental surgery, with gland transplantation and grafting, promised rejuvenation and intellectual vitality; from bodily rhythms to behavioral patterns; from the pace of history to the trajectory of nations—phenomena of all sorts began to be associated to hormone production in causal links. Italo Svevo was fascinated by Basedow and Graves's discoveries on the thyroid, a gland that was supposed to determine the speed and promptness of one's body according to the amount of hormones it produced—hypothyroidism, or scarcity of hormones, would entail lethargic behavior and slow movements, while hyperthyroidism, or the abundant production of hormones, would lead to excessive activity and consumption. Through the analysis of an early short story by Svevo, "Doctor Menghi's Drug"

(ca 1904) this paper addresses how the activity of the thyroid affects not only bodily rhythms, but also narrative time— intended as both the time of the story (diegetic time) and the pace of storytelling— and it explores how metabolic processes act as constraints for literary creativity by complicating narrative time and raising questions of narrative agency.

Oulipian Analytic and Synthetic Constraints
Natalie Berkman (Princeton University; nberkman@princeton.edu)

In the Oulipo's first manifesto, cofounder François Le Lionnais declares that all art begins with an inspiration, or at least, that is what the artist would have you believe. The Oulipo (Ouvroir de Littérature Potentielle, loosely translated at Workshop of Potential Literature) is not so trusting, and believes rather that the artist who writes whatever comes to mind is in reality a slave to rules of which he is ignorant. The eclectic group of members (writers, mathematicians, computer scientists, and more) are therefore in the business of constraint, rigorously defined rules for composition that they believe frees a writer more than freedom itself. The group has now entered its sixth decade, and each new generation of members has subtly contributed to a growing conception of their work. Through a more general, historical approach, this paper intends to track the development of the Oulipian concept of constraint and evaluate the effects of this strategy on their texts and reception.

What's Your Problem of Modern Philosophy?: Stanley Cavell Creates a Paratactic Poetics
Nathaniel, Steve (Indiana University; stevenanathaniel@gmail.com)

Although he crams three problems into his brief essay "Aesthetic Problems of Modern Philosophy," philosopher and aesthetician Stanley Cavell leaves ample space for interpretation. Refusing to bind questions of poetic paraphrase, musical tonality, and philosophical judgment in a robust argumentative logic, he facilitates further critical intervention. Just as juxtaposed images invite its critic to reconcile them creatively, Cavell's essay's paratactic arrangement invites theoretical intercession. Considering these conspicuous gaps that Cavell leaves in his essay, I interpose modernity's most prominent theoretical acts. Specifically, I elaborate on his first "problem," that of modern poetics. When modern poetic theorists such as Yvor Winters and Cleanth Brooks describe enduring poetry, they evoke concepts and essences, but they suppose such abstractions to exist autonomously; they theorize poetry as sovereign from theorist. Cavell argues to the contrary that poetry proceeds from the critic who mediates an inexorable flow from essence to concept. I investigate this creative process and certain modern theorists who attempted to efface its historical and personal contexts. I argue that *these* theorists' contexts, which include a culture of scientific objectivity, create their theories. Thus, aesthetics that deny critical participation in art may proceed from obtrusive artistic personalities like Ezra Pound. By scrutinizing the contexts of such theorizations through Cavell's philosophical lens, I encounter moments when modern critics, credulously and ardently, declare themselves absent.

Panel 6F: Friday, November 4, 1:30 PM-3:30 PM *Ansley 6* (projector, screen, and speakers)

Fluxus 4: Unpacking the Creative Act: Play and Other Disruptive Actions Forging a Two-Sided Exchange

Chair: James J. McManus

Please Add To… Ray Johnson Performs the Creative Act through the Mail
Kate Dempsey (kateedempsey@gmail.com)

In his "Creative Act" speech in 1957 Duchamp outlined what he understood to be a two-sided exchange. According to him, the viewer completes the work of art. "The spectator," Duchamp explained, "brings the work in contact with the external world by deciphering and interpreting its inner qualifications and thus adds his contribution to the creative act." Ray Johnson may have been one of Duchamp's ideal receptors in this "art coefficient." Johnson embraced Duchamp's ideas in his Correspondence Art—demanding active participation from his audience. He challenged the idea of authorship by sending missives through middlemen who were instructed to "add to and send to" the next recipient. While Correspondence Art was not a reaction to Duchamp's "The Creative Act" speech in 1957—Johnson had started using the mail as an art form much earlier—the actual founding of Johnson's New York Correspondence School and its heyday in the 1960's postdates the speech and may have been possible in part because of Duchamp's teachings. Duchamp called for artists to relinquish some of their authority, and viewers to perceive art interactively, with their minds rather than just their passive retinas—precisely what Johnson and his Correspondence School did. This paper will study Johnson's likely exposure to Duchamp's "Creative Act" and the work that these ideas fostered.

The Audience's Share: Re-evaluating Intellectual Contexts of Marcel Duchamp's "Creative Act" (1957)
James Housefield (University of California at Davis; jehousefield@ucdavis.edu)

Marcel Duchamp's brief statement "The Creative Act" stands as one of his most cogent articulations about art and creativity. His emphasis on the role of the audience in making sense of a work of art set the stage for new generations of artists – including the creators associated with the international fluxus movement – to approach creativity in new ways. Although the essay's brevity contributes to its continuing circulation today, its succinct nature likely contributed to a perception of the statement's exceptionalism. How different was "The Creative Act," really? This paper examines the intellectual contexts out of which Duchamp's ideas emerged when he first delivered it at a conference in Houston, Texas, in 1957. T.S. Eliot, identified by name in Duchamp's essay, is one clear point of reference. Others remain to be identified, as do the contexts in which Duchamp's quasi-scientific language makes sense. This paper considers Duchamp's words in relation to a twentieth-century quest for scientific approaches to criticism and art history. Against this foil, his science-inspired language is a playful response anchored in Alfred Jarry's use of scientific terms and concepts for a 'pataphysical literature. Additionally, I consider Duchamp's emphasis on the audience's share in the creative act in relation to the art criticism of French author Paul Valéry. Analyzing the audience's place in the ideas of Duchamp and Valéry highlights unrecognized points of convergence and divergence in their thought and situates "The Creative Act" in a dynamic context that marked the investigation of art and creativity some 60 years ago.

At Play: The Creative Act – "There is no solution because there is no problem" - Unpacking Boxes by Marcel Duchamp and George Maciunas

James W. McManus (California State University at Chico; jmcmanus@csuchico.edu)

Board games, their contents presented and arranged in boxes have played an important role in our popular culture for well over a century. Whether the game's goal is accumulating all the wealth, solving the murder, or something else, rules dictate play toward a planned outcome. The boxes discussed in this paper by Marcel Duchamp and George Maciunas promote play in a different direction – shaping the open-ended discourse between the work and the spectator/participant who, through choice and order of selection, completes the creative act. With their boxes both artists offer something quite different. Drawing from both artist's larger *oeuvre* this paper will consider five works by Duchamp (the *1914 Box, The Green Box*, the *Rotoreliefs*, the *Boîte-en-valise* and the *White Box*) and examples from the running series of *Flux Boxes* and *Flux Kits* coming from Maciunas. As arranged, the elements making up the content of each of these works have no specific order for consideration.

In this paper I will consider qualities shared by the boxes from Duchamp and Maciunas, and importantly their differences. Significant is their manufacture. Based on his notes and/or art works, the contents of Duchamp's boxes, as well as the boxes themselves, were of his own manufacture and contribute to their autobiographic character. Contributing to his goal of promoting a living art the *Flux Kits* and *Flux Boxes* coming from George Maciunas differ from the boxes by Duchamp. Maciunas maintained an inventory of animate and inanimate items from many sources which he could select and insert into one of his boxes which can vary from made to found. As a result their vast differences in form and content contribute to a larger sense of independence from category. Beyond the differences the boxes by both authors intend an important feature – an open-ended engagement with play.

The last part of this paper addresses the fate of these works. As these works are moved out of the public venue and into collections (public and private) the exchange with play is broken. Never intended to succumb to encasement in vitrines, they are rendered incomplete – the creative act unfulfilled.

Respondent: Dalia Judowitz (Emory University; djudovi@emory.edu)

Panel 6G: Friday, November 4, 1:30 PM-3:30 PM *Ansley 7* (projector, screen, and speakers)

Networks 2: Network Ephemerality

This panel, which examines the complex relations between networks and the ephemeral, is being proposed in conjunction with a second panel, "Social Networks and Narrative Form," proposed by Scott Selisker, Lindsay Thomas, and Gabriel Hankins. In recent years, from 9/11 to The Arab Spring to the Black Lives Matter movement, the power of social networks to spark political destabilization has been a topic of considerable interest to pundits and intelligence officials as well as artists and activists, especially the deliberate strategies of anonymity, invisibility, ephemerality, and the resistance of both personal kinship and total plot knowledge. Such acts invite, as Bruno Latour and others have encouraged, a more nuanced understanding of "the social" as routed through migratory alliance that precedes kinship and commonality. If we understand the "social" as defined through action and movement, and in such cases, through the necessary refusal of surveillance and accounting, how do we come to understand and situate these movements as a "network," an organism with boundaries as well as branches? Across

multiple historical periods, this panel explores the implications of recuperating disparate, migratory, and deliberately ephemeral acts through the umbrella term "network," and whether or not the very act of creating, shaping, and tracing a network can only be done from the outside, thereby risking the undermining and misunderstanding of how such gestures of resistance emerge, operate, and persevere. Through interwoven conversations among literary studies, film studies, and media studies, this panel examines the implications of concretizing the ephemeral in a network.

Chair: Jennifer Rhee

"Secret Keepers: Tracing Rumor and Slave Revolts Across the Americas"
Nihad Farooq (Georgia Institute of Technology; nihadf@gmail.com)

This paper explores eighteenth- and nineteenth-century communication networks. Nihad Farooq tracks the power of rumor, gossip, and communication networks in stirring political agitation and change in the Atlantic world, focusing primarily on the alleged "Secret Keeper" plot of 1793, in which news of an alleged slave revolt moved from Virginia to South Carolina, breeding paranoia among white slaveowners. While the Secret Keeper rumor remained just that, it still moved through the air as gossip and information does, and wielded a similar power as the news of actual revolution in Saint Domingue that inspired it. It hinted at a network and a growing consciousness that did, in fact, exist, and the terror and dis-ease it planted in the minds of slavers had a well-documented power in helping to further ignite this consciousness. Whatever the larger political motivations that fed this paranoia, its effect on black revolutionary foment and networked organization in the recently-independent U.S. was strong, as news of revolution was in the air, and growing stronger.

"Black Liquidity and the Weaving of Black Sociality"
Alessandra Raengo (Georgia State University; araengo@gsu.edu)

While the resilience of the "racial panopticon" and anti-black violence has moved several "Afropessimist" scholars to understand blackness under the rubric of "social death," the ascendance of the #BlackLivesMatter movement vindicates instead the opposing "Afro-optimist" position, which affirms the *generative capacity* of black social life. "Black Liquidity and the Weaving of Black Sociality" examines this tension in Arthur Jafa's essay film *Dreams are Colder than Death* (2013), a meditation on the legacy of Martin Luther King's "I have a dream speech," conducted through interviews with African-American intellectuals and artists. Woven together with lyrical, slow-motion images of ordinary black people, water and cosmological images of deep space, these voices reflect on the ontology of blackness and its relationship to life, death, and the concept of the human. Eventually, through the words of Fred Moten, the film questions the possibility to love black people once blackness is solely understood within the "afterlife of slavery." This paper reads the film's rhizomatic structure, which effectively performs the very networks of solidarity, grief, and grievance sought by #BLM, as the *evidence* of such love. Through its aesthetic liquidity, i.e. the film's facility to move across scale –from the minute to the cosmological, from the familial to the collective—and the way it disjoins some of the very conditions for black surveillance—voices strategically recorded independently from the

image; faces hardly visible because shot against intense light sources—the film claims for blackness the expansiveness that institutes radical networks of black love.

"Drone Death and Networks of Life in Drone Art"
Jennifer Rhee (Virginia Commonwealth University; rhee.jennifer.s@gmail.com)

This talk examines twenty-first century networks of humanization and dehumanization in U.S. military drone strikes. Jennifer Rhee looks specifically at #NotaBugSplat, a series of installations by an anonymous art collective in collaboration with local Afghani citizens. This work recuperates the humanity of those who fall under the dehumanizing gaze of the military drone by at once making visible and destabilizing existing networks connecting those who have been killed by drones, those who currently live under the threat of drone death, and U.S. drone operators. In various outdoor spaces in Afghanistan, #NotaBugSplat presents large-scale photographic images of Afghani children so as to be visible from the perspective of the drone flying overhead or the satellite in orbit. As the name of the project connotes, the artists combat the dehumanizing scale of drone vision in which humans appear as small dots, more like "little bugs" than humans, and the military jargon that metaphorizes dead drone victims as "bug splats." In the face of official military protocols (for example, identifying any unknown male out of childhood as an enemy militant, unless explicit evidence to the contrary is provided) and surveillance technologies that render humans as deindividuated targets, the installation appeals to the drone operators, as well as the larger socio-technological network that comprises the drone, to see the humans who inhabit the area being surveilled and targeted. In this way, #NotaBugSplat offers a different network, and thus a different mode of accounting for both the dead and the living.

Panel 6H: Friday, November 4, 1:30 PM-3:30 PM *Ansley 8* (projector, screen, and speakers)

Science Fiction Fools

As much as science fiction is concerned with portraying brilliant, often mad, scientists modeled on the cultural capital of Einstein's celebrity, the genre has a nearly equal investment in the character of the fool. C-3PO, Bill and Ted, Jayne Cobb (Serenity), and Verence (Pratchett), for example, function as much more than foils to main characters; their bumbling and clever idiocies are mainstays for the genre. However, while the fool has become a fixture in contemporary science fiction, the history of the archetype is ancient. How does the genre adapt this archetype, or how has the role of the fool changed the genre? What is the nature of the sustained relationship between science fiction and fools? What is the connection between science, technology, and idiocy? This panel examines science fiction's fools as unexpected foci for explicating the genre's relationship to narrative, ecology, and posthumanist ethics.

Chair: Laura Richardson

Time-Traveling Fools and Narrative Critique in *Bill and Ted's Excellent Adventure*
Laura Richardson (Rice University; lkr1@rice.edu)

The time travel genre is overwhelming concerned with rules, cause and effect, compounding consequences, and the protection of chronological minutiae—matters that parallel its equally extensive interest in the particularities of chronotourism's science, the often ornately symbolic mechanisms of travel, and generally meticulous explanations of what effect time voyages have on historic and future chronologies. Tales of time travel are mired in planning, detail, and anxiety—hallmarks of the genre that brought us the "butterfly effect." But there are a few notable exceptions. In the 1980s cult classic, *Bill and Ted's Excellent Adventure*, the titular characters use an oddly Whovian time machine to kidnap famous historical figures—Joan of Arc, Socrates, Ghengis Khan—and bring them back to complete a high school history project in 1988 California, exhibiting zero concern for the chronological ripple effect. Bill and Ted are well-intentioned fools who, wielding their phone booth time vehicle, approach godlike power without a thought of its world-altering potential. They just really need an "A" in history. Like the archetypical fool, however, Bill and Ted aren't as idiotic as they seem, and neither is their film. Tales of time travel are inherently narratological, as David Wittenberg (2013) argues; narrative itself is already a form of chronological wandering, and time travel literalizes the temporal jumps necessary for storytelling. Eschewing standard time travel narrative structures and plot concerns, Bill and Ted utilizes the fool archetype to critique the very traditional narratological structures its genre manifests as plot devices.

The Chemist as Wise Fool: Primo Levi and the Practitioners of Posthumanist Science
Raymond Malewitz (Oregon State University; Raymond.malewitz@oregonstate.edu)

Critics frequently celebrate Primo Levi's depiction of the chemist in his memoir The Periodic Table as "homo faber" capable of fashioning the brute matter of the world into expressions of his or her will. For example, Catalina Botez argues that "the scientist's clash with [matter] is equally empowering and ennobling, in that it bestows on man the privilege to search, understand and theorise the natural world to his practical advantage." But if chemistry is an elegant system that organizes the particular under the category of a universal set of laws transparently accessible to rational human beings, Levi does a terrible job of showing it in *The Periodic Table*. Indeed, the collection describes disruptions and failures in the system that call attention to the ways that actual matter only periodically conforms to the impression that Levi and his fellow chemists have of it. This paper positions Levi's bumbling caricature of himself as an entry point into a larger discussion regarding representations of chemistry as a humanist or posthumanist science in 20th and 21st century culture. In contrast to ideal models of material behavior, which Levi associates with physics, experiments in *The Periodic Table* do not reach neat conclusions, and these failures call attention to the limited and inevitably inadequate ways that humanist, universalist frameworks model the object world. I conclude that Levi's maturation as chemist—his willingness to play the part of the fool—enables him to establish a posthumanist narrative and an accompanying ethics rooted in irregular, material conditions of particularity.

Science Fiction Fools in Aristophanes' Clouds
Sam Cooper (Princeton University; anothersamcooper@gmail.com)

My paper looks at Socrates and Strepsiades, the main characters of Aristophanes' Clouds and arguably the first "science fiction fools" in Western literature. Strepsiades is an agroikos ("country bumpkin") who goes to the Phrontisterion ("Thinkery"), the first laboratory in Western

literature, seeking an ecologically irresponsible technique for eliminating the massive debts his son's passion for expensive horses has produced. Aristophanes' comedy, I argue, is not the straightforward satirical attack on Socrates, the Phrontisterion's "mad scientist" leader, that it is widely thought to be, for the foolish Strepsiades, whose plans ultimately end in the kind of disaster characteristic of dystopian sf, is the victim of the ridiculous Socrates only inasmuch as he fails to fully anticipate the consequences of turning Socrates' "science" into a tool for fixing his broken finances. Strepsiades, in other words, is as much the play's "mad scientist" as Socrates; or, to put it another way, the "madness" of science results from the interaction of open-ended, and foolish qua apparently impractical, epistemological innovation (Socrates) and goal-oriented, foolish qua ecologically shortsighted, financial innovation (Strepsiades). That science divorced from ecological wisdom breeds deadly foolishness is an enduring theme in sf.

More than Just a Ball: A New Kind of Fool in Star Wars: The Force Awakens
Michelle-Taylor Sherwin (Florida State University; ms11aj@my.fsu.edu)

The "fool" as a trope in science fiction seemingly functions as comedic relief, operating within a limited archetype that does not appear to further the genre. However, this paper argues that as science fiction progresses in the world of cinema, the fool breaks the typical rhetorical conventions and instead becomes a significant asset to the narrative, ultimately transforming the genre entirely. In terms of the usual conventions in science fiction, the fool is generally not human, but is instead some form of alien or robot. C-3PO, as part of original Star Wars canon, is the epitome of the initial stereotype. He constantly blunders throughout each movie, interrupting key moments and dialogue with his innate chatter. This casts the role of the fool in a negative light, creating a binary between the fool and the major characters. With this damaging portrayal, the fool is deemed irrelevant. The most recent movie in the Star Wars franchise, The Force Awakens, disregards the traditional, C-3PO-esque fool. Now, the series portrays "fools" in a new, positive way with the introduction of the robot BB-8. As the very antithesis of C-3PO, BB-8 communicates through computer sounds and beeps and at one point, uses a lighter as a thumbs-up. BB-8's actions perpetuate the movie; through his possession of a crucial map and the friendship with Rey, BB-8 arguably starts the chain of events that create the action of the film. This paper reconstructs the role of the "fool," and highlights the now imperative role in science fiction.

Panel 6I: Friday, November 4, 1:30 PM-3:30 PM *Peachtree 1* (larger room, projector, screen, and speakers)

Book Panel for *Object-Oriented Feminism* – with Katherine Behar and Contributors

Object-Oriented Feminism (OOF)—a feminist intervention into recent philosophical discourses like speculative realism, object-oriented ontology, and new materialism that take objects, things, stuff, and matter as primary—has been "created" collaboratively at SLSA since 2010. In conjunction with this year's conference, we are celebrating the launch of *Object-Oriented Feminism*, an edited collection featuring many SLSA members, and reflecting SLSA's creative, transdisciplinary ethos.

Yet this new object (the book) presents object-oriented feminists with a special quandary: How should we orient ourselves toward so apparently static an artifact of an ongoing creative and intellectual project? Having dropped the "ontology" from object-oriented ontology, OOF steadfastly rejects grand philosophical truth claims, instead staking a modest ethical position that arrives at being "in the right" by being "wrong." In this spirit, OOF's own methodology requires "Opening OOF" through "Proliferations" and "Provocations," to engage in constructive critique and creative deployments, intervening in the book's objective capacity to close a chapter or become a final word. This book panel offers feminist responses to the volume from new materialist, speculative realist, and adjacent perspectives, as well as comments from contributors.

Chair: Katherine Behar

Presentations:
Rebekah Sheldon (Indiana University; rsheldon000@gmail.com)
Iris Van der Tuin (Utrecht University, The Netherlands; i.vandertuin@uu.nl)

Respondents:
Irina Aristarkhova (University of Michigan; irinaaristarkhova@gmail.com)
Katherine Behar (City University of New York, Baruch College; kb@katherinebehar.com)
Frenchy Lunning (Minneapolis College of Art and Design; frenchy_lunning@mcad.edu)
Anne Pollock (Georgia Institute of Technology; apollock@gatech.edu)
R. Joshua Scannell (City University of New York; joshua.scannell@gmail.com)

Panel 6J: Friday, November 4, 1:30 PM-3:30 PM *Peachtree 2* (projector, screen, and speakers)

Fiction after Anthropocentrism

Chair: Brittany Roberts

Crossing the Invisible Circle: Anthropocentrism, Speculative Realism, and the Occulted Universe of Aleksandr Sokurov's *Days of Eclipse*
Brittany Roberts (University of California at Riverside; brobe005@ucr.edu)

Aleksandr Sokurov's *Days of Eclipse* (1988) challenges anthropocentrism and human exceptionalism by presenting radically nonhuman agencies and ontologies that sharply underscore the limits of humanist epistemologies. In the film, a Russian doctor, Dmitri Malianov, conducts research on the correlation between religious faith and children's health. His research, however, is interrupted again and again: some agentive force—strongly suggested to be the universe itself—prevents Malianov from developing his work further. As Malianov attracts more and more inexplicable geological events, Sokurov suggests that the nonhuman, unable to be domesticated by anthropocentric discourses, always overflows narrowly human timescales; the geological deep time of the universe, along with its agentive capacities, forever evades human access. Given the implicit overlap between the epistemological concerns of *Days of Eclipse* and speculative realism's radical deconstruction of anthropocentric discourses, I use speculative realism to take seriously the speculative, ontological, and ecological bases that

underwrite Sokurov's film. Reading Sokurov's universe alongside Timothy Morton's hyperobjects, Eugene Thacker's "world-in-itself," and Levi Bryant's ontic principle, I foreground the creativity and agency of a radically nonhuman universe that consistently exceeds the humanist discourses through which Malianov attempts to apprehend it. Drawing on several key scenes from the film, I argue that *Days of Eclipse* stages an inexplicable confrontation with the nonhuman space through which we move, to which we are ecologically bound, and from which we are, ultimately, ontologically foreclosed: an inhuman universe that cannot be known, ordered, or rendered sensible, but that, nonetheless, exists alongside and demands recognition from the human.

Control in William Gibson's The Peripheral: Guns, Virtual Reality, Narrative
Samuel Schwartz (Oregon State University; schwartzsamuelr@gmail.com)

This presentation is about the relationship between three types of control in William Gibson's novel *The Peripheral* (2014): aesthetic control in the form of literary narrative, virtual control in the form of "haptic" technology, and traditional forms of political control. Its goal is to offer evidence for the claim that "virtual reality"--which in the novel takes the form of advanced, militarized "haptics" and virtual gaming--complicates and in some sense erases the space sometimes presumed to exist between the types of control practiced by artists (liberating, expressive), and the types of control wielded by those in power (authoritarian, censoring). This space, idealistically preserving for artists the type of control needed by them to "craft" worlds (utopias, dystopias, and everything in between) from the type of control that these worlds often--not always--aim to critique, becomes muddled and exposed as illusory in Gibson's novel, not only in the story it tells, but in the very nature of how it is told. The experience of reading this ascetically crafted novel, is, after all, an exhibition of control. It creates its world in the spaces that it opens rather than with the heavy hand of a worlding, omniscient approach. However, the practice of this narrative control and the experience of being controlled by it as a reader cannot be viewed in such simple terms as oppression or liberation, art or politics. This paper will explore how the novel complicates the idea of "control" to show that its aesthetic and political uses can never be completely severed, one from the other.

Delany's Other Bodies: Alternative Posthumanism in Samuel R. Delany's Science Fiction
Taylor Evans (University of California, Riverside; tevan001@ucr.edu)

In this essay, I approach the queer, black, science fiction author Samuel R. Delany as the genre's preeminent theorist of the human body. Examining a range of his works—especially "Aye, and Gomorrah" (1967), *Dhalgren* (1975), *The Motion of Light in Water* (1988) and *Through the Valley of the Nest of Spiders* (2012)—I argue that the central *novum* in Delany's works is a speculative, technologically-inflected mode of emphatically embodied identity. Following the work of Afro-Caribbean scholar Sylvia Wynter, I argue that Delany's speculative bodies offer a complex alternative to what Wynter calls "the genre of Man" (i.e., the typical liberal human subject—often marked as white, male, and bourgeois) "which which overrepresents itself as if it were the human itself." Delany's "Other" bodies form an alternative future-genealogy of the post-human subject, one which functions as a critique of the very notion of the human itself. What would sociality be like if we abandoned our commitment to humanism and its future iterations? If science fiction relentlessly reflects the era in which it is written, what possibility is

there for imagining truly alternative futures? Drawing on theoretical works by Donna Haraway, N. Katherine Hayles, Sherryl Vint, José Esteban Muñoz, and Hortense Spillers, I seek to situate Delany in a broader tradition that critically responds to the project of liberal humanism. Ultimately, I argue that the science fictional body Delany theorizes is less "post"-human—following from the liberal humanist subject—than "para"-human—a radically alternative form drawn from the always-present margins of contemporary life.

Posthuman creativity without conscious selves? Considering the possibilities with Atwood's *Oryx and Crake* and Pullman's *Clockwork*
Jessica Van Gilder (University of Minnesota; vangi007@umn.edu)

From the earliest instances of representation and a desire for aesthetics, to arts role in human evolution, and its ongoing ability to enable humans to explore and attempt to understand our existence and our humanity, the importance of our ability to create could never be understated. Is it possible that creativity could also play such a significant role for posthumans? Would posthuman subjectivities need art as part of their evolution, as humans have needed and used art for theirs? If we are willing to consider that nonhuman or posthuman subjectivities might also need art in some capacity, then the next point of consideration is whether or not posthumans will be capable of creativity, as we understand creativity that is. Any concept of what creativity could mean for the nonhuman and posthuman requires grappling with posthumanism's frequent, if varied, displacement of consciousness from the materiality of the human subject. The disembodiment of consciousness troubles notions of the autonomous self, and without conscious selves to reflect on, creativity for the posthuman is at risk of being reduced to a meaning confined to production and invention within the context of problem solving. However, that position privileges Cartesian dualism that provides the bases for current understandings of liberal human subjectivity. By considering the presentations of posthuman subjectivity in Philip Pullman's *Clockwork* (2004) and Margaret Atwood's *Oryx and Crake* (2004), this paper will interrogate whether such humanist assumptions have merit, and the possibility that art will remain a uniquely fundamental characteristic of humans.

Panel 6K: Friday, November 4, 1:30 PM-3:30 PM *Augusta 1* (projector, screen, and speakers)

Lose It to Use It: Ecstasy, Ego Death, & the Genesis of Creation

The language and practices of "invention" in diverse rhetorical traditions often point to an elsewhere, an otherwise wisdom from which radically creative aspects of reality emerge. William Burroughs, along with Brion Gysin, dubbed it the "Third Mind", James Merrill accessed it with a Ouija board, and Maria Sabina found it chanting with mushrooms. This elsewhere seems to be welcomed and occasioned by an extraordinary "loss" of the usual sense of self. While the proliferating consumer economy would seem to oblige participants to manifest identity, the ongoing acceleration toward technological singularity renders any such egoic claim incoherent. In short, the flourishing of economies and ecologies of "innovation" - on both the short term temporal scales of markets and the deep time scales of evolution - would seem to depend fundamentally on a hiatus in the experienced coherence of identity: By whom? These papers will focus on practices of ecstasy, anonymity and depersonalization in the incubation and cultivation of radically creative states.

Chair: Richard Doyle

Epistemologies of Ecstasy: A Synthesis of Parliament and Aristotle's Theories of Happiness and the Good.
Alexandria Lockett (Spelman College; alexandrialockett@gmail.com)

What is happiness? As a causal influence of pleasure or wealth, contemporary consumers often locate happiness in an object, or through the acquisition of a thing. As many studies show, the belief that happiness is a 'thing to be possessed' produces the opposite effect (Frey and Stutzer; Gilmour; Haybron; Nicolao and Irwin; Wilkenson). One reason that happiness seems to be unattainable lies in a fundamental misconception about humans' relationship to ecstasy. Aristotle wondered whether the praise of ecstasy was misunderstood as a human virtue when he considered that, "Certain thinkers used to believe that beyond these many good things [honor, pleasure, etc.] there is something else good in itself, which makes all these good things good." This paper responds to the problem of the good by proposing that this 'genesis of good' that eluded Aristotle is what Parliament dubs 'the funk.' Parliament's theory of Funkadelic productively engages Aristotle's uneasiness about the relationship between happiness and ecstasy. Through Parliament's discussion of Funk as cosmos intercoursing with the mind, the presenter explores the idea of the Funk as the feeling of mind and body syncing with the cosmos and the emotional, intellectually stimulating ecstatic experiencing of Self as cosmic Being. For Parliament, Funkadelic is 'dedicated to the feeling of good,' which is antithetical to a culture that stigmatizes feeling good. Therefore, the presenter will analyze how Funkadelic operates as an epistemology of pleasure that is capable of cultivating entelechy.

The Genesis of Now: Neuroscience and Ego Death in the King James Bible
Richard Doyle (Pennylvania State University; mobius@psu.edu)

What if the King James Bible, the best-selling book of all time, has been misunderstood by almost all of its readers? What if instead of offering rules for obedience and belief, the King James Bible featured algorithmic scripts for ecstatic loss of self? Indeed, it just may be that we have radically misunderstood and misused the Bible precisely because it has sold so many copies and attracted so many scholars and interpreters. We have so many readers and experts working with this colossally powerful text that we become convinced that we know what the Bible has to say, and we avoid the sometimes difficult task of investigating the matter ourselves. Drawing on diverse spiritual traditions including Buddhism, Vedanta, Sufism, non duality and Yogi Berra, this presentation offers a series of self experiments informed by contemporary neuroscience designed to help activate the Bible's latent capacity to transform readers, now.

The Not-Self of Djuna Barnes' *Nightwood*: Re-imagining Robin Vote
Aaren Pastor (Pennsylvania State University; avp5573@psu.edu)

Through a series of insights into the transience of embodiment, feelings, perceptions, mental processes, and consciousness, the Buddha's second discourse points to the Not-Self. Yet, the experience of Not-Self can appear inherently contradictory, for to contemplate and attain such a state is to seemingly occupy a psycho-physical body and to have the unmistakable impression of possessing a Self in a constrained space. Acceptance of this apparent contradiction can liberate

the practicioner into a depersonalized and de-limited state of mind and mindfulness. It provides a freedom, unfettered from the obligation to manifest a discrete self-identity, to open into creativity – a creativity characterized by movement and communication beyond the human. How to foster this acceptance? While literary characters are often treated as selves, Djuna Barnes' Robin Vote manifests as Not-Self. This paper argues, contra Carrie Rohman and Teresa de Lauretis respectively, that rather than functioning as a disruptive Other or embodiment of loss and sexual trauma, Robin Vote opens into not-Self. Robin's primarily non-verbal communication, her affinity with animals, and the various descriptions of her as dirt and odorous plant-life are Djuna Barnes' attempts to articulate, and perhaps induce, the ineffability of the state of Not-Self. Nightwood therefore evades a simple or discrete categorization as a novel and is an experiment in writing the Not-Self that pushes against the constraints of the novel form. The stylistic devices Barnes employs create characters manifesting Not Self even as they appear as spectacular bohemians of the late 1920s Parisian nightscape.

The Poetry that Connects: The Ecstatic Abduction of Gregory Bateson and Erasmus Darwin

Peter Gillon (Pennsylvania State University; gillonpetera@gmail.com)

For Gregory Bateson, gaining insight into biological nature—or *creatura* as he, following the Gnostics, referred to it as—calls for an aesthetic mode of inquiry. This mode, which Bateson termed abduction after C.S. Peirce's related concept, reveals formal patterns that connect life: from the sea anemone to the primrose to human societies. Though Erasmus Darwin does not number among the English romantic poets often cited by Bateson, this paper argues that Darwin's poetry both performs Batesonian abduction and illuminates it as a rhetorical practice of invention. In poems on the sex lives of plants, springtime regeneration, and evolutionary history, Darwin explores biological nature, including its extensions in human culture, as a creative force and unified whole. Through analogy, allegory, and other devices of Batesonian abduction, Darwin ceaselessly attempts to interconnect flora and fauna, processes of growth and decay, ancient mythologies, and social formations. Beyond enacting Bateson's mode and bearing out his claim that it bridges poetry and science, Darwin's verse suggests that to practice abduction is to allow oneself to become abducted—by a love of form. Indeed, Darwin's accumulative style, exotic language, and perplexing metaphors earned him both praise and condemnation for transporting readers "beside themselves," i.e. into ecstasy, through an aesthetic that seems to privilege sound over sense. Through this aesthetic, Darwin's poetry induces the state of creative receptivity to form necessary for recognizing the very life-connecting patterns that both he and Bateson sought.

Session 7: Friday, November 4, 3:45 PM-5:15 PM

Panel 7A: Friday, November 4, 3:45 PM-5:15 PM *Ansley 1* (no AV)

Whitehead 2: Revisiting Whitehead's Invention of "Creativity": A New Name for a New Way of Thinking?

Chair: Steven Meyer

There is no Meaning to "Creativity" apart from Its "Creatures"
Michael Halewood (University of Essex; m.halewood@essex.ac.uk)

A quick search for instances of the term "creativity" on the website of the newspaper *The Guardian* returns 1,780,000 results. How did this technical philosophical term, coined by Alfred North Whitehead in the 1920s, become so widespread in the following 90 years or so? Have we lost the original meaning of this concept? In this paper, I may not be able to answer the first of these questions but I will aim to respond to the second. Hopefully, this may give us some hints as to the popularity of this word, as evidenced in its use in sports reports, job adverts and beyond. Whitehead describes creativity as the "universal of universals." It is tempting to envisage creativity as some kind of backdrop to existence. In this sense it can be taken as some kind of ethereal Platonic realm (of the good). This mention of "the good" is important. It signals that creativity is usually associated with something benign and beneficial. In this paper I will argue against both of these ideas. Creativity, for Whitehead, is a resolutely neutral term. It is neither good nor bad. But it is a condition of existence. This condition is not separate from the items of existence—its creatures. Indeed, creativity does not go beyond its creatures. We can't think of creativity without thinking of its creatures, and vice versa. Through re-reading Whitehead's text I hope to provide a reformulation of both our understanding of creativity and what it means to be a creature.

Whiteheadian Creativity: Non-human Societies, Enduring Objects, Living Things
James J. Bono (State University of New York at Buffalo; hischaos@buffalo.edu)

As Whitehead declares in *Process and Reality*, "According to the ontological principle there is nothing which floats into the world from nowhere" (244). Where, then, do his famous actual occasions (atomistic and in some sense sui generis) come from? Quite simply, for Whitehead, they derive from the data of other actual occasions and societies of actual occasions. In *Thinking with Whitehead* Isabelle Stengers elucidates the way in which novelty occurs in Whitehead's scheme. Rather than being due to a principle or a reason that imposes itself like some universal law on actual entities, the actual occasion makes itself novel through its own decisiveness: "Everything has a reason," Stengers glosses, "but everything is equally decision" (263). The very way in which the many become one in the making of an actual occasion rests upon means through which the many are gathered- or held-together in a highly specific configuration; and this configuration depends upon the subjective decision of the emergent, the new, actual occasion. Thus, the reasons that explain this actual entity—by extension, any and every society, enduring object, or organism—are the result of a decision that "exemplifies creativity" (263). After further elucidating Whitehead's ontology in relation to his notion of creativity, this paper will seek to explore the Whiteheadian creativity that is not a principle through examples drawn from the life sciences, including the cognitive network theory of the immune system articulated by Francisco Varela, Henri Atlan, Irun Cohen and other colleagues, and the epigenetic thought of C.H. Waddington.

On Mistaking Creativeness for Creativity and Creativity for Creativeness (Provisional Conclusions)
Steven Meyer (Washington University; sjmeyer@wustl.edu)

In the preface to the English-language edition of *Dialogues* (1987), Gilles Deleuze mistakenly alluded to "creativeness" when he meant to refer to "creativity": "I have always felt that I am an empiricist, that is, a pluralist. But what does this equivalence between empiricism and pluralism mean? It derives from the two characteristics by which Whitehead defined empiricism: the abstract does not explain, but must itself be explained; and the aim is not to rediscover the eternal or the universal, but to find the conditions under which something new is produced (*creativeness*)." In the posthumous edition of George Herbert Mead's *Mind, Self, and Society* (1934) prepared by the semiotician Charles W. Morris, Morris added "the social creativity of the emergent self" as one of the section titles. This is one of the earliest instances of "creativity" used in place of "creativeness." That Whitehead was on Morris's mind is suggested by the concluding lines of his preface, in which he spoke of the work as "carry[ing] to a wider audience . . . the adventures of ideas (to use Mr. Whitehead's phrase) which made notable to smaller audiences for over thirty years Mr. Mead's lectures on social psychology." Errors such as these help to clarify the significance of the creativity/creativeness dynamic even as it becomes all the more imperative to distinguish the two terms. In light of the arguments of the previous speakers, and to initiate further discussion, I propose several provisional conclusions regarding the intimate relation between errancy and Whiteheadian creativity.

Panel 7B: Friday, November 4, 3:45 PM-5:15 PM *Ansley 2* (projector and screen)

Bouncing a Cheque: The Mechanics of Money

From the existential and entropic horror of exponential accumulation in incremental games to the financial architecture that supports professional sports to the preoccupations with material resistance that inform Quattrocento perspectivalism and its digital afterlives, this panel explores the game of moving money and the movement of money through games. We've got to balance the books, break the bank, cut our losses, draw interest, float a loan, hit the jackpot, pad the bill, pass the buck, play the market, rake it in, shake it down, strike it rich, throw money around, turn on a dime, and bounce a cheque. Given that it seems money is made to move, it might be more accurate to say that money is made through movement. So what happens when we question the phenomenological premises of the mechanics of money? What happens when a cheque bounces? This series of talks will think about the intersection between money, games, and art. We specifically investigate the physical processes--from thermodynamics to the physics of bounce--that underlie the circulation of these symbolic systems.

Chair: Stephanie Boluk

Cookiecoin: The Financial Imagination and the Horror of Cookie Clicker
Stephanie Boluk (University of California at Davis; boluk@ucdavis.edu)

In the spirit of Ian Bogost's Cow Clicker, the French JavaScript game Cookie Clicker by Orteil and Opti both lampoons the accelerationist and accumulationist logic of videogame scoring while offering an unexpectedly pleasurable form of numeric play in the absence of other game mechanics. Following the success of other web-based "incremental" or "idle" games released in 2013, Cookie Clicker does not terminate in the absurdist fantasy of computational counting like Aniwey's Candy Box nor the progressivist telos of human evolution like Michael Townsend's A

Dark Room, but offers a darker, more horrific vision of a cookie cosmos baked through the logic of finance capital. From Eugene Thacker's Horror of Philosophy trilogy to Mark Hansen's Feed-Forward, this talk examines the horror of numeral and nonhuman scales of temporality through a study of the processes, modifications, and metagames occurring in, on, around, and through Cookie Clicker. Idle games are anything but idle. The processing power of the machine and what Lisa Parks and Nicole Starosielski describe as the game's "media infrastructure" move this genre of incremental games to what could perhaps be more accurately termed "infrastructure games" or "games of heat." Imagining the heat signature of the processor cycle and heat death of the earth, Cookie Clicker abandons its focus on the clicking hand of the player towards the distribution and circulation of the game.

Bailed Out and Bouncing Right along
Carlin Wing (Scripps College; carlinwing@gmail.com)

Once a year, a truck pulls up to Grand Central Terminal in New York City. A Kansas-based work crew unloads the truck and spends two days building a glass squash court in Vanderbilt Hall. One week later, they disassemble the court, reload the truck, and move along to their next destination. The Tournament of Champions is a single node on a global circuit. Players circle the world while courts traverse continents. Bear Stearns was the tournament's title sponsor from 2003 until 2008 when the company lost $10 billion dollars in a single day, and informed the Federal Reserve that it would have to file for bankruptcy. In an unprecedented move, the Fed offered Bear Stearns a $30 billion loan and orchestrated a deal in which J. P. Morgan acquired Bear Stearns at the price of $10 per share. Since 2009, J. P. Morgan has been the title sponsor of the Tournament of Champions. This talk addresses the infrastructures for circulating spectacle and speculation. Building Observations I and II, time-lapse videos showing the court being assembled for the 2008 Bear Stearns Tournament of Champions and disassembled after the 2013 JP Morgan Tournament of Champions will play in the background. The videos highlight the three work crews responsible for the event and the different populations of commuters, tourists, homeless, and workers that regularly rotate through the station. By setting multiple modes of representation against each other this presentation will both address and enact the contemporary conditions for capturing global play.global play.

Pièce de Résistance: Money, Florentine Visuality & the Limits of Political Modernity
Scott Ferguson (University of South Florida; sferguson@usf.edu)

This paper constellates three seemingly unrelated visual artifacts: Masaccio's The Tribute Money (1425), Jean-Louis David's The Tennis Court Oath (1790 – 94), and The Lego Movie (2014). Each offers a glimpse into a contradictory aesthetic regime I call "Florentine visuality." Arising with the mathematical perspectivalism of Quattrocento Italy, Florentine visuality gains its phenomenological "grounds" through rich simulations of material contiguity, gravity, and resistance. My claim is that Florentine visuality plays a foundational role in shaping the political history of the modern West and the image of money upon which this history turns. Specially, I argue that the Florentine preoccupation with material resistance has naturalized a delimited and privative image of money that has crippled Liberal, Marxist, and Neoliberal regimes alike. Here, I set forth a critical alternative to such aesthetics by drawing upon the contemporary heterodox school of political economy known as "Modern Monetary Theory" (MMT). Against the

hegemonic commodity theory of money that has debilitated political modernity, MMT insists that money is an unlimited public recording instrument; that government spending is never bounded by finite tax revenues and debt; and that money's irreducible abstractness permits a state to be able to afford any project it is impelled to undertake. The question I pose is this: If it is technically impossible for a currency-issuing polity to exhaust its fiscal capacity or to, as it were, bounce a check, then what does this mean for the history of modern politics and the dominant visual regime that serves as its support?

Averting Crisis: Artificial Intelligence and the Future of Employment
Kevin LaGrandeur (New York Institute of Technology; Institute for Ethics and Emerging Technologies; klagrand@nyit.edu)

The process of technological displacement of workers began in the automobile industry in the 1960's, and with the rise of connectivity and AI it is accelerating rapidly. For example, it may be no surprise, given what's happened in the automobile industry, that the world's first farm that is completely run by robots is about to open in Japan; or that a new robot is available for the construction industry that can lay bricks three times faster than a human. This kind of displacement of manual labor happened in previous industrial revolutions as well. More surprising, however, is the breadth of jobs that can be replaced by intelligent automation: for instance, even writers are being replaced by computer software. In January, 2016, "the Associated Press (AP) revealed that [a software program called] Wordsmith has been rolling out content since July 2014 without any human intervention." This Wordpress software has been generating 1000 stories per month, mostly about financial matters, which is "14 times more than the previous manual output of AP's reporters and editors." In terms of sheer productivity, human writers cannot keep up with computers and robots. These kinds of developments are oddly predicted in novels such as Richard K. Morgan's Altered Carbon, William Gibson's Zero History, and TV shows such as Almost Human. So what can we do as a society to compensate for technological unemployment, and to prevent the poverty, dislocation, and even violence that might follow, as it has in past industrial revolutions? Sociologist James Hughes and I have begun to work on a book to answer these questions, and my talk will present both the problems and possible solutions that we see.

Panel 7C: Friday, November 4, 3:45 PM-5:15 PM *Ansley 3* (projector and screen)

Improvisation and Political Change

Whether in quantum particle physics, evolutionary innovation, neurological learning, cellular genetics, conversation, writing, or artworks and performance, improvisation explains the dynamic at play in creative processes of life, matter, learning, change, and innovation. Arguing that such material processes of becoming embed ethicality, voices in the margins of science theory, primarily feminist ones, cite this as grounding their political visions. Accepting this premise, then it follows that improvisation is key to how an ethical world is brought forth, and how political and social change happens. Thus, improvisation itself warrants a closer look, for it is anything but what has defined modernity, namely the dominance of causal, linear, autonomous, rational, hierarchical, and predictable logics. This panel looks at the political possibility and practice of improvisation as seen in literary modes, in science-inspired feminist

theory, in quantum science-inspired visual art, and as a movement practice in dance. Might artists be seen as the vanguard of political change?

Chair: Cordelia Sand

Exploring the Intersections of Improvisation, Feminist Science, and Political Change
Cordelia Sand (University of Massachusetts Amherst; cordeliasand@gmail.com)

Improvisation—understood either as practice, creative method, or playful participation with the unforeseen— figures centrally in the experience of many visual and performing artists and writers. In its many forms, improvisation serves to coax forth the unknown, and readies the subject for surprise. Its gut-level listening provides a structure of attentiveness to difference and an availability to wonder. In creative relationship with uncertainty, improvisation builds collaborative ways of knowing that honor complexity and not-knowing. These subject skills get called forth by feminist new materialism theorists who envision a radically new foundation of social justice in a time of planetary ecological and economic crisis. Arguing that material processes of emergence and becoming embed ethicality, feminist voices in both biology and physics cite this science as grounding their transformative politics. In what ways might scientific perspectives on innovation properly (or improperly) contextualize, inform, and support radical political action? Might social justice movements benefit from an alignment with scientific theories of innovation? There is little credible argument to oppose the view that current planetary conditions put life as we have known it at risk. Improvisation, as seen in the light of both science and creative practice, may offer insights into how an ethical, life-affirming world might be brought forth that alters cataclysmic trajectories advanced by dominant neoliberal forces. In the least, engagement with improvisation may shift how we think and act, and it may affect the choices we make about things that matter.

The Politics of Saying "Yes, and . . ."
Randy Fertel (Fertel Foundation; randy@fertel.com)

Improvisers urge that their achievement is not an effect of talent, skill, or method but something beyond the reach of art, infused by the muse or by one's genius, or whatever extra-rational faculty serves to rebut an epoch's rationality. Improvisations challenge the reigning rationality of their age. This is the truth behind Paul Valèry's lovely paradox that "Everything changes but the avant-garde." In A Taste for Chaos: The Art of Literary Improvisation I offer a taxonomy of the formal and stylistic gestures and characteristics of improv which persist since classical times. Those formal characteristics working together to challenge rationality and catalyze in the audience a more open state of mind, urging us to seize life, all of it: not merely carpe diem, but carpe vitam. This injunction to seize all of life leads to a breakdown of hierarchies and to an embrace of a democratic spirit. The question is, if there is an essential definition of improv, if there is a line of improvisation that dates to classical times and that manifests a consistent set of formal devices and thematic concerns, how does this speak to political engagement and action? One answer is that an awareness of improvisation's rhetorical and formal devices can help us analyze and better understand the gestures of such political movements such as Occupy Wall Street in New York, Podemus in Spain, and La Nuit Debout in Paris: their insistent rejection of hierarchies, their embrace of every voice.

Quantum Field of Thought
Sally Weber (Resonance Studio, Austin TX; snw@sallyweber.com)

As a visual artist working in 3-D imaging using lasers, holography, holographic optical elements, and interferometry, I am intrigued by vibrating particles of light and their complex interactions. The unresolved mysteries from revelations of quantum spacetime fields and the components of matter continue to challenge the modernist Western world and its understanding of the fundamentals of energy, matter, temporality, and memory. Flux, a jittering laser pendulum installation inspired by the constant vibration of elemental particles, draws chaotic colored lines in sand, leaving traces as they fade to suggest our own erratic movements and chance encounters. The photon, the artist, the viewer, and the scientist all dwell in Flux, not knowing 'where' we are going nor how we might get 'there'. Working with Craig Newswanger at Resonance Studio, we contend that the memory of the universe is held in the structures of its smallest and most fundamental particles. Our continued investigation into these structures and those yet to be discovered map the fundamental interconnectiveness of the universe. As a quantum-inspired visual artist, I hope to offer viewers the means to come to know the intricacies and implications of shared fundamental queries. By creating immersive experiences the viewers might recognize that they, too, are materially interconnected —and implicated—within this quantum field of light and its entangled forces.

Attuning the Body
Elena Demyanenko (Bennington College; demyanenko0@gmail.com)

Attuning the Body is a lecture-performance where linguistic articulation of improvisational logic and immediate extemporized performance are in a feedback loop, informing and animating one another: thoughts on tuning the senses speak to a readiness to respond; eye movements are in conversation with ways of seeing. Real-time tracking and choice-making eschews opinion, style, and resolution, instead reaching for fundamental ways of being attentive and attuned as a means to invent physical narrative and explore meaning. What I do is determined in the moment by channeling the attention of what my mind-body organizes and selects in space and time. The only pre-set aspect is the readiness of my muscles and availability of my guts. Spontaneous physical thinking in the form of deep listening takes stage. With adaptation at its core, the practice of attuning the body becomes integral to the play of improvisation. Working against expectation while enhancing flow, improvisation practice exposes the practitioner and the viewer to unpredictable formations, patterns and logic. Embodied experience with these modes of uncertainty activates subjects' ability to see and make sense of layers and currents of information. As a mode of knowing, movement improvisation constitutes a practice of ethical recognition, one that embraces the uncanny simultaneity of simplicity and complexity in the new meanings that emerge and surprise.

Panel 7D: Friday, November 4, 3:45 PM-5:15 PM *Ansley 4* (projector and screen)

Lush Bodies of Romanticism 3: Demarcating Abundance

The critical perspective on the relationship between Romanticism and science has undergone a thorough transformation over the last 20 years not only as a result of the repositioning of

literature within networks of empirical, experimental, medical, idealist, and materialist discourses, but also as a consequence of the reconceptualization of scientific methodologies and self-definitions of the period. A preoccupation with generativity, i.e. with the mechanism for beginnings – of ideas, of life, of energy, or of causal chains – dominated literature, philosophy, and natural history of the time. These inquiries across discipline were not isolated, but in dialogue with each other. Moreover, these dialogues happened transnationally, with exceptional exchange between German and British naturalists and literary authors. This series of three panels will bring together comparative scholars of Romanticism whose work links Great Britain and Germany, while investigating the convergences of science with literature around the issue of luxuriant productivity, in nature, in the human mind, and in textual tropes (both scientific and literary). Panel III: Demarcating Abundance illustrates the conundrum involved in all attempts to know, i.e. to systematize and delineate, flourishing abundance. Heringman and Rajan explore engagements with the ability of nature to produce new forms over deep time. Conceiving of nature in terms of organized sequence and petrification paradoxically enables proliferation and transformation. Engelstein meanwhile focuses on productivity in a single generation and illustrates the challenge offered to both empiricist and idealist epistemological systems by the impulsive sexual drive and ability to reproduce.

Chair: Stefani Engelstein

Blake's "Vegetation" and the Natural History of Fossil Plants
Noah Heringman (University of Missouri at Columbia; HeringmanN@missouri.edu)

Taking a contrarian approach to natural history, William Blake explained in his epic Jerusalem that "the Rocks are opake hardnesses covering all Vegetated things." In his later poetry, Blake took an increasingly skeptical view of sexual embodiment and reproduction, and in this respect his images of the "vegetative powers" of the body and its "unnatural consanguinities" follow in the tradition of Platonism. At the same time, however, his critique of "opake" empirical epistemologies produced a novel intersection between the vegetable and the mineral kingdoms, expressing the philosophical double-bind which makes the vegetative state of human faculties seem both original and permanent through the paradox of "rock and stone in ever painful throes of vegetation." From the perspective of natural history, this paradox is resolved in the fossils that Blake's friend and sometime collaborator George Cumberland described as "fragments of a former creation." Whereas Cumberland's notion of a "chaos" comprising these jumbled remains may have direct analogues in Blake, Blake's strong emphasis on the luxurious excess of vegetation and its stony covering is equally reminiscent of period accounts of fossil plants in the coal measures. The Comte de Buffon and John Reinhold Forster were among the naturalists who drew analogies between the teeming rainforests of Guyana and New Zealand, respectively, and the "treasuries of inexhaustible fecundity" that corresponded to them in the fossil record. This paper will seek correspondences between this lush fossil record and what Blake calls "the rock: the stone: the metal: / of Vegetative Nature," referring both to natural bodies and to contested bodies of knowledge.

The Laboratory of Nature: Schelling's *First Outline of a System of the Philosophy of Nature* (1799)
Tilottama Rajan (University of Western Ontario; trajan@uwo.ca)

This paper takes up Schelling's *First Outline* and its speculative publication as "lectures," reading it as a text (in Barthes' sense) rather than a book. As such it starts from the ungrounding paradox Schelling later describes: that the mind's desire for a system means that things are not in a system but in "asystasy." For Schelling mind and nature were a continuum and to "philosophise about nature" meant to "create it": nature exists only as thought, but thought is immanently generated by where it enfolds itself into the rhizome of the life sciences. The *First Outline* is thus not one but many contesting systems, generated by the different scientific fields by which Schelling focalises nature (physics, biology, physiology, geology), the theories of matter and organization he puts in play (atomism, Leibnizian monads, epigenesis), and the philosophical syntheses he (de)constructs in a series of "speculative invasion[s]" of nature. Chief among these is the Stufenfolge, or "graduated series of stages" by which nature self-organises into spirit: a paradigm underpinning much German Idealism across fields. Where Hegel lamented that "Nature's ever-increasing wealth of detail" was "refractory to the unity of notion," Schelling's engagement with nature in this unusual early work thus has consequences both for contemporary science-studies and, given the interdisciplinary mix of this text, for the ongoing dialogue between idealist paradigms and the philosophy of nature in his own subsequent work (1809-21).

Generative Knowledge: Outer Bounds
Stefani Engelstein (Duke University; stefani.engelstein@duke.edu)

Fascination with the generative powers of nature and the generative powers of mind dominated explorations of both life sciences and literary production around 1800. While Kant trumpeted Horace's dictum "Sapere aude," post-Kantian idealists resolved the search for knowledge into the Delphic "Gnothi Seauton," struggling against both the concept of empirical access to nature and the deterministic laws an independent nature implied. The problem of self as object was particularly acute in sexual relations and drives, and nowhere more so than in Fichte and Kleist. For Fichte, nature can be posited only by the concept-generating, self-conscious I. And yet nature is imbricated with the I, as generative body. This split in modes of generation recurs for Fichte at the level of the pair, in which the woman is structurally prohibited from self-awareness, particularly of her own sexual drive. Experimenting with this same constellation, Kleist unsparingly illustrates the most-feared implications of the empirical and the idealist approach through two texts that also formally enact these epistemological investments: "The Marquise of O" and "Penthesilea." The Marquise proves able to negotiate external relations and produce offspring precisely by repressing knowledge of herself as a passive object of outside forces (in this case, a rape), while Penthesilea, unable to know anything but her own desires, ultimately devours her lover (literally) and kills herself with a dagger she conjures from her subconscious. If the empiricist's world is masochistic, one must conclude from Kleist, the idealist's is annihilatory.

Panel 7E: Friday, November 4, 3:45 PM-5:15 PM *Ansley 5* (projector and screen)

Creating Places 1: Scary Cities

Chair: Martin Willis

Creating Modern Science in Travel Guides to Victorian London
Martin Willis (Cardiff University; willism8@cardiff.ac.uk)

Travel guides are often thought of as packages of information rather than works of creativity and imagination. Indeed travel guides are not often thought of as requiring authorship – instead they are simply accumulations of knowledge about places, times, directions, and locations. Yet the Victorian travel guide was a hugely creative undertaking, often written by writers of considerable literary repute, and in collaboration with leading scientists. Such guides are fascinating repositories of the representation of science to various audiences through the auspices of literary writing. In this paper I offer the first analysis of scientific representations in travel guide books to London. Taking a range of travel guides from the 1860s to the end of the century, I consider which scientific sites travel guides chose to promote to the tourist reader, and investigate what kinds of representations of science their narratives provide. This allows for two key questions: first, how did science contribute to visions of London as a city and second, in what ways did travel guides mediate science to achieve this. I conclude that travel guides are the location of a particularly rich interaction between science and the humanities, where literary writers give science a powerful place in an emerging modernity through their creative construction of the city itself.

Fearing London: Mysophobia, Xenophobia, and the East-End in Victorian Fiction
Amanda Caleb (Misericordia University; Acaleb@misericordia.edu)

By the end of the century, London was a space unrecognizable to mid-Victorians: the urban landscape was filled with tall buildings, department stores, and an expanding Underground train system. The spreading metropolis was a dichotomy of cultural dominance and cultural degeneration, power and subjection, urban and suburban. The psychological landscape of the city—as aligned with the human mind—reveals how spatial and social phobias shape literary representations of London. This paper looks at how the fictional representation of slumming in Frank Danby's *(Julia Frankau) A Babe in Bohemia* and George Gissing's *The Nether World* represent the rise of and relationship between xenophobia and mysophobia, represented in both the social and cultural landscape of the city. In looking at the physical landscape of the city through these fictional works, I argue that anxieties regarding class and ethnicity are transcribed on the city spaces: mysophobia, then, is a product of an East-West end division. Simultaneously, it is because of this very spatial division that such anxiety—and even hatred—of the lower classes develops. In particular, the association of physical filth with moral depravity and corruption suggests contagion—both of physical and moral disease—which speaks to the dichotomous nature of London in Victorian fiction. In conflating the lower classes with Jews through mysophobia, the novels suggest how the lower classes are considered as foreign and therefore a threat to the British identity.

Surreal Architectures: Creating the City in Steven Millhauser's *Martin Dressler*
Dale Pattison (Texas A&M University at Corpus Christi; dale.pattison@tamucc.edu)

Steven Millhauser's 1996 novel, *Martin Dressler: The Tale of an American Dreamer*, describes the rise of Manhattan at the turn of the century, characterizing the city's rapidly transforming urban space as a surreal site of both fantastic possibility and nightmarish portent. Undergirding

these diverging vectors is the novel's depiction of the modern city as a dream space produced by the entrepreneurial Martin Dressler's creative imagining of architecture and the built environment. Conflating Dressler's visions of a metropolitan future with his fraught personal and sexual relationships, Millhauser's book identifies the ways in which creativity, architecture, and eroticism are inextricably intertwined, and how the city of the twentieth century is in fact a product of these converging forces. Millhauser explicitly links the city's inchoate architectural forms—forms that would ultimately produce the modern skyscraper—with creativity and transgression, two concepts that, I argue, would help to redefine public space in the twentieth century. Millhauser's narrative, too, thrusts readers into surreal textual spaces that simulate the dreamlike architectures described in the book. Using George Tschumi's and Rem Koolhaas's theories on architecture and built space as well as post-Marxist spatial theory that argues for the need to creatively negotiate space, this paper reads narrative and the city as spatial loci particularly conducive to creativity and the imagination. Indeed, the modern city, I will argue, cannot be read in the absence of discourses on creativity that capture the possibility (and peril) of architecture and the built environment.

Panel 7F: Friday, November 4, 3:45 PM-5:15 PM *Ansley 6* (projector, screen, and speakers)

Hi Mom! 2 -- Feminism, Psychoanalysis + the Arrival of the Mother in 20th Century Psychology

Chair: Elizabeth Wilson

A Baby and Someone – maternal representations of creation and destruction
Lana Lin (The New School; linl@newschool.edu)

D.W. Winnicott famously claimed that there is no such thing as a baby. For Winnicott there is always only a baby and someone. This someone is the maternal figure. Using psychoanalytic object relations theory, this paper will reflect upon motherhood as the basis of both creativity and destruction. I will examine literary and visual art works that interrogate the imbrication of creation and destruction, and discuss how this contest serves as the backdrop to identity formation. Melanie Klein's often antagonistic, certainly agonist phantasies of the good and bad mother are applicable to the powerful and conflicted scenes of motherhood that pervade Audre Lorde's poetry and prose. In her graphic memoir, Are You My Mother?, Alison Bechdel relies on Winnicott's concepts to trace her own angst-ridden trajectory toward self-recognition and definition. Motivated by the near simultaneous death of her mother and sister and birth of her child, Amy Jenkins's Instructions on Parting (in progress), meditates upon the vicissitudes of mortality. The video depicts the exclusive conditions under which the human body fails to reject a foreign substance, that is, during cases of pregnancy or cancer. Motherhood and cancer eerily echo one another as creative-destructive forces through which the self contends with the other in what is literally a life and death struggle. Lorde's, Bechdel's, and Jenkins's creative works illustrate how reproduction, in its constructive and damaging iterations, affords "a baby and someone" the possibility of becoming "someone."

Attachment Material - The Strange Situation Experiment and the Material Aesthetics of Attachment
Eric Taggart (University of California at Davis; Erictaggart@gmail.com)

This presentation is an aesthetic (mis)translation of developmental attachment theory (Bowlby, Ainsworth, etc) into a feminist materialist revision of the psychoanalytic project. I suggest that deployment of the term "attachment" in psychoanalytic critical discourse (eg: Butler, Berlant, Brennan) conflates attachment theory with psychoanalysis in a way that obscures many interesting contributions from the attachment literature. In response, I arrange an introduction between attachment theory and critical discourse and bring aesthetic questions and methods to bear on the archive of developmental attachment research (ie: Ainsworth's Strange Situation Experiment, Main's Adult Attachment Interview, Beebe's infant-mother microanalyses, etc.).

Contending with Two Faces: Feeling for the Cognition of the Still-Face
Rachel Weitzenkorn (Emory University; rweitzenkorn@gmail.com)

In a 1983 study of infant coping methods, Ed Tronick and Jefferey Cohn simulated emotional stress by asking mother's to "act the way they do on the day they feel blue." In an aside in this experimental protocol the researchers remarked, "normal mothers had no trouble following these instructions" (160, Tronick). While the findings on depression and infant care are significant, I would like to focus instead on the familiarity of the depressive state. Three minutes of flattened engagement from mother caused the baby to have a noticeably dynamic and negative reaction; a series of behaviors that we could guess were very familiar to the baby. That is, "negative cycling and distress" is mundane in infant life. Yet, researchers who focus on the empirical observation of mother-infant pairs tend to highlight reciprocity and attunement rather than "negative cycling". Researchers understand the familiar distress, failures, and mismatches through either sentimental images of human relations or through cognitive systems of communication and goals. These are not contradictory in the empirical evidence of early-caregiver relationships. Through a close reading of the Still-Face paradigm developed by Tronick in the late 70s I ask how researchers manage the central role of failure, distress, and negativity in their evidence of mutuality? The physical mechanical elements (dual cameras and manipulation of time) are considered, along with affective coding of looking, sound, and touch. Do these tools flatten the experiential significance of the paradigm or do they highlight a new aspect of the interaction?

Still Born: "Remembrance Photography," Trauma, and Ritual within the Hospital Setting
Nancy West (University of Missouri; WestN@missouri.edu)
Ron Schleifer (University of Oklahoma; schleifer@ou.edu)

This talk explores the recent and remarkable phenomenon of "remembrance photography," post-mortem photographic records of still born children that are used to memorialize their birth (and death). Post-mortem photography is as old as photographic technology itself, but in recent years, with the ubiquity of photography altogether, it has become a more widespread phenomenon. In fact, Professor West has recently published an essay examining a volunteer organization called *Now I Lay Me Down to Sleep*, which hires professional photographers to take photos of dead or dying infants, to describe what she calls "postmodern, post-mortem photography." In this talk, together with Professor Schleifer, they examine the *institutionalization* of such practices

within hospital settings in order to analyze the ways that photography and discourse are used to transform the site of trauma into a ritual site that is at once impersonal, communal, and an expansion of patient-centered treatment and healing. Paralleling the standard practice of the "history of present illness" in routine patient-physician interchange with the extraordinary practice of "remembrance photography," the talk examines the ways that the horizon of healthcare and the very definition of "health" are expanding in concert with the transformation of the borders of private grief, public spectacle, and the contours of self-definition in relation to digital and internet technologies.

Panel 7G: Friday, November 4, 3:45 PM-5:15 PM *Ansley 7* (projector, screen, and speakers)

Nonhuman Relational Creativity 2: Crafting Queer Kin and New Kinds

Chair: Harlan Weaver

Bodies of data: kin, kine, and algorithmic creativity
Scout Calvert (University of California at Los Angeles; scout@hoyden.org)

The long co-domestication of cattle and people has included kin-making in multiple modes. Human and bovine bodies have both changed in the process. Humans have imposed themselves fully on the biological and reproductive functions of cow bodies, impositions which also require changes in human response to cows. By late in the 20th century, computer algorithms could convert basic data kept for "breed improvement plans" into phenotype indexes with strong correlative power to genotype. These "expected progeny differences" were very useful for selling the reproductive capacities of the animals, particularly in the form of frozen semen and embryos. Sensor and robotic technologies are in wide use in dairy farming, enabling milk cows to exert more agency, ostensibly improving their working conditions. These sensors enable tracking of the cows' milking and other habits on the farm, adding to bodies of data about cow bodies. They also enable animals' participation in communication, including using social media: a dozen dairy cows at an Ontario dairy tweeted their experiences with robotic milking parlors over the space of a year, aided by creative humans. Automation creates distance between people and cows on the farm, distance that is posited as an accommodation to bovine preferences, eliminating stressful encounters with humans. The Twitter project was designed as an experiment in remediating this distance. This paper explores the consequences for human-bovine relationships of human creativity in several media: cryopreserved gametes, DNA, data, and social media.

Junkpit (stage reading): Queer co-creation of selves and time within fracture
Oskar Cole July (Independent Scholar; zipshark@gmail.com)

Dissident strains of sci-fi insistently imagine unthinkable relations that reconfigure time and self, and unravel definitions of human and natural. I draw on contemporary discourses across performance studies, queer and trans theory, necropolitics, and multi-species ethnography to dramatize the co-creation of selves within a damaged condition I call the Fracture Commons. This short musical comedy presents a 23rd-century queer utopia: a much-more-than-human commons that emerges in toxic territory. Scavengers living on the Cumberland Plateau Cyber

Junkpit (or CPCJ, located in the actual Cumberland Plateau of Eastern Kentucky and Tennessee) collect high-value scrap for sale, and find parts for their own projects and bodies as well. Cyberjunk robots work alongside dispossessed humans, ghosts, and shape-shifters. In their off-time, the robots like to reprogram themselves with fragments of radical manifestos they discover in the oldest layers of memory chips. Beavers who have begun to repopulate the region, and who retain acute collective awareness of their previous extirpation at the hands of the fur trade, form a chorus. Beside piles of cyberjunk and space junk from the fallen empires that once claimed the skies, the beavers perform "Astro-Dam", expressing their own hopes of stellar expansionism, and other tunes. The play animates the contradictions of national sacrifice zones, and enacts utopian and dystopian theoretical visions of differently-crafted kinships.

Scenes of Relation: Love in the Age of Extinction
Ammi Keller and Tash Wilder (Stanford University; ammiemergency@gmail.com)

Examining as its source material hundreds of selfies of visitors to natural history museums posing with dinosaur skeletons, this presentation asks what might be learned by attending closely to these as creative acts. Using Kim Tallbear's work on relationality, Eve Sedgwick's ideas about reparativity and performativity, Zeb Tortorici's writing on viscerality in the archive, Deborah Bird-Rose's concept of double-death and Jose Muñoz's search for a queer utopian future in the liminal space of the past, we inquire into the nature of creativity and consider queer opportunities for blurring the taxonomies (reptile/sapien, extinct/not extinct, Mesozoic/Cenozoic) that stop us from acting to prevent future species extinction, including our own. Natural history museums house a visceral archive of extinct bodies, evidence of mass extinction events that preceded the current, human-generated one. Visitors often respond by arranging ourselves into dramatic scenes with dinosaur skeletons—scenes performing friendship, romance or familial relationships, or scenes imagining being pursued or consumed by dinosaurs—in order to photograph and share these tableaus with others on platforms like Instagram. Close readings of these photos allows us to ask: how might queering kinship and troubling settler-culture conceptions of love make possible new engagements with life and death across temporalities?

Creating Kin: An Analysis of Companion Species Design in Video Games
Melissa Bianchi (University of Florida; mbianchi@ufl.edu)

Donna Haraway's latest slogan, "Make Kin Not Babies!" pushes for multispecies ecojustice dependent on understanding humans and other species as kin. In part, making kin depends on understanding humans as part of companion species--a category that subsumes both Haraway's cyborg and her understandings of human-animal companionate bonds--and on fostering "significant otherness." Haraway explains that establishing "significant otherness" in our relationships with other species requires "cobbl[ing] together nonharmonious agencies and ways of living that are accountable both to their disparate inherited histories and to their barely possible but absolutely necessary joint futures." Kinship creation, she argues, teaches us to view nonhuman species and their histories as significant, particularly in light of impending ecological crises. At the end of her interview with Cary Wolfe in *Manifestly Haraway*, Haraway cites several works making kin, one of which is an Iñupiaq video game called *Never Alone* Turning to *Never Alone*, *Valiant Hearts*, and similar action-adventure, role-playing games, this presentation examines how companion species design in games can encourage players to view nonhuman

animals as significant others. Specifically, the presentation determines how playing as a companion species--a human/humanoid avatar and its nonhuman animal companion, but also an organic being engaging a game machine--helps players understand and appreciate their relationships with other animals as kinships through storytelling, procedures, and user interface design. By analyzing gamic companion species as both natureculture and technoculture, the presentation also demonstrates how video games might urge players to (re)imagine their posthuman identity and materiality broadly.

Panel 7H: Friday, November 4, 3:45 PM-5:15 PM *Ansley 8* (projector, screen, and speakers)

Book Panel for Rebekah Sheldon's *The Child to Come: Life after the Human Catastrophe* (University of Minnesota Press, [forthcoming])

The figure of the child has long operated as a synecdoche for the future, if not the future's very self. The figure of the child is also a mainstay of the environmental imagination and crucial to its efforts at moral and aesthetic persuasion. But what becomes of this child¬-figure under the new conditions of the Anthropocene, when the future she figures can no longer be relied upon to offer safe harbor for the anthropos? In *The Child to Come*, Rebekah Sheldon explores representations of this perilous future and the new figurations of the child that have arisen in response to it in popular rhetoric and popular science fiction, film and television. This book panel will use the occasion of Sheldon's book, which will be launched by Minnesota Press at SLSA 2016, to showcase scholars whose work in the fields of childhood studies, queer theory, science fiction studies, biotechnology and reproduction, and ecocriticism substantially intersect with the book's efforts. Rather than "reviewing" the work, the panelists will offer their own new scholarship in light of the book's key arguments as embodied, for example, in concepts like somatic capitalism, the biopolitics of reproduction, and the child-¬as-¬resource, though by no means limited to those. The panel's ambition, therefore, is to use the book as the springboard for a wide-ranging discussion about the shifting relations between the child, the reproductive woman, and the future they figure.

Chair: Rebecca Sheldon

Julian Gill-Peterson (University of Pittsburgh; jgillpeterson@gmail.com)
Ashley Shelden (Kennesaw State University; ashelden@kennesaw.edu)

Karen Weingarten (Queens College, CUNY; karenweingarten@gmail.com)

Panel 7I: Friday, November 4, 3:45 PM-5:15 PM *Peachtree 1* (larger room, projector, screen, and speakers)

Roundtable: Aesthetics, Methods, and Materialities in—and beyond—Eighteenth-Century Science

Studies of eighteenth-century science and creativity intersect in many ways. This roundtable focuses its discussion of science and creativity on aesthetics, methods, and varying forms of materiality. The scholars on this roundtable approach creativity from the perspectives of varying

disciplines, including the chemical, physical, cognitive, and life sciences. Their presentations, respectively, analyze the intersection of cognitive science and eighteenth-century methods, the material histories of eighteenth-century and contemporary technology, the troubled boundaries of science and fiction, and the links between creativity and human-animal exchange. Our presenters will generate new dialogue about eighteenth-century aesthetics, the methods we use to understand eighteenth-century science, and the relevance of eighteenth-century creativity today.

Moderator: Laura Miller

Contributions:
Jason Pearl (Florida International University; jpearl@fiu.edu)
Laura Miller (University of West Georgia; lmiller@westga.edu)
Aaron Santesso (Georgia Institute of Technology; aaron.santesso@lmc.gatech.edu)
David Rosen (Trinity College; david.rosen@trincoll.edu)
Rajani Sudan (Southern Methodist University; rsudan@mail.smu.edu)

Panel 7J: Friday, November 4, 3:45 PM-5:15 PM *Peachtree 2* (projector, screen, and speakers)

Roundtable: Creating Disciplines, Disciplining Creativity

In *Creativity and Other Fundamentalisms*, Pascal Gielen argues that creative capitalism acts as a constraint to manage an orderly and apolitical population. Gielen suggests, "creativity will have to be recharged via criticism – social criticism included – in order to proclaim new models of living together" (104-105). The speakers will address creativity as social construct and as social tactic, offering two critical approaches to thinking about creativity: (1) critiques of creativity as disciplinary strategy and (2) creative production as social critique. This roundtable will explore the confluences and conflicts that arise when thinking about creativity as both an activity that crosses boundaries and disrupts discipline, but also an activity for which and in which one is trained or disciplined. Each speaker will present a short position paper (7-10 minutes), which will leave ample time for discussion among the panelists and with the audience. Questions raised by the panel include: What are we privileging when we position creativity as a restorative force? What is the role of tactical creativity in relation to dominant systems? What are the tensions between a social critique of creativity and creativity as feminist, anti-racist, and social justice oriented practice? How might creativity make visible boundaries and disciplining assemblages that otherwise appear as naturalized? How might creativity be tactically subversive? How might it be a disciplinary strategy? What are the possibilities for a politics of creativity that accounts for these tensions?

Moderator: Steven Pokornowski

Contributions:
Josef Nguyen (University of Texas at Dallas; josef.nguyen@utdallas.edu)
Steven Pokornowski (Rio Hondo College; steven.pokornowski@gmail.com)
Margaret Rhee (University of Oregon; emjrhee@gmail.com)
Amanda Phillips (Georgetown University; amanda.phillips@georgetown.edu)

Kim Brillante Knight (University of Texas at Dallas; kim.knight@utdallas.edu)
Jih-Fei Cheng (Scripps College; jcheng@scrippscollege.edu)

Friday Plenary Session with Darryl Cunningham, 5:30 PM-7:00 PM, Augusta 1-2-3

Art Exhibit and Reception, 7:30 PM-8:30 PM, Peachtree 1 & 2

Session 8: Saturday, November 5, 8:30 AM-10:00 AM

Panel 8A: Saturday, November 5, 8:30 AM-10:00 AM *Ansley 1* (no AV)

ASLE panel at SLSA: Creative/Creating Environment

Three panelists, James Barilla, Karen Leona Anderson, and Helena Feder, will be reading new creative non-fiction and poetry (and discussing creativity in the Anthropocene in the Q and A).

Chair: Helena Feder

Readings of Creative Writing by:

Helena Feder (East Carolina University; federh@ecu.edu)

Matter of the Anthropocene "Light" and "dark" material, human feeling and human technologies live alongside the hard facts of animal lives, ours and others. From nonhuman animal cooperatives to neutron detectors, dying long leaf pines and the high windows of poets, these poems inhabit, expand, and contract the energy and matter of the Anthropocene.

James Barilla (University of South Carolina; BARILLAJ@mailbox.sc.edu)

It's a blustery Sunday morning, and I'm out walking the dog. That probably sounds pretty mundane, but I'm not your average dog walker, and Freedom, although he looks the part of a typical black lab, is not your average dog. I've never actually "owned" a dog myself, and Freedom is no mere pet: he's a service dog in training, and he spends his weeks in prison, where the lights come on at four in the morning and his trainers lead regimented lives. When I look at Freedom, I see a potential blueprint of sorts, a descendant of wolves sculpted by the forces of domestication and coevolution into a model for creatures of a different stripe. Somewhere in there lies the sweet spot known as companionship, and that's ultimately what roboticists are aiming for with software and hardware: a robotic version of Freedom, built to trot along at my side. Their biomimetic creatures are built to make us feel what we feel when we spend time in the company of an animal like Freedom. All of which, for a naturalist accustomed to the idea that anything that barks and begs must be alive, is quite disorienting. There's something about the prospect of a such a creature that is deeply unsettling, something that triggers an uncomfortable series of questions about the nature of companionship. Which rung of the tree of life, that vast, expanding taxonomic diagram we use to make sense of everything that scurries and flits, photosynthesizes and infects, do these creatures inhabit? What does it mean to love the natural world, if it includes cybernetic organisms with soft fur and a charming, soulful gaze? This essay

will explore these questions through a series of encounters with creatures like Freedom and the companion robots AIBO and PARO.

Karen Leona Anderson (St. Mary's College of Maryland; klanderson@smcm.edu)

Too Much Against the background of extinction, these poems will consider the environmental consequences of human attitudes towards animal and plant proliferation. From the "trash birds" that inspire contempt in birders to invasive species such as kudzu or purple loosestrife to domestic pests to uncontrollable algae blooms, these poems will focus on human anxieties around growing, ignoring, controlling, and exterminating the populations around them.

Panel 8B: Saturday, November 5, 8:30 AM-10:00 AM *Ansley 2* (projector and screen)

Scale Variance 1: Theory and Aesthetics

Scale variance is the opposite of scale invariance, the smooth scaling represented by fractal patterns, nested Matroyshka dolls, or the growing and shrinking characters in Gulliver's Travels and Fantastic Voyage. Scale variance means that changes of size lead to changes of form. In recent criticism and anthropology, this phenomenon also goes under the names of "scale effects" (Timothy Clark), "nonrecursiveness across scales" (Wai Chee Dimock), and "nonscalability" (Anna Tsing). How do aesthetic forms interact with this phenomenon? How does scale variance relate to debates about emergent complexity and reductionism that have, at least since Bergson's *Creative Evolution*, fuelled arguments for nature's undetermined creativity? Individual papers address scale variance in science writing, architecture, new materialist philosophy, science fiction, the detective novel, and other archives. As a response to general discussions of scale driven in part by the Anthropocene discourse, this double panel advances the topic by focusing on a single concept.

Chair: Derek Woods

"Proper Scale" and the Ecosystem Concept
Derek Woods (Rice University; derekjohnwoods@gmail.com)

Opening this double panel, my paper briefly introduces scale (in)variance, drawing on science writing such as James Gleick's "Chaos: Making a New Science" and Benoit Mandelbrot's "The Fractal Geometry of Nature" I move on to discuss scale variance as a function of duration rather than space. Stephen Jay Gould's concept of "proper scale," from "The Golden Rule: The Proper Scale of Our Environmental Crisis," helps me add time to this problematic. For Gould, proper scale is a narrative frame that sets the temporal boundaries that allow an event (his example is species extinction) to be meaningful, a duration somewhere between nihilistic stretches of deep time and the shallow time of the news cycle. His essay implies the existence of bounded temporal domains to which knowledge and poetics need somehow to be matched. As a contribution to science studies, my paper tests this relation between scale variance and proper scale on the terrain of a specialist ecological literature that takes shape between Simon Levin's 1989 MacArthur lecture and the present, a discourse concerned with both spatial and temporal scaling and their relation to the still-controversial ecosystem concept.

Scaling Laws and Disciplinarization
Zach Horton (University of Pittsburgh; zhorton@english.ucsb.edu)

For a complex concept, scale is remarkably at hand, ready to be deployed in innumerable contexts. Most academics deploy the term without definitional concern, suggesting that "everyone knows what scale means." And yet, as becomes clear in interdisciplinary contexts, nearly everyone seems to have a different idea of what exactly scale means. In this talk I attempt a brief disciplinary genealogy of scale, tracing the academic use of the term to four specific disciplines, each of which defines and deploys the term differently. Getting to the bottom of the conflicting notions of scale that most hybrid disciplines have borrowed—often without awareness of the provenance of these ideas or their contradictory entailments—not only clarifies what we can mean by scale, but also brings into relief the intimate relationship between scaling laws and diciplinarization. Whether scale is taken to be a form of scalability (a relationship of homologous structuration) or a prohibition against freescaling (a relationship of scalar difference) is not only dependent upon particular disciplinary uses, but also plays a role in constituting disciplinary boundaries through those deployments. In other words, scale disciplines just as much as disciplines scale. In the course of this presentation, I examine four primary disciplinary stabilizations of scale (or scalar stabilizations of discipline): those of cartography, physics, engineering, and mathematics. Each discipline partly defines itself based upon the scalability or non-scalability of its characteristic objects of study, disciplining its access to those objects as a function of scale restrictions.

Megalopolis: Speculative Infrastructures at Scale
Joan Lubin (University of Pennsylvania; lubinj@english.penn.edu)

This paper collates a set of postwar thought experiments in the scalability of the city form across the discourses of science fiction, architecture, urban planning, and national security. In The Year 2000: A Framework for Speculation on the Next 33 Years, RAND analyst Herman Kahn speculated that the millennial population of the United States would be reconsolidated into sprawling megalopolises composed of the concatenated urban centers of his own 1967: Boston to Washington, DC, would become Boswash; Chicago to Pittsburgh, Chipitt; San Francisco to San Diego, Sansan. Each megalopolis would be a city composed of the vestigial city-forms of its constituent precursors, a self-similar scaled model of urban form. This paper traces the figure of Kahn's megalopolis through science fiction by Ursula Le Guin, Ernest Callenbach, Robert Silverberg, and William Gibson that tries to imagine the point of discontinuity in the scaling up of the city form. By reading science fiction as a genre that formalizes scale variance, I draw it into contact with contemporary urban planning and architectural discourses that posed the question of how to humanize infrastructure to scale smoothly between people and the apparatus of the state. This paper provides an inventory of speculative infrastructures that pose the question of scale variance as a problem of urban sprawl.

Respondent: Thomas Lamarre

Panel 8C: Saturday, November 5, 8:30 AM-10:00 AM *Ansley 3* (projector and screen)

Bergsonian Creativity and its More Contemporary Evolutions

In his critique of cinematographical movement as a misrepresentation of motion in enframed, frozen, and static states, twentieth-century French philosopher and mathematician Henri Bergson offers a powerful philosophy of movement. For Bergson, the concept of "creativity" is that which refers to real becoming as opposed to being. Perhaps most famously in his 1907 text Creative Evolution, Bergson describes "creativity" as élan vital, "stream of consciousness," "flow of reality," or duration. For him, change is growth, growth is creation, and creation is freedom. Hence, Bergson's theory of time is a critique of metaphysics because evolution is the expression of a creative urgency generated in the process of time itself rather than something predetermined. Ultimately, what is creative is that which produces effects that expand and transcend being as, for example, memory moves from matter to mind and back again. This panel explores Bergson's philosophy of movement and some neo-Bergsonian offshoots that further evolve his concept of duration. First, the panel engages a critique of "creativity" through Alfred North Whitehead's concept of "novelty." Then, it addresses fundamental differences between Bergson's concept of èlan vital and vitalism as a historical scientific doctrine. Further, this panel interrogates Bergson's presence and influence within Gilles Deleuze's critique of Kant's category of recognition by arguing for creativity emerging from actual-and-virtual pairing rather than a distinction between possible-and-real. Finally, it explores how the notion of duration is echoed in twenty-first century critiques of digital culture as a form of hyper-spatialization which precisely parallel Bergson's critique of space.

Chair: Maryann Murtagh

The Vital Impetus beyond Vitalism, or, The Creative Intensification of Life
Annu Dahiya (Duke University; annu.dahiya@duke.edu)

Despite disavowing vitalism in his writings, Henri Bergson is remembered as a vitalist. This paper works out the differences between Bergson's élan vital (or vital impetus) and vitalism as a scientific-medical doctrine. Vitalism, for Bergson, rests on a conscious/unconscious binary—one that does not theoretically hold within his larger metaphysics. If there is not for Bergson a vital force unique to living beings, what distinguishes them from inert matter? Life is when consciousness is most awake but is not as central a term in relation to matter or the inorganic as that of memory or consciousness. Bergson manages to show the particularity of life without divorcing it from the rest of the world: the possibility of life in matter-memory arises in moments there is a hesitation in inert matter. In terms of the relationship between the origins of life and matter, Bergson connects and distinguishes life and matter through movement. Vitalism, in contrast, creates a sharp distinction between material and living or non-life and life. A difference in kind in the present, life becomes different in degree to matter the farther back we move into our evolutionary past. Rather than a life-force specific to the organic, for Bergson, life has the ability to 'unwind' the concentrated forces of matter. The dual direction of life ensures matter is not rendered passive and inert in the specification of life. Rather, the resistance of matter creates a productive tension for the creative intensification of life.

Against Hyperstasis: Duration and the Neo-Bergsonist Critique of Digital Culture
Yair Rubinstein (Duke University; yair.rubinstein@duke.edu)

This paper will argue for the increased resonance of Bergsonist duration to contemporary critiques of digital culture (such as social media, smart phones, online games, etc). Duration for Bergson is a qualitative, temporal process that must be lived through and felt to be properly experienced. It is this experiential aspect of Bergson's notion of duration that I will argue has been inflected in both popular and scholarly resistances to the supposed perils of digital culture, i.e. its omnipresent connectivity and hyper-spatiality. While the critique of culture as being fundamentally organized around atemporal, ahistorical, and spatial axes is not necessarily new (i.e. Jameson's Postmodernism or the Cultural Logic of Late Capitalism), I will argue that our current conjuncture has given standard critiques of spatialization a pointedly neo-Bergsonist inflection. This is because of contemporary capital's unprecedented intensification of global communication, which as a result, has heralded a kind of vitalist imperative to re-experience time qualitatively. From popular articles declaring a desire to disconnect from the internet and live our 'real lives,' to more theoretical critiques (i.e. Jodi Dean's notion of communicative capitalism, Simon Reynold's denunciation of digital culture as being in a state of paralytic 'hyperstasis'), I will explore the possibility of a 'durational turn' occurring as a critical reactionary formation to the supposed atemporal 'hyperspace' of digital culture.

A Schizophrenic Clattering of the Jaws: Encountering Process Philosophy in the Nonhuman

A. L. Sakrison (Arizona State University; asakriso@asu.edu)

Henri Bergson said that the present is "simply what is being made," but what does it mean to be made differently in the era of climate change? If, according to Deleuze's critique of Platonism and ideal forms, difference is not to be thought of as departure from an original or model, but as the manifest identity of a continually differentiating being, then how do we account for an undeniable sense of alteration when we encounter an ecosystem in crisis, a "ruined" environment, or a destroyed landscape? This paper responds to a call to uncover the ways in "which the relational, processual, and affective materialities of space and place might be apprehended" (McCormick 2010) by examining an encounter with dying oysters in the "dead zone" of Hood Canal, WA. Warmer waters and ecosystem shifts led to a thinning of the oysters, and dead oyster shells that had developed three holes in the shape of screaming faces were arrestingly scattered everywhere. The rupturing presence of these oyster faces is used to consider whether or not there is room for "agents of destruction" (Colebrook 2016) or a concept of alteration within Deleuze's process metaphysics. This work illustrates how the nonhuman can communicate a different accumulation of difference, or its own duration. Beyond recognizing "alteration" in any sense, in encountering the screaming oyster faces we become attuned to our own role in the process of emergence—we recognize that we have shifted the conditions of becoming to a new set of potentialities.

Panel 8D: Saturday, November 5, 8:30 AM-10:00 AM *Ansley 4* (projector and screen)

Lab Culture 2: Lab in a Box

This panel is part of a stream that explores "lab culture" in the arts humanities. Practitioners from a variety of laboratories will discuss the politics of creating and maintaining an arts/humanities

laboratory. They will also discuss recent research emerging from their labs. This specific panel explores material culture and subject formation both in the lab itself and in its research projects.

Chair: Isabel Pedersen

Boxes and the Work of Articulation
Darren Wershler (Concordia University, Montreal; D.Wershler@concordia.ca)

Media labs do many different things, but one of the things that they do most frequently is to *articulate*, in the precise sense that Stuart Hall uses the term. This talk will consider the process of laboratory articulation in terms of the boxes that help to facilitate it. The media archaeology lab at Milieux Concordia is increasingly populated by a bewildering array of small metal and plastic boxes. Most of them are manufactured somewhere in the Pacific Rim. They are relatively nondescript in appearance, and have poor interface design at best. They arrive with almost no instructions, and they require a substantial amount of fiddling in order to figure out how to use them in the first place. Some cost almost nothing; others are worth thousands of dollars. We use almost none of them for their ostensible purpose. What we use these boxes for is the act of articulation, that is, the linking of disparate elements together (e.g. a first-generation video game console and a contemporary digital flatscreen monitor) to create a temporary unity (e.g. a functioning gaming system). There's nothing necessary, determined or even correct about these unities; the individual components have been utilized in others in different ways, and no doubt will be again. The argument that I want to make is that it's important to think of these articulations with Hall in mind because they occur on an ideological as well as a technical level. As media theory after Kittler (particularly the work of Wolfgang Ernst) argues, the sort of articulation that lab boxes accomplish is deeply concerned with signal processing and temporal synchronization. But that analysis alone, I'd contend, is not enough. Both media archaeology and platform studies need to be re-introduced to technological theory informed by models of communication other than Shannon-Weaver (especially James Carey's ritual model).

The Politics of Making a Media Archaeology Lab
Jesper Olsson (Linköping University, Sweden; jesper.olsson@liu.se)

While the concept and phenomenon of the lab have been heavily exploited in contemporary academic and artistic practice (and in culture as a whole), the idea of a media archaeology lab still has a critical leverage. Not least by offering a historicizing and materialist antidote to the ideologies of digitization and the insistent idea of constant technological progress. In this paper I will discuss these affordances of the media archaeological lab as well as the politics of establishing such an environment. More specifically I will look into the challenges and potentials of building a lab as a collaborative venture between the university and the computer museum in Linköping, Sweden. Situated on the threshold between academia and the public sphere, and aiming to explore the con- and disjunctions between scholarly and artistic practice, as well as public knowledge work, such an endeavor poses specific problems in regard to epistemic and institutional politics. How to negotiate the relationship between humanities and the the 'scientistic' heritage of the lab? How to fund an activity that attempts to wed artistic work with scholarly practice? How to define a distinct experimental approach of media archaeology in relation to the activities in hacker cultures? And, how to situate such a new kind of knowledge

institution – a kind of labrary, as Jeffrey Schnapp has suggested – within the existing infrastructures of universities, museums, libraries, and similar public institutions?

Entangled Aesthetics and Materialities – The Lab as a Network of Interdisciplinary Collaborations

Jakob Lien (Linköping University, Sweden; jakob.lien@liu.se)
Ragnild Lome (Linköping University, Sweden; ragnild.lome@liu.se)

Must a lab be site specific? Or can we think of the lab rather as something defined by its practices? Can a lab be a network?
In media archaeology, we often talk about finding new perspectives within the entangled histories of literature, media and art, on drawing attention to forgotten practices and showing how they operate in the present. But how do we approach these questions in a more practical way? And how do we do to conjoin art and media forms of the past that have hitherto been separated by a historiography limited by disciplinary boundaries? This paper will outline some perspectives on research taking place at this juncture that needs to be interdisciplinary at its core, but still is often regulated by disciplinary borders.
More specifically this paper will focus on the Ph.D. initiated, Nordic research network (and an annual journal and independent small press) called Sensorium (www.liu.se/sensorium) and the collaborations that has developed out of its interdisciplinary activities. Rather than building upon more established notions and instantiations of a DH- or media lab, Sensorium has found inspiration in the German media scholar Siegfried Zielinski's *variantology* and *anarchive* as a methodological approach as well as an alternative entity to the traditional archive – or what we might call an "aesthetic media *an*archaeology".
Emphasis will be on both the beneficial and problematic aspects in terms of academic knowledge production, as well as more practical experiences and institutional boundaries

TRON: What have you become?

David Munns (John Jay College, CUNY; dmunns@jjay.cuny.edu)

I follow the suffix tron. I take up Robert Proctor's challenge to grapple with the "pragmatics of language," though with technological and scientific instruments and facilities named "tron" rather than disciplinary regimes. A suffix like tron is, in Proctor's terms, an "embodied symbol." When scientists built and then named their new device a tron, whether it was a cyclotron or a phytotron, they inscribed a set of meanings for the world to see, as much as ancient knights displayed heraldic shields. By following the lineages of the trons of physics or biology offers insights, I shall argue, into how scientists, governments, industries, and the public understood that strange period of peace lined by imminent nuclear annihilation called the Cold War. Above all, the embodied symbol of the suffix "tron" signals the centrality of modernism to postwar science, namely that technology would solve social problems and that scientists became technologists to master both nature and society. Notably in the life sciences, modernist trons speak of an era that demanded control, be it control over nature, control over populations, or ultimately control over minds and thoughts, and put its hope for that control in technology. Trons evince a people that sought security and salvation in machines and systems.

Panel 8E: Saturday, November 5, 8:30 AM-10:00 AM Ansley 5 (projector and screen)

Science, Occultism and the Arts 1: Magnetic Modernism and Scientific Spiritualism

This is the first of three panels in a proposed stream entitled "Science, Occultism, and the Arts in the 19th and 20th Centuries" which brings together international scholars to address this subject.

Chair: Fae Brauer

'A Magnetic Current of Thought': Gauguin as *Révélateur* and Hypnotist
Barbara Larson (University of West Florida; blarson@uwf.edu)

Like many Symbolists with occult leanings, Gauguin claimed a superior capacity to penetrate and reveal nature, an act that could be achieved through painting. In this way the ordinary viewer would experience raised awareness of a higher dimension of truth. For example, in response to an admirer of his painting *Vision after the Sermon* Gauguin said, "I am like an Inca who has returned to the sun. If I awaken in you a sense of the beyond, it is perhaps through a magnetic current of thought." Critics and friends remarked on the hypnotic effect of the artist's works. This paper examines Gauguin's interest in color experiments by psychophysiologists Charles Henry and Charles Féré that were indebted to the concepts of dynamogenous colors that produce heightened response and inhibitory colors that were enervating, with a combined collective effect that, according to leading psychologist and hypnotist Hippolyte Bernheim, produced hypnotic effects. Yet the combination of the two were also seen as necessary for overall harmony by Henry and Féré and factored into Henry's philosophy of man's relationship to the universe, a position not unlike Gauguin's discussion of those colors that corresponded to the ecstasy and sorrow inherent within nature, that together were an essential part of his program of universal harmony. Gauguin's hidden scientific agenda with its potentially hypnotic dimensions is discussed against the backdrop of the artist's claims to be a *révélateur*.

Mesmeric Performativity: Neo-Magnetists, Hypnotic Bodies and "l'art inconscient"
Fae Brauer (University of East London; University of New South Wales; fay.brauer@unsw.edu.au)

Amidst the flourishing of Neo-Magnetism during Jean Martin Charcot's reign at Salpêtrière and Hippolyte Bernheim's at the Hôpital de Nancy, French alienists, neurologists, psychophysiologists, parapsychologists, occultists and Rosicrucians explored the potency of imagistic suggestion and sensory activation alongside the vibratory power of magnetic emanations to unleash the unconscious and generate creativity. In states that Pierre Janet called "automatisme psychologique," Jules Janet called "somnambulisme magnétique," and Albert de Rochas called "psychic theosophy," the sensory subjectivity of magnetized subjects was considered so heightened that without any training, they could create art. So prevalent did these explorations become that while mesmeric states were being induced by sensory bombardment and images of hypnotic bodies at the Salon de la Rose+Croix, the parapsychologists Rochas and Émile Magnin were experimenting with ways in which their magnetized subjects, particularly the artist models, Lina and Magdaleine G., were able to perform plays, operas and dance. Regarded as impossible to attain in "modern oppressive civilization," the playwright with a PhD in superconsciousness, Jules Bois, explained that these states could only be attained "by

hypnosis, by that artificial sleep that dips the soul into delicious oblivion and brings back the natural being, magnetic and rhythmically responsive." By focusing upon the hypnotic bodies and mesmeric performativity of Lina and Magdaleine G., as well as at the Salon de la Rose-Croix, this paper will explore how and why they appeared as an authentic attainment of what Bois called "l'art inconscient."

Teleplasmic Traces: Technology and Theatre in Thomas Glendenning Hamilton's Scientific Investigations of Spiritualism
Serena Keshavjee (University of Winnipeg; s.keshavjee@uwinnipeg.ca)

By the late 1920s and 1930s interest in the religion of Spiritualism and scientific attitudes towards the phenomenon were waning in the West. Nonetheless, a small group of men kept up the investigations into mediumship, including Charles Richet in Paris, William Prince in Boston, and the lesser known Thomas Glendenning Hamilton in Winnipeg. Like these other doctors and scientists, Hamilton had an international profile and he published regularly in journals, including *Light* and *Psychic Science*. He delivered 85 lectures across North America and Europe and traded his photographs of the medium Mary Marshall, so that they are now found in archives around the Western world. Consequently, Winnipeg is a repository for one of the best archives of Psychic Studies in the world.

Dr. Hamilton carried out controlled experiments with mediums for over 20 years. His main contribution to the international psychic research community during the 1930s was his expertise in photographing the fragile excretions labelled "teleplasm," and the manifestations of ghosts he described as "miniature face forms." His facility with technology and design principles, including stereoscopic equipment, electrically controlled flashbulbs and a purpose built cabinet, with elements of luminous paint, enabled him to capture ectoplasm on film. Hamilton seems to have modeled his photographs of Marshall on Albert Freiherr von Schrenck-Notzing's infamous images of Eva Carrière excreting ectoplasm from c. 1912.

Hamilton is little known outside Winnipeg, and for this paper I will begin to contextualize his investigations internationally, and examine the rich visual material, expensive equipment, and Hamilton's own inventions, with a focus on the technical, theatrical and the performative side of scientific séances.

Panel 8F: Saturday, November 5, 8:30 AM-10:00 AM *Ansley 6* (projector, screen, and speakers)

Active Visual Perception

Chair: Rivka Swenson

How to Perceive Objects—Aesthetic or Other
Hedwig Fraunhofer (Georgia College; hedwig.fraunhofer@gcsu.edu)

Following Martin Heidegger in her claim that the given world is "primarily creative and conversational – rather than logical," Claire Colebrook conceives of "a general creativity: a world in which aesthesis or sensation, feeling or being affected is primary." As she points out, Gilles Deleuze and post-phenomenologists "seem to privilege the primacy of aesthetic

perception." (Sex After Life 57) In this vein, we can then see creativity or affect as anti-Cartesian, as an energy that "does not presuppose self-consciousness" (Reidar Due, qtd. by Colebrook 58). But let me ask: Does such a reading not ultimately keep intact the Cartesian dichotomy between mind and matter, logic and feeling, only to reverse the hierarchy? In my research, I am interested in the creative, dramatic production of European modernism, and in how to approach this creative production. Arguing that existing modernization theories have been unnecessarily one-sided, my work offers a rewriting of modernity that cuts across binary methodologies – human subjectivity and materiality, logic and affect, epistemology and ontology, and ultimately the human and the nonhuman. My goal is to provide a materialism of literary texts as "special bodies" in Jane Bennett's sense, textual bodies that help connect humans and matter. In Bennett's words, such texts "help us feel more of the liveliness hidden in [a variety of bodies] and reveal more of the threads of connection binding our fate to theirs." (Bennett 234-235)

Of Vitrines and Bioreactors: Museums and Methods of Preservation and Display
Helen Gregory (Independent scholar; interferenceviolet@gmail.com)

Since the 1960s, artists have drawn upon the museum vitrine as a method of display, capitalizing on the history of its multiple uses, from museum display to church reliquary, and also on its role in science and medicine as a means of displaying specimens. Working from the premise that, in contemporary art, the bioreactor functions in much the same way as a traditional museum vitrine, I argue that both of these structures act as a disciplinary barrier between the viewer and the enclosed objects. These methods of display embody contradictory positions in that they respond to an implied duty of care by providing a means of preservation while at the same time offering up spectacle for public consumption. The vitrine provides protection against both the viewer and the environment, thus preserving and extending the life – or afterlife – of the enclosed objects. This function closely parallels that of the bioreactor used in the sciences, and more specifically within the context of my argument, in bioart. Drawing on several case studies in which glass acts as a barrier that both protects and reveals its contents (including Snæbjörnsdóttir/Wilson's nanoq: flat out and bluesome, Fiona Tan's Depot, Mark Dion's Neukom Vivarium, and the work of Tissue Culture and Art Project), I illustrate how the vitrine and the bioreactor act as a marker of difference that dictates how the viewer can understand and interact with the enclosed objects, specimens, or cultured tissues.

The Fourth Dimension in Mathematics and the Visual Arts
Jean Constant (Hermay.org; jconstant@hermay.org)

This short paper focuses on the geometer's descriptive of the 4th dimension as defined by Coxeter and Schläfli and how it can be integrated in the visual arts. The presentation revolves around 4D Draw, a geometry graphic software created by MacArthur grant recipient Jeffrey Weeks. In a first step, I introduce the topic with a brief overview of the concept of the fourth dimension, its historical background in the humanities - philosophy and literature; the visual arts, architecture and films and follow by the mathematical definition of the 4th dimension. The main body of the paper is articulated around a descriptive of the program 4D Draw and the transformative steps I use in various graphic visualization programs to create an artwork based on an image originated in 4D Draw. The demonstration centers on a unique 4-dimensional object

made of 24 vertices, 96 edges and 96 triangular faces called the octaplex. I am past professor of Visual Communication, presently involved in research on the aesthetics of Mathematics and art. I already wrote several papers on this particular theme, two of them in the process of being published next June by academic publishers, in the US and in Europe. I was also invited introduce this topic at the upcoming International Bridges Mathematics and Art conference next August.

THE LAKE-GLASS HOUSE
James Bardis (McGill University; jamesbardis@gmail.com)

A three part presentation beginning with a short fictive and imaginal setting on the grounds of a glass house by a lake where an artist conducts psycho-dramas with his audience that explore the interface between the observer and the observed, interiority and exteriority and patiency and agency. Part 2 Explores a proto-dialectical logic that deals with the fundamentals of cerebral thought's claim to rationally order and process the "world," phenomenal, scientific or otherwise. And Part 3 treats, in historical fashion by reconstructing the philosophical exchange between Alexander the Great and the Indian gymnosophist Dandimus, the architectonics that form the foundation of "The Lake Glass House."

Panel 8G: Saturday, November 5, 8:30 AM-10:00 AM *Ansley 7* (projector, screen, and speakers)

Natural Knowledge, Environment, and Survival in the 18th and 19th Century Circum-Caribbean World

This panel examines the interaction between natural knowledge and ideology in the 18th and 19th century circum-Caribbean world, a time and place where ideas about the environment carried enormous political significance. Natural knowledge structured the global and hemispheric understandings of a landscape that often teetered on the brink of sovereignty for the many nations that vied for its control and tried to survive in its climatic milieu. Settlers, soldiers, and other residents responded creatively to a landscape that in most registers was one that whites avoided. The papers in this panel examine how they did so. Katherine Johnston explores how 18th century British settlers experimented with ways to protect their food from insects and their bodies from the searing heat. Elaine LaFay shows how 19th century U.S. physicians in the “American tropics” of south Florida sought to coax unwilling tropical plants from the earth in a medically and agriculturally driven pursuit to recreate the tropical landscape. Finally, Lauren LaFauci argues that during the U.S. Civil War, Confederate medical officers appropriated black and Native knowledge of local medicinal plants to stave off an array of diseases ravaging their troops. As these papers argue, cutting across these efforts is the exploitation and adaptation of local knowledge in the creation of a landscape amenable to white sovereignty. Drawing on travel writing, medical and agricultural literature, weather diaries, and archival materials, these papers emphasize the centrality of natural knowledge to 18th and 19th century anxieties and ambitions in the circum-Caribbean world.

Chair: Susan Scott Parrish

Slavery and Deforestation: A Climatic Conundrum
Katherine Johnston (Loyola University Maryland; kmjohnston@loyola.edu)

During the eighteenth century, British colonists in the Greater Caribbean believed in a strong connection between bodily health and the environment. As they settled in places with warm, humid climates – particularly the West Indies and the Carolina/Georgia Lowcountry – they often tried to change those environments to better suit their bodies. Many settlers believed that cutting down trees, for instance, would increase air flow and decrease moisture in a region, making a place healthier. But as they attempted to manage the environment in these places, colonists often found their actions had unintended consequences.

First, settlers noted that deforested areas could become too dry to support the cultivation of crops. As a result, they faced a tension between creating a healthy environment for their bodies and sustaining conditions that would facilitate cultivation. Second, as planters tried to manipulate the climate to suit European bodies, they risked undermining their own climate-based arguments for African slavery. Drawing upon concepts of climatic determinism, British planters often justified African slavery by arguing that African bodies were particularly suited to labor in the Greater Caribbean climate, while Europeans would find it debilitating. But as planters attempted to alter the environment to suit their own bodies, their climatic justifications for African slavery looked increasingly dubious. How could planters claim that only Africans suited the West Indian and Lowcountry climate while also insisting that these places were growing increasingly healthy for European bodies? This paper examines the limits, both tangible and rhetorical, of managing the environment in Greater Caribbean plantation societies. It reveals the nuances and contradictions involved in conceptions of health and the environment, as well as the frictions between bodily health and economic growth, and between climatic theory and racial slavery.

Sovereignty and Botany in the American Tropics
Elaine LaFay (University of Pennsylvania; elafay@sas.upenn.edu)

Nineteenth-century physicians and patients grappled with the climate along the U.S. Gulf Coast, an area that seemed to defy classification. To many observers, this region existed in a global geography of tropical and partially tropical locales that shared many key features. 'The tropics,' a politically charged geographic term, could be alternately lethal or rejuvenating. Questions of tropicality cut across efforts to consolidate U.S. sovereignty, tame the landscape, and manage the bodies within it. This paper highlights attempts to harness the power of the tropics in 1830s Florida. A cadre of physicians wanted to entice American citizens, especially invalids, to travel southward and join them in endeavors to cultivate tropical vegetation and simultaneously be healed by the climate. These doctors drew on various resources to realize this project — invalid populations, government funding, indigenous connections, trade in vegetation with tropical countries—and ultimately recreate the region's environment. On U.S. soil, the argument went, the tropics could be 'improved' and ordered for U.S. colonization and cultivation. These attempts refracted anxieties about ownership and belonging in an unruly region. Scholars have studied tropicality elsewhere or, on the U.S., in later time periods. This paper expands that literature by exploring these questions in a "tropical borderland," a place where tropical status was hotly contested. Tropicality became an avenue for experimenting with the health of the country, settler

colonialism, and the power to bend the environment to an imperial will at the fringes of the U.S. Empire.

Botanic Knowledge and Civil War
Lauren LaFauci (Linköping University; laurenlafauci@me.com)

Allopathic medicine did not in the first half of the 19th century enjoy the epistemological hegemony that it does today. Indeed, those we now call "MDs" faced stiff competition from those we now call "folk" healers, such as homeopaths, conjure doctors, and hydropaths. These practitioners possessed deep understanding of local materia medica, a nature-knowledge that held great value during a time when disease etiology was not understood: truly, botanical remedies often worked more effectively than did the allopaths' mineral formulae. In the southern states, the transferral of this valuable nature-knowledge among diverse communities complicates notions of a shared national or regional medical epistemology: webs of healing practices, anchored in small localities, characterized southern medical care. White men appointed black healers to treat both black and white bodies, while white women administered remedies to enslaved people; meanwhile, both whites and blacks appropriated Native knowledge. And as the southern "nation" marched toward disunion, Confederate medical officers facing a coastal blockade took these knowledge systems as their own, using them to formulate botanical preparations for the diseases rattling their army. As the Confederacy appropriated Native and black botanic expertise, its white citizens and scientists imagined the viability of a future southern nation in part through a botanic lens, exalting the South's "indigenous" species as signifiers of the region's "natural" independence from and superiority to the Union. Ultimately, this appropriation of botanic expertise for political gain triggered a loss of local knowledge in favor of a regionalism that resisted incorporation in the body politic.

Panel 8H: Saturday, November 5, 8:30 AM-10:00 AM *Ansley 8* (projector, screen, and speakers)

Crafting Science and the Science of Craft in the Long Eighteenth Century

This panel explores the intersections between science and craft in the long eighteenth century, paying particular attention to the ways in which both present theoretical and practical difficulty as categories of knowledge-making built by habits of hand and the work of the eye. The panel will address questions such as: what were the relationships between craft and science in the period? What methodologies and practices did they share? How was craft conceived of in the terms of science, and how was science understood as craft? What implications arise from considering these questions, especially with regards to the role writing or language plays in representing and mediating the material work of the hands and eyes in the science of craft and the craft of science?

Chair: Crystal B. Lake

Tacit Knowledge in the Eighteenth Century
Sean Silver (University of Michigan; srsilver@gmail.com)

This essay develops a vocabulary for thinking about craft knowledge in the context of the Restoration and eighteenth-century sciences. Modern scholars of scientific practice are largely indebted to Michael Polanyi for theories of tacit knowledge-- the habits of hand, eye, and mind that are responsible for scientific work, without showing up explicitly in reports of experimental results. It thereby offers a powerful methodological tool for thinking about abstract knowledge as a craft practice. Polanyi was part of an early 20th-century movement to develop collaborations between scholars and practitioners; his philosophical work emerged from his experience as a chemist in various partnerships with industry. Similar structural formations emerged in Restoration England and eighteenth-century France; these were such things as the Royal Society's History of Trades project (which had, as its ambition, a catalog of England's manual, preindustrial arts) or the partnerships emerging between the Royal Academy and the French silk industry. It is in places such as these, in writings by figures like William Petty or John Evelyn, that we may begin to reconstruct a historical, non-anachronistic language for thinking about tacit knowledge in the early sciences.

The Art and Science of Eighteenth-Century Paper Crafts
Crystal B. Lake (Wright State University; crystal.lake@wright.edu)

This presentation recovers the history of the earliest mass-printed paper crafts in Britain. Paper dolls, fans, wall paper, and pattern books engaged their users in acts of "critical making." According to Matt Ratto, critical making blends critical thinking with making, the former the work of the mind and the latter the work of the hands. The materials produced by critical making emphasize process and object equally; the product of critical making enjoys an agency that is as materially generative as it is conceptually provocative. Early paper crafts suggest that critical making has a long and interdisciplinary history. The first paper crafts were overwhelmingly produced in response to the first popular novels. They were the means by which enthusiastic readers of characters, plots, and settings could transform their conceptual experiences of text into three-dimensional theaters of print. The work of the mind and eye became the work of the hand; the public experience of the circulating novel became the private experience of the laboring individual. Early paper-crafts, however, not only encouraged their enthusiasts to pursue acts of interpretation, they also invited speculation on the nature and process of interpretation itself. By rendering fictions into ephemeral physical objects, early paper crafts subjected the conceptual to the material scrutiny of science. Early paper crafts were provocative not only for their final fragile products of whimsy, but for the ways those products embodied both the promises and the limitations of empiricism's investments in observation, proportion, and reason.

"So ready at my hand": Craft and Comfort in Robinson Crusoe
Sarah Tindal Kareem (UCLA; kareem@humnet.ucla.edu)

My paper explores the relationship between craft and comfort in Daniel Defoe's novel Robinson Crusoe. In Defoe's novel, comfort is conditional upon craft. I argue that Crusoe perceives objects in the world in a manner consistent with J.J. Gibson's theory of affordances. That is to say, Crusoe conceives of "table" not in terms of a set of given properties but in terms of the actions it allows: "I could not write or eat, or do several things, with so much pleasure without a table: so I went to work." I will argue, moreover, that these affordances are not merely pragmatic—the table affords the ability to write or eat—but also affective. The table affords a particular sort of

pleasure: comfort, a pleasure that is not entirely reducible to the sum total of the table's pragmatic functions. Key to Crusoe's sense of comfort is the extent to which the environment contributes to his sense of proprioception. He arranges his environment such that it anchors him in space. The purpose of craft is to create sufficient room for the body's ease of motion—"room to turn myself"—and also to place his possessions literally within arm's reach—"so ready at my hand."

The Inherent Objectness of Destruction within Creation
Courtney Ryan (Georgia Southern University; cr05484@georgiasouthern.edu)

Destruction is the harbinger of creation. Creativity is widely thought to be the process and generation of something new in the world but what happens when creation is born from the act of total destruction? Destruction being both the creator and the destroyer simultaneously. Looking specifically at the science and art behind the creation of ceramics, I intend to discuss the processes behind the making of ceramic sculptures and their inherent "objectness" that allows them to reside in both the realm of creation and destruction concurrently. This paper will highlight some of the personal scientific based discoveries I have made while working with this material (ceramics) that I have found to contain conflicting data when it comes to the true definition of creativity. I believe that ceramic based creative forms can only be created through the act of destruction, which contradicts the nature of creation and represents an alternate reality for which the works themselves reside. My sculptures specifically are made from cardboard, fabrics, and plastics, but once they have completed the process I put them through, those materials are in fact no longer present and have completely vanished from the final product which is a ceramic ghost of the original material. Thus creating a duality of inherent "objectness" within the sculptural form.

Panel 8I: Saturday, November 5, 8:30 AM-10:00 AM *Peachtree 1* (larger room, projector, screen, and speakers)

Roundtable: Global Weirding

The editors and select contributors of the upcoming special issue of *Paradoxa* on "Global Weirding" will discuss the issue and its focus on the aesthetic, political, ethical, and existential potentials that arise when weird ecological patterns or events converge with weird speculative literature. Jeff Vandermeer's acclaimed 2014 Southern Reach Trilogy (*Annihilation, Authority, Acceptance*) cracked open the space for thinking the weird and the ecological together—for experimenting with radical new ways of representing massive and mind-bending things like global warming, geological time, the Anthropocene, the life and afterlife of infrastructures, and so on. This issue attempts to further analyze the eco-literary link we're calling "Global Weirding"—mirroring the term proposed by some climate scientists to register that global warming does not simply mean higher temperatures but a global planetary ecology transformed in radical and sometimes highly unexpected ways. The discussion will range across the strange catalog of weird fiction and weirder science to illuminate those elements that offer alternative perspectives on and/or representations of ecological ethics, thought, aesthetics in our era of planetary crisis.

Moderator: Gerry Canavan

Contributions:
Andy Hageman (Luther College; hagean03@luther.edu)
David Higgins (Enver Hills Community College; dmhiggin@gmail.com)
Mindi McMann (The College of New Jersey; mindi mcmannm@tcnj.edu)
Matthew Schneider (University of Wisconsin at Milwaukee; mjschn982@gmail.com)
Ali Sperling (University of Wisconsin at Milwaukee; alison.sperling@gmail.com)

Panel 8J: Saturday, November 5, 8:30 AM-10:00 AM *Peachtree 2* (projector, screen, and speakers)

Creating Places 2: Wild Spots

Chair: Melissa Bailes

Created for Consumption: Botany, Colonial Cannibalism, and National/Natural History in Sydney Owenson's *The Wild Irish Girl*
Melissa Bailes (Tulane University; mbailes@tulane.edu)

Sydney Owenson, Lady Morgan begins her national tale, *The Wild Irish Girl* (1806), with an epigraph from an early-modern traveler, remarking of the Irish, "they are sweet to him who tries and tastes them." Begging the question of where savagery lies in imperial conquest, this rhetoric of cannibalism and consumption sets the tone for transforming the Irish into commodities, into nourishing food for the "body politic," that is, for Ireland's incorporation (or ingestion) into Great Britain with the Act of Union in 1800. Throughout this novel, the English protagonist, the Irish heroine, and the Irish population at large, are analogized with flowers and vegetables, sometimes delineated in great scientific detail, highlighting their symbolism and use value, as well as contentions of class and nation. However, in addition to the organic health and aesthetic beauty of national and natural hybridity, botanical imagery also conveys potential dangers of this sociological "engrafting." Drawing on works such as Erasmus Darwin's "The Loves of the Plants" and popular contemporary interest in "the language of flowers," Owenson melds science and sensibility, as well as natural history and national history. In doing so, I argue that she displays Ireland's past flourishing and the possibility, couched in these vegetable analogies, for future cultural regeneration on Irish soil despite the constant threat of English consumption of all that grows there.

"Misled by the picturesque appearance of villages": The rural idyll, hygiene, backwardness and creating the rural environment in Britain, 1870-1914

Keir Waddington (Cardiff University; waddingtonk@cardiff.ac.uk)

The more society felt it lost contact with the rural, the more metropolitan commentators idealized the countryside as a moral and healthy antidote to urban life, creating an ideal of the rural as an escape from urban grime that was to become widespread in British culture by 1914. Yet, public health officials and social investigators described a different environment. In their writings, they

drew on a medicalized understanding of place to present an image of filth and disease in apparent opposition to the bucolic image of green rolling hills and 'chocolate box' villages. In creating this alternate image, rural responses to sanitary problems were presented as somehow quaint or backward, often due in the *Lancet*'s words 'to the inherent slowness of the pastoral mind' and its failure to assimilate modern hygienic ideas. Through an examination of artistic and literary representations, sanitary reports, and newspapers this paper explores these dual images of the rural environment to investigate the moral typographies created though romantic representations and hygienic discourses. Drawing on cultural geographies of place – how the rural and individual communities could be fashioned through different representations - I examine tensions between cultural and sanitary representations and the interactions between them to explore how these competing narratives emerged in geographically particularized ways.

Defiant Captives and Warrior Princesses: New Representations of Womanhood in Writing of the Argentine Pampa
Ashley Kerr (University of Idaho; akerr@uidaho.edu)

In the late nineteenth-century, Argentine intellectuals turned their attention to crafting a cohesive national body at home and projecting a modern identity to the world. They relied heavily on the emerging fields of anthropology and ethnography, particularly with regard to projects of racial exclusion. These activities were generally defined as masculine endeavors, the vast pampas and cold steppes of Patagonia a playground for virile explorers. Although men dominated the Argentine natural sciences, there were women whose activities and texts engaged with questions of ethnography, miscegenation, and indigenous and criollo identities. In this paper I study Argentine Eduarda Mansilla and Englishwoman Florence Dixie, who published accounts with ethnographic value of their travels across Argentina. Both avid proponents of women's rights, they also each published a fictional text (*Lucía Miranda* (1860) and *Aniwee, or The Warrior Queen* (1890), respectively) that uses the indigenous world as a space for the formation of strong female characters who model behaviors and cultural models the writer wished to see implemented in her homeland. Here, I compare both authors' understanding of race and gender, as well as analyzing how gendered discourse changes in the generic shift from travelogue to novel. In addition to suggesting the importance of genre with regard to gender and indigenous representations, the comparison of the two women also permits an exploration of the similarities and differences between Argentine nationalist projects and British imperial efforts in the southern provinces.

Coffee and Tea Break, 10:00 AM-10:15 AM

Session 9: Saturday, November 5, 10:15 AM-11:45 AM

Panel 9A: Saturday, November 5, 10:15 AM-11:45 AM *Ansley 1* (no AV)

Creating Others

Chair: Kelly McKisson

Creating an Alternative Life: Michael K and the Garden
Kelly McKisson (Portland State University; mckisson@pdx.edu)

J.M. Coetzee's novel *Life & Times of Michael K* begins with noticing, at his birth, the gap of Michael K: "he had a hare lip. The lip curled like a snail's foot, the left nostril gaped" (3). Thus, readers are immediately faced with character who throughout the novel presents a gap - "his was always a story with a hole" - a failure to the image and idea of the human (110). However, beginning from this position of failure, as Halberstam has argued, allows a subject to create a counter-mode of common sense, to produce new possibilities: Michael K's failure and resistance to participate in a normative role frustrates the systems of biopolitical control that would incorporate him into the institutions of the state. Instead, this paper argues that Michael K creates an alternative life for himself, thus an alternative humanity: "I am becoming a different kind of man, he thought, if there are two kinds of man" (67). Michael K chooses to "stay behind and keep gardening alive, or at least the idea of gardening," constructing a different kind of relationship to the world, one of cultivation (109). Michael K creates his own family, proposing relationality between human as well as non-human animals, plants, and land – a family which defies even the subject-object binary. Michael K's posture of queer ecology constructs an alternative ontology of life, one which blurs established boundaries in favor of the overlaps and interconnections of ecological life.

Alien/Racial Forms in Jeffrey Yang's *An Aquarium*
Michelle N. Huang (Penn State University; michellenhuang@gmail.com)

Stacy Alaimo, in her work on pelagic new materialisms, argues, "The pervasive trope of the oceans as alien may alienate humans from the seas, but it may also suggest that sea life hovers at the very limits of what terrestrial humans can comprehend." This proposed paper extends Alaimo's suggestion that the boundaries of the earth-bound human are the very means by which we understand the category itself by excavating the nexus of racial and poetic form. Specifically, this paper examines the trope of alienation through Jeffrey Yang's *An Aquarium: Poems (2008)*. Aquarium, as a bestiary (and abecedary) of sea animals, draws our attention to taxonomic classification and its role in epistemic creation. Yang's oceanic denizens—abalone, barnacle, coelacanth, dinoflagellate, etc.—elicit an ambivalent response of wonder and disgust. They also evoke alienness and animality, two reoccurring tropes for Asian Americans, a racial group whose subjectivity has historically been conceived as radically foreign, inhuman, and inscrutable. Drawing from work by posthuman scholars such as Alaimo, Cary Wolfe, and Donna Haraway on one hand and work on Asian American experimental poetics on the other, I argue that through its reconfiguration of poetic and taxonomic forms of ordering, *Aquarium* provides a nonrepresentational lens for illuminating the submerged microstructures of race. Even in the absence of readily identifiable human bodies, poetry makes visible racial logics, and these insights in turn alter our understanding of the limits of the category "Asian American literature."

"What nature never intended her to be": Transitioning in Sui Sin Far's Short Fiction
Kayla Walker Edin (Milligan College; kwalkeredin@milligan.edu)

Sui Sin Far's *Mrs. Spring Fragrance and Other Stories* (published 1912) creates nuanced depictions of Chinese, American, and Chinese-American identities as fluid and intersectional. In

"A Chinese Boy-Girl," a father's cross-dressing son is removed from his care by a "well-meaning" white teacher; in "Pat and Pan," a Chinese family loses custody of its white foster son. Both stories suggest subtle critiques of the salvific (and white) New Woman featured so prominently in western literature at the fin de siècle. For children caught at these intersections of race, class, and politics, Sin Far depicts the consequences of "slight" cultural oversights and "minor" assumptions as nothing short of life and death. At a time of rampant sinophobia and homophobia in North America, this collection of short fiction creates a singular space where racial and gender identities are exposed as artificial and explored within the context of a growing and diverse Asian-American community. Sin Far's fiction re-creates "American" identity as a site of great violence and unlimited creative potential. Motifs like adopting, "passing," and transitioning become creative mechanisms for the complicated constructions of intersectional identity that characterize Sin Far's short fiction. My paper examines three of these stories in light of Sin Far's own gender non-conformity as well as biracial identity. I argue that she utilizes the trope of "transitioning" in order to expose our limited capacities for change and to resist claims of solidarity and unity as plausible solutions for a young country at the cusp of a new century.

Speculative Play and the Body Becoming Risk
Benjamin Haber (City University of New York; keepmoving@gmail.com)

The promise of abundant corporeal plasticity has made for strange and uncomfortable bedfellows. The unbounding of biological determinism from the priorities of capital and the waning power of religious conservatism in American politics has made a certain kind of queer body not just acceptable but paradigmatic of the new spirit of networked monetization. Queers have long been expected to encounter the body-self with an everyday sense of statistical risk, have dense social networks of bio-social exchange, and epistemological attachments to ontological interconnection and destabilization. In this paper I look to complicate the politics of queerness through a cultural analysis of the speculative moves to cultivate playful attachments to the body as risk. Looking at the affective creep of the doctor's office to the digital device, I highlight the cultural life of quantified understandings of embodiment and sociality as creating new circuits of desire and vulnerability. The development of a profitable infrastructure for risk play suggests both an intensification of biopolitical modulation and the possibility of new political affinities between disability/capacity and queerness that don't always already begin with representational logics and a fully formed subject.

Panel 9B: Saturday, November 5, 10:15 AM-11:45 AM *Ansley 2* (projector and screen)

Scale Variance 2: Theory and Aesthetics

Chair: Derek Woods

The Transversal Scale: Intimacy in Multiple Dimensions
Megan Fernandes (Lafayette College; megfern@gmail.com)

In J.G. Ballard's story, "The Thousand Dreams of Stellavista," a couple visits a suburban neighborhood of psychotropic houses that adapt to the personalities and moods of their inhabitants. The houses are not only responsive, but sentient and temperamental social structures

that are largely unpredictable. The real estate agent accompanying the couple addresses the shrinking and expanding houses: “Of course, you're getting nothing but custom units here. The vinyl chains in this plastex were hand-crafted literally molecule by molecule." In terms of scale variance, as the house size changes based on the intimacy with its inhabitants, so does the form. In recent years, new materialist theories have transformed inscrutable agentic assemblages into spaces of intimacy. In fact, intimacy could be defined as the acknowledgement of a secretive and cozy intersection between material bodies that requires a revised scalar imagination. Discussing this issue in an institutional context, Felix Guattari begins 'The Molecular Revolution' with a chapter on “transversality.” Though Guattari takes up transversality as a psychoanalytical term, he regularly refers to the “dimensionality” of the transversal and its ability to connote an "intellectual mobility across discipline boundaries." In the era of new materialist assemblages, what does it mean then to scale transversally? What does the dimensionality of scale offer to our understanding of haptic intimacies at the nano or molecular levels? How have writers and artists from J.G. Ballard to Cardiff and Miller explored the nostalgic and voyeuristic forms of intimacy that are the affective results of scale variance?

Hard-Boiled Biology: Apprehensions of Scale in Francois Jacob and Dashiell Hammett
Lee Brewster Norton (University of North Carolina at Chapel Hill; lnorton@email.unc.edu)

Reductionist arguments – especially claims that the science of biology can be “reduced” to the laws of physics – owe their power to the ease with which they scale. This is true of reductionist logic but also and especially its figural repertoire; scale-blind argument finds its alibi in an elegant rhetoric of self-similarity and infinite regress. My reading of Francois Jacob’s “The Integron” reveals the extent to which, at midcentury, the discourse of theory reduction inherently favored scale-invariant arguments. So Jacob, in search of evocative formulations, reaches for Matryoshka dolls and nested “black boxes”: the same scale-invariant image repertoire of the reductionism that he is arguing against. I then trace this difficulty of articulation into the genre of hard-boiled crime fiction, where the problem of theorizing emergence finds its unlikely version. Using Dashiell Hammett’s Red Harvest, I show how the hard-boiled protagonist – at once an individual actor among many and the self-appointed adversary of an emergent criminal ecosystem as such – mobilizes the semantics of life in order to make metaphorical sense of how his actions will ramify at higher “ecosystemic” levels. The “chancy” hard-boiled universe, in contrast to the Newtonian worlds of Holmes and Dupin, ultimately produces the hard-boiled worldview itself, which functions to inoculate the hard-boiled hero to the unanticipatable effects of his actions at scale.

Scalar Life
Matthew Taylor (University of North Carolina Chapel Hill; mattheta@email.unc.edu)

My paper will compare theorizations of hylozoism—or universal life—at the turn of the twentieth century (William James, Twain, Bierce, Doyle) and the present (Lovelock, Stengers, Latour, Bennett, and Connolly), paying particular attention to the continuities, homologies, and dissonances understood to obtain between the extreme spatial scales of atomic and planetary life. Placing these traditions within the increasing politicization of life (and biologization of politics) over the twentieth century, I will explore the ways that they imagine the ethical possibilities and dangers associated with hylozoism. Although both traditions make life-as-such both an object of

study and a methodological model, I will contend that the earlier discourse was more attentive to the risks—epistemological and ecological—of establishing life as a normative value. I will conclude with a discussion of the significant disciplinary and metaphysical implications of the century-long evolution of our current utopias of life. What, for instance, is vitalized—and what deadened—when everything is alive, especially in a moment of mass, anthropogenic extinctions?

Respondent: Thomas Lamarre

Panel 9C Saturday, November 5, 10:15 AM-11:45 AM *Ansley 3* (projector and screen)

Vibrant Machinery: Troubling Mechanism and Motion in the Eighteenth Century

This session seeks to reimagine the role of mechanical philosophy, theories of motion, and emerging technologies with regards to the production of English thought throughout the long eighteenth century. The period possesses a rich body of work that highlights the importance of machines to the cultural imagination, as well as supplies ample evidence of the proliferation of theories of mechanism and motion that heavily influenced the technological, scientific, and literary output of the era. With the continued success of new materialisms in recent years, a distinction has been made between two of the titans of eighteenth century philosophy, mechanism and materialism, and this constructed binary has tended to privilege the active or "vibrant" materialist theories over the supposedly homogeneous and static mechanical philosophies. However, this binary should not be overstated or become too entrenched in the way we consider the theoretical concerns of the period, and this panel will challenge these assumptions by considering the active and creative capacities in mechanical thought that are visible within the cultural output of the eighteenth century. This session will reevaluate the construction of machines and the production of theories of motion alongside the now-too-often pejoratively classified mechanical philosophies of the time. In doing so, we will think about mechanism, machines, and motion in new—often paradoxical—ways that elucidate the creative and fluid functionality operating beneath the misconstrued reputation of mechanical philosophy as a project overly committed to a rigid, immobile, and mathematical understanding of the world.

Chair: Kevin MacDonnell

What is Mechanism and Why Does it Matter?
Sarah Ellenzweig (Rice University; sellenz@rice.edu)

New materialism posits a vitalist ontology as a correction to the mechanistic understanding of matter as passive and inert. We tend to assume that this account of mechanism (or the "mechanical philosophy") is correct, yet it may be time to consider whether there is more to say about mechanism than what has been proffered by new materialism. This paper will take the recent call to rethink matter and matter theory as an opportunity to rethink mechanism. My central interest will be to challenge the conventional opposition between mechanism and materialism. Through examining the shared complexities of Descartes' and Newton's theories of inertia and how they were received in the period, I will claim, for example, that strictly speaking, neither Descartes nor Newton believed that matter was inert. Our prevailing assumption that they did think so bears testament to the ideological appropriation of the mechanical philosophy by

theologians to combat the linked threats of atheism and materialism. New materialism's critique of mechanism's passive matter thus unwittingly continues the thread of this centuries-old ideological appropriation and bears testament to its enduring success. It is perhaps not a surprise, then, that new materialism embraces a post-secular openness to "enchantment" as part of its critique of neo-liberal politics, while seventeenth-century mechanistic materialism aimed to replace theological explanation with a purely naturalistic account of the universe. Are there lessons to learn from this history as new materialism moves forward?

Narrative Form and Parallel Motion
Kevin MacDonnell (Rice University; ktm3@rice.edu)

The beginning of the Industrial Revolution is traditionally dated to the April 1784 patenting of the double-acting steam engine by James Watt. Paul Crutzen has proposed that the Anthropocene begins with Watt's 1784 patent, while Michel Serres says of the invention of the steam engine: "As soon as one can build them… the notion of time changes." Watt had patented earlier versions of the machine, but the importance of the 1784 design lies in its application of parallel motion, a mechanical linkage invented by the British engineer that allowed the steam engine to achieve maximum efficiency by connecting the straight-line motion of the piston with the circular motion of the working beam. The ensuing history of increasingly destructive environmental exploitation that would result from the advances in industrial technology following Watt's invention has led to the proliferation of what I believe to be a mistaken correlation between parallel motion and an always already exploitative temporal foundation. By grounding my discussion in recent trends in literary formalism that enable a comparison between literary and material forms, I will consider the ways in which the eighteenth century narrative techniques developing alongside Watt's invention integrated a progressive movement identical to parallel motion into their formal infrastructure. The transgressive and antithetical relation to time, motion, and the concept of progress found in these texts allows us to reconsider the effects of parallel motion—the underlying mechanism operating beneath the advent of the Industrial Age—and imagine alternative relationships between technology, narrative, and time.

Novel Machines in Eighteenth-Century Britain
Joseph Drury (Villanova University; joseph.drury@villanova.edu)

The eighteenth century saw the production of two competing notions of the Panopticon that were radically different from one another. Jeremy Bentham's Panopticon is of course the more well-known of these conceptual designs, and was an important model for New Historicist scholars in the 1980s who wanted to think about the form of the novel in relation to contemporary technologies of power. My view is that the heightened focus on Bentham's model has given us a distorted view of the relationship between technology and narrative form, and that if we look at a broader range of eighteenth-century technologies, we can see that the simple fact that a novel has form of narrative "machinery" need not imply that it is invested in discipline, surveillance and social control. At this point, the "other" Panopticon I will discuss in my talk becomes helpful. This earlier version of the Panopticon was a musical clock built by the watch- and toymaker Christopher Pinchbeck in the 1750s, one of a number of entertaining mechanical amusements that eighteenth-century Londoners could have enjoyed during a day out in London. By

combining spectacle, ingenuity and philosophical instruction, Pinchbeck's Panopticon offers, in my view, a much more compelling model for the form of the eighteenth-century novel.

Mechanism and Alchemy
Helen F. Thompson (Northwestern University; hthompson@northwestern.edu)

The talk will try to do more than simply recapitulate the now decades-long revision in the history of science which shows that the mechanism concept accommodates non-mechanistic sources of motion and ontology like tingeing parts, semina, putrefaction, and attraction. In the talk, I'll undertake a close reading of late 17C alchemists (Robert Boyle, or George Starkey, or maybe both) to speak to the mechanism/ materialism concept which is the topic of the panel. I will suggest that both motion and ontology may not be fully explicated by mechanism. Eighteenth-century scholars tend to see motion as mechanistic and ontology as idealistic (cf. Wolfram Schmidgen or Jonathan Kramnick); my talk will suggest that both motion and ontology involve mechanism/ materialism as well as various kinds of entailed ends (which may not strictly speaking be "idealistic" as they're susceptible to the influence of matter). Ultimately, I will suggest, "transmutation" is not simply a marginal or occult phenomenon restricted to the conversion of base metals into gold. Rather, "transmutation" encompasses a range of life processes—digestion, vegetation, and others—which entail radical change and resist the binary of mechanism versus "idealism."

Panel 9D: Saturday Nov 5, 10:15 AM-11:45 AM *Ansley 4* (projector and screen)

Lab Culture 3: Critical/Digital

This panel is part of a stream that explores "lab culture" in the arts humanities. Practitioners from a variety of laboratories will discuss the politics of creating and maintaining an arts/humanities laboratory. They will also discuss recent research emerging from their labs. This specific panel focuses on labs that practice hands-on digital production, guided by methodologies of "critical making."

Chair: Adam Noceck

The Studio for Critical Making: Projects in Slow Interaction and Unubiquitous Computing
Garnet Hertz (Emily Carr University; garnethertz@gmail.com)

In this presentation, I will focus on two projects emerging from conceptlab, which demonstrate the lab's mandate and methodologies. Ubiquitous communication technologies like smartphones have contributed to the rise of interpersonal interconnections, producing many beneficial results. Yet, at the same time this has led to the public feeling overloaded with pervasive information technologies. Our project goal is to build fully-functional design artifacts that critically frame this problem in the digital economy and offer imaginative solutions. We will accomplish this by prototyping and manufacturing "unubiquitous" cellular phone-like devices that, somewhat ironically, help people disconnect from technology and reconnect face-to-face. Our aim is to use these devices as case studies to deliver a clearly articulated framework for 'critical making': building creative technologies as an alternate mode of knowledge dissemination. I've been

collaborating with Will Odom over the past year on a project titled "Slow Game" - a physical video game with a very low frequency of interaction: one move a day. The game exists as a small 5cm cube, with a low resolution display consisting of 64 tiny white lights. The game is based on the classic video game 'snake', where the player manoeuvres a line which grows in length, with the line itself being a primary obstacle. The game is played by physically rotating the cube, which turns the direction that the snake moves. By reducing the feedback loop to a frequency of a day, Slow Game radically challenges our memory, observation and patience.

Enculturating Decimal Lab

Isabel Pedersen (University of the Ontario Institute of Technology; Isabel.Pedersen@uoit.ca)

Decimal Lab (Digital Culture and Media Lab), is a critical media space and collective of people affiliated with the University of Ontario Institute of Technology. The lab explores personal media associated with the human body using critical humanities methodologies, digital rhetoric and artistic interrogations. Concerned with the emergence of embodied tech -- mobile, wearable, implantable, and ingestible digital technologies -- it explores the social, political and cultural consequences of people's ongoing technological adaptation. Funded by Canada foundation for Innovation and fulfilling goals of the Canada Research Chair in digital life, media and culture sometimes conflict (or I perceive them to conflict) over lab goals and goals for student researchers who need to prepare to be knowledge workers in digital economy. I will discuss challenges that are also sometimes great motivators. For example, faculty associates have disparate methods, theories and concerns. When I want a creation project to be ironic, my associates or students might want it to be earnest or not necessarily agree with creative projects that are deliberately ambiguous.

What Do You Do When Your Boring Things Become Interesting?

Matt Ratto (University of Toronto; matt.ratto@utoronto.ca)

I started using the term Critical Making in 2007, and formed the Critical Making Lab the following year. Our primary focus has been to examine how material engagement fits into humanistic and interpretive scholarship as a resource for enhancing critical reflection. This has typically been very mundane and tinkery work, often with partial, ugly, obscure and in some cases boring objects as the result. Rather than attempt to make these objects ‘other-ready’ so to speak by making them less conceptually opaque, aesthetically more approachable, or even instrumentally useful, we have revelled in their mundanity, following Leigh Star’s guidance to study ‘boring things.' Since the beginning most of our critical making has focused on navigating the complex pathways between expression and instrumentality, choosing not to engage directly with either art and design or science and engineering directly. Working against the instrumental or exhibitory impulse has bade these engagements purposefully liminal, frangible events focused on process rather than product and with the main value accrued by participants rather than observers. But, increasingly, no matter what my students and I do, we have unfortunately begun producing interesting things. No matter how much we want our material results to recede into the background of our other expressive activities, they refuse to take a back seat. Like Latour’s *Aramis* (1996) our objects have begun to take on a life of their own, and we are left with the question what do you do when your boring things become interesting?

Digital Neo-Luddism in the Critical Media Lab
Marcel O'Gorman (University of Waterloo; marcel@uwaterloo.ca)

For some, the growing ubiquity of digital media represents a great achievement in human history (Segal, Rheingold), or even a turning point in human evolution (Brooks, Kurzweil). But there exists a persistent desire to unplug from our wired world, especially in response to information overload (Carr, Stiegler), the spectre of surveillance (Castells, Mayer-Schonberger), and what might be called the relentless tyranny of social media (Spitzer, Tennant). Recent projects from the Critical Media Lab explore why and how neo-Luddism is observed by a number of individuals, communities and cultures. The research and hands-on projects resulting from this project will not be used to recommend some form of digital prohibition, but to promote a more careful and critical understanding of the impacts of digital technology on our lives. While this is certainly a media studies project, these objectives will be achieved by following a cross-disciplinary approach that is typical of research conducted in the Critical Media Lab (CML), a unit that draws on new media technologies to investigate the impact of technology on society and the human condition.

Panel 9E: Saturday, Nov 5, 10:15 AM-11:45 AM *Ansley 5* (projector and screen)

Science, Occultism, and the Arts 2: 'Transcendental Photography': From Cubism and Dali to the 'Phantom Leaf'

This is the second of three panels in a proposed stream entitled "Science, Occultism, and the Arts in the 19th and 20th Centuries" which brings together international scholars to address this subject.

Chair: Jeremy Stolow

Picturing the Psychical Force: Transcendental Photography, *La Vie Mystérieuse*, and Cubism
Flaurette Gautier (Université de Paris 1, Panthéon-Sorbonne; flaurette.gautier@icloud.com)

“What could be more obvious . . . than the influence of our will upon our senses?” the Cubists painters Albert Gleizes and Jean Metzinger asked rhetorically in their book *Du Cubisme* of 1912. This question highlights one of the most crucial contributions of Cubist art theory to the transformation of representation in early 20th-century art. Within the context of a wider debate on the relationship between perception and conception in the creative process, “Delaunay, Gleizes, Metzinger, and Boccioni felt that, paradoxically, the most reliable indication of the outside world was inside ourselves” (Charlotte Douglas, 1990). This new mode of apprehension of reality, based on intelligence rather than vision, coincided with a significant aesthetic paradigm shift: Cubism marked the radical transition from a style based on visual perception to a style focused on the conceptualization of the visible. This paper aims to demonstrate that this transfer of the creative power from the eye to the mind was fostered by the “psychical culture” that emerged at the turn of the century, promoted notably via the occult periodical *La Vie Mystérieuse* (1909-1914). The journal listed among its collaborators numerous figures from French fin-de-siècle occult circles as well as several intellectuals close to the Cubist movement

(A. Mercereau, J. Nayral, E. Figuière), many of whom figured also in the Société Internationale de Recherches Psychiques, founded in Paris in 1911. My paper will thus explore the relevance of topics such as transcendental photography and willpower theories for Cubist art theory, especially in Gleizes, Metzinger and Apollinaire's writings.

« Sainte Objectivité », Salvador Dalí, and the Surrealist Fantasm of Photography of Thought
Pascal Rousseau (Université de Paris 1, Panthéon-Sorbonne; pl.rousseau@free.fr)

On many occasions, Salvador Dalí presented the camera as a revolutionary instrument to rethink the status of representation in the modern age and photography as a paradigm of new vision. More curiously—and what is less discussed in the canonical historiography of Surrealism—is that he developed, from the early 1920's to the 1940's, a delirious hypothesis concerning a new instrument he called the «photographic eye», able to produce direct images of thought. This paper will analyse the historical and cultural context of that fantasy of immediate projection of thought («thoughtography») in dalinian Surrealism, mixing neurology, occultism and new media technology in the 1920s and 1930s.

Notes on the Phantom Leaf Experiment
Jeremy Stolow (Concordia University, Montreal; jeremy.stolow@concordia.ca)

This presentation is part of a larger research project on the history of efforts to visualize and graphically depict 'auras', 'astral bodies', and 'phantom presences', a practice that can be traced back to the early twentieth-century interactions of Theosophists, psychic researchers, artists, and others who sought to make occult phenomena visible via photography and other media instruments. My talk will move from this longer history to consider a particular episode: the 'phantom leaf experiment', first conducted by Soviet researchers in 1966 using a Kirlian apparatus (a non-camera technique for producing electrically-mediated contact photographs). Using torn segments of plant leaves, the scientists proclaimed to have photo-documented the ghostly apparition of those portions of the specimens that had been torn away: an effect which was possible, they postulated, on account of an as-yet undocumented vital energy, an ethereal 'bio-plasma', surrounding all living things. In the subsequent decade, the phantom leaf experiment came to be known in the West. Widely-reported efforts were made to replicate the Soviet research in the USA and in Brazil; the figure of the 'phantom leaf' entered into the visual repertoire of psychedelic counterculture of the 1970s; and over time Kirlian photography helped pave the way for a bustling economy of New Age spiritual healing practice in which images of 'human auras' play a central role.

Panel 9F: Saturday, November 5, 10:15 AM-11:45 AM *Ansley 6* (projector, screen, and speakers)

Creative Animals 2

Chair: Christina M. Colvin

Cognitive Ethology for the Loneliest Epoch
Christina M. Colvin (Georgia Institute of Technology; christina.m.colvin@gatech.edu)

Hens exercise transitive inference to navigate social relationships; elephants recognize themselves in mirrors; Grey parrots use elements of English speech referentially and to produce meaningful, novel utterances: recent findings like these challenge long-held assumptions about the cognitive capacities of nonhuman animals. Research in the field of cognitive ethology, broadly defined as the scientific study of animal minds, has been particularly revolutionary for its contributions to public and scientific ideas about nonhuman behavior, thought, and emotion. Despite cognitive ethology's popularity among animal philosophers and activists, scholars have yet to grapple with the appearance of cognitive ethology in contemporary literature. Focusing on two recent novels--Lydia Millet's *How the Dead Dream* (2007) and Margaret Atwood's *Oryx and Crake* (2004)--I will show how the work of cognitive ethologists shapes these narratives; I will also explore how Atwood and Millet depict the relationship between human psychology, creativity, and our recognition of nonhuman consciousnesses. In particular, I will argue that Millet and Atwood invoke cognitive ethology to figure the cascading consequences of the current extinction crisis and the indelible loneliness that attends it. Just as we begin to scratch the surface of the complexity of animal minds, we also witness the anthropogenic threat to those minds' future survival. Uniting these issues, Millet and Atwood imagine the Anthropocene as the loneliest epoch, the period humans find themselves increasingly alone as a diversity of nonhuman minds cease to be.

Underwater Sex: Animal Beauty and Invertebrate Hermaphroditism in *Descent of Man*
Dagmar Van Engen (University of Southern California; vanengen@usc.edu)

This presentation examines the function of nonbinary animal genders and sexualities within Darwin's theory of sexual selection in *Descent of Man* to open up a range of queer, trans, and feminist engagements with the nonhuman. Descent of Man narrates the gender and sexual lives of animals through a European-specific sense of beauty and Victorian gender stereotypes that makes vertebrate animals like birds and monkeys appear higher on an evolutionary scale than animals more distantly related to humans. But invertebrate animals like snails, clams, starfish, and jellyfish confused Darwin's efforts to enshrine heterosexuality, patriarchy, and gender binaries as survival mechanisms within evolutionary processes. Invertebrate sea creatures are often hermaphroditic, and their senses of desire, pleasure, and beauty offer new sites for reimagining trans and nonbinary human life today. Aquatic invertebrate animals, because of their nonbinary genders, asexual reproduction, and nonphallic sexualities, frustrate the logics of heteroreproductive futurity and masculine aggression that are central mechanisms within survival-of-the-fittest Darwinian logics. In the wake of Darwin, the creative world of underwater invertebrate sex is a rich site for rethinking queerness, femininity, and nonbinary gender in Western racialized sexual imaginations.

Predators, People, and Possibility: Towards a New Understanding of an Animal Icon
Alba Tomasula y García (University of California at Berkeley; albachatnoir@gmail.com)

In the United States, there are few beasts as simultaneously cherished and reviled as wolves. Long used as living symbols of "the wild" (i.e. nonhuman existence), wolves are often perceived

as either innocent creatures that must be protected or as malignant entities that should be exterminated. Although they are animals, they continue to be framed in dichotomous moralistic terms. While this Janus-faced perception of wolves continues to dominate policies towards them and other nonhuman animals, some posthuman thinkers have begun to challenge this impression by arguing for a de-anthropomorphization of landscapes and their creatures. In doing so, they contend that we should both acknowledge the ethics and emotions that influence human behavior and that we should relate to nonhuman beings not with adoration or with horror, but simply in the understanding that nonhuman existence should not be perceived through human moral standards. Through a study and critique of works on wolves from figures such as David Mech and Jon Coleman, this paper will argue that in acknowledging both the moralizing tendency of humans, and that animals exist outside of morals, a new model of how to interact with nonhumans is being created. This new paradigm, which avoids anthropomorphizing nonhumans even while it reaffirms the human capacity to relate ethically to nonhuman existence, calls for humans to labor constantly not towards the usual outcomes of either destruction or simplification, but rather to consider and provide what the many different and multifaceted beings—wild, domestic, and human—need to survive another day.

Creativity's limits: an arts-based perspective on the problems and potential of the word "creativity"

Maria Lux (Whitman College; marialux@gmail.com)

As a visual artist, I find the word "creativity" problematic. While "creativity" is a presumed requisite for art (and an under-recognized requisite for so many other professions), many artists, including myself, do not recognize this word in what we do. This presentation will use my recent installation project centering on fruit bats, vultures, zoonotic diseases, and death as an example for exploring concerns with the word "creativity"(including the way it mystifies the methods and work involved in generating objects or ideas, sets an unrealistic expectation of "originality" that misrepresents actual "creative" processes, and limits people in other fields from thinking of themselves as "creative.") I also argue for alternative words and concepts to replace "creativity" in our discourse. Anecdotes from producing the vulture/fruit bat project illustrate ways in which the making process engages people typically considered outside creative fields (from electrical repair people and countertop retailers to museum researchers and virologists), and uses imitative and "non-original" practices. The vulture/fruit bat work also directly considers the role of the "creative person" as a cultural buffer against anxiety about death, focusing on our reliance of this role as a way of separating the human from the animal and attaining some measure of symbolic immortality. Because my studio practice revolves around animal subjects, I also suggest that a less human-centered definition of creativity may prove more fruitful, both for people who define themselves as artists and those who don't. Related images can be found at marialux.net. The aforementioned project is forthcoming.

Panel 9G: Saturday, November 5, 10:15 AM-11:45 AM *Ansley 7* (projector, screen, and speakers)

Creative Mediations: History, Science, and their Publics

This panel brings together a diverse group of scholars, educators, artists and theorists who are all engaged in inter/transdisciplinary and collaborative explorations of the History of Science, Literary Studies, art, art history, new media, digital humanities, public and popular culture and gender studies. Each presentation offers perspectives that examine the history, literature and art of science (all broadly defined / "without borders") through subjects, objects, texts, artifacts, materials, media and messages in unique combinations that extend into and create new critical spaces for analysis and meaning-making. Each talk will include description and discussion of the challenges and possibilities of various collaborative scholarly processes in the creation of knowledge formation and products that respond to, reach toward, shape and envision new audiences for such research outside traditional disciplinary distinctions and classroom settings and beyond academic and professional boundaries. Presenters include the director of a multi-institutional digital humanities archive; a curriculum developer and educator for race- and gender-based violence prevention who works on 19th-century literature and science and the gendered separation between public and elite science; a painter, sculptor, and printmaker currently writing a dissertation about design culture and the built environment in the American space program; a new media artist and educator whose books bridge the gap between histories, theories, and production in new media education; and a professor of American literature whose work combines literary, cultural, gender and disability studies as in her current book project, Deforming the Neighbors: Cross-Class Urban Relations in Progressive Era Literature.

Chair: Pamela Gossin

Under Construction: Unexpected History of Science in a Digital Humanities Archive
Pamela Gossin (University of Texas at Dallas; psgossin@telepath.com)

"Across the Spectrum: The Interdisciplinary Life and Letters of John G. Neihardt" is a searchable digital archive under construction in partnership with the Center for Digital Research in the Humanities at the University of Nebraska-Lincoln. As one component of The Neihardt Projects, the archive preserves and makes publically accessible long-hidden works of this prolific and versatile writer. It has also unearthed an unexpected trove of primary history of science materials. Who knew that the epic poet and writer best known for his friendship and collaboration with a Lakota Holy Man in Black Elk Speaks also wrote over 800 essays on early 20th-c science books for Joseph Pulitzer's flagship newspaper, the St. Louis-Post-Dispatch, in which he promotes a progressive vision of early environmentalism, emergent social science, Einstein's relativity and explores the interrelations of gender, race, class, world religion and science?

Lady Science: Women and Gender Studies on the Open Web
McNeill, Leila A. (Independent Scholar; leila.a.mcneill@gmail.com)
Anna Reser (University of Oklahoma; art.annareser@gmail.com)

Lady Science is a collaborative and open access writing project founded and edited by Anna Reser and Leila McNeill. Lady Science focuses on women and gender in science, technology, and medicine in both history and popular culture. In this presentation, we discuss our editorial process, steps for self-publication, and writing with guest authors. In addition to the technical

aspects of the project, we also cover our motivations for the project and what it is like to write scholarship for the public and to collaborate with other writers.

The Korl Woman as a Locus of Public Complicities
Xtine Burrough (University of Texas at Dallas; cxb153930@utdallas.edu)

Our presentation demonstrates the continued relevance of Rebecca Harding Davis' realist novella *Life in the Iron Mills* (1861) in a multi-modal digital fabrication that brings the literary text from literary studies students and piecework laborers on Amazon.com's Mechanical Turk virtual crowd work platform to, public viewers together in the joint creation of a present-day Korl woman installation. In mediation of the artistic dialog at the core of the story we recover the text for the 21st Century.

The *CSI* Effect: Are Jurors Starstruck by Forensic Science?
Anna Swartz (Michigan Tech; akswartz@mtu.edu)

My aim in this paper is to use the *CSI* effect—the purported influence that *CSI* and shows alike have on public beliefs about forensic evidence, the forensic science profession, and the role that forensic evidence should play in the courtroom— as a case study for how artful and fictional storytelling through television can shift popular social perspectives of real forensic science and technology, and how the legal community reacts to these new expectations. Previous studies on the *CSI* effect have argued that *CSI* portrays an unrealistic and glorified view of the real-world capabilities of forensic testing and tends to overvalue the importance of certain kinds of forensic evidence. The show's creators often take dramatic license in the name of entertainment and narrative and stand accused of depicting forensic science as sexy, credible, and as objective truth. Much debate surrounds the *CSI* effect and many studies have found that evidence of its effects are largely based on anecdote and not on empirical data. However, many of these same studies have shown that *CSI* influences the public's attitudes and expectations of forensic science. The objective of this paper is to add to the existing literature on the *CSI* effect and its depiction of science by asking in what way is the *CSI* effect influencing the American justice system and how might the legal community respond to its influence.

Panel 9H: Saturday, November 5, 10:15 AM-11:45 AM *Ansley 8* (projector, screen, and speakers)

Creativity to the Nth: Scalar Dimensions across the Biological, Social, and Planetary

This panel explores the impact of scale on generativity using concepts from complexity and evolutionary theory. However it is defined, "creativity" is most commonly associated with human scale, even when it is attributed to non-human entities or processes. The standing theory of evolution, for example, is rooted in a mammal-centric scale. In this scenario, there is little account of the infinite world of microscopic bacterial life. Creativity in this framing is located in the workings of what can be seen with the bare eye: mammals using opposable thumbs with an occasional dispensation to the bowerbird miraculously building his nest for a would-be paramour. But what about creativity and symbiosis, parthenogenesis, and horizontal gene transfer at the micro-scale? So much goes missed in creativity defined according to the human

scale. Power laws tell us that scaling up or scaling down radically shifts relationships between physical qualities such as mass and strength. Using power laws as a metaphoric prod raises new questions about the components of creativity and how their relationship might shift at different scales. Among the questions under discussion are: How are notions of “emergence” or “agent structure” meaningful to creativity at social or planetary scales? Does "diversity" at micro-scale relate to creativity at meso-scale, and if so, how? Do scientific theories of networks relate productively to notions of collective creativity? Opening questions such as these, this panel explores the creativity of the microcosm and macrocosm.

Chair: Meredith Tromble

Degrees of Freedom: Complexity, Creativity, and Thought Networks
Meredith Tromble (San Francisco Art Institute; mtromble@sfai.edu)

Through readings of four examples of creative scholarship, this paper introduces baseline concepts of complexity theory relevant to scale and creativity, analyzing the ways those concepts have enabled multiple levels of analysis in other fields and approaching them as interconnected thought networks. In the wake of 20th century discoveries in dynamics and complexity science, scholars across the arts, humanities and social sciences have been mining that science to generate new questions in their own fields. Concepts such as “deterministic chaos,” “emergence,” "feedback," “networks,” and “self-organization” have stimulated innovative approaches to reorganizing knowledge, and have often been used by practitioners and scholars to propose novel relationships across the scalar dimensions of their subject. Artist and theorist Philip Galanter has proposed “complexism” as the successor to “post-modernism" along a time-scale of artistic epochs; philosopher Manuel Delanda recast economics, biology, and linguistics as large-scale flows of energy and matter, sociologist Saskia Sassen describes “predatory formations” in global economics as emerging from complex assemblages of technology and politics, and psychologist R. Keith Sawyer builds from his studies of individual creativity to arrive at the argument that societies are complex dynamical systems best modeled as emergent entities with nonlinear properties. Mapping the patterns of analysis represented in these works as networks is both a revealing description of their content and an exemplary application of the ideas under discussion, outlining territory for future research in complexity and collective creativity and cognition.

Autonomous Agents as Artistic Collaborators
David Kadish (Living Architecture Systems Group; david.kadish@gmail.com)

In this paper, I ask whether it is possible to exert creative direction on the emergence of large scale patterns from the actions of autonomous or semi-autonomous actors. As an artist and an engineer, I undertake installations and projects with an intent to create, to make art or innovative structures. At the same time, one of my artistic interests is in ceding a great deal of creative control to a cluster of robotic actors, in the process interrogating the lack of control that we, as a species, exert over the world. Here, I explore this idea in the context of an ongoing project called Inorganisms, in which I invite participants to create a physical body and basic sensory response for an inorganic, electronic organism (an inorganism). When enough inorganisms exist, they will find themselves living together in a space and will have to determine how they relate to one another and the humans that navigate the space as well. My work has implications for how we as

a species address planetary-scale challenges and whether we can organize societies to find emergent solutions to complex problems. Behind my artistic interest is the idea that "creation" has no teleological impulse. The creative force from which innovations at large (galactic systems) and small (DNA) scales emerged were happy accidents of physics and chemistry. This raises the fundamental questions that my work explores, interrogating the relationship between the creativity of emergent processes on the micro- and macro- scales and the creative processes of living beings.

Panel 9I: Saturday, November 5, 10:15 AM-11:45 AM *Peachtree 1* (larger room, projector, screen, and speakers)

Generativity and Creative Agency in Post-Cinematic Media

This panel seeks to elucidate the generative potentials and creative agencies of contemporary audiovisual media, or post-cinematic media. We explore these potentials in terms of technological, aesthetic, affective, and political processes involved in 21st-century media, theorizing their impact on the images that dominate our experience of the contemporary lifeworld. Collectively, these presentations provide a picture of post-cinema as a field of material, cultural, informatic, and ideological agencies—a media regime that exhibits an unprecedented form of productivity, or creative force, owing in part to the shift from a photographic-indexical to a computational ontology, but continuing to speak to human sensibilities through images that actively generate an interface with sub-perceptual and informational processes. Shane Denson's contribution introduces the notion of post-cinema as a framework for contemporary experience—a generative framework that displaces human perspectives while simultaneously re-situating them with respect to the microtemporal processes that subtend perception in the age of digital, networked media. David Rambo's presentation focuses on the productive potential of what he calls the "error-image"—an image of hyperinformatic excess and exhaustion, leading to unanticipated visualizations of a technological and economic infrastructure pushed to its very limits. Mark Hansen's talk turns to the use of military drones in the production of strategic and aesthetic images, questioning the relation between the visual and the informatic. Ozgun Eylul Iscen picks up this thread and links the political power of post-cinematic images to the generative power of the glitch, a phenomenon which hovers between properly perceptual and infrastructural registers.

Chair: Shane Denson

Post-Cinema as a Generative Media Regime
Shane Denson (Stanford University; shane.denson@stanford.edu)

This presentation examines recent theories and approaches to post-cinema, understood broadly as the informatically informed audio-visual media regime that follows in the wake of electronic and digital media's absorption and re-tooling of cinematic technologies and modes of representation. Taking cues from Steven Shaviro's Post-Cinematic Affect (2010) and the diverse contributions to the collection Post-Cinema: Theorizing 21st-Century Film (2016, co-edited by Shane Denson and Julia Leyda), among others, I aim in particular to foreground the ways in which what has often been conceived in terms of loss (e.g. the loss of indexicality, the demise of celluloid, or the

death of cinema as an institution or context for collective reception) inevitably also involves an additive or generative moment—a moment of technical and cultural creation informed by the microtemporal and computational processes that displace and transform the photographic ontology of cinema. Such generativity has been glimpsed in a variety of critical and theoretical statements, such as Lev Manovich's argument that digital processes render all images "animation," Steven Shaviro's focus on "affect" as the pre-perceptual site of these images' registration, or Vivian Sobchack's recent meditations on the emergence of a new spatiotemporal dimension within the "screen-sphere" that now encompasses all of human life. As of yet, however, these approaches have not been synthesized into a more general, comprehensive framework of post-cinematic generativity. This talk aims to make a step in this direction by identifying the technical, phenomenological, and pre-personal foundations of the post-cinematic media regime and its particular mechanisms of creative agency.

Indexicality as "Shadow Archive" in Post-Cinema
Ozgun Eylul Iscen (Duke University; ozgun.eylul.iscen@duke.edu)

If technical infrastructures are no longer homogenous with surface appearances in the era of computerized and networked media, how can we reach out to the structures that are not available to us immediately but that underlie the very constitution of the digital image itself? Can a digital image become an index of its own mediation? In this paper, I draw upon Akira Mazuta Lippit's notion of the "shadow archive" (as inspired by Derrida); the concept underlines an accumulation of accidental recollections and enfolded traces at the edge of visibility, thus taking the form of "avisuality." I propose that the notion of shadow archive could play a key role in mapping out the diverse layers of digital processes that act while remaining invisible. This raises questions about whether it is possible to trace back those layers, what kind of aesthetics would be called for, and what the political significance would be. For instance, glitch, as an error within a digital image, can be indexical of an 'accident' in hardware or in the material infrastructure (e.g. electricity). While the visibility of a digital image deteriorates, the invisible but constitutive elements of the image come to the surface. Thus, glitch reminds us of digital information's analog roots, confronts the apparent perfectness of the digital, and reveals both the materiality and the ideology that digital media are built on. I argue that this understanding of indexicality as a shadow archive underscores digital imagery's analog roots and its processual and immanent nature.

Playing the Photographer: Creative Self-Expression through In-Game Photography
Jason Lajoie (University of Waterloo; jlajoie@hotmail.ca)

The photo editor mode offered in The Last of Us Remastered (TLOUR), Naughty Dog's 2014 Playstation 4 port of their 2013 Playstation 3 game, offers players the means to take a photo at any point in the game. This option alters and can also elevate user engagement within the game. It can also make statements about self-expression through gameplay, as notably illustrated by conflict photographer Ashley Gilbertson, who applied the same techniques he acquired in real-world conflict zones to the fictitious battlegrounds in the game, achieving his photographs by considering his situatedness as real spectator in virtual environments. From a game studies perspective, the photo editor mode enables new ways for players and designers to think about game design, and offers innovative means of expression for players to interact in a creative game

space. My investigation draws on Roland Barthes' exploration into the affective capacity of photographs, and Jose Van Dijck's claim that the malleability and manipulability of digital photography affects the formation of identity by repurposing our memories and means of communication. What are the affective resonances of photographs on real spectators when the spectrum itself is virtual? By exploring the use of photo editor modes in TLOUR, and in other Playstation 4 titles like The Order: 1886, I consider the ways this program expands the affordances of gameplay and narrativity by providing players interactive means for creative expression in otherwise restrictive and linear game modes.

Between Information and Fabulation: Cinema After Drones
Mark Hansen (Duke University; mark.hansen@duke.edu)

This talk focuses on the use of high speed digital video cameras onboard Unmanned Aerial Vehicles or military drones to gather "intelligence, surveillance, and reconnaissance" (ISR). In order to address the key "aesthetic" issue involved here—the question of whether such ISR can be said to operate through the register of the visible, and thus the question of where to locate its cinematic dimension—I shall approach the images generated by drone reconnaissance on two planes: as a source of information that can only be analyzed by computers and as a "vision machine" that renders visibility asymmetrical in order to identify it with power. My talk will think with and through Israeli artist Omer Fast's 2011 video *5000 Feet is the Best* in order to explore: 1) the decoupling of "cinema" from human perception that is at issue in ISR images; and 2) how a cinematic aesthetic can create an indirect perceptual interface onto the imperceptible, informational domain "machinically-presentified" by and through these images.

Panel 9J: Saturday, November 5, 10:15 AM-11:45 AM *Peachtree 2* (projector, screen, and speakers)

Creating Environments

Chair: Shruti Desai

Creating Environments with/that Care: Foresting Futures with Digital Media
Shruti Desai (Goldsmiths College, University of London; s.desai@gold.ac.uk)

The hallmark of creativity is the potential to bring forth the new, such as conceiving a new, caring attitude toward living or indeed, architecting an unprecedented ecological future. In this paper, I defend the role of creativity in accomplishing both tasks in the context of using digital media in 'new' ways to plant trees. I discuss in particular the ecological value of making morally creative, these 'new' uses of digital media to plant trees around the world under the auspices of 'sustainable development'. In the last decade, numerous campaigns for large-scale afforestation and reforestation have emerged, aiming to address issues of deforestation, desertification, and forest degradation with the help of members of the general public. By integrating tree planting with everyday (digital) activities, such as web browsing and tweeting, these campaigns have funded millions of plantings, with the goal to fund billions more. While thus demonstrating how online, social, and mobile media platforms can provide efficient means of funding forestry projects, the campaigns nevertheless prompt us to consider whether such platforms, as they are

being currently employed, can actually foster the flourishing of human and nonhuman livelihoods, as one might infer from the rhetoric commonly employed to encourage involvement in the campaigns, such as 'planting peace' and 'growing hope'. Based on digital ecocritical studies of the campaigns, I propose that prioritizing ethical creativity over environmental sustainability is necessary for imagining genuinely sustainable ecologies, wherein trees are not a means to human flourishing, but beings whose flourishing is inextricable from ours.

Terraforming and Representation
Michael Gaffney (Duke University; michael.gaffney@duke.edu)

My paper will explore the concept of "terraforming," the process by which other planets are made "Earth-like" in terms of their surface features and atmosphere. First, I plan to historicize the concept of terraforming, reviewing its first appearances in science fiction and its most concentrated representation in Kim Stanley Robinson's Mars Trilogy. Then I consider terraforming as a contemporary scientific problem, not simply in terms of transforming other planets like Mars, but in terms of terraforming Earth itself. Some have suggested that we have already terraformed Earth, as we have reshaped the climate of the planet, while others have argued that it is because of climate change that we may need to enact large scale "geoengineering" or climate engineering projects, from planting more trees to constructing sunlight-reflecting space mirrors, in order to preserve a climate hospitable for humans. After reviewing these literary and scientific possibilities, I conclude by reflecting on some of the contradictions of terraforming. Specifically, I want to understand terraforming as both a creative act, establishing the basis for life where there is none, and as its opposite, a destructive act that fundamentally strips away a non-human environment for anthropocentric purposes. Viewing terraforming in this way should make clear both the creative and utopian energies that can be awakened by it, but also the potentially dangerous unintended consequences for human and non-human life.

Beyond Mapping, Beyond Categories…Or, coping with ecological complexity
Roberta Buiani (University of Toronto; rbuiani@gmail.com)

This paper reflects on two research creation projects, asking whether their situated approach may facilitate the comprehension of those complex relations invisible to traditional methodologies. Transition in progress (2015) is a mobile lab, which engaged with, and sought to valorize, the affective vectors and registers through which individuals, plants and animals shape the significance of the urban landscapes in which they dwell. The Cabinet Project (in progress) is a distributed exhibition, which will be turning abandoned cabinets at several science departments at the University of Toronto into small-scale installations, featuring dialogues between art and science that engage with objects and instruments created in nearby science labs, as well as with their stories (real or imagined). In both projects, I reject the idea of interpreting public and institutional spaces through assumptions based on, or imposed by official narratives, conventional mapping techniques and distanced views (a call it a petri dish view). To this view, I oppose a situated, in vivo approach: rather than visiting a gallery, participants interact with different locations and their multiple protagonists. Rather than being confined in one place, they walk and explore as they see fit. I argue that it is only through this situated experience, the interaction with objects and their physicality, as well as with human and more-than-human

protagonists that one can grasp the complex entanglements of the sometimes evident, sometimes hidden, sometimes imagined naturecultural geographies that lie behind the official narratives, the closed doors and the semi-empty corridors making these spaces. With these two projects I aimed to restore an appreciation for the "messiness" and non-measurable significance of complex ecologies: but how can these ecologies be communicated beyond the immediacy of these performative experiences?

Utopia, Dystopia, Decay: Or, What is 'Biomass'
Christopher Walker (University of California at Santa Barbara; caw2105@gmail.com)

While utopian narratives since Thomas More's *Utopia* (1516) have imagined the social, juridical, and economic conditions necessary to establish ideal human communities, early instances of the genre did so without attending to ecological concerns. In fact, these early utopias are set in nondescript, homogenized environments that are completely subject to human control. Likewise, many dystopian narratives elide environmental nuance through apocalyptic leveling as anthropogenic crises affect global-scale changes. Beginning from these observations, this paper makes two interconnected claims. First, that the elision of environmental nuance and ecological interconnection is embedded within the fabric of both the utopian and dystopian genres. Reading Aldous Huxley's *Brave New World* (1932) and Ernest Callenbach's *Ecotopia* (1975), I argue that these exclusions are represented in the biopolitical controls placed on both the human body and the environmental resources. In both of these novels, human bodies are turned into environmental resource, reduced to their molecular constitution. Second, turning to the history of ecological sciences, I claim that these same biopolitical concerns are figured as "biomass," an ecological concept first articulated in the early 1930s. Defined as the carbon index—the total flora and fauna living in an ecosystem—biomass imagines all ecological life as non-distinct, fungible, and available to decay and nutrient recycling. In tracing the development of the biomass concept alongside Huxley and Callenbach's novels, I argue that the "ecological thought" in Timothy Morton's terms, is infected with a biopolitics that reduces all life to its reproductive potentiality.

Business Lunch (for paid registrants), 11:45 AM-1:30 PM, Savannah Ballroom

Session 10: Saturday, November 5, 1:30 PM-3:30 PM

Panel 10A: Saturday, November 5, 1:30 PM-3:30 PM *Ansley 1* (no AV)

New Fiction and Poetry

Our panelists will present original poems and short stories that engage the conference theme and grapple questions and relationships which are among the central concerns of SLSA. Sumita Chakraborty will recite her poem, "Marigolds" – after the French "soucis," which also means "worries" – dramatizing the relationship between the contemplation of the self and looking outward in wonder at what is not oneself. Blake Leland will read original poetry that demonstrates the creative potential of the scholarly use of sources and shows research-oriented thinking at work in artistic practice. Kellie Wells will present her short story, "Weight," about a peculiar correlation between contemporary Western society's obsession with physical fitness –

that is, the strength of the human body – and our increasing sense of impending eco-apocalypse. Mandy-Suzanne Wong will read a story on the ama of Japan, female subsistence divers who, well into their seventies, plunge deep into the ocean without scuba equipment, nurturing each day a fraught intimacy between their fragile human bodies and the inhuman sea, between old age and climate change.

Chair: Mandy-Suzanne Wong

"Marigolds"
Sumita Chakraborty (Emory University; sumita.chakraborty@emory.edu)

"A Scholar's Valentine"
Blake Leland (Georgia Institute of Technology; blake.leland@lmc.gatech.edu)

And suddenly I am there with them, my head shaved close, in saffron robes, my knees wet with mud of the stream-bank, my left hand sinking in the muck at the edge. And I am leaning out over the water, a stick of red sandalwood (candanam) in my hand, writing your name on the surface of the water again and again.

"Ayuka Breathes"
Mandy-Suzanne Wong (Independent scholar; mandywong@ucla.edu)

The Co-op had a one-eyed look, like an old fisherman. A plywood patch covered a broken window. A glob of seaweed stuck to a cheap clock above the window. An old-fashioned loudspeaker dangled from a wire like ash from a dying cigarette.

"The Crones"
Kellie Wells (University of Alabama; kwells28@gmail.com)

This did little to slow the rising of the sea, you understand, which was just then not so stealthily inching its way up the legs of everyone, but the robust people, they were able to tread water for hours on end and therefore scoffed at the arrogance of the creeping tides.

Panel 10B: Saturday, November 5, 1:30 PM-3:30 PM *Ansley 2* (projector and screen)

Reconfiguring Networked Publics: Speculative Redesigns and Online Harassment

If witch hunting, vote brigading, forum raiding, email spamming, internet stalking, and threats of violence have become persistent modes of online discourse, then how might we redesign our network protocols, graphic user interfaces, social networks, and theoretical constructs to address this ongoing problem of toxicity, harassment, and abuse in twenty-first century media? What new possibilities might we imagine by reconfiguring and reshaping how we deal with computational interfaces and with one another through networked media? From discussions of the public-private divide of post-Web 2.0 pseudonymous online spaces like Tumblr to the backlash against feminist media critics who spoil the game for so many "magic circle jerks" on Twitch TV to a series of social networking interventions that work to reveal the embodied and

material effects of networked discourse on Twitter, this panel addresses the ongoing problem of online harassment by suggesting speculative redesigns, proposing how we might construct alternate spaces for engagement and trigger new ways of dealing with harassing and abusive behavior. Over the past decade the movement from trash talking to verbal abuse in arcades; griefing to cyberbullying in online games; trolling to hate speech on web forums; botting to blacklists on social media; and pizza bombing to DDoSing, doxxing, swatting, and stalking through locative, biometric, and other forms of identifying media reveals not only a shift in how we use social media, but how social media is designed. How can we redesign networked spaces in the face online harassment?

Chair: James Brown

Breaking the Metagame: Feminist Spoilsports and Magic Circle Jerks
Stephanie Boluk; Patrick LeMieux (University of California at Davis; boluk@ucdavis.edu, lemieux@ucdavis.edu)

If hackers and modders, speedrunners and pro gamers, traders and farmers are sometimes considered cheaters or triflers because they play beyond the standard ways of engaging videogames, their tweaks and changes, exploits and expertise, gambling and grinding are nevertheless granted some leniency within both online and offline forums. These metagames do not disrupt the dominant social order of videogaming even as they test the rules, experiment with mechanics, and manipulate virtual economies. Yet forms of play that stray further from the standard are not as easily tolerated. Johan Huizinga's term for the seditious player is the "spoilsport," or the one who profanes the "magic circle" and "shatters the play-world itself." This talk will discuss how feminist critics within the games industry not only play the part of Sara Ahmed's "feminist killjoy" but, more accurately, that of the "feminist spoilsport." And although Eric Zimmerman has argued that the naive belief in the magic circle is one of the most pervasive strawmen in game studies, the strident and ongoing vilification of feminist work on videogames indicate that even if the magic circle does not exist, the desire for an ahistorical, escapist gamespace continues to govern the standard metagame. Whereas the spoilsport plays a metagame that acknowledges the specific gendered, classed, raced, and embodied conditions of play, the magic circle jerk embraces an anti-metagaming metagame that disavows its own existence. What forms of play, game design technologies, and alternative interfaces can help us remake, break, cheat, or spoil this form of toxic metagaming?

Complicit Interfaces and the Bodies of Online Harassment
James Brown (Rutgers University at Camden; jim.brown@rutgers.edu), Becca Tarsa (Trinity College; becca.tarsa@trincoll.edu)

In *The Internet of Garbage*, Sarah Jeong suggests that redesigns of Twitter could "dampen harassing behavior, while shielding targets from harassing content." Following Jeong, this presentation offers speculative redesigns that attempt to address the scourge of online harassment. We argue that current desktop and mobile interfaces efface physical bodies—abuser and abused become abstractions, and this feeds the harassment machine. One approach to the problem might involve reminding abusers that their actions have real world consequences and that "the network" is made up of real bodies. We don't have much faith in this approach. The

gestures of point, click, and swipe not only make the interface "disappear" (long a dream of designers and programmers) but also make bodies disappear. Therefore, we imagine a series of redesigns to social networking platforms that remind abusers of their own bodies: using the computer's front-facing camera to show users a picture of themselves as they engage in abusive behavior, generating feedback based on the user's keyboard rhythm and speed, or strategically using glitches to introduce friction into the interface (scrambling usernames so that it's more difficult to identify victims, replacing the avatars of victims with avatars from the abuser's list of friends). We imagine the audience for these features being the abuser himself, but all unverified and new accounts would be subject to them, making the values of the platform clear to all newcomers. We suggest that introducing friction into interfaces that are too smooth offers a new way of addressing abusive and harassing behavior.

Tumbling and Trolling: Reimagining Tumblr as a Progressive Networked Public
Anastasia Salter (University of Central Florida; anastasia.salter@gmail.com)

Tumblr attracts ongoing conflict as a site of convergent discourse as a pseudonymous social network, a dominant characteristic that sets it apart from most of what we term Web 2.0. The concept of Web 2.0 is strongly tied to real identities, with professional use of Twitter and personal use of Facebook both strongly grounded in building social capital that traverses the so-called real/virtual divide. Contrasting the affordances and the approach to moderating privacy on each of these networks offers insight into the construction of pseudonymous social media sites as space of resistant to trolling. danah boyd suggests that networked publics such as Tumblr serve as spaces akin to parks and malls, but with affinity spaces that go beyond the illusory Hot Topic – Abercrombie and Fitch divide. The association of Tumblr with the rise of the "social justice warrior" as a rhetorical device suggests the progressive (and transgressive) power of the network, even as Tumblr's approach to remix and flow makes it a more contested public than the networks that preceded it. Lori Kendall's observation that LiveJournal was haunted by the legacy of the diary, simultaneously public and private, personal and performative, can be extended to the fan-centered communities of Tumblr, where clashes such as the Star Wars "Kylux" and "Reylo" shipping wars draw attention to the uncontrolled movement of ideas beyond affinity communities. How might we reimagine the spaces of Web 2.0, and address the public-private divide, by redefining Tumblr's boundaries and connections?

Interactivity, Collaboration, and Authoring in Social Media
Krystina Madej (Georgia Institute of Technology; krystina.madej@lmc.gatech.edu)

At the forefront of narrative innovation are social media channels – speculative spaces for creating and experiencing stories that are interactive and collaborative. Media, however, is only the access point to the expressiveness of narrative content. Wikis, messaging, mash-ups, and social media (Facebook, Twitter, YouTube and others) are on a trajectory of participatory story creation that goes back many centuries. These forms offer authors ways to create narrative meaning that reflects our current media culture, as the harlequinade reflected the culture of the 18th century, and as the volvelle reflected that of the 13th century. This presentation takes you inside the process of creating a collaborative, interactive narrative in today's social media through an authoring experience undertaken by a group of graduate students. The engaging mix of blogs, emails, personal diaries, and fabricated documents used to create the narrative

demonstrates that a social media environment can facilitate a meaningful and productive collaborative authorial experience and result in an abundance of networked, personally expressive, and visually and textually referential content. The resulting narrative, After Love Comes Destruction, based in Shakespeare's Romeo and Juliet, shows how a generative narrative space evolved around the students' use of social media in ways they had not previously considered both for authoring and for delivery of their final narrative artifact.

Panel 10C: Saturday, November 5, 1:30 PM-3:30 PM Ansley 3 (projector and screen)

Representation and Translation 2: Representation, from Minds to Worlds

That humans have no unmediated access to reality is a common theme in literature-and-science studies: representation plays a central role. Arguably the ability to move freely among the various forms of representation — verbal, pictorial, mathematical —facilitates creativity and communication in the scientific realm, much as the ability to interconvert languages — translation — operates in the literary realm. This sequence of panels explores aspects of representation and translation, and the connections between them, in the creation and communication of knowledge.

Chair: Jay Labinger

A More than Wild Surmise: Representing Hyperobjects
Ellen McManus (Dominican University; emcmanus@dom.edu)

Hyperobjects—defined by Timothy Morton as "things that are massively distributed in time and space relative to humans" (*Hyperobjects: Philosophy and Ecology after the End of the World*, 2013, p. 1), with climate change as the most obvious and complex example—add several terrible complications to the proposition that scientific phenomena must be translated into representations that humans can comprehend and respond to: many hyperobjects were deliberately if myopically created by humans; they have the power to determine the quality, and even the continuation, of life on a massive scale; humans might still have the power to alter their impacts; but emotionally powerful representations of hyperobjects are needed to persuade humans to act in this regard; and the window for action is closing. This paper will examine some of the most successful of these representations in visual and narrative art and explore whether humans have the imaginative capacity to respond to them before the window closes.

Representing Molecular Biology: Bringing the Scientist Back In
Steven J. Oscherwitz (Artist; sjosch@uw.edu)

At present subjective phenomena such as our own unique experiences of shapes, colors and time are in no way represented and/or translated to have any functional meaning for molecular biologists in their empirical research. In other words, in current molecular biology, the pictorial representations assembled from such powerful and sophisticated imaging technologies as NMR, electron microscopy, or spectroscopic methods, and their beautifully digitized portrayals of folding proteins, crystallographic lattice structures that compose atomic density maps revealing endless arrays of proteomic signaling pathways and networks, are translated only as an empirical

objectivity that excludes the scientists' own unique subjective experiences of colors, shapes, and time of these phenomena. I philosophically explore subjectivity by relating my own observations of the shapes, colors and temporal experiences of molecular landscapes, contrasting Kant's more static idyllic philosophy of subjectivity specifically related to time to that of Deleuze's more temporally dynamic philosophy of subjectivity, to suggest and argue that subjectivity can in fact be an integral component in the experimental design of contemporary research in molecular biology: A design where one's own creative genesis of art-making, composed of traditional drawing and computational simulations, can create visualizations and experiences of molecular phenomena that can translate obsolete, idyllic, and static forms of subjectivity into more temporally dynamic forms of subjectivity, that can become an integral and important part of scientists' envisioning and designing their experimental research.

Reading Thoughts and Writing Novels Using EEG Signals
Van Scoy, Frances Lucretia (West Virginia University; francesvanscoy@aol.com)
Coester, Dana (West Virginia University; dana.coester@mail.wvu.edu)

Rosemary Rogers described constructing "mind movies" as she wrote her novels. Other writers have described a similar envisioning process. Imagine writing the first draft of a short story or a chapter of a novel using Brain-Computer Interface (BCI): What if you could sit in a quiet room, wear an inexpensive headset, imagine the setting, listen to the conversations between your characters, observe what they do, and a short time later receive a digital rough draft of your story as a text or video file of what you saw and heard as you imagined your story? While the long-term goal of hardware/software for generating the first draft of a work of fiction remains 10-15 years away, we are taking initial steps towards developing software for such a system. Inspiration for this research came from two talks at the 2008 SLSA meeting, "Digital Gaming and the Supersession of Representation" by Aden Evens and "A Compound Picture: My Philosophical Trajectory" by Steven Oscherwitz. In spring semester 2016 we jointly taught an experimental multi-disciplinary course "Neuroscience, computing, and media" that continued Van Scoy's research in recognizing specific thoughts, such as individual pizza toppings, from EEG signals. This work builds on that of CMU neuroscientist Marcel Just. Coester's work, "The Reverberatory Narrative: Toward Story as a Multisensory Network," integrates the results of these experiments to describe a model that tests the integration of an EEG headset and bio sensors within a mixed reality environment.

Panel 10D: Saturday, November 5, 1:30 PM-3:30 PM *Ansley 4* (projector and screen)

Exacting Interiority: Scientific Analogy, Literary Imagination

Bringing together scientifically minded scholars of 19th- and 20th-century literature and literarily engaged historians of science, this panel investigates in detail the interactions between scientific models and literary visions in representing and expressing interior states. The papers examine a range of scientific concepts and practices—the "stream of consciousness," composite photography, analogical method—and related representations of consciousness, interiority, creativity, and imagination from the 1860s through the 1920s. Connected both chronologically and thematically, the papers look at a range of British, American, and French philosophers, psychologists, and literary figures. Together these perspectives add precision and conceptual

density to scientific notions often glibly adduced as contexts for literature in this period, and trace the formal enactment of psychological ideas in literature through the modernist moment. We are especially interested in questions of epistemology and method at the intersection of literature and science, paying attention to the role of language and metaphor across fields, as well as overlaps in conceptual models and figures of thought. At the same time, we trace how these shared figures and methods—the stream, the composite, the analogy—are nevertheless developed in distinct ways and put to different uses in different disciplines. Our hope is to produce a textured intellectual history of several moments of intersection in literature and science from the mid-nineteenth through early twentieth century, illuminating the complex ways in which interiority was investigated and imagined.

Chair: Dora Zhang

The Physician's Stammbuch: Humanist Creativity in Knowledge Networking
Maria Avxentevskaya (Max Planck Institute for the History of Science, Berlin; mavxent@zedat.fu-berlin.de)

The genre of *Stammbuch*, also known as album amicorum or traveling poesy album, served as a popular means of displaying humanist scholarship and ingenuity from mid-sixteenth to late eighteenth centuries. Many such albums were kept by university professors, physicians, and artisans traveling between scholarly communities, and thereby these early social media also participated in establishing the networks of scientific communication. The manuscripts feature abundant specimens of playful verbal and visual rhetoric, as well as paper technologies, demonstrating relations of intellectual trust within and between specific groups, which later converted into formal institutional links. While celebrated university professors and physicians leading academies and learned societies, as well as common medical students and artisans, collected notes from fellow scholars traveling between the top European institutions, their *Stammbuch* entries employed witty techniques of the genre to call attention to novelties about nature and the most telling details and important values of a qualified experimental inquiry. The Stammbuch-related creative practices sharpened collective perception and helped process individual experiences into scientific ontologies. My paper will explore how by playing vividly on borrowings from classical legacy, popular culture, and medical studies, the Stammbuch patterns of creativity contributed to formulation of experimental values and building a new socio-professional identity of the physician. I will also employ a web application similar to Spatial History Project (Stanford), to visualize the transmission of creative patterns through alba amicorum in early modern medical humanities.

Omissions: William James and the Adaptive Stream
Henry Cowles (Yale University; henry.cowles@yale.edu)

Before "stream of consciousness" was a narrative mode, it was a theory of mind. Everybody knows that William James popularized the term (more prominently as the "Stream of Thought") in his 1890 *Principles of Psychology*. But where did James's famous idea come from and what did he do with it? This paper presses this question of origins toward a reconsideration of the rise of the "stream" metaphor and, more broadly, the role of language and analogy in the history of science. What we find when we look closely at James's early work is a concerted effort to push

the boundaries of psychological introspection to their limits; to examine what he called, in an early version of his chapter on the stream, "some Omissions of introspective psychology." Seeking to reframe the self in light of psychologists' increasing hostility to introspection, James made use of a range of metaphors and analogies drawn from psychology, philosophy, theology, and literature. In particular, James's articles and notebooks from the 1870s and 1880s reveal a conscious methodological program aimed at solving "the problem of other minds" through narrative means. Drawing on the work of eccentric philosopher Shadworth Hodgson and nervous physiologist William Carpenter, James built a model of the interiority of others predicated on notions of plasticity, adaptability, and creativity. This paper lays out the origin of this important metaphor in James's attempt to exact interiority and concludes with some thoughts on the consequences of these origins for the term's use in literary studies.

Francis Galton, Thomas Hardy, and the Composite Imagination
Daniel Williams (Harvard University; william1@fas.harvard.edu)

Francis Galton's composite photographs produced, out of many images of faces superimposed on a single plate, "an imaginary figure possessing the average features of any given group." Such an "averaged portrait" provided a visual tool for sifting the statistical norm from the deviation, and as such composites were notoriously deployed in late Victorian racial typology and criminology. Yet their figurative pliability was also noted by thinkers such as Peirce, Freud, and Wittgenstein, who deployed composites to model the aggregative work of thinking—associating ideas, forming concepts, recombining mental images—and to describe porous conceptual ensembles such as "family resemblance." This paper takes the composite as a supple resource for resemblance—for literary representation and imagination—by considering the late work of Thomas Hardy. It explores Galton's influence on Hardy first in a short story that trades on the figurative suppleness of composites to tease out connections between facial expression, hereditary history, and narrative realization. The paper then turns to *The Mayor of Casterbridge* (1886), a novel in which a minor character comes to break through conditioned ignorance by thinking about her personhood and future prospects in composite and suppositional figures. If Hardy uses such images as a way to envision how interior facts—hereditary secrets, imagined futures—can be analyzed on the surface where they play out, his meta-description of fictional method as forging "composite pictures" out of factual referents and imagined constructs moves in the opposite direction, defending a mode of realist representation that resists analytic disaggregation.

The Exact Curve of the Thing: Modernism and the Effects of Analogy
Dora Zhang (University of California at Berkeley; dyzhang@berkeley.edu)

In "Classicism and Romanticism" (1911), T. E. Hulme, the English translator of Henri Bergson and influential critic, claimed that "the highest verse" was that which used the whole of an analogy—without any excess or ill fit—to "get out the exact curve of the feeling or the thing you want to express." Not only modernist poetry but also modernist fiction is filled with analogies—often drawn from the sciences—trying to capture the exact curve of the thing. Perhaps nowhere was the analogical method more intensely applied than in descriptions of subjective conscious experience, the "inward turn" that has become synonymous with modernist literature. At the same time, we find strikingly similar uses of analogy in William James's investigations into the

phenomena of consciousness in the budding discipline of psychology. In all of these texts the use of analogy appears to be not simply incidental but an essential—if not necessary—tool for representing the feel of interior facts. Tracing some commonalities in the analogical practices of Marcel Proust, Virginia Woolf, and James, this paper will focus on the methodological implications of analogy not only as a representational technique but also as a means of epistemology discovery. Drawing on work from philosophy of science as well as poetics, a close study of early twentieth century analogizing will hone in on a distinctive feature of modernist aesthetics while also opening onto broad conceptual problems such as the relationship of the particular and the general, sameness and difference, and description and explanation.

Respondent: Robert Mitchell (Duke University; rmitch@duke.edu)

Panel 10E: Saturday, November 5, 1:30 PM-3:30 PM *Ansley 5* (projector and screen)

Science, Occultism and the Arts 3: Scientific Occultism in Art and Culture in Early 20th-Century Russia and Germany

This is the third of three panels in a proposed stream entitled "Science, Occultism, and the Arts in the 19th and 20th Centuries" which brings together international scholars to address this subject.

Chair: Linda Dalrymple Henderson

Alchemy of Word and Image: Transforming Alchemical Narrative in the Russian Avant-garde
Nina Gourianova (Northwestern University; n-gourianova@northwestern.edu)

At the turn of the century, alchemical imagery and metaphors were popularized among the Russian cultural elite. In my presentation I will explore visual and literary works of the early Russian avant-garde artists and poets Nikolai Kulbin, Elena Guro, Pavel Filonov, Andrei Bely, Velimir Khlebnikov, Aleksei Kruchenykh, and Kazimir Malevich in the context of alchemical imagery and metaphors.

***Die Uebersinnliche Welt* and the Occult Contexts of Edvard Munch and Wassily Kandinsky**
Linda Dalrymple Henderson (University of Texas at Austin; dnehl@austin.utexas.edu)

Among the many occult books and journals preserved in Wassily Kandinsky's library are several issues of *Die Uebersinnliche Welt*, an international monthly spiritualist periodical published in Berlin from 1893 to 1922. Kandinsky's issues (from 1904, 1906, 1908), along with his other holdings, document his awareness of the international cultures of occultism and science that were transmitted through such periodicals. Dedicated to "scientific spiritualism," the editors of the journal drew on the very latest developments in science—e.g., X-rays, radioactivity, and the hypothesis of the ether—to support their case for spiritualist phenomena. Translating articles by scientists such as Oliver Lodge as well as presenting the latest information from seances in Milan, Paris, and London, the journal functioned like the internet of its time. As such, *Die Uebersinnliche Welt* documents the way in which new ideas about the nature of matter and space

circulated throughout Europe and affected modern artists in a variety of locations. If Kandinsky's issues exemplify the journal's concerns in the pre-World War I era, the early issues of *Die Uebersinnliche Welt*, beginning in 1893, served as the backdrop for artists in Berlin in the 1890s, including Edvard Munch. Munch was a member of the circle based at the tavern Zum Schwerzen Ferkel, which also included writers August Strindberg and Stanislaw Przybyszewski, and there were important connections between that circle and associates of *Die Uebersinnliche Welt*. This talk will present a sampling of the results of my current study of this prominent journal and its importance for artists.

Re-enchanting the Farm: Biodynamics in Interwar Germany
Corinna Treitel (Washington University of St. Louis; ctreitel@wustl.edu)

For more than a century, Germans have been international leaders in the development and implementation of ecological agriculture, yet historical knowledge of this topic is scant. Gunter Vogt opened up this area for scholarship in his path breaking doctoral thesis *Entstehung und Entwicklung des ökologischen Landbaus im deutschsprachingen Raum* (2000), but offered a rather teleological history of organic agriculture as it is practiced in Germany today. Rather than starting with the present, my paper returns to the interwar years to examine this topic at the interface of the German life sciences and German life reform. It explains the emergence of "biodynamic agriculture"--an interwar cultivation system that shunned the use of commercial fertilizers and pesticides--as the product of two trends: the emergence of the scientific field of agricultural bacteriology circa 1900 and the simultaneous burgeoning of the influential Theosophical offshoot Anthroposophy. Attention will focus on the material, political, and philosophical factors that inspired the first generation of biodynamic pioneers as well as the ways in which Anthroposophical ideas were translated into practice on working farms. Biodynamic agriculture, the paper argues, owes its origins, development, and popularity both to the enchanting and disenchanting impulses of German modernity.

Panel 10F: Saturday, November 5, 1:30 PM-3:30 PM *Ansley 6* (projector, screen, and speakers)

Critical Code Studies and Creativity

Without questions, computer source code has been an explosive tool of creativity for over fifty years. However, in the realm of code, meaning is created in ways distinct from and yet complementary to other symbolic systems. Using the methods of Critical Code Studies, this panel will explore the meaning created through approaches to code. To begin, we will examine the ways code through its own rhetorical structures enables argumentation in critical and creative inquiry. As a means of rhetorical expression, we will then consider code as a means of social engagement. Since expression in code is constrained by programming languages, we will also examine the ways in which languages themselves facilitate or inhibit that expression. Finally, we will consider the way rule-based play in Live Action Role Play (larp) can be understood when situated as encoded play and read through the tools of CCS. These four presentations will give way to a discussion with the audience of the implications of regarding code as a means of communication.

Chair: Mark Marino

The Creative Potential of Composing in Code
Kevin Brock (University of South Carolina; kevin@brockoleur.com)

Since Marino's (2006) initial publication calling for a critical code studies (CCS), one of the emerging field's principal questions has been: "What would happen if we began to interpret the meaning of the code?" This is a valuable question that facilitates critical and analytical inquiry into the arguments made within the code of existing software programs. However, for disciplines interested in employing or invoking CCS' theoretical lenses for facilitating various forms of communication, this question can be extended beyond the scope of interpretation to include also creation or meaning-making. Put another way, the question can be asked as: "What would happen if we began consciously to construct meaningful arguments in code?" CCS offers an especially valuable framework through which to explore the potential of inventio for the development of code specifically and procedure more broadly. That is, the critical study of code and its production--whether in professional or amateur contexts--can illuminate for us how code texts might be developed differently and more kairotically when, following Knuth (1992) and others since, explicit attention is paid to the articulation of human-comprehensible, persuasive argument through procedural logic. Through the examination of several brief case studies where arguments in code (as distinct from and in addition to discursive arguments surrounding said code) had significant impact on their development, application, and subsequent uptake, Brock will attend to the potential for a broader and more nuanced approach to rhetorical invention in, and geared toward, code as distinct from invention in other modes of communication.

Dynamic Conversations in the Humanities
Michael Russo (Rutgers University at Camden; russo.ink@rutgers.edu)

Russo discusses the advantages – and disadvantages – of teaching code to humanities students, as means through which students can interact and communicate with heterogeneous, oftentimes conflicting communities that comprise the public sphere. Questioning the constraints of conventional (pen-and-paper) writing assignments through theories of procedural rhetoric, Russo addresses the creative process as simulated identity in action, communal and reciprocal. If one of the objectives of humanities studies is to create better citizens, engagement with the processes that govern citizenship must be restructured in ways that foster rhetorical engagement using technologies that encourage dynamic discourse. By allowing both readers and writers a sense of dynamism absent from traditional (pen-and-paper) assignments, code can help to reorient student writing along an axis of social action. This approach brings together the philosophies of Burke and Bogost insofar as it recognizes language as a progressive system of symbols and terms that frame authorial identity -- language not limited by written or spoken word. By introducing humanities students to encoded, axiological structures that sustain algorithmic argumentation, we foster creative techniques adapted to new systems of symbols and terms that more and more become ubiquitous in public conversation. In short, students who themselves create procedural, interactive arguments have a better understanding of the dynamic, dialectical models that shape realties, communities, cultures, and beliefs. To teach code is to provide a uniquely accessible platform on which students can negotiate new modes of civic understanding.

FLOW-MATIC and fluency in programming
Mark Marino (University of Southern California; markcmarino@gmail.com)

Critical Code Studies investigates the layers of communication between humans and machines through computer source code. As computer literacy continues to expand beyond professional programmers, more accessible languages will be in high demand. While one might assume languages which are closer to natural languages are more accessible, easier to read and write, that is not necessarily the case. In fact, these boundaries of understanding and uptake help outline the additional literacy requirements of what Jeanette Wing calls "computational thinking." Natural languages become difficult to use and adopt at the point at which coding proves itself other than person-to-person communication. I will explore this aspect of programming languages through a case study. In the early days of programming languages, Grace Hopper developed FLOW-MATIC, a pre-COBOL language, designed to make programming more accessible to business people. The language used natural language tokens, such as the word EQUALS for the = sign. As it turned out, using tokens that look like English did not make programming easier. While the ideas of FLOW-Matic would later become COBOL, many programmers at the time prefered FORTRAN, a contemporaneous language with a more encoded and abbreviated syntax. Although FLOW-MATIC may have failed as a programming language the quest for an English-like language emphasizes the human audience of code. Using the Methods of CCS, I close read a passage of FLOW-MATIC in light of Annette Vee's theorization of coding literacy.

Code as Diegetic Language in LARP
Samara Hayley Steele (University of Southern California; samarahayleysteele@gmail.com)

Live Action Role Play or larp presents procedurally governed narrative play. In autumn of 2003, I encountered my first campaign larp, and was charmed by this peculiar practice of creating an augmented sociality in which people shout commands at each other, and, if executed properly, these commands are unwaveringly obeyed. The use of command-phrases and -actions in many campaign larps allow players to fluidly incorporate fantasy elements into the social narrative, such as throwing lightening bolts or casting love spells, as well as incorporating morally undesirable behavior such as murder and torture. These rule sets provide a procedural model of command and consequence, allowing players to swiftly resolve "non-real" activities without enacting them, and to do so with relative autonomy from the game staff. Code is a linguistic form that is both declarative and imperative (Buswell 2009), and with larp rules fitting this definition, they can be interpreted as "code that runs on humans." Through the methodological approach of Critical Code Studies (Marino 2006) the form of this code can be more readily studied, allowing game designers to develop games in which the social materiality arises more fluidly from the rules. Likewise, the codic sociality of larp provides a neutral setting to observe the way social codes underlay that processes of reification (Lukács 1923) through which our political economic structures take shape.

Panel 10G: Saturday, November 5, 1:30 PM-3:30 PM *Ansley 7* (projector, screen, and speakers)

Film as Art and Science 1

Chair: Daniel Reynolds

Three Films Imagine Emergence
Daniel Reynolds (Emory University; daniel.reynolds@emory.edu)

How we conceive of emergence, the relationship between phenomena and their underpinnings, has profound implications for questions of selfhood, mediation, and creativity. Humans have been conceptually decentered by centuries of cosmology, biology, and cognitive science, but humans decentered are also humans reintegrated into the continuity of the world around them. Media, particularly cinema, have weathered similar crises. Thrust into continuity, people and media turn to questioning the physical, technological, and conceptual platforms that structure their experiences. The films *Tron* (Lisberger, 1982), *Hugo* (Scorsese, 2011), and *The Lego Movie* (Lord and Miller, 2014) conceive of emergence in different ways. Tron, a film about computational media, figures emergence as an epistemological phenomenon which reflects the scale at which an event is observed. Hugo, about analog media, casts emergence as an epiphenomenon of mechanistic action. Both films grapple with the transitional moments for media at which they were produced, Tron at the dawn of CGI special effects and Hugo early in the era of modern 3D. The Lego Movie posits a supervenient relationship between the material world and events that transpire in it, a gap that can be transcended only by fealty to the Lego brand. In the end, the world of each film is structured both from above and from below, shaped by its dynamic relationship to a host of technological, industrial, and cultural pressures, our understanding each of them dependent the scale of our own analysis. Which is to say: Tron gets it right.

Spaces of creativity and/as care in Pedro Almodóvar's *All About My Mother* and *Talk to Her*
Lisa Diedrich (State University of New York at Stony Brook; ldiedrich@gmail.com)

In *Homo Sacer*, Agamben develops Foucault's concept of biopolitics, exploring biopower in relation to, and as produced by, sovereign power. Agamben argues that the concentration camp is the paradigmatic location for the exercise of biopolitics and also identifies the refugee as a modern figure of bare life. What is less frequently noted is that Agamben discusses as well the phenomenon of "coma dépassé" (a phrase he suggests might be rendered as "overcoma"), a newly emergent postmodern condition in which the threshold between life and death is redefined in the spaces of the hospital through technologies that maintain the patient as not simply alive or dead, but as living when dead. Agamben, then, like Foucault, takes medicine as an exemplary domain in and through which life and death become politicized. In this paper, I explore the emergence of this new threshold condition in medicine through an analysis of the figure of the overcomatose patient in Pedro Almodóvar's films *All About My Mother* and *Talk to Her*. In his work, Almodóvar stages overcoma-ness as a kind of biopolitical experience and event that produces transitional spaces in which new forms of care are enacted. In *All About My Mother*, Almodóvar offers the practice of medical simulation as a doctor-centered pedagogy of care that facilitates organ procurement. In contrast, *Talk to Her* offers modes of stimulation—through practices of affective labor, including talking, touching, and sexual healing—as a patient-centered pedagogy of care that facilitates recovery. Almodóvar's films link the clinic with the theater as transitional spaces of creativity and/as care.

Rodin's *Thinker* and 3D Roxy: Godard's *Adieu au Langage* and Hylomorphism in the Filmic Essay

Maryann Murtagh (Duke University; maryann.murtagh@duke.edu)

The purpose of this paper is to argue Jean-Luc Godard's first 3D project, *Adieu au Langage* (2014), does not merely fit into the categorical genre of the filmic essay, but extends criterion of the genre itself to encompass hylomorphism as a crucial principle. Hylomorphism, here, refers to the Aristotelian concept of the combinatorial matrix of form and matter in being -- but, I suggest, with a cinematic spin. The filmic essay is hylomorphic where the form of filmmaking-- editing process, camera technology, and viewing medium-- becomes self-reflexively incorporated into the film's content. Godard's use of 3D highlights revolutionary potentials for thinking through crossable thresholds of the screen in a complication of the audio-visual with the tactile or haptic. To demonstrate this point, I engage in dialogue with film scholars Nico Baumbach, David Bordwell, and Rick Warner to provide a rich framework around focal character, Godard's own dog, Roxy Miéville, whose snout often projects off-screen. Beyond Roxy's invocation of Godard's indirect self-inscription, he functions as a lever between two couples in the film's fragmentary narrative. Here, a scene is double-performed where each man sits on the toilet posturing like Rodin's *Thinker* and each woman protests for equality while bearing witness to his defecation and flatulence. Godard includes a shot of Roxy defecating as well to rework the concept of equality between man and woman, extending it philosophically to forms of thinking between human and animal. It is this itinerary intimacy of address at the creative site of fecal objects that alludes to cinema's hylomorphic 3D format where image also becomes object. Simultaneously, it points to sense of smell as the limit of cinematic sensorial engagement and where language between human and animal comes to a salutary point.

"Scientific Surrealism" in Contemporary Documentary Film

Sarah O'Brien (Georgia Institute of Technology; sarah.obrien@lmc.gatech.edu)

In *Creaturely Poetics*, Anat Pick positions the documentary *Primate* (Frederick Wiseman, 1974) as exemplary of "scientific surrealism," a mode or aesthetics characterized by a "prurient gaze" that at once replicates and discloses "modern technoscience's cool monotony of violence." Scientific surrealism, Pick contends, is a progenitor of the ostentatiously controversial "bio arts" of contemporary postmodern arts. This paper takes up the question, left open by Pick, of how contemporary documentary film inherits this scrutinizing gaze. It takes as its primary textual focus *Memoirs of a Plague* (Robert Nugent, 2011), a highly experimental and openly subjective consideration of science's abiding fascination with locusts—an interest expressed in the species' standing as the most frequently tested in science labs around in the world. Whereas Primate's most remarkable formal features are its predilection for heavily constructed montage and its refusal of a voiceover, *Memoirs of a Plague* delights in additive excesses and sporadically employs Nugent's own voiceover narration to splice together scenes styled in the disparate conventions of horror and science film, memoirs and travelogues, and music videos. This paper explores the ethics behind the film's ungainly hybrid form, and consider the ways in which its exuberant experimentation with film genre and style conforms to/departs from the alternately dispassionate and capricious logic associated with laboratory science and scientific surrealism.

Panel 10H: Saturday, November 5, 1:30 PM-3:30 PM *Ansley 8* (projector, screen, and speakers)

On Heterodox Science: Anarchy, Creativity, Facticity

In his 1975 manifesto *Against Method*, Paul Feyerebend called for a new kind of scientific practice called "epistemological anarchism" that deployed metaphysics, mythology, religion, and art to counteract what he saw as the stultifying conservatism of positivistic science. While Feyerebend's call-to-arms has yet to incite a paradigm shift in Western science, there is little doubt that "bad science" has consistently spurred the scientific and literary imagination. From alchemy to Lamarckism to the multiverse, heterodox science has a rich—and controversial—intellectual history that has inspired some of the most creative works of our time while paving the way for real scientific development. In this panel, we will discuss how various anarchic knowledge-forms like the UFO journal or the parapsychological novel have affected the scientific status quo and the processes of fact production itself. Following Feyerebend's lead, we ask if unsanctioned sciences productively expand the boundaries of knowledge, sidetrack "true" scientific progress, or perhaps something else altogether. Likewise, we question if the so-called pseudosciences belong in the proverbial dustbin of history or if they still have a vital role to play in scientific epistemology. At stake in this conversation are fundamental questions for our posthuman, postsecular age: what is the precise role of radically transgressive ideas in science and literature? What audiences alternatively dismiss and praise "creative" science, and how do they arbitrate its facticity? How can this discussion guide our ethical obligations when encountering future "impossible" sciences?

Chair: Derek Lee

Traces of Heterodoxy: Locating Telepathy's Legacy in Contemporary EEG Neurotechnologies
Melissa Littlefield (University of Illinois at Urbana-Champaign; mml@illinois.edu)

EEG has long been a technology of the margins even as it has revolutionized neuroscientific and popular understandings of brain function. From Hans Berger's initial—and initially unrecognized experimentation—to the recent emergence of neurotechnologies, EEG or human electroencephalography, has faced the criticism of mainstream scientists. In this paper, I argue that EEG's early associations with telepathy have influenced both neurophysiological and popular conceptions of the mind's powers to control the body, communicate with other minds, and express states of arousal and emotion. After briefly addressing several genealogies of EEG, including Hans Berger's unorthodox experiments of the 1920s, I turn to two contemporary examples, one from science and one from literature: a 2015 PLOSone study by Andrea Stocco et al. "Playing 20 Questions with the Mind: Collaborative Problem Solving by Humans Using a Brain-to-Brain interface," and Mind Plague, a 2013 self-published novel by Kyle Kirkland. In each, questions of mind, matter, and machine resurface in ways that echo Hans Berger's concerns about the place and power of the mental over the physical. And, in each, questions of heterodox science also reflect Berger's initial reception among his psychiatrist colleagues. My goal here is not to create a one-to-one correspondence or identify an origin story; but to illuminate resonances between early work on EEG and its contemporary manifestations.

Crackpot Science: The UFO and Scientific Controversy in Cold War America
Kate Dorsch (University of Pennsylvania; kdorsch@sas.upenn.edu)

Unidentified flying objects (colloquially known as UFOs) have long been relegated to the realm of crackpots and conspiracy theorists. Interested scholars have gestured in recent years toward the 'UFO taboo,' an attitude that treats UFO investigations as pseudoscience, unworthy of serious scholarly attention. This paper rejects that attitude. The modern UFO came into being as an object of legitimate scientific inquiry, and was the focus of a series of official Air Force investigations between 1947 and 1969. As a scientific object which rejected traditional efforts to 'discipline' it – phenomena could not be reproduced in the lab nor in nature, making them difficult to study and know – the UFO represents a meeting point between traditional scientific interest and alternate ways of knowing, as non-expert witnesses were relied upon for data gathering and fact production. This paper will treat the UFO as a case study for exploring "controversial science" in postwar America, and will pay special attention to the crises of authority experienced by the scientific establishment, both as they played out within the scientific establishment and between the scientific establishment and the interested American public. Furthermore, it will join Pinch and Collins, Kaiser, Gordin, Buhs, Eghigian, and others in arguing that "fringe" science and pseudoscience have an important place in our histories, as nontraditional narratives help us clarify (or complicate) what we mean when we refer to "Science" in a given time and place.

Anti-Anatomy and the Posthuman Mind in the Human Centipede Films
Anthony Cooke (Emory University; acooke2@emory.edu)

This paper explores the ways in which representations of heterodox science in the Human Centipede films create fresh approaches to questions of the posthuman. The film trilogy tells the story of the discovery of a surgical procedure for connecting human bodies that mimics the form of a centipede. The films enjoy a cult status mainly due to the director's claim that the procedure is "one hundred percent medically accurate." While this paper does not in any way condone or promote human experimentation, I do suggest that the Human Centipede films might serve as the basis for philosophical and scientific discussions regarding new locations of the "mind" and the "body." For instance, the forced unity of muscle movements, digestion, and even group intelligence the subjects undergo in the films invite comparisons with coral reefs or bryozoans—individual animals that work together to form one organism. If the mind is not a physical entity, then making connections between the Human Centipede films and other organisms raises deeper questions such as, where do the boundaries and limits of the mind lie, if such limits exist at all?

How to do Things with Telepathy: X-Men and Theosophical Chemistry
Derek Lee (Pennsylvania State University; dpl151@psu.edu)

In their 1919 text Occult Chemistry, the Theosophists Annie Besant and Charles Leadbeater used clairvoyance to scry the inner structure of physical matter, a process that led to the "discovery" of previously unknown elements and radically new subatomic structures. While ignored as pseudoscientific musing, theosophical chemistry would find a greater impact and a more willing audience fifty years later in the pages of X-Men, where mutant telepaths would not only see the internal structure of atoms but also rearrange their chemical composition. What is abundantly

clear from a contemporary perspective is that such unusual alchemical texts are not about matter so much as the human mind. In this paper I use Occult Chemistry and the X-Men to explore the fantastical limits of telepathy in twentieth century discourse as well as the ideological formations that allow such ideas to arise. By following this heterodox science from its roots in Victorian spiritualism to the heart of atomic age fiction, I attempt to understand the telepathic mind first and foremost as a scientific object. What do such texts reveal about the cultural construction of normality and paranormality? What does it say about the trajectory of the telepathic imaginary over the course of the twentieth century? What are the epistemological differences between speculation in occult manuals and mass-market comics, and most importantly, what do such differences unveil about the technics of knowledge creation and the agents authorized to perform it?

Respondent: Adam Nocek (Arizona State University; Adam.Nocek@asu.edu)

Panel 10I: Saturday, November 5, 1:30 PM-3:30 PM *Peachtree 1* (larger room, projector, screen, and speakers)

Roundtable*: Orphan Black* and Biotech

The four seasons of *Orphan Black* (2013-16) epitomize serial television's capacity to reflect and influence contemporary technoculture. Produced in Toronto, the show imagines human clones were born as early as 1984, well over a decade before Dolly the sheep appeared in Edinburgh. The forty episodes explore multiple forms of biotechnological innovation, including genetic testing, gene therapy, and designer babies. With comments from the show's science consultant, this roundtable promises diverse disciplinary and theoretical viewpoints and ample time for audience participation. Our questions include: 1) What insights about biotechnology and its cultural assimilation does *Orphan Black* offer? How do they compare to those of previous narratives, from Shelley to Ishiguro? 2) How does *Orphan Black* rely upon and revise previous mythologies about the gene and genome? What is its orientation to the past and the future? 3) What do we understand the show to say about differences of sexuality and gender? According to *Orphan Black*, how are these defined by genetics vis-à-vis environment, culture, individual agency, etc.? 4) How does the series treat problems of bio-economics and tensions between the human, the animal, and the synthetic? What does *Orphan Black* say about the commodification of the life sciences, including gene patenting? 5) What does *Orphan Black* suggest is the cultural/social significance of biological identity and difference, given that they are increasingly described by potentiality rather than determinism?

Moderator: Everett Hamner

Contributions:
Priscilla Wald (Duke University; pwald@duke.edu)
Nathaniel Comfort (Johns Hopkins University; nccomfort@gmail.com)
Sherryl Vint (University of California at Riverside; sherryl.vint@gmail.com)
Rebecca Wilbanks (Stanford University; rrw@stanford.edu)
Everett Hamner (Western Illinois University; everetthamner@gmail.com)
Cosima Herter (Orphan Black science consultant; cosimaj@gmail.com)

Panel 10J: Saturday, November 5, 1:30 PM-3:30 PM *Peachtree 2* (projector, screen, and speakers)

Roundtable: Physiological Aesthetics and the Making of Modernism in the Arts

Movement, energy, vibration, rhythm, duration, arrest, organization, sensation, kinesthesia, plasticity, dynamism. These familiar terms from late-nineteenth and early twentieth-century modernist discourse have yet to be fully connected to their origins in the techniques of experimental physiological science. With roots in eighteenth and early nineteenth century somatic philosophies, cutting-edge European and American laboratory scientists examined how line, color, sound, and perception of movement produced a corresponding neuromuscular response in the beholder's body, stimulating either kinesthetic empathy or neurasthenic revulsion. Their introspective and instrumental protocols for measuring sensorimotor response to stimuli established new understandings of visual experience, designated "physiological aesthetics." Through a variety of channels, including visual art, literature, performance, and philosophy, physiological aesthetics contributed new expectations for the arts' functional value, namely the subjective artistic practices and discourse we recognize now as modernism. For too long, the mid-twentieth-century model of disembodied modernism has obscured the fact that earlier modernists embraced models of sensory integration and subjective embodiment. The participants in this roundtable seek to map the wide-ranging manifestations of modernism's physiological aesthetics. We engage with the theme of scientific investigation via multiple approaches, including creativity, reception, and the epistemology of artistic perception and cognition. Finally, we consider why physiological aesthetics was repressed or forgotten in both culture-industry critiques and in the postwar historiography of modernism.

Moderators: Robert Brain and Robin Veder

Contributions:
Francesca Bordogna (University of Notre Dame; fbordog1@nd.edu)
Robert Brain (University of British Columbia, Canada; rbrain@mail.ubc.ca)
Ana Keilson (Columbia University; ak2016@columbia.edu)
Whitney Laemmli (Columbia University; laemmli@sas.upenn.edu)
Susan Lanzoni (Harvard University; smlanzoni@gmail.com)
Aris Sarafianos (University of Ioannina, Greece; aris_sarafianos@hotmail.com)
John Tresch (University of Pennsylvania; jtresch@sas.upenn.edu)
Robin Veder (Penn State University, Harrisburg; rmv10@psu.edu)
Matthew Vollgraff (Princeton University; vollgraff@gmail.com)

Session 11: Saturday, November 5, 3:45 PM-5:15 PM

Panel 11A: Saturday, November 5, 3:45 PM-5:15 PM *Ansley 1* (no AV)

Roundtable: Performing Science 2 (Performing Science 1 is part of HSS Conference)

Seeking to expand the conversation beginning in the HSS roundtable "Performing Science," our panel will also "examine ways in which literature has been used as a vehicle to examine the promise and perils of scientific advance. Participants in this roundtable will examine the subversive potential of women 'performing science'" in poetry, drama, and film. Like the HSS roundtable, ours will be concerned with questions of "who gets to perform science, how is it done, and why? Participants will focus on various ways science has been performed" on the stage, screen, and page with particular attention to the literariness of these objects, texts as diverse as the poetry of Stephanie Strickland (*True North, slippingglimpse, Dragon Logic*), filmic texts such as *The X-Files* and *Sherlock*, and plays from the 'nineties and 'oughts such as *Harvest*, by Manjula Padmanabhan; *Now Then Again*, by Penny Penniston; *Arcadia*, by Tom Stoppard; *Copenhagen*, by Michael Frayn; *QED*, by Peter Parnell; *Love and Information*, by Caryl Churchill; and *Oxygen*, by Carl Djerassi and Roald Hoffmann.

Moderator: Marsha Richmond (Wayne State University; marsha.richmond@wayne.edu)

Michaela Giesenkirchen Sawyer (Utah Valley University; GIESENMI@uvu.edu)
Jenni Halpin (Savannah State University; jennihalpin@gmail.com)
Jay Labinger (California Institute of Technology; jal@its.caltech.edu)
Gwen Le Cor (Université Paris 8, France; gwen.le-cor@univ-paris8.fr)
Cordelia Sand (University of Massachusetts at Amherst; cordeliasand@gmail.com)

Panel 11B: Saturday, November 5, 3:45 PM-5:15 PM *Ansley 2* (projector and screen)

Constructing Bodies 1

Chair: Bryan Alkemeyer

Human Body and "Hoggish Minde": Human/Pig Comparisons in Renaissance Anatomy and Spenser's *Faerie Queene*
Bryan Alkemeyer (The College of Wooster; balkemeyer@wooster.edu)

Book 2 of Spenser's *Faerie Queene* (1590) ends with the Palmer's judging Gryll, who prefers to be a pig rather than a human: "Let *Gryll* be *Gryll*, and have his hoggish minde." Although this human/pig comparison has familiar moralistic significance (condemning self-indulgence), it also has profoundly destabilizing implications for human nature that become legible within the contexts of Renaissance anatomy and humoral theory. Before Tyson anatomizes a chimpanzee in 1699, many writers believe that the pig is the animal whose internal anatomy most closely resembles the human's. Topsell, for instance, writes, "inwardly they [pigs] do more resemble a mans body then an Ape, . . . and therefore our predecessours did first of all dissect a Swyne, and then a man, for the Swine was an example or introduction to the other." This especially close resemblance raises disturbing questions about human distinctiveness in a culture understanding physiology and psychology in terms of fluids produced by internal organs. Gail Kern Paster's argument that humoral theory supports "identification across the species barrier" deserves further specification: the pig's human-like anatomy renders human/pig comparisons particularly corrosive of human exceptionalism. Thus, the Palmer's pronouncement on Gryll does not simply enforce certain standards of human behavior; it suggests that the human is always precariously

close to true as well as metaphorical swinishness. Spenser's human/pig transformation includes—as an important aspect of its allegorical meaning—a disturbing definition according to which a pig is both what a human is and must not be.

Creating Bodies: Embodied Cognition in Faulkner's "Red Leaves" and Porter's "The Jilting of Granny Weatherall"
Laurel Bollinger (University of Alabama at Huntsville; bollinl@uah.edu)

If cognitive science begins from the premise that brains function like computers, embodied cognition explores issues at the juncture of brain and body, seeking moments when the two most fully intersect. A rejoinder to the Cartesian "mind-in-a-vat" dualism that posits the body strictly as a host for cognition, embodied cognition insists we recognize the brain as intimately enmeshed with the rest of the body at every level, with a bidirectionality of influence that refutes any residue of Cartesian dualism. Such enmeshing is perhaps most fully experienced in what we might consider crises of embodiment, or moments when the experience of being (not having) a body dominates our conscious minds. While theorist Lisa Zunshine suggests that readerly pleasure emerges from opportunity to engage directly with characters' cognition, reading literature through the lens of embodied cognition asks us to go still further. How do writers create narratives that ask us to engage with the embodied experiences of their characters, particularly as those characters experience crises of embodiment? Modernist writers are nicely poised to address such questions, in that their willingness to experiment with form opens opportunities unavailable to traditional narrative (often committed to something more like Cartesian sensibility). To that end, this paper will look at how two modernist writers, William Faulkner and Katherine Anne Porter, create characters whose crises of embodiment seek to reach their readers as bodies, not strictly as minds. Particularly with the Porter story, reading the work through insights derived from embodied cognition helps address long-standing critical controversies.

Triangles and Taxidermy: Re-Creating Animal Bodies as Digital Fragments
Julie McCown (University of Texas at Arlington; mccown@uta.edu)

In this presentation I examine the re-creation and digitization of animal bodies in three websites: *Crappy Taxidermy*, *In Pieces*, and *What is Missing?* Digitized animal bodies circulate freely and are capable of being viewed by anyone with an Internet connection; physical decay and decomposition no longer pose a threat to the animal body, now preserved as a digital presence. Yet digitized animal bodies also separates humans from flesh-and-blood animals, a separation with both positive and negative implications. With our focus on digitized animals, we can potentially leave real animals alone and undisturbed, but we can also find ourselves caring less and less about the real animals and their fate. After all, the digitized animals are far easier to control, contain, and manipulate than real animals; they do not die, escape, or resist us. Drawing on animal studies and media theory, I argue that the digital presence of the animal bodies in these websites is in many ways more vital than the original materiality of flesh-and-blood animal bodies out in the natural world, traveling farther, faster, and more reliably that flesh-and-blood animal specimens. *Crappy Taxidermy* emphasizes the distanced viewing of the taxidermied animal body; the website's animal bodies have been photographed and digitized, further removing them from their original embodiment as living creatures. In addition to humorous sites

like *Crappy Taxidermy*, digitized animal bodies shape more serious-minded projects such as *In Pieces* and *What is Missing?* in which digitized animal bodies connect people and raise awareness about species and habitat loss.

Panel 11C: Saturday, November 5, 3:45 PM-5:15 PM *Ansley 3* (projector and screen)

Reimagining Poetic Creation 1

Chair: Katherine Blake

Creating New Burial Practices: William Wordsworth's Poetic Health Reform
Katherine Blake (Indiana University; katblake@indiana.edu)

Creativity and the System of Self-reference: The Poetry of Wallace Stevens and Elizabeth Bishop
Gi Taek Ryoo (Chungbuk National University; gtryoo@chungbuk.ac.kr)

There is no reality that exists outside our mind. Reality is the product of imagination as it constructs the world. We create "an acceptable fiction" which we call reality. However, imagination is not equivalent to human consciousness. It is rather a mechanism by which we conceptualize the patterns of the world and experience. The inner 'models' of poetry are but subjective dynamic constructions that, by complex feedback paths within the elements of poetry (Stevens) or the observer and environment (Bishop), move the system towards its emergent goals. The poetry of Wallace Stevens and Elizabeth Bishop exhibits feedback mechanisms through which information flows and enables a poetic system to integrate within itself. Their poems are constructed by an interlocking series of self-reflective metaphors or similes, which bring about the sudden emergence of new forms of order at the crisis of disintegration. Their unique poetic styles show how poetry may act as a self-organizing system, evolving through chaotic feedback loops towards higher orders of systematic organization. The product of one interaction becomes the catalyst or the ingredient for another. Every turn of the wheel exhibits 'difference' or what Bateson calls "information," in the ordering of antecedents and subsequents. The scientific ideas of cybernetics, complexity, and systems theories, in this regard, provide helpful language to illuminate the process of creativity. The constant movement of feedback loops is precisely what generates a creative force which allows the textual system to consistently self-organize and produce itself anew.

'Where the Meanings, are –' Emily Dickinson's Mythopoeic Quest Toward Integral Consciousness
Christine C. Keating (Assumption College; cckeating@earthlink.net)

Upon examination, Dickinson's poetics illustrate an intentionality of mindfulness and imagination that is empowered by her prophetic envisioning of the power of self-consciousness as seen in the science of phenomenology. This paper demonstrates that Emily Dickinson is a pre-phenomenologist in that she, not having knowledge of the field, illustrates through her poetics she intentionally grasped for modes of consciousness that unleashed the infinite power of her transcendental ego. The relationship between Edmund Husserl and Jean-Paul Sartre's theories on

phenomenology and how they relate to Dickinson's work will be explored. Discussing her work as mythopoeic, this paper looks to Dickinson's rejection of a hierarchal religion that sought to remove power from the human imagination and seeks to discover her creation of a new reality via a poetics where she takes a god-like dominion. The theoretical framework of this paper includes William I. Thompson's perspective that myths, whether they are seen as scientific, philosophic, theological, or literary, are constructed from patterns that emerge out of chaos to form order and begin to connect with other forms into a system – thus creating a whole – a being that can be seen as a true Creation. Several poems will be explicated in this paper illustrating Dickinson's description of the ability of the consciousness to be aware of the both the material world and itself, traversing the intervals unique to human experiences, both external and internal to self.

Insects, Drought, Human Stones and, Queerly, Mad Max: Reading Eliot's *The Waste Land* in the Anthropocene

Erik Fuhrer (The University of Notre Dame; efuhrer@nd.edu)

In 1922, Eliot first published his modernist epic, *The Waste Land*. Nearly a century later, in 2000, Paul Crutzen and EF Stoermer proposed a new geological era titled the Anthropocene that emphasizes how drastically human impact has altered the physicality of the Earth. Though reading the Anthropocene through the lens of *The Waste Land* may at first seem deeply anachronistic, this paper will argue that Eliot's poem yields a deep engagement with ecocritical responses to the Anthropocene, especially those that turn toward the nonhuman for epistemological recalibrations. While ecocritics such as Tim Morton have praised Eliot's contemporary, Virginia Woolf, for slipping between human and snail consciousnesses, this paper will be the first to focus on Eliot's more subtle creative engagements with arthropod agencies that offer a more radical critique of humanist ideologies. This paper will therefore illuminate the ways in which *The Waste Land* creates an ecocritical theory that is not interested in human correctives to the Anthropocene but in visions of radical nonhuman and geological becoming. This analysis of *The Waste Land* will engage *Mad Max: Fury Road*, as a companion text on the journey through Eliot's pages. Max will serve as a harbinger of scorched futures who will enter into the mesh of Eliot's *The Waste Land* and illuminate its demons. Yet the assertion will continuously and ultimately be that Eliot is even more radically posthuman, in the sense of creating and embracing a world beyond that of the human, in his imaginaries than the contemporary blockbuster.

Panel 11D: Saturday, November 5, 3:45 PM-5:15 PM *Ansley 4* (projector and screen)

Medicine, Fiction, and Mental Illness

This panel explores intersections among patient narratives, fiction about mental illness, and medical history.

Chair: Elizabeth Donaldson

Narrative, Representation, or Myth: Fictionalizing Medicine in Charlotte Perkins Gilman's "The Yellow Wallpaper"

Leslie Ward (City University of New York, Queensborough Community College; LWard@qcc.cuny.edu)

With the publication of "The Yellow Wallpaper" in 1892, Charlotte Perkins Gilman solidified her place in literary history for her portrayal of a woman suffering from a “nervous disease” and the ill effects of her husband’s attempts at treatment. Inspired by her own experiences with S. Weir Mitchell’s rest cure, Gilman’s story, “was not intended to drive people crazy, but to save people from being driven crazy.” Though the short story is known for its place in literature, as well as gender, women’s and cultural studies, its subject inspires another question: what role does the story play in medical history? Patient narrative plays a key role in medical history: it provides tangible, relatable, and easy to understand context to circumstances that pure data cannot. This paper will attempt to identify whether the narrator’s portrayal of her disease, her treatment, and her experience acts as medical narrative, representation, or myth. By examining the medico-linguistic portrayal of disease, the role of narrator as patient and the use of active voice, this paper will examine the fine line between illness experience and representational texts designed for public consumption. In doing so, this paper will act as an examination of fictionalized accounts of medical experience as a history from below and therefore a valid medical document.

Snake Pits Revisited: Mary Jane Ward’s Mental Health Advocacy, Relapse, and Asylum Fiction

Elizabeth Donaldson (New York Institute of Technology; edonalds@nyit.edu)

When it was first published in 1946, Mary Jane Ward’s *The Snake Pit* was an instant success. Chosen as a Book-Club-of-the-Month title, the autobiographically-based novel about Ward’s experiences as a psychiatric patient in a state mental hospital sold hundreds of thousands of copies even before being made into an Academy Award winning feature film starring Olivia de Havilland. The wild success of the book and the film catapulted Ward into fame and garnered public support for reforms in psychiatric institutions. After her stint in Hollywood, Ward took to the road as a speaker for the National Mental Health Foundation, visiting state mental hospitals and lecturing to lay people and to healthcare professionals about the importance of the patient experience and the responsibility of the community to care for people with mental illnesses. In this paper, which takes its title from Ward’s unpublished autobiography, I focus on *Counterclockwise* (1969), Ward’s neglected final novel. Using archival evidence from Ward’s papers, I argue that *Counterclockwise* can be read as a sequel to the autobiographically-based *Snake Pit*. This forgotten novel about Ward’s relapse and hospitalization documents social and cultural changes in psychiatric care and is a lost history of her significant mental health advocacy in the 1950s.

On Resistance and Social Suffering in Narratives of Mental Illness

Srikanth Mallavarapu (Roanoke College; mallavarapu@roanoke.edu)

Arthur Kleinman distinguishes his approach to illness from Canguilhem’s account of the construction of the normal and pathological as well as phenomenological approaches that focus on embodied experience. Kleinman’s framework focuses on microcontexts, which allows for an exploration of social and political factors as well as the personal. Kleinman draws on this

framework to develop a model of suffering and resistance through a comparison of patients suffering chronic pain in North America and China. He uses resistance not only to refer to the struggle against modes of domination but also to the "opposition to the flow of lived experience," which is linked to suffering. In this paper, I examine the strengths and weaknesses of Kleinman's approach to illness through an analysis of two novels that deal with the issue of mental illness in the Indian context, Amandeep Sandhu's *Sepia Leaves* and Jerry Pinto's *Em and the Big Hoom*. These novels, both of which are about a mother dealing with mental illness, allow for a critical interrogation of Kleinman's model of resistance and suffering as well as an examination of the construction of medical categories and the lived, embodied experiences of patients, families, and caregivers in a specific social and political context.

Character Defects: Genetics, Race, & Addiction in 1930s America
Lisa Mendelman (University of California at Los Angeles; lisame@ucla.edu)

This paper analyzes genetic and aesthetic models of race and addiction in 1930s America. Engaging writing from Nella Larsen (*Passing* [1929]), Zora Neale Hurston (*Their Eyes Were Watching God* [1937]), and the 1939 Alcoholics Anonymous "big book," as well as contemporaneous genetic theory, I elucidate period understandings of race and addiction as, on the one hand, a matter of inherited biology and, on the other, a matter of individual character. In each case, the possibility of defection—meaning both deficiency and desertion—looms large. I highlight the ways in which these fictive and scientific models mirror and complicate one another. Employing this mutually-contextualizing approach to modern science and literature, this paper further illuminates the history of American mental health and reconceptualizes the relation between narrative form and the history of medical conditions.

Panel 11E: Saturday, November 5, 3:45 PM-5:15 PM *Ansley 5* (projector and screen)

Imagining Futures 1

Chair: Hannah Rogers

Emerge: Artists and Scientists Redesign the Future
Hannah Rogers (Columbia University; hannahstarrogers@gmail.com)

Emerge is a public event sponsored by Arizona State University's School for the Future of Innovation in Society that dares brilliant creative and technical minds to bring questions about the future to life through performance, technology, and storytelling. The event gathers artists, designers, researchers, scientists, engineers, and audiences to imagine possible futures and the ways those futures are chosen and achieved. Each year a theme ("Carnival of the Future," "The Future of Sport 2040," "Frankenstein," etc.) brings together collaborative teams of artists and scientists to create an event for the public. Each team creates a product, performance, or installation for the public to experience as a "Visitation" from the future. This paper will discuss the use of design fictions, particularly the AI Cheerleader (CAIL), Cheering Artificial Intelligence Leader), to think about the ways that the critical art-science projects can raise questions about social issues and future imaginaries.

Creating Futures in the Wild
Anneke Schwob (University of North Carolina; schwob@live.unc.edu)

This paper argues that the wild regions of dense growth, historically categorized as "jungles," offer space to imagine human futures in the face of environmental collapse. Throughout their exploration and exploitation, the jungle has been figured as a pluripotent site to encounter other ways of being – to both positive and negative ends. When William James and Louis Agassiz explored the Amazon in the mid-nineteenth century, their expedition, which aimed to garner support for Agassiz's evolutionary theories over Darwin's, was flavored by Manifest Destiny and paternalistic racism. By the twentieth century, however, Darwin's theories had proven increasingly resilient and the jungle began to appear in utopian fiction like Charlotte Perkins Gilman's *Herland* and pulp like Edgar Rice Burroughs's *Tarzan of the Apes* not merely as an exploitable resource but as a proving ground for human evolution. Under dense tree cover, both Gilman and Burroughs create their models for evolutionarily superior human being. In this paper, I read contemporary considerations of wildness against these sometimes-contradictory legacies. The possibility of wide-ranging ecological catastrophe and consequent collapse of human civilization as we know it requires that we expand our consideration of the future to include alternate modes of being. From post-human anthropologies like Eduardo Kohn's *How Forests Think* and Jack Halberstam's queer readings of wildness to apocalyptic survivalist manifestos and Jeff Vandermeer's *Southern Reach* series, these jungles force a confrontation with a less-than-triumphant human telos while simultaneously proffering themselves as a space to create alternatives.

"Behold a fire from the opposite shore": Radical Political Subjectivities in Chang Rae Lee's *On Such a Full Sea*
Andrew Rose (Christopher Newport University; arose1@uw.edu)

Chang-Rae Lee's speculative fiction novel *On Such a Full Sea* imagines a future North America inhabited by relocated Chinese refugees. Deep in an opaque past, the former U.S. has been decimated by climate change and resulting economic and political collapse, while a similarly challenged Chinese population escapes their drought and wild fires via a postapocalyptic colonization of inhabitable areas in the Americas. A dominant feature of this society is institutionalized economic inequality. Lee's novel imagines a future society that is at once technologically enhanced and resource limited, and which strategically deploys technology to promote private profit and an apoliticized public. In our contemporary moment, Wendy Brown argues, in *Undoing the Demos*, one impact of the "economization" of society under neoliberalism is the redefinition of liberal democratic norms in economic terms. That is, "as each term is relocated to the economy and recast in an economic idiom, inclusion inverts into competition, equality into inequality, freedom into deregulated marketplaces, and popular sovereignty is nowhere to be found…neoliberal rationality hollows out both liberal democratic reason and a democratic imaginary that would exceed it" (42). Reading Lee's novel through this critical lens, this paper argues that the narrative, in significant part, sketches an inchoate political subjectivity fashioned out of the wreckage of neoliberal rationality. Thus, this approach to Lee's novel compels us to speculate upon the possibility of creating new political subjectivities, alliances, and aspirations that breach the limitations of contemporary neoliberal and liberal democratic imaginations.

Feeling Machines: Exploring Human-Nonhuman Relationships as a Function of Cybernetics and Bioart
Kameron Sanzo (University of California Riverside; kameron.sanzo@gmail.com)

This paper considers an approach to affect that decenters or destabilizes anthropocentric models of affective phenomenology. While this is not necessarily a new thing, considerable controversy or even squeamishness surrounds the idea of a palpable conflation of living and non-living entities. This paper works intertextually to explore the affective representation of the doll. Ken Liu's short story "The Algorithms for Love" treats human affect as something questionably unstable, in that thinking about feeling as prescriptive or algorithmic potentially disrupts the capacity to experience feeling. The cybernetic relationship between Liu's dolls and their human creator is alienating, whereas Oron Catts's and Ionat Zurr's "Semi-Living Worry Dolls" bioart exhibit embraces a posthuman rejection of discrete demarcations between the living, the non-living, and the semi-living. What may be considered organic or innate affective reactions are challenged with the premise that human life is necessarily symbiotic with non-human lifeforms. I explore whether, if affect can be mimicked, or if ostensibly innate physiological responses to affect can be challenged, we must reconsider our own systems to be machine-like or routinized. Contrary to a negative reading of affect as a potentially mutable but nonetheless routinized system, I argue that we already think of our bodies as posthuman machines and have done so for centuries. If we are not to consider our affective phenomenologies as divorced from our mechanical bodies, then our feeling minds are arguably also organic machines. Moreover, reevaluating affect as mechanical not in a rote, routinized way but in a comfortingly routinized way embraces a cybernetic reading of the body that has evolved with technology, and a technology that reads as increasingly affective.

Panel 11F: Saturday, November 5, 3:45 PM-5:15 PM *Ansley 6* (projector, screen, and speakers)

Creating Places 3: Local Affect

Chair: Celina Osuna

Giving Color to Place and Memory: Unconventional Creativity in *Gardens in the Dunes*
Celina Osuna (Arizona State University; cosuna2@asu.edu)

This paper will examine how author Leslie Marmon Silko expertly demonstrates the power of color to transform and create place and memory in her novel *Gardens in the Dunes* (1999). Specifically, I will investigate how the character of Indigo, a young, indigenous girl from the fictional Sand Lizard tribe, experiences color and creates place as she travels beyond her native Colorado River region and heads east to Europe with Hattie and Edward, an affluent couple who adopt Indigo for the summer. Set in the late 19th century, *Gardens* is typically analyzed in terms of colonialism, gender, and culture. What I intend to do instead is open up the work in terms beyond identity politics and focus on how the text successfully expresses the understanding that place and memory are not static or stale experiences: they are and must be created. The past and present are simultaneous and coexistent, and this is illustrated through Indigo's own creativity. Whether through her imagination, artwork, or gardening, Indigo's memories, triggered by color,

affect each other constantly in dreams as much as while awake in order to produce place. Armed with her own gardening knowledge and prized gift of colored pencils, Indigo is able to synthesize the environments she experiences once she returns home at the end of the novel. By exploring the often-overlooked sense of creativity found in memory and place-making, I hope this paper will be a useful way to further understanding across disciplines about what it means to have human experiences.

Augmenting Public Spaces: Creating through Hybrid Environments
Shannon Butts (University of Florida; shannonmariebutts@gmail.com)

Drawing from Augmented Reality projects based in Paris and Atlanta, this presentation discusses how AR applications offer a new medium for creativity, rewriting cities through mobile technologies. Through AR apps, users can position a smart phone in a physical location to trigger a digital 'pop-up' of information on the screen – similar to an audio tour that guides a user through an environment. AR apps initiate hybrid spaces where users can interact with existing environments and create new types of art and discourse. Writing through site-specific augmentations encourages a mobile literacy that engages what Amy Propen calls a "visual-material rhetoric," uniting space, the body, and the material to shape lived experiences. As a hybrid text that unites digital and physical space, the media of augmentation circulates both information and individuals, rewriting public space through the lived experience of mobility. By augmenting environments, AR technologies offer mobile platforms for education, art, and activism, technologies that invite users to be active, to participate in a media ecology that teaches "us about the way things move, transform, effect change, and become rhetorical" (Gries 2015). In creating and following AR prompts, users not only move through a city, but also participate in a genealogy of spreadable media, a "writing in motion" that revises spaces and creates new opportunities for participatory media. In addition to the formal presentation, "Augmenting Public Spaces" offers an optional AR walking tour participants can download and later follow through downtown Atlanta to experience firsthand the mobility of augmentation.

Recreating Place and Exile in Adios, Happy Homeland!
Kevin Concannon (Texas A&M University at Corpus Christi; kevin.concannon@tamucc.edu)

Ana Menéndez's recent collection of short stories, *Adios, Happy Homeland!*, draws on Edward Said's understanding of the exile as not only acted upon, but as participating in the creation of their homeland. Looking at the experience of Cuban exiles, Menéndez describes Cuba as an archipelago rather than an island. While accurate, this is clearly unconventional, even though Cuba is part of the Canarreos Archipelago. The significance of this shift is twofold. It sees Cuba in terms of connectivity rather than the separation implied by an island, and it presents this connectivity as occurring within a larger context of repression, since Cuba traditionally is seen as isolated. Menéndez's use of Aleksandr Solzhenitsyn's *The Gulag Archipelago* as a footnoted reference adds to this sense of repression, while also underlining a textual and imaginative history to archipelagos, since he presents them as part of the history of the Soviet Union even if they are denied by the government. To see Cuba as an archipelago, therefore, means to place Cuba as much as in a creative as a geographic context, where it is produced or reproduced by language rather than being already "there." The significance of this shift, and what my paper will examine, is how Menéndez's work changes our focus away from the movement of the exile—as

in Said—to the "movement" of one's homeland. One of the given assumptions of exile is that the individual can leave their home, encouraging a belief in the stability of the nation. The exile moves away, and in many cases searches for a way to "get back." Both actions imply the nation remains identifiable and more importantly, locatable in terms of its boundaries, even as it undergoes historical change. Menéndez's text reverses this assumption by seeing Cuba as an archipelago, stretching its geographic definition.

Slow Light and Lunar Drift
Rebecca Cummins (University of Washington at Seattle; rcummins@uw.edu)

I am inspired by science, its history and instrumentation. I probe science for meanings relevant to our more prosaic or domestic lives with art works that acknowledge the complex interactions between technology, culture and the physical universe in a broad range of media that have included photography, installation, performance, sculpture, mechatronics and video. In addition to an independent studio practice, I am active in public art and cross-disciplinary collaborations with other artists, scientists and community partners. Recently, I have been investigating light, time and natural phenomena within a variety of photographic, sculptural and conceptual frameworks. Many of these works offer innovative, sometimes playful or intimate approaches to conceptualizing and / or visualizing time. They invite viewers to experience a heightened awareness of the earth's movement and how this affects our perceived environment, including daily and seasonal light and shadow occurrences quite specific to the moment and to geographical location. Related projects are installed at the Seattle Public Library ("Skylight Aperture Sundial") and "Solar Hour Benches", The Exploratorium Museum, San Francisco (with Astronomer Woody Sullivan). Lunar Drift: Sun and Moon Pointers, 2013 (with Paul DeMarinis) tracks the sun and the moon in the Miller Study Center, Western Washington U. (with ArtsWA). I have also been expanding my knowledge of the life sciences; in 2015 I was Artist-in-Resident at SymbioticA, a research lab for artists in the School of Anatomy and Human Biology, U. of Western Australia, Perth. http://faculty.washington.edu/rcummins/CumminsCatalogue2003-2013.pdf

Panel 11G: Saturday, November 5, 3:45 PM-5:15 PM *Ansley 7* (projector, screen, and speakers)

Creative Becomings: Thinking and Being with Earth and Animal

These panelists approach walking, climbing, and riding, reconfiguring human/earth and human/nonhuman hierarchies. A long-distance walker tracks the thinking enabled by traversing the earth. A climber and rider consider the agency of granite and horse. How do these various embodied conversations influence a becoming perspective? Hugh Crawford follows the footsteps of walking thinkers from Rousseau to Thoreau. He ruminates upon this creative source—thinking in motion. Ned Weidner examines inter-corporeal encounters upon rocks and mountains. Moving from Donna Haraway to Bruno Latour, from cracks to crags, he presents climbing as a way of knowing and being invested in embodied conversation with the earth. Erica Tom explores the edges of self in the deeply visceral relationship of horse in human in motion. Taking the path toward interspecies mutuality, discussed by Vicki Hearne and Kari Weil, she opens herself to ways of being-in and understanding one's edges and embodiment through

horseback riding. Aiming to create an experiential presentation—this panel considers the creative somatic practices of walking, climbing, and riding by melding visual and aural rumination on embodied conversations with earth and animal.

Chair: Erica Tom

Blurring the Edge: Becoming with Horses
Erica Tom (Rutgers University at Newark; erica.c.tom@gmail.com)

"Man and his best friend" and "cat-lady and her cats" are two well known tropes of interspecies affection, understanding, and domestic ritualization. Yet, there is perhaps no interspecies relationship as viscerally engaging as that of horse and human. Horseback riding has been elevated as an art form and denigrated as bestial. Horses located as prey, and humans as predators, this relationship has been viewed primarily as human domination over equines. Few have considered other ways of understanding the nuances of this relationship. Vicki Hearne clears a path toward different thinking, asking us to consider how training may engender an interspecies mutuality. Kari Weil further this, suggesting "empathetic anthropomorphism" might turn us toward understanding. Here, I continue down this way in a rumination on my interspecies relating. Joining experimental videography and poetic narrativization, I explore horseback riding's intimacy. Heeding Hearne and Weil in this exploration, I open myself to ways of knowing—of being known. Considering horseback riding as a creative somatic practice, how may a horse and human in motion engender new ways of being-in and understanding one's edges and embodiment?

Touching to Be: Embodied Conversations with Granite
Ned Weidner (Claremont University; Ned.Weidner@cgu.edu)

Outdoor sports like mountaineering, rock climbing, hunting, and fishing have often been criticized for proliferating an egocentric, human dominion over the natural world. This type of criticism is not very creative in the sense that it does not offer the natural world agency in these outdoor endeavors. These critics also fail to see the possibility for intercorporeal encounters in these outdoor sports. Outdoor sports like rock climbing can be seen as much more than a mastery over nature. In fact they can be seen as embodied conversations with rock that are imagined and expressed in the bodily meetings of flesh and granite between climbers and the crag. Scholars like Donna Haraway, Bruno Latour, and Vicki Hearne have opened paths for news ways of being and thinking with nonhumans. No longer is it a stretch to envision a dog training session as being a conversation. But what about hanging thirty feet off the ground with your fingers jammed into a thin crack at Joshua Tree? It might seem irrational to argue humans might have conversations with granite, yet this is exactly the avenue this presentation takes. Combining climbing literature with videography this presentation will consider how rock climbing might open up new ways of sensing, knowing, and being that rely on an embodied conversation with nonhumans.

Bodies of Data: Reinterpreting The Quantified Self
Gabi Schaffzin (University of California at San Diego; gschaffz@ucsd.edu)

The information age has ushered in countless new cultural understandings of the human self. One must consider that the body is no longer represented by (a representation of?) the machines that built our industrial revolution—arms as hammers, legs as wheels—but by datasets. That is, our muscles are made of rep and weight values. Our legs are reinforced by the number of steps taken every day. We are sick when our decoded genetic sequences predict the possibility. Our new bodily metaphor opens us up to the proprietary systems that translate predetermined physiological patterns to whatever metrics, standards, goals, biases, and motives held by the designers, developers, salespeople, and investors in the products that collect these datasets. As an artist and technologist, I am in a position to manipulate data at its most fundamental level: the binary code generated by consumer- and laboratory-level "quantified-self" tracking devices. When a Fitbit registers a "step", it really just records a set of 1s and 0s. What happens when images, sounds, 3D-printed sculptures, and other digitally-generated forms are built using step, gene, calorie data, et al? My work is based on an auto-ethnographic practice. I interpret this data in multiple modalities, alongside "analog" representations of my own genetic condition, Ehlers-Danlos Syndrome, a painful collagen disorder. Elaine Scary's The Body in Pain, Ian Hacking's The Taming of Chance, and other important theorists build the foundation upon which my work is conceptualized and executed. Please note that this work is in progress. I have included a link to my previous projects: http://utopia-dystopia.com/

Panel 11H: Saturday, November 5, 3:45 PM-5:15 PM *Ansley 8* (projector, screen, and speakers)

Is the Future Not 'What It Used to Be?' Reevaluating Domesticity in 20th-Century U.S. Literature and Film

This panel proposes to disarticulate the domestic imagination from the constraints of nostalgic thinking—which, for us, also means resisting the projection of nostalgia beyond the present moment to forecast how, to quote the title of Mickey Newbury's 1971 country song: "the future's not what it used to be." Our critical investigations freely express the past, present, and future as interrelated, as doubling back or reiterating temporal modes. Furthermore, we radically transform the popular sentiment of "being at home" into the destabilized and contingent process of "becoming at home," which also takes into account the feeling of "becoming not at home." Our explorations of literature and film across the 20th century focus on the domestic practices that constitute daily lived realities and inform strategies for social reform and expanding the emotional contours of home life. We propose that futuristic visions of home have been, and are being, guided by scientific theories that redefine sex and domesticity, science fiction (SF) narratives of non-Earthbound human civilizations, and post-human models of communication. At the same time, we interrogate utopian dreams of home that imagine the future as the best of all possible worlds, where gender, race, and class-based tensions have been somehow transcended. Individually and collectively, we expand upon how the domestic economy is an affective economy by finding pressure points where dominant cultural conceptions of domesticity cannot contain desires for a home that keeps the future open and vital.

Chair: Patrick Sharp

Darwinist Feminism in Early Science Fiction Magazines
Patrick Sharp (California State University; psharp@exchange.calstatela.edu)

This paper examines the work of women authors who published in SF magazines in the late 1920s and the influence of Darwinist feminism on their storytelling practices. As Kimberly Hamlin notes, Darwin's account of sexual selection inspired feminists of the late nineteenth century who embraced it as a scientific alternative to the myth of Eve and the concomitant dismissal of women's rights based on religious fables. Though Darwinist feminism became marginalized from mainstream U.S. feminist movements, secular-minded feminists such as Charlotte Perkins Gilman and Margaret Sanger continued to appeal to evolutionary concepts in their arguments to liberate women's bodies from patriarchal control. In magazines such as Amazing Stories and Air Wonder Stories, women such as Lilith Lorraine, Leslie F. Stone, and Minna Irving continued this science-minded feminist tradition in their tales that defied masculinist assumptions about technology and progress (among other things). Lorraine's SF stories were unabashedly feminist and utopian, filled with strong female characters who were full partners in technoscientific progress. Stone updated the sprawling adventures of Edgar Rice Burroughs with a feminist approach to evolution. Her stories included Amazons, angels, and battles between the sexes that ended with females taking their well-earned place as leaders in shaping the evolutionary destiny of (post)humanity. Irving's "The Moon Woman" (1929) imagined an evolutionary future where women use technology to fly freely and defend themselves against the dangers posed by men. These women expanded the scope of Darwinist feminism and made it a regular feature of magazine SF.

Home and Homesickness in the Science Fiction of Robert Heinlein
Craig McConnell (California State University at Fullerton; cmcconnell@exchange.fullerton.edu)

The American science fiction writer Robert Heinlein (1907-1988) produced a corpus of forward looking stories about the future of civilization. Many of his tales present exploration of the frontier in romanticized terms. These stories are informed by images of the construction of "home" and characters dealing with homesickness. Early works such as the 1939 short "Misfit", the 1947 short "It's Great to Be Back" and the 1948 juvenile Space Cadet develop character and plot through representations of homesickness. In more developed works like 1961's Stranger in a Strange Land and 1966's The Moon is a Harsh Mistress, the progressive future that Heinlein envisioned included people dwelling on memories of homes abandoned as well as people engaging with the ways in which the traditions and relationships with place that define a home unfold. I read Heinlein's treatment of homesickness in his early works, stories of exploration and conquest of the newly conceptualized frontier of outer space analogous to the settlement of the American west shaped by military and para-military social structures, against his personal experience leaving his native Missouri to attend the Naval Academy in Annapolis. I consider his later representations of home against his identity as a Westerner moving across the country to Colorado and eventually California. In casting his considerations of home and homesickness in futuristic environments, Heinlein considers the dynamics of geographic identity and the construction of domestic routines that at times commented on contemporary issues and at times presented hypothetical alternatives to contemporary norms.

Factory-made baby fat and silicone births: Reborn culture and transgressive domesticity

Emilie St. Hilaire (Concordia University; emilie.st.hilaire@concordia.ca)

This paper introduces key aspects of Reborn baby culture to be examined from a queer feminist perspective. I will consider the practices of Reborn enthusiasts in relation to domesticity, normativity, and transgressive play. Reborn babies are elaborately crafted dolls made to resemble real babies as much as possible. Some Reborn enthusiasts treat the dolls like babies and dozens of collectors regularly post videos on YouTube chronicling their lives as the "mothers" of Reborn babies. Although regularly criticized or shamed by psychologists, television talk show hosts, and internet trolls, Reborn community members are supportive of one another and vocal defending their practices. Following from Isabelle Stengers' theoretical model of reclamation, this contribution aims to celebrate and explore the disruptive potential of Reborn dolls for queering the maternal. Understanding Reborn enthusiasm should deepen and expand cultural perceptions and potentialities, not apply reductive labels and limitations to actions rooted in creative practices of care and play. I draw from Sara Ahmed's queer phenomenology to explore the niche within the Reborn community for Reborn animals, which combine the features of babies and animals to create hybrid dolls that are not quite baby or doll. I propose that orientation toward these inter-species cyborg bodies enables an expanded understanding of Reborns and their collectors. Reborn animals provide rich terrain upon which to speculate about the potential of art objects that foster strong affective relations from adoration to repulsion toward the uncanny.

Panel 11I: Saturday, November 5, 3:45 PM-5:15 PM *Peachtree 1* (larger room, projector, screen, and speakers)

Roundtable: Creating Life: Frankenstein in the 21st Century

The Frankenstein story, never out of print since Mary Shelley wrote it in 1818, continues to display a powerful literary and media presence. It is also an increasingly relevant cautionary tale as science approaches the possibility of modifying and creating life. This roundtable brings together editors and contributors for the forthcoming Frankenstein 2018 (Pegasus Books), and other interested parties to consider the modern impact of "Frankenstein" at its 200th anniversary, which is generating widespread scholarly and media interest. Possible areas of discussion include but are not limited to: The origins of Frankenstein Frankenstein on stage and screen Frankenstein in language and metaphor Genetic engineering, robotics and the ethics of creating life The emotions of a Frankenstein's monster Frankenstein and disability The panelists will make prepared remarks (five minutes each) and welcome on-site participation in discussion by SLSA attendees.

Moderator: Carol Colatrella

Presentations:

Workshops of Filthy Creation: Sick Frankenstein and the Contemporary Anatomy Lab
Catherine Belling (Northwestern University; c-belling@northwestern.edu)

Faced with the successful and monstrous culmination of his work, Victor Frankenstein falls ill. His reaction to apprehending the horror of what he has made is anticipated by the context of his preceding work, unmaking the dead—"my attention was fixed upon every object the most insupportable to the delicacy of the human feelings." Contemporary medical students, despite significant changes over the past decades in the ethos of medical education—fear that they, too, will be sickened—viscerally and morally—by their work among the cadavers. They must conceal their fear and nausea: both are considered unprofessional. But I will suggest that what really makes doctors sick is repressing the horror they experience in the anatomy lab, where bodies are destroyed and doctors are created. This talk is part of a larger project examining the place in medicine of horror—as both a mode of representation and an affective response—and the implications of its displacement from the manifest agenda of the clinic and of medical school. Focusing here on anatomy lab as a key step in the formation of professional identity, I argue that this repression threatens harm to the health of future physicians and their future patients—and that Frankenstein is a persuasive cautionary tale, not just against hubristic creation, but against allowing the hubris of bioscientific ambition to dull the instructive apprehension of horror and to keep physicians from anticipating the most frightening aspects of their work.

Bodily Pain: Romantic Neurology and *Frankenstein*
Terence H. W. Shih (St. John's University; thwshih@mail.sju.edu.tw

From a perspective of cognitive historicism, this paper aims to explore the issue of bodily pain in the Romantic period. Cognitive science crosses the boundaries of psychology, philosophy, and even artificial intelligence in hopes of understanding the workings of the human mind. Alan Richardson draws on cognitive science and literary studies and uses the perspective of cognitive historicism to further understand English Romantic literature. His research therefore provides a new lens for Romantic studies. In terms of Richardson's concept of "neural Romanticism," the research focuses on bodily pain so as to analyze how British intellectuals during the Romantic period understood the subtle relationship between nerves, electricity, pain and the brain. First of all, this paper will revisit English Romantic neurology in a bid to understand how the intellectuals thought of bodily pain. The Italian physiologist Luigi Galvani focused on animal electricity and launched a breakthrough study. Integrated with electricity, nerves and muscles, his research deeply helped with neural studies in Romanticism and influenced scientific circles in Britain, for example Volta and Davy. Due to this ethos, English Romantic poets (Coleridge, Shelley) further pondered on the relationship between nerves and the mind and particularly focused their works on bodily pain. Secondly, the paper aims to explore experiences of bodily pain by rereading Mary Shelley's *Frankenstein*, in particular the 1831 version of the novel. Different from the 1818 version, the author mentioned galvanism in the Introduction and the 1831 text. The project particularly examines Mary Shelley's narration of bodily pain and its connection with perspectives of neurology.

Contributions:
Sidney Perkowitz (Emory University; physp@emory.edu)
Amy Sijing Li (Emory University; amy.s.li@emory.edu)
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Carol Colatrella (Georgia Institute of Technology; carol.colatrella@lmc.gatech.edu)

Panel 11J: Saturday, November 5, 3:45 PM-5:15 PM *Peachtree 2* (projector, screen, and speakers)

Lab Culture 4: Speculative Environments

This panel is part of a stream that explores "lab culture" in the arts humanities. Practitioners from a variety of laboratories will discuss the politics of creating and maintaining an arts/humanities laboratory. They will also discuss recent research emerging from their labs. This specific panel focuses on lab work that fosters situational approaches, considering art as a form of knowledge practice.

Chair: Maria Whiteman

The Synthesis Research Clusters: "Art all the way down"
Xin Wei Sha (Arizona State University; sxwasu@gmail.com)

Alchemy was the art of transmuting bodies and substances, the quick and the dead, the inert becoming vital, accidentals and essences becoming quintessences. Five centuries ago, alchemy was a practical and magical art, concerned with bodies and materials that are always suffused with ethical, vital and material power. Under the prism of the Enlightenment, such practices split into the practical (e.g. engineering or medicine), the scientific, and the art of the imaginary. Our work fuses these arts together again to transmute the material of social relations. Backed by a team of experts in experimental art and speculative engineering, Synthesis hosts research clusters motivated by an experimental question or proposition inspiring two or more investigators. To be productive, this form of transdisciplinary research and learning requires respect and patience for alien norms of what counts as a contribution. Synthesis provides a place for experimentally inventing and fusing fresh practices of understanding how the world works with fresh practices of making meaning. The motto "Art all the way down" implies that we cannot do business as usual by simply identically reproducing ourselves: our apprentices will learn but differ from the professions under which we were trained. We create stronger alloys of the know-hows and know-thats we have inherited from the past 500 years of knowledge creation. Transdisciplinary research is more than merely sitting an engineer and an artist and a philosopher in a room; it means transforming each discipline's own ways of doing things, with care.

Laboratory for Critical Technics
Adam Nocek (Arizona State University; Adam.Nocek@asu.edu)

The laboratory for critical technics (LCT) at Arizona State University is a transdisciplinary laboratory for critical experimentation on the conditions for living and dwelling together in the 21st century. Although philosophers and critical theorists have tried to recover a notion of the "commons" in the wake of the fragmentation and dispersal of work and social existence in late capitalism, the LCT does not presume to know where or by what means common worlds are tenuously or tenaciously forged. Instead, the LCT investigates how dwelling-with-others is a problem, in Gilles Deleuze's sense of the term, whose solution cannot be known in advance. In this talk, I discuss how members of the LCT resist the temptation to privilege any knowledges, tools, or materials. What constitutes world-building technê is an infinitely demanding problem

without a solution. All techniques are local and finite resolutions generated out of the affordances of a practice or a situation rather than out of modes of judgment meant to hierarchize solutions. As such, the LCT is interested in the consequences of technê, what it produces, how it forges solidarity, what it lures us into thinking, and not whether it is faithful to pre-ordained tools, methods, and values. In short, does a technê yield the kind of world worth preserving? At present, we are investigating and building out techniques that draw on methodologies from speculative and critical design, video and sound art, DIYbiology, and others.

Columbia Group for Experimental Methods in the Humanities
Grant Wythoff (Columbia University; grant.wythoff@columbia.edu)

What does it mean to "experiment" in the study of history, literature, or philosophy? In answering that question we draw inspiration from two distinct spaces. First, the laboratory, where scientists bracket the world in search for independent variables and reproducible results. Second, the studio, where artists let the world in: to disrupt rigid modes of perception under circumstances that are always indeterminate and subjective. In both spaces, thought is secreted in practice, "on the fetid and throbbing ground of life." The Columbia Group for Experimental Methods in the Humanities is dedicated to the rapid prototyping of speculative ideas. To this end, we collect, curate, and publish intermediary artifacts of scholarship: drafts, notes, graphics, twitter bots, web-protocols, "situations," tools, and tutorials that take us some way from unstructured thought to accepted knowledge. Some of these artifacts are presented as is, others will be peer-reviewed (and clearly marked as such). Somewhere between a lab experiment and experimental art, we hope to open a space for process-based scholarship, "to be judged not on its success or failure, but simply as an act the outcome of which is unknown."

Saturday Plenary Session with Margaret Edson, 5:30 PM-7:00 PM, Augusta 1-2-3

Art Exhibit and Reception, 7:00 PM-8:00 PM, Peachtree 1 & 2

Dance! 10:00 PM-12:00 AM, Savannah Ballroom

Session 12: Sun Nov 6, 8:30 AM-10:00 AM

Panel 12A: Sun Nov 6, 8:30 AM-10:00 AM *Ansley 1* (no AV)

Zoopoetics Unbound: The Creative Agency of Animals, Plants, and Machines around 1900

This panel extends the traditional focus of zoopoetics from animal life into the broader realm of the nonhuman. Together, our papers track animals, plants, machines, and natureculture assemblages across literature and culture. In so doing, we ask not only how nonhumans work in cultural production, but also how they work on culture. That is, we investigate how the nonhuman takes on a kind of creative agency in literary and cultural production, thus opening onto new aesthetic and sociopolitical possibilities. Most saliently, this panel explores the various ways that nonhuman agents can "create" literature. We consider nonhuman power in shaping literary style and narration, as well as the wildly imaginative influence that nonhuman agents can

have on literary production as such. Secondly, our papers follow creative nonhumans across the boundaries of literature, tracking their relations of influence with scientific discourse, law, political economy, and education.

Our inquiry into nonhuman creative agency encompasses American literary naturalism and likewise both British and German modernism. As such, the panel necessarily asks after the aesthetic potencies of the nonhuman across generic and national boundaries. Since we focus on literary examples around 1900, we hope also to generate discussion about the varied role of the nonhuman in modernity. How, for example, might shared historical conditions or transnational exchange explain resemblances across these literary cases? Alternately, to what extent can variations in nonhuman creative agency across each text be attributed to cultural and geographical difference?

Chair: Agnes Malinowska

Everything Unspeaks: Narrating Animals and Animal Narrative in *Ulysses*
Nell Pach (University of Chicago; npach@uchicago.edu)

We meet Leopold Bloom, putative protagonist of Ulysses, while he is hypothesizing about his pet cat's whiskers. It is the cat who speaks first, however, in a famous unpronounceable sequence of letters: "Mkgnao!" This, and the cat's subsequent vocalizations, might be mistaken for one of Joyce's "unspeakable sentences," as Fredric Jameson calls them, writ small, a premonition of the "depersonalized language" Jameson describes in the later "Ithaca" episode. I argue that "depersonalization," while technically right as a term, is wrong in putting the emphasis on the absence or removal of human voices and perspectives from the narrative rather than on the attempt to make present, or at least to hold a place for, animal speech. The salient point is not the "aphasia" inflicted on humans but the "phasia," as it were, of the newly subjectivized animal. To call sentences "unspeakable" is of course to precipitate the question "Unspeakable for whom?" As Leopold Bloom tries to imagine a subjectivity for and empathize with his cat, I argue that his own thoughts and the narrative around them becomes infiltrated by the cat's "language," and even the pronouns Bloom uses for himself are usurped and troubled by the intruding presence of the cat's perspective. In light of recent theoretical work on nonhuman cognition, I consider the novel's attempt to imagine an animal not just as a cognitive agent but as a narrative and narrating subject.

Phytopoetics: Creative Plant Agency in Literary and Cultural Modernism
Joela Jacobs (University of Arizona; joelajacobs@email.arizona.edu)

In Oskar Panizza's grotesque German short story, "The Crime in Tavistock-Square" (1891), a young policeman reports the unsettling discovery of masturbating plants. In the text, aberrant human sexuality is displaced onto flowers, and as we will learn in the course of the story, the policeman is in fact exposing the deviant behavior of his colleagues. At the time, the police was tasked with the persecution and censorship of both sexual and literary transgressions, yet this censoring of free speech inadvertently resulted in an abundance of creative language use. One particularly wide-spread trope was that of vegetal eroticism, which was so pervasive in the popular imagination (including art nouveau imagery) that it led to the actual prohibition of

botanical science education in schools for several years around 1900. The idea of plants both as sexual beings themselves and as a potential danger to human morality spurred the cultural imagination to such an extent that it endowed plants with a unique kind of creative agency with both literary and cultural effects. In this sense, plants "created" laws, curricula, and art works, and the pervasive influence of creative plant agency on the human imagination and resulting behavior was both acknowledged and satirized in the literature of the time.

"A Leviathan with Tentacles of Steel": Nature-Machine Agents and "Bad" Naturalist Style in *The Octopus*

Agnes Malinowska (University of Chicago; amalinowska@uchicago.edu)

In the final moments of *The Octopus* (1901), Frank Norris doles out a particularly grim form of poetic justice to S. Behrman, the novel's hated railroad agent. Briefly put, Behrman falls into a grain elevator and is pummeled to death by countless razor-sharp grains of incoming wheat. Wheat here likewise buries Norris's style, overwhelming it with verbs, adverbs, and adjectives; its particular form of agency—dispersed and unified, apparently willful but inevitable—seems to produce the author's very sentences. This striking moment of *The Octopus* usefully points us to the way that nonhuman agency more generally permeates the novel's naturalist aesthetics. I argue here that Norris's repetitive, highly descriptive and occasionally grotesque style acutely registers the wildly powerful nature-machine hybrids at the center of not only this agricultural drama, but also Norris's turn-of-the-century historical moment—America's speedy emergence as a fully industrialized, urban nation. Norris's stylistic excesses are often dismissed by critics as evidence of naturalism's "bad" style; in my reading, it is precisely these features that can productively be analyzed for their serious rendering of nonhuman agency. At the same time, *The Octopus* highlights an ambivalence vis-à-vis nonhuman power that I locate in literary naturalism more generally, a relay of unleashing and containment. In Norris's novel specifically, such containment takes place through the same discursive framework that releases it in the first place, Herbert Spencer's wildly popular evolutionary philosophy and its central image, a universe governed by "Force."

"Non-anthropocentric Poetics: The Creative Signature of Mycobacteria"

Nevena Ivanova (Waseda University; ve4ernitsa@gmail.com)

"So well established was the cliché which connected TB and creativity that at the end of the century one critic suggested that it was the progressive disappearance of TB which accounted for the current decline of literature and the arts." [1] Some biochemical evidence does indeed invite a hypothesis that M. tuberculosis originally joined the human holobiont as a brain evolution-enhancing endosymbiont, thus possibly contributing to the development of human consciousness and creative potential. [2][3][4] Exploring the complexity of mycobacteria's entanglements within human corporeality leads us to questions that challenge anthropocentric conceptions of creativity in a twofold manner. As noted above, the tubercle bacillus forms machinic assemblages (Deleuze and Guattari) and operates as an endosymbiont with human bio-systems. It is possible that these endosymbiotic assemblages contribute to human creativity and destabilize simple notions of its origin. In a double reflection, the concept of creativity itself could be revisited along alternative lines: it cannot be considered anymore only as the production of human cultural artefacts and experiences, but rather it can be understood as ubiquitous activity

performed by heterogeneous highly dynamic machinic assemblages (comprising of human, animal, computational, social, molecular, bacterial, viral, and other processes), which lead to the production of novel modes of existence.

Panel 12B: Sun Nov 6, 8:30 AM-10:00 AM *Ansley 2* (projector and screen)

Creating Accounts of Creative Bodies: the Narrative Work of Female Fertility

Babies perform a lot of narrative work. George Eliot's *Middlemarch* narrator playfully quips that "where there was a baby, things were right enough," and that "error, in general, was a mere lack of that central poising force," and this is often as true for narratives themselves as for the characters therein. Babies often serve as forces of disruption or normatization in literary texts, and this panel seeks to explore the narrative work that the (pro)creative and (pro)created bodies of mothers and babies perform. This panel seeks to situate the creative work of female reproduction in the context of its narrative creation, taking seriously the textual creation and performance of fertility in literary texts. We seek to explore what a "partum" epistemology might look like in language and in narrative, and to consider what an epistemology of motherhood might look like for both the female writers engaging it and for the characters that they create. How, we wonder, does the insertion or withholding of maternity work to influence narrative? How does the pro-"creativity" of the narrator or author intersect with that of her characters? How might textual events like abortions, miscarriages, rapes, and births serve to radically disrupt or re-entrench social norms of fertility? How does a woman's fertile potential influence the voice and structure of her narrative? This panel seeks to situate the creative accounts of creative female bodies in a consideration of the narrative "fertility" of both the female author and her characters.

Chair: Alyssa Duck

Vo(i)lée et V(i)olée: (Re)creation and (Re)birthing of the Female Sextual Body
Cara Wilson (Vanderbilt University; cara.l.wilson@vanderbilt.edu)

In literature there exists a phallocentric tradition in which the male writes the female – whether that be the male scriptor who creates his female characters or the male characters in the work that discursively create the female's story. The masculine figure inaugurates a dichotomy that originates from oppositions considered natural between man and woman ¬– oppositions in which virility is masculine and passivity is feminine. This oppressive binary becomes manifests in the literature itself: the man represents himself as the one who impregnates the fertile soil, which is the woman. By evoking the work of Luce Irigaray (Ce sexe qui n'en est pas un) and Hélène Cixous (Le Rire de la Méduse), this paper proposes to consider the metaphors of reproduction that are closely tied to the creative act of writing. With their unique contributions to philosophy and psychoanalysis, Irigaray and Cixous unveil and demystify the inextricable link between the repression of the female sex and écriture feminine. This paper proposes to consider how masculine writing symbolizes an act of rape and forced insemination of the feminine body of text because the feminine figure is written to reflect and reproduce a masculine imaginary. The female form remains veiled so long as her writing remains impregnated and usurped by the male voice. However by returning to a maternal matrix where the woman explores her sexual body (of text), the woman may create herself through writing.

Liquid Echoes: Breast Milk and Female Voice in Maryse Condé's Windward Heights
Nicole Morris (Emory University; nicole.morris@emory.edu)

Critic Francoise Lionnet suggests, "[i]t may [...] be possible to read the concluding pages of Windward Heights as a warning of the author directed at her Caribbean "brothers": women's lives are the key to the history of the Caribbean, and those who ignore them do so at great cost to themselves and their descendants." This essay will explore ways that the breast, and importantly, its milk, is of central importance in the recovery of these stories in Maryse Condé's novel. Though set after the abolition of slavery, patriarchally-imposed forced control over women's bodies – the attempted silencing of their voices, severing of matrilineal connections, and casting as sexual objects, sites of reproduction of labor, and as producers of nutrition-- endures. In this essay, I propose that Condé teaches another way of 'reading' the female history of the Caribbean. This method of reading involves engaging the creolized transmission of the breast. Condé is teaching us that women's history in the Caribbean can be read and has been preserved through breast milk flows. While literal mother/daughter relationships have been broken by death and the attempted co-opting of fertility, an intricate network, quite to the contrary of patriarchal aims, has formed based off of the redirected and unpredictable flow of breast milk. This network has redirected and recorded women's history, and created new avenues for 'othermothering' and the female voice.

"Who knows what babies will turn to?": the M[isc]arriage Plot in *Middlemarch*
Alyssa Duck (Emory University; alyssa.duck@emory.edu)

In Middlemarch as in Victorian society at large, human babies perform a lot of narrative work. The production of babies serves as a normativizing force in Middlemarch, entrenching the feminine situation of the Mother while legitimizing healthy unions with fruit. Middlemarch withholds, however, as many babies as it bestows, and this withholding signifies, in the case of the Lydgates as in that of the Casaubons, the absence or disruption of the normative marital qualities necessary to the narrative entrenchment of the woman's situation in Motherhood. Babies are volatile if conservative narrative tools, and neither reader nor parents can know, as Mr. Vincy laments of Fred, "what babies will turn to" (581). This paper will examine the miscarriage of Rosamond Vincy Lydgate as one such instance of this disruptive reproductive withholding, and will consider both the practical and narrative consequences of the pregnancy's termination in light of Rosamond's situation in the Victorian "marriage plot." While I argue alongside Doreen Thierauf that Rosamond's miscarriage symbolizes an unauthorized disruption of the husband's prerogative to control the female reproductive system, I will focus on the narrative work of the miscarriage qua withheld child rather than as a speculative scene of abortion. This paper seeks to situate the narrative space of Rosamond's miscarriage in the terms of how "what isn't" in her womb reflects "what isn't" in her marriage and feminine character.

Bastardy, Shame, and Property: *Moll Flanders*, Crime, and the Governess as Entrepreneur
Kristen Distel (Ohio University; kd484114@ohio.edu)

My paper examines the ways in which Moll Flanders and her governess redefine normative cultural expectations for women's conduct, especially the manner in which these characters reject shame. I will analyze Moll and the governess's awareness of hegemonic power structures

that demanded women's obedience to male authority in both social and domestic spaces. In analyzing the governess's "bill of fare," I argue that the governess translates patriarchal control of women's bodies into a lucrative enterprise. Her knowledge of business allows her to eschew the sense of shame and wrongdoing that patriarchal authority would attempt to place upon her, as well as to translate other women's sense of shame into a profitable trade. For Moll, both a fear of punishment and her pride in her successful career as a thief replace feelings of shame. I argue that Moll and the governess's successful entrepreneurship and their understanding of the principles of commodification serve as the locus of their identity and pride. Their satisfaction with their entrepreneurial endeavors and their ability to defy socioeconomic limitations prompt them to display a sense of impudence, rather than shame. Moll and the governess transform social constraints on women's conduct into an enterprise in which they position mothers of illegitimate children as customers and situate theft as a viable trade, thereby taking advantage of and helping create a covert market of goods and services. Their crimes arise from rational risk-taking and a shared sense of self-interest and survival; thus, shame is extraneous to their endeavors.

Panel 12C: Sun Nov 6, 8:30 AM-10:00 AM *Ansley 3* (projector and screen)

Technology as Art

Chair: Jennifer Lieberman

Tracing the Technological Fallacy, or, How The Word Technology Has Inflected Literary History
Jennifer Lieberman (University of North Florida; jleigh@gmail.com)

Perceiving technology as pervasive and ahistorical, even the most careful scholars have projected this concept onto the past as if it had always existed. I call this projection "the technological fallacy" because it functions like the New Critics' intentional and affective fallacies, shaping the way scholars approach literary and cultural history. Leo Marx has rationalized this act of projection by suggesting that there was "no adequate concept" to understand the abstract concept we call technology: in an elegant turn of phrase, he argues that this word emerged to fill a "semantic void." Although artifacts that we would now identify as technological existed before the term came into popular use in the 1930s, I disagree with Marx. The concept did not emerge in the American vernacular with a precise definition; it accumulated connotations in feedback with practices, institutions, and social mores. As Eric Schatzberg argues, "When the term became widespread in elite discourse in the United States, it bore the stamp of a long struggle over the meanings of industrialization." More importantly, what existed before the word technology was not a void. In this paper, I make a case for disentangling the concepts that scholars have come to identify as "technology". I examine historical rhetorical techniques that have been muddied by our use of this abstracted term in order to illuminate alternative ways that we could clarify and re-formulate the "unusually slippery term" that we have come to rely upon so heavily.

Heinrich von Kleist on Artificial Intelligence
Wayne Miller (Duke University; wayne.miller@law.duke.edu)

In his text *Über das Marionettentheater* (1810) Kleist addresses himself to the costs of self-consciousness in art and skill, employing both a trained bear and marionettes in a theater to illustrate the inherent weakness in human intention. Many commentators have developed the themes of freedom, creativity, angst and authentic life in this text. Some have reinterpreted it in light of modern concerns with media theory, neuropsychology and postmodern philosophy. Artificial intelligence (AI) suggests the same problem complex of human and non-human intelligence and intentionality. But did Kleist have anything to say about AI? In part the answer rests with how AI is defined, whether in the narrow modern sense of intelligence arising from algorithm and feedback systems or something more akin to mechanistic organism. Heinrich von Kleist was not specifically concerned with algorithm, but he also did not invest the marionettes with a mechanical intelligence. In fact, the human operator continues to have agency over the marionettes' "grace" (*Grazie*), which works on a different basis, according to inertia and other physical forces, without internal motor or intention. The marionettes suggest a kind of "virtual reality" in their existence untethered from gravity. The bear who calmly parries every human fencing thrust is not a continuation of the marionettes' grace but the natural counter-example to the frailty of intention. The text ends with the supposition that we humans must eat of the tree of knowledge again to move beyond consciousness – perhaps to where we can begin to consider the grace of AI.

The Hacker as Artist/Critic: Recovering the Mutability of Virtual Space
Chaz Evans (Northwestern University; chazevans@northwestern.edu)

This project addresses a paradoxical connection between creative and destructive practices by drawing an analogy between the building cuts of Gordon Matta-Clark and the software-altering practices of the hacker. I align the creation of dynamic space out of derelict buildings found in Matta-Clark's building cuts, such as Day's End, to the practice of hacking. After exploding some common pop-cultural myths associated with the term, hacking can more clearly be defined as the alteration of software to reveal code as mutable and dynamic. This notion of creative hacking is evident in the work of artist duo JODI. Their work, such as video installation MY%DESKTOP and the JODI blogs, illustrates the practical artistic use of "metaphor shear," a term coined by author Neal Stephenson to describe the moment of anxiety caused by errors that expose the technological fallibility that software metaphors are built to conceal. I argue that, instead of producing cultural anxiety, metaphor shear can be exploited by the software artist (or hacker) as an apparently destructive but fundamentally creative technological-artistic act. Furthermore, this attention to metaphor shear coincides with and extends theories of glitch aesthetics, while resolving problems extant in the discourses around glitch art. To view hacking through this creative perspective offers a diverse set of methods for creators of software as well as new tools for the textual analysis of software as cultural, rather than utilitarian, objects.

Panel 12D: Sun Nov 6, 8:30 AM-10:00 AM *Ansley 4* (projector and screen)

The Politics of Biocentrism: How Creativity Masks, Transforms, or Enhances the Politics of the Ecological Movement

The contemporary moment is suffused with a heightened awareness of the Earth's ecology. While climate change and global warming are scientific facts and politically neutral, ecological

consciousness and the environmentalist movement have identified with leftist politics. A closer look at biocentrism, an origin point of the contemporary ecological movement, reveals a spectrum of political positions, from the far right to the far left. We are interested in the political implications of this condition for creative production. While biocentrism has its deep origins in the Romantic philosophy of Johann Wolfgang von Goethe, it effloresced in late nineteenth-century Germany in a scientifically based awareness of our oneness with nature. An array of political positions developed around biocentrism: from anarchism, through Catholic nature-centrism, to right-leaning biologism connected to theories of racial purity, the Volk and its relations to the soil, eugenics, the rise in the 1930s of National Socialism, and, by the 1960s and 70s, a left-leaning environmentalism, which in the same years also incarnated as a libertarian-right systems-oriented cybernetic functionalism. This panel focuses on biocentrism in the genealogy of the ecological movement in order to dissect its creative interpretation and misinterpretation in art, architecture, and design. We query how members of the creative class, ranging from modernists, such as Ludwig Mies van der Rohe and László Moholy-Nagy at the German Bauhaus to counter-cultural artist collectives of the 1960s such as USCO and Drop City, creatively channeled and masked, transformed, or enhanced the politics of ecology and environmentalism.

Chair: Oliver Botar

Raoul Francé: Navigating the Nazi Ecosystem
Oliver Botar (University of Manitoba; Oliver.Botar@umanitoba.ca)

In 1990 Stanislaus von Moos wrote that botanist Raoul Heinrich Francé is “probably the most important inspiration for most European avant-garde artists and architects intrigued by the analogies of natural and technical form.” Among these were Friedrich Kiesler, Lazar El Lissitzky, Hannes Meyer, Ludwig Mies van der Rohe, László Moholy-Nagy, Paul Westheim and Stefan Zweig. A principal figure of Central European biocentrism from 1910 to the 1930s, Francé established soil ecology, identifying a hierarchy of nested eco-systems starting at the cellular level. In fact, he is a pioneer of Systems Theory, having preceded Ludwig von Bertalanffy by at least 35 years. Long forgotten, rather than the Greens, it was the German Right that initiated his rediscovery. This would prove significant. By the time this revival was in full swing in the early 1990s his legacy was attacked by social historian Joachim Wolschke-Bulmahn, who revealed that in a 1938 letter Francé claimed to have been a Nazi Party member for “years,” a fact confirmed by my discovery of the relevant documents. Wolschke-Bulmahn holds that since all “organically” inclined individuals at the time were quasi-Fascist or Fascist, this is not surprising. But Francé displayed philo-Semitic tendencies; indeed his wife was Jewish. Of the admirers listed above, only Mies and Meyer were gentile. So, was Francé a philo-Semite who succumbed to what Fritz Stern has termed “National Socialism as Temptation”? Or was his Biocentrism essentially Fascist? Alternatively is the story even more complex?

The Cell State: Ludwig von Bertalanffy, Organismal Biology, and the Führer Principle
Charissa N. Terranova (University of Texas at Dallas; terranova@utdallas.edu)

The Austrian biologist Ludwig von Bertalanffy (1901-1972), or “von B” as his students called him, is best known for his pioneering work in General Systems Theory (GST) mid last century.

With the publication of General System Theory: Foundations, Development, Applications in 1968, Von B etched his influences across the academy, from the natural to social sciences, business management to art history and criticism. With his Modern Theories of Development: An Introduction to Theoretical Biology, published in German in 1928 and translated by the British biologist Joseph Woodger in 1933, Von B positioned himself as the bellwether of organismal biology, opening space beyond the vitalism versus mechanism debate, while becoming the catalytic thinker of a British group of left-leaning activist scientists known as The Theoretical Biology Club. The events of the WW II period within Von B's life put a wedge in the middle of this time, splintering his reputation as avant-garde leader. From 1938 to 1945, Von B pledged allegiance to the National Socialist Party in Austria, recasting his ideas according to a metaphysics of totalitarianism and bastardizing his once prescient and groundbreaking holistic take on the "cell state" in terms of "a hierarchical structure, dominated on each level by the Führer principle." This paper queries the effects of his political position as a supporter of fascism during WW II on creativity before and after, in the discourse of Theoretical Biology of the 1930s, Information Art in the 1960s, and contemporary relational theory within ecology.

Unmasking Harm Producing Apparatuses: Hans Haacke's Site-specific Critical Praxis and the Politics of Biocentrism
Flint Collins (Hanover College, Indiana; flintcollins@att.net)

During the late 1960s, art theorist Jack Burnham deemed Hans Haacke's work a hallmark example of systems art. Burnham's essays related ecology-oriented artworks such as Haacke's to Ludwig Von Bertalanffy's biocentric theorization of systems ecology. Burnham sought to expand the conceptual parameters of artworks beyond their material concerns into their assigned context, encompassing their contingent ecological, sociopolitical, and technological relations. Conversely Haacke's early artistic development was influenced by Burnham's writings. The impact of biocentric systems thinking is discernible in many of Haacke's artworks, especially his earliest ecology-oriented works such as Grass Grows (1969). Over time, Haacke's work shifted focus away from ecological themes toward site-specific critiques of human profit systems and their ideological apparatuses. Nevertheless, echoes of biocentrism reverberate through his later politically oriented works such as Der Bevölkerung (To the Population) (2000), a 21 foot x 68 foot planter containing the title phrase in bold neon letters surrounded by soil from different regions deposited by parliament members, installed in the northern courtyard of the Reichstag in Berlin, Germany, which critiques the fascist and racist eugenic implications of the parliament building's 1916 exclusionary inscription "Dem Deutschen Volkes" (To The German People). This paper examines the connections between these artworks by Haacke in relation to the diverse spectrum of political positions associated with biocentrism. It argues that Haacke's critical praxis is informed by biocentrism but is ultimately positioned against authoritarian systems such as fascism and works to unmask their harm producing apparatuses and expose their moral weaknesses.

Panel 12E: Sun Nov 6, 8:30 AM-10:00 AM *Ansley 5* (projector and screen)

Anti-productive Creativities

In the very first pages of The Structure of the Artistic Text (1971), Juri Lotman defines art as a "special mechanism, a generator of more and more new "languages" to act as a vehicle for necessary knowledge." (1971, p. 4) This knowledge is necessary, because an "organism incapable of responding and adjusting to external influence would inevitably perish" (p. 3) Thus, artistic creativity appears as a productive force for innovation and semiotic growth, a growth made necessary by survival in an environment that we can only imagine as hostile and competitive. As is often the case, the desirability of innovation, growth and production (central creeds of neoliberal capitalism) is established in the name of what would be an a-historical natural order, a set of universal biological rules that determines the conditions of survival: without growth, death. It is paradoxical that artistic growth and development would be sought in the name of "nature", while the living world is brutalized by over-productivity and the unbridled creativity of humans. At a time when our civilization's obsession with growth appears ecologically problematic, it seems important to question views of creativity inherited from the key tenets of the 20th century Modernist avant-gardes: the endless possibilities of artistic experimentation would help us adapt to the new political, social, cultural, economic, and physical environments of the industrialized world. Is it possible to rethink creativity through other biological phenomena than growth and competition, such as maintenance and homeostasis? Can art be re-inscribed in a homeostatic paradigm? To what extent can we consider artworks and texts as habitat, refuges and shelters, instead of technologies of progress?

Chair: Marie-Pier Boucher

Ecological Creativity: Disrupting the spectacular city
Eleonora Diamanti (McGill University; ioiadi@gmail.com)

The word "creativity" is ubiquitous in the contemporary political discourse and has become a political tool to associate cultural with environmental and economic urban policies focusing on inclusion and social justice to enhance sustainability. However, the more static macropolitical discursive strategy often wanders away from micro tactics exploring creative and innovative paths of inclusion and sustainable living. This papers aims at exploring artistic micro-tactics, arguing for their strong political and ecological potential. It focuses on the wide range of tactics that occur at a micro level, such as small, interstitial and furtive practices that inform and form, from the ground up, the medial ecology of the city. Since politics is pervasive, and it involves at the same time macro and micro levels, grass-root activism and community based artistic practices can constitute a ground to explore a more-than-human and ecological approach to our everyday experience and inform the macropolitical. In particular, I will focus on a series of "anti-spectacular" urban interventions undertaken by a Montréal-based artist collective in the city's central and spectacular "Entertainment District" (Quartier des spectacles). The art project aimed at disrupting the spectacularization of the so-called "creative city" by proposing creative ecological practices responding and adapting to the environment.

Incomplete Life
Marie-Pier Boucher (McGill University; boucher.mariep@gmail.com)

"To defy gravity is to defy the accepted, the unquestioned, and the status quo." (Triscott, 2005). Incomplete life looks at levitation as a pragmatic choreography of sensations that frees up "the

mind from the clichés of the physical world" (kac, 2005) to challenge our imagination. Levitation, it suggests, enables the articulation of non-functionalist forms of living efficacy, which give rise to modes of attachment informed by the non-productive modifications of experience produced by life. Incomplete life departs from an appreciative definition of life as linked to habitual plasticity, that is, as linked to what William James describe as "the possession of a structure weak enough to yield to an influence, but strong enough not to yield all at once." (James, 1890) Incompletion emphasizes the impossibility of fully capturing life's creativity, to resist what Tim Ingold describes as an emphasis on "the artifactual domain at the expense of living organisms." Ingold, 2012) Focusing instead on the incompletion of habitual plasticity, it refuses to subscribe the false pretence to axiological neutrality. More precisely, it seeks to ask (1) how creativity can be thought of outside of the economy of novelty (which often lurks as unspoken causality); and (2) how can the incompletion of life be thought of outside an ideal of scientificity? The discussion will focus on the nonproductive work of astronauts and cosmonauts and on the nonproductive dimensions of alternate techniques to achieve levitation to question the possibility for levitation to render productive life an impossibility.

Non-productive Creativity in Immersive Environments

Pierre-Louis Patoine (Sorbonne-Nouvelle University; pl_patoine@yahoo.fr)

Among the first large generation of programmers, which came of age in the 1970s, many appear to have been avid Dungeons & Dragons players, and readers of science fiction and fantasy. This conjunction between informatics, role-playing games and fantasy literature gave rise in the following decade to a "transmedia matrix" that will expand into one of the most powerful influence on today's practices of leisure. At the core of this matrix is the principle of world-creation, exploration and inhabitation: fantasy literature and RPG videogames tend to transport their readers and players in carefully designed, immersive environments. Can this spatial and ecological principle play a central role in the way we exercise and experience creativity in the 21st century? We will see how, by proposing spectacular environments to their readers and players, by privileging description/paidia over narration/ludus, fantasy texts promote an aesthetical, unproductive and profitless way of being, and encourage receptive, trance-like states of consciousness that disrupt structures of attention and modes of cognition that are called for by our neoliberal culture.

Ontological Remix Methods

Kira deCoudres (Hampshire College; kcd13@hampshire.edu)

Ontology refers to the nature of being while remix is the method of modulating variables, transforming a form or being into a variation of itself. Ontological Remix is media theory dealing with bioethical philosophies of science and the unexplored potentials of biomedical technologies twisted with imperfect Posthuman aesthetics. Focused on methods of mutation and modulation, Ontological Remix has interest in DIY Hormone Synthesis, Transgenic Mutations, Sensory Extensions, Disease & Disability, and "Natural" disasters such as car crashes. All methods (re)produce a body with biochemical, genetic, or mechanical accessories that transform, or, 'remix' the being.

Panel 12F: Sun Nov 6, 8:30 AM-10:00 AM *Ansley 6* (projector, screen, and speakers)

Film as Art and Science 2

Chair: Lauren Benjamin

Jean Painlevé's Creative Anthropomorphism
Lauren Benjamin (University of Michigan; labenj@umich.edu)

The paper considers the act of seeing animals as an ethical, creative principle in the films of Jean Painlevé. Building from Jakob von Uexküll's notion of animal *Umwelt* (translated sometimes as "environment" or "world-space"), I argue that Painlevé's science films allow viewers to see the animal as both like and unlike the human, practicing what I call "creative anthropomorphism." Though anthropomorphism has been roundly derided by ethnologists and critical theorists alike as contributing to the myth of human superiority, Painlevé's unique blend of surrealism and science—he was both trained as a scientist and active in the French Surrealist movement—allows for a third alternative. Rather than eliminate the trace of the self in the animal or subsume the animal other into the human self, Painlevé's films locate the strangeness of humanness precisely in the animal. In seeing ourselves in Painlevé's octopus, for example, we recognize an uncanny affiliation—a bodily not-at-home-ness—that illuminates not only the strangeness of the octopus, but the strangeness at the heart of all relations. Creative anthropomorphism builds from a Derridian notion of "being with" animals in all of their peculiarity, as well as Elizabeth Grosz's re-viewing of Darwin as a posthumanist philosopher. In Grosz's terms, this is an important distinction of difference in rather than difference from: instead of defining any particular entity in opposition to another, differences of all sorts are embraced in their unique—yet interconnected—multiplicity.

Memory, Thought and Technology in Cinematic Philosophies of Deleuze and Stiegler
Sergey Toymentsev (Florida State University; stoymentsev@fsu.edu)

The paper attempts to undertake a comparative study of cinematic philosophies of Gilles Deleuze and Bernard Stiegler, since both heavily rely on Kant's threefold synthesis of cognition and transcendental imagination in their analyses of the relationship between individuation and technology. Both Deleuze and Stiegler attack dogmas and clichés of the movement-image, yet their remedies are fundamentally different. Whereas Deleuze prioritizes the cinematic unconscious of the time-image that overcomes sensorimotor schemata of the movement-image, Stiegler focuses more on the industrialized nature of cinematic consciousness of the movement-image by criticizing its negative impact on individuation. Stiegler's approach, therefore, remains within phenomenological confines by viewing the process of thinking as the state of being awake. For Deleuze, on the contrary, thought manifests itself as a failure of consciousness, i.e. a "shock of the outside" or "the unthought within thought." In the tradition of the Frankfurt School, Stiegler provides a powerful critique of the malaise of the clichéd nature of cinematic consciousness, just as he criticizes the decadence, catastrophe or misery of other aspects of "culture industry." I will conclude that despite their divergent approaches to the film image, both philosophers complement each other: Stiegler's critique of industrialized individuation enriches

Deleuze's (less critical) work on the movement-image, while the latter's utopian writings on the time-image counter-balances the former's pessimism regarding the capitalist film production.

"Pray for the Human Race": Bodies, Borders, and Ecological Thinking in *Invasion of the Body Snatchers* and *Alien*
Rosalind Díaz (University of California at Berkeley; diaz.rosalind@gmail.com)

The imagined threat of alien invasion of the body relies on and reifies an understanding of the body as essentially bounded, separable from its environment, and thereby vulnerable to invasion by "foreign bodies." My paper interrogates the trope of alien invasion via two classic SF films: *Alien* (dir. Ridley Scott, 1979) and *Invasion of the Body Snatchers* (dir. Philip Kaufman, 1978). The aggressively parasitic creature in *Alien* emerges alongside the replicative aliens of *Body Snatchers* in the context of the project of policing borders on a transnational scale. The vulnerability of the human body to alien invasion resonates with fears of the invasion of nations and planets by racialized "alien" bodies, organisms, and substances, in an era of emerging global networks and of the rise of certain forms of ecological thinking. These alien invasions threaten to displace reproductive futurity, replacing the normative generational iteration of the (white) "human race" with unnatural replications/reproductions that produce horrifying alien creatures. I argue that to read these alien invasions as allegories of transnational colonialist and neocolonialist projects is not to misrecognize their biological narratives as political, but rather, to re-cognize the political stakes of biological narratives that frame the interactions between human and nonhuman organisms, bodies, and substances as battles pitting a vulnerable, bounded body against a hostile alien invader.

Panel 12G: Sun Nov 6, 8:30 AM-10:00 AM *Ansley 7* (projector, screen, and speakers)

Constructing Bodies 2

Chair: Ben Murphy

Homeostasis and the Ecology of Bodies
Ben Murphy (University of North Carolina at Chapel Hill; bmurphy2@live.unc.edu)

The human body has long been used to make sense of the enveloping material world. Environmental historians and Foucault alike remind us that ancient Greeks recognized correspondences between the cosmos and human forms; more recently, environmental humanities scholars—such as Heather Houser and Stacy Alaimo—have addressed ecological degradation by calling on tropes of bodily sickness. Addressing the latter approach, this paper isolates one particular version of the human body essential to writings on and about ecology—namely, the body as understood by Walter Cannon's theorization of homeostasis. This body is characterized by self-regulation, exchange between internal and eternal environments, and organic holism. My paper interrogates a conceptual slippage between ecology and physiology to consider what this homeostatic body obviates and what it enables for a broader ecocritical account. What "body of nature" is imagined when the homeostatic human body is the analogue? Apart from indicating the role of cybernetics as a mediating term, addressing this question exposes a tension between Cannon's homeostatic body and this same body as it operates for

ecology: the issue of health. Whereas Cannon understands homeostasis as the miraculous achievement of a body's successful functioning, environmental humanities work often adopts the malfunctioning body as its metaphor. A normative "wisdom of the body" for Cannon, the flows and regulations of homeostasis are, for ecology, frequently the features gone awry. It will thus be an aim of this paper to understand how and why homeostasis shuttles across disciplines and yet nevertheless can manifest in virtually polarized applications.

Creating the Artful Body "de soi même": Dance and Drill in Eighteenth-Century Diagrammatic Notations of Movement

Tamara Caulkins (Oregon State University; caulkint@oregonstate.edu)

In the eighteenth-century, the introduction of abstract diagrams to indicate human movement rationalized the body in a new way. Creating choreographies for ball dances and notating patterns for military drill transformed the coordination of moving bodies into a complex science. Drawing on the work of John Bender and Michael Marrinan in *The Culture of Diagram*, as well as the notion of "immutable mobiles" of Bruno Latour, this talk looks at the mapping of movement through the invention of diagrammatic systems for dance and drill that were widely used throughout Europe and its colonies. This talk will discuss the implications of visualizing the body on the page for creating "natural" hierarchies in the eighteenth-century social order, whether at court or on the battlefield. Drawing on eighteenth-century drill and dance manuals, such as the *Memoires* of French General Maurice de Saxe, the "Albums Delaistre," *Manoeuvers* by William Young, and the *Chorégraphies* by Raoul Feuillet and Dupré of Mans, I argue that through publication, coupled with the instruction of dancing masters and officers, European movement practices were dispersed globally. Nevertheless, as period descriptions of dance and drill suggest, in the works of Moreau de Saint Méry in the Caribbean and the Baron Von Steuben in North America, these movement practices were modified in response to new conditions in a globally expanding world. Users of these movement notations found not only prescriptions for artful movement, but also room for creativity and freedom in their own personal fashionings of an elite body.

Skeptical Breathing: Local Ethics in Speculative Literature

Jean-Thomas Tremblay (University of Chicago; tremblay@uchicago.edu)

This paper studies creative uses of breathing and breath in speculative literature, broadly conceived. Texts by Samuel Delany (Dhalgren, 1975), Renee Gladman (the Ravicka trilogy, 2010-2013), and David Buuck (Site Cite City, 2015) produce cartographies of urban encounters in the midst of environmental degradation, pollution, and the collapse of social institutions. Delany and Gladman's books deploy a science fiction neither utopian nor dystopian, while Buuck's monograph contains transcripts of staged artistic actions (elaborated under the doctrine of "respiracy"), some of which will only have happened decades from now. These texts operate from the premise that organisms, even when they breathe the same air, breathe it differently. Discrepancies in the length, intensity, sound, thickness, texture, and temperature of breathing (e.g. in wheezing, panic attacks, asthma episodes, or allergic reactions) stage two kinds of speculation. First, variations of breathing enable characters and readers alike to imagine makeshift symptomatologies, pathologies, and epidemiologies in the absence of official data on the toxicity that saturates the locales at stake. Second, these variations also enable characters and

readers to articulate a skeptical ethics: an ethics that is limited in its reach (i.e. it is site-specific), and which issues from the negotiation of what can or cannot be known or felt about the experiences of those with whom organisms share milieus. Accounts of breathing and breath are not literary clichés or platitudes that merely reveal the aliveness of organisms. The plasticity of breathing registers inequalities in embodiment and experience, and anchors creative speculation for addressing these inequalities.

Creating the New Flesh: The Body Horror of Adaptation as Augmentation
Caleb Milligan (University of Florida; camilligan@ufl.edu)

In this paper, I explore David Cronenberg's body horror films as unsettling considerations of what "being a body" means against the proliferation of new technology. Cronenberg's investigations into what bodies "are" supplement our current considerations of posthumanism and augmentation as theories to recreate our relationship to ourselves, not threaten them. Cronenberg instead invites viewers to imagine mutilations and mutations not as uninvited intruders on a perfectly functioning body, but more compellingly rather as augmentations. He introduced "the New Flesh"—the body literally extended into media—in his landmark film *Videodrome* (1983), and I now take up the mess it creates to resolve embodied anxiety amid encroaching technology. Cronenberg's fascination with augmentation can even be traced within his own creative procedure, as his "body" of work is marked by adaptation, in directions from both page to screen and the less critically considered vice versa. I draw upon Daniel Punday's corporeal narratology to discuss his film adaptations and novelizations of his screenplays as narratively augmented bodies. Likened to body horror, adaptations can be mutilations in either direction, but these extended bodies posit mediated embodiment as positive mutation. For Cronenberg, augmentation is a practice channeled through his creative process embodied in the technologies of film and print. Critically considering Donna Haraway's "cyborg" through Bruno Latour's concept of actancy, I analyze Cronenberg's adaptation processes as versions of body horror to literalize the uneasiness of how we write about our own bodies as creations of uncomfortable extension, from messily mediated to messy media.

Panel 12H: Sun Nov 6, 8:30 AM-10:00 AM *Ansley 8* (projector, screen, and speakers)

Narration and Authorship 2

Chair: Aleksandra Hernandez

Digitization and the Impersonal Narrator in Melville's "The Chart"
Aleksandra Hernandez (University of Notre Dame; mherna13@nd.edu)

Herman Melville's *Moby-Dick* chapter "The Chart" (1851) takes as its subject Matthew Fontaine Maury's navigation charts, one of the first open-access digital projects that made ocean travel considerably faster and safer. We owe the success of Maury's charts to his data collection methods which involved the free distribution of ocean and wind current charts in exchange for detailed ship logs from around the globe over a period of thirty years. This paper considers moments in the novel that register an ambivalent media consciousness about the effects of digitization on our experience of what is real—an experience that Melville attributes to the media

ecologies in which we function. Ahab's use of Maury's navigation charts, in particular, reproduces the latent tension between objective and subjective experiences of space on the level of narrative form. Given that all encounters with Moby-Dick occur outside of the purview of the chart, it is striking that Ahab's obsession is fueled by an artifact that will increase, but not guarantee, his chances of finding Moby-Dick. In this paper, I argue that the quantitative logic of remote pilotage contaminates Ishmael's embodied telling of the story, raising the question of whether an embodied narrator is the teller of Ahab's story, or whether we have at hand a distributed, impersonal "I" decoupled from character, personhood, and voice.

The Novel in the Time of the Anthropocene: Our Tools Make Us and Our Literature Post
Steve Tomasula (University of Notre Dame; tomasula.4@nd.edu)

New technologies, modes of thought, and social orientations have always found expression in new literary forms, and literary form informs how we understand ourselves and the natural. In contrast to the generic character types of medieval mystery plays written by anonymous authors, for example, one consequence of technical and social change in 18th century England was the first-person novel: an artistic solution to the redefinition of humans and their relationships that resulted from a belief in empiricism and the autonomy of the individual. Today, the autonomous individual, made possible by the concepts of separation and privacy, is being undermined by new social formulations. As computer scientist Arvind Narayanan describes one characteristic of this sea change, the amount of data that each of us generates just by living, the incentives to mine this data, and the increasing power and decreasing cost of the tools used to do so have already brought us to the point where "anonymity of any kind may be algorithmically impossible." Though a survey of contemporary literature would show a great variety of aesthetics, and authorial stances, works that could not have been written without the aide of contemporary authoring tools, networks of technology (especially media technology), and new conceptions of the self and the earth, are contributing to a body of writing that can be called Posthuman. This talk will consider form in the contemporary novel as an expression of these mutually reinforcing and generative vectors; it will consider emergence as both an organizing principle in the writing of novels, and a lens through which to read them in the time of the Anthropocene.

Rationalism, Realism, and Race: Authority and Creativity in the Writing of Kenan Malik
Suzanne Black (State University of New York College at Oneonta; suzanne.black@oneonta.edu)

This talk examines the writing of the British author Kenan Malik, focusing particularly on three of his books: *Man, Beast and Zombie: What Science Can and Cannot Tell Us About Human Nature (2002), Strange Fruit: Why Both Sides Are Wrong in the Race Debate (2008), and From Fatwa to Jihad: The Rushdie Affair and its Legacy (2009).* As a public intellectual, Malik has become increasingly visible in the United States, with op-eds in The New York Times and approving references in The Washington Post. Malik describes himself as a defender of "free speech, secularism and scientific rationalism," and he is sharply critical of both racism and certain approaches to multiculturalism.

Although I believe Malik's insights into race and Islam in the UK are worth considering, I will concentrate in this talk on his ethos and creative techniques. Malik draws his authority both from his training as a scientist and from his Indian origins, and his writing has been praised for techniques that seem grounded both in scientific training (classification and partition) and in

creative non-fiction (recreated conversations and the personal anecdote). I will explore Malik's ideas, his argumentative strategies, and some of the responses to his work (such as criticisms chiding him as reductionist and incoherent).

Innovation in the Online Creation and Debating of Fan-made Comic Book Battles

Chris Wildrick (Syracuse University; chris.wildrick@gmail.com)

Comic battle debating is a popular online fan activity. Comic fans devise a battle between characters, such as Spider-Man vs Batman. Then other fans present their case for why one character/team would win. It takes a lot of creativity and contextual awareness to make a balanced battle: one must balance many factors such as the characters' powers, histories, tactical abilities, teamwork, morality, and the location. The debating of the battles can be equally innovative, with fans writing enormously long posts to express the evidence and reasoning behind their position, and attacking other debaters' points with very sophisticated rhetorical, logical, and factual arguments. In one popular variation, fans even make well-produced films portraying the scene as they envision it. I am a respected participant in this community: I have created 300+ battles on ComicVine, a popular battle forum, have been nominated for their Debater Hall of Fame multiple times, and have had my arguments featured in their Battle of the Week more than any other user. I believe fan activities such as comic battles, cosplay, and fan fiction are as vital and creative as their "professional primary sources" (comics, movies, video games). For SLSA, I will speak about the forms of creativity involved in creating and debating battles. We will then end my time slot by having the audience debate and vote on a battle that I have created. Recent work: chriswildrick.wordpress.com A list of my battles on my ComicVine profile: comicvine.gamespot.com/profile/owie/blog/list-of-all-of-owie-s-battles-by-power-level/101499/

Coffee and Tea Break, 10:00 AM-10:15 AM

Session 13: Sun Nov 6, 10:15 AM-11:45 AM

Panel 13A: Sun Nov 6, 10:15 AM-11:45 AM *Ansley 1* (no AV)

Ecological Scenes

Chair: Sarah Sydney Lane

Interspecies Affect and Material Entanglements: An Aesthetics of Eco-phenomenology in Jeff Vandermeer's *Southern Reach Trilogy*

Sarah Sydney Lane (University of California at Santa Barbara; slane@umail.ucsb.edu)

Jeff Vandermeer's *Southern Reach Trilogy* critiques scientific epistemologies that enframe nature as inert object and resource. "Objective" science is portrayed as preventing the discernment of diverse existential territories that exceed interpretation and as stymying to the creative evolution of richer aesthetic, ethical, and interspecies worlds. As figured by the first novels' protagonist, "the biologist," the texts favor an eco-phenomenology that results in an

understanding of interspecies "life-worlds." This ecological imagining revives the notion of "nature" as an alien domain of recalcitrant otherness that is more ecologically responsible in its concession to autopoietic unfolding. This ecological science imagined in terms of phenomenological experience is organized around the body-mediated "praxis of paying attention" to nature (Tracy Warkentin) through an affective comportment composed of erotically charged wonderment. Thus, the novels map the genesis of anti-Oedipal, innovative non/human symbiotic couplings in entangled environments. The goal of this relational epistemology based on subjective, embodied experience—that results in an awareness of the phenomenal field as composed of multiple experiencing subjectivities—is to open up a "transindividual" "zone" (figured in the novels as the sentient landscape, Area X) conducive to triggering behavioral and expressive improvisation (Brian Massumi). This zone, as both psychological stance and material situation/site, propels new technologies of perception and being, whereby the scientist, the science, and the object-in-environment of study co-evolve in unforeseen ways. I read the novels to theorize an "ecological" subjectivity that is imbued by an affective palette of self-dissociating erotic biophilia and wonder. This subjectivity is nonagential and susceptible to the sublime, and therefore promotes collective discernment of the withdrawn ways in which all beings creatively unravel/rebuild and perceive one another on the micro-indiscernible scale of affect. The novel suggests an awareness that the ecological "mesh" (Timothy Morton) provides space for interspecies crossings that produce emergent ecologies.

Seaweed, Pearls, and Mermaids: Ecology, Gender, and Creativity in Nineteenth-century American Women's Sea Fiction

Liz Hutter (Georgia Institute of Technology; liz.hutter@lmc.gatech.edu)

This paper examines the aesthetic and ecological value of marine objects--seaweed and seashells, mermaids and pearls--in women's nineteenth-century sea fiction. Artifacts *created by* the sea and *creating with* sea materials expand critical interpretation of women's relationship to and participation in maritime culture. Whereas the genre of nineteenth-century sea fiction is characteristically associated with ocean voyages, ships, and sailors, my analysis of women's sea fiction shifts focus from ocean spaces to more intimate tidal regions--the liminal, hybrid spaces along shore and sea. With particular emphasis on New England maritime fiction such as *The Pearl of Orr's Island* (1861) by Harriet Beecher Stowe and *Country of the Pointed Firs* (1896) by Sarah Orne Jewett, my analysis employs a bioregional interpretive frame with ecomaterialism theory. For Mara, Stowe's orphaned, youthful protagonist, for instance, an afternoon's row boat excursion or scamper along shore provide opportunities where mermaids become imaginary friends and shells become toys. The artful appropriation of marine specimens as domesticated artifacts signals a form of dwelling that immerses and enfolds characters in their tidal environment. Thus, the tidal is no longer the metaphorical zone for the expression of women's experiences as Melody Graulich conceptualizes, but rather, an organic, dynamic interlacing of human and marine, nature and craft.

'Botany in the Garret: Women and plant science in Rousseau's time'.

Sarah Benharrech (University of Maryland; sbenharr@umd.edu)

In his pedagogical treatise Emile ou de l'Education (1762), Rousseau eliminated all scientific subjects from the restricted educational program that he envisioned for Sophie. Doomed to marry

and have children, it was enough for her to fulfill domestic chores. A few years later, though, Rousseau held more liberal views about women who yearned to learn botany. In the letters that he wrote to Mme Delessert, the pedagogue painstakingly developed a method adapted to the aptitudes of the mother and child which would enable them to recognize and name plants. Rousseau praised botanical activities in the belief that they kept young women away from more frivolous concerns. Was it an opinion commonly shared in his time? Does it imply that women were learning botany? Difficult to say: there is a dearth of studies on botany and women in France. One of the reasons may be that the scientific institutions such as the Parisian and provincial academies and the Jardin du Roy did not accept women among their ranks, an exclusion that seemingly prevented them from contributing. Despite these obstacles, a few women practiced botany as a hobby or even at a professional level. Some of them gained some recognition during their lifetimes but most sank into oblivion in the 19th century. One of them was Mme Dugage who remains totally unknown up to this day even though a plant bears her name. This study will focus on Mme Dugage, her life and her botanical work in the late 18th century.

Panel 13B: Sun Nov 6, 10:15 AM-11:45 AM *Ansley 2* (projector and screen)

Natural Relations

Chair: Bethany Doane

Re-Creating the Monstrous Feminine
Bethany Doane (Pennsylvania State University; bdoanepsu@gmail.com)

Theoretical discussions of feminine monstrosity have been limited, primarily, in two ways. First, psychoanalysis dominated most of the feminist discourse around horror and feminine monstrosity between the 1970s and 1990s. The second limitation is the tendency to interpret all monsters as symbols or signifiers for greater social or cultural anxieties. My goal here is to redefine the monstrous feminine beyond both hermeneutics and critique in order to engage a new feminist methodology for reading horror that is situated *with*, rather than against or outside, its textual objects. As theory has "turned" in the twenty-first century to the material and the real, new opportunities open up for reconsidering the monstrous feminine as having a literal and metonymic politics of *the flesh*. My reconfiguration of the monstrous feminine, by way of this fleshly politics, emerges as a disruptor of both political and ontological certainty: it is that which stands outside the "socially constructed" sphere and threatens its dissolution. It is "feminine" not in that it is bound to either biological sex or gender, but that it exists in the deterritorialized arena of matter and force that is radically ontologically disruptive to the "masculine:" the realm of activity, generation, progress, and meaning. The monstrous feminine is thus opposed to that very process that genders, taxonomizes, or orders. As an example of the value of this reformulation, I (re)examine two disparate stories of "monstrous flesh:" Bram Stoker's *Dracula* (1897) and the recent early American horror film *The Witch* (2016).

Creating Gender / Creating Death: Femininity and the Death Monologue in As I Lay Dying and Zero K
Kate Schnur (University of Michigan; krschnu@umich.edu)

The "Addie section" of William Faulkner's As I Lay Dying has often been read as Addie's resistance to motherhood and the language system that structures her oppression. Though already dead in the novel's narrative, her monologue allows her speak while her body balances between her ended life and her oncoming death. Eighty years after the publication of As I Lay Dying, Don DeLillo's Zero K considers the creative and destructive abilities of a technologically mediated limbo between life and death, cryogenic freezing. In it, the narrator's stepmother, Artis, speaks to the reader in a prelude to the novel's second half, after already cryogenically frozen in mid-bodily degeneration. This paper argues that both Faulkner's and DeLillo's uses of these extra-narrative monologues expose the frailty of language, and consequently, of the lives and bodies constructed in the symbolic systems of language. In the liminal space between life and death, these women — who are otherwise relatively silent — do more than speak from the beyond. They expose the limitations of how we rely on language to solidify the supposed stability of the gendered body and of the living body. In reading Artis's section in conversation with Addie's, I will argue that DeLillo's novel is not the technophobic rant that his critics contend, but is rather a reconsideration of how the technology of cryogenics re-shapes and revises Faulkner's meditation on how the simultaneously fleeting and time-defying moments before death are opportunities for formal creativity and political resistance.

Something or An Other: A Consideration of Datalogical Bodies
Lucas Power (Duke University; lucas.power@duke.edu)

The creation of personal data and a connection to our data is a matter of fact. The precision with which individuals can be identified through aggregate data is restricted only by motive and skill. In certain scenarios, data traces the body to a point of creating another self. Consideration of a datalogical body has been taken up by Haggerty and Ericson with their Surveillant Assemblage and by Critical Art Ensemble with their Data Body. The importance of connecting embodiment to virtual experience, here emphasized as a digital regime, has been explored by Mark B. N. Hansen. This paper attempts to bridge a phenomenological account of virtuality with a Foucauldian analysis of power by taking points of connection between physical and datalogical bodies as object-targets for power. Instances in which data is accepted as representational of the self are contrasted with a similarly passive stance on false-positives in the monitoring and reporting of that data. Each of these broad positions compel users to accept data as both representational and at risk. The assumption of risk over material that is assumed simultaneously accurate and falsifiable emphasizes conformity as best practice. I argue that such an outcome is consistent with Foucault's theory of subjectivation under one pole of biopower. My position is not that we should avoid interconnected technologies in response, but rather bear such facts in mind as we continue to consider the effects where these technologies are inextricable from contemporary life.

Panel 13C: Sun Nov 6, 10:15 AM-11:45 AM *Ansley 3* (projector and screen)

The Truth of Fictions

The debate on fictions in science is one area where philosophy of science meets literature and literary theory. Arguably, this debate reaches back well into the 19th century. Its current incarnation arose in discussions of models and modelling such as Nancy Cartwright's remarks on "the theatre of physics": The laws of physics lie in that they do not literally represent what actually happens but employ fictions to tell the truth. This has philosophers worried on three counts, and at least on the latter two they benefit from the encounter with literary writers and theorists: 1. Do fictions – as opposed to idealizations and abstractions – really play a role in scientific modelling? 2. How can models with fictional elements represent the world? If fictions are required to tell the truth, there must be "representations" without literal accuracy, likeness or resemblance – or we have to jettison representation altogether. 3. If models include fictional and non-fictional elements, do scientific models require interpretation for their message or moral to be understood? It is a conceit and perhaps a necessity for "normal" science that the members of the scientific community can understand each other literally (the puzzled question what an author means is taken as a sign of crisis). The presentations - two from the perspective of literature, two from the perspective of scientific modellng - will be short enough to allow for 30 minutes of general discussion of the SLSA/PSA audience.

Chair: Alfred Nordmann

Emerson's Tribunal of Truth: Fiction and the Relational Real
Laura Dassow Walls (University of Notre Dame; lwalls@nd.edu)

Emerson's tribunal of truth tries the novel against the familiar, a standard by which the novel may be revealed as, in his words, "more excellent" insofar as it relates us more closely to the real--Thoreau's "framework of the universe." Both authors incorporated science into their fictions in order to move us beyond ossified conventions; Nature, the embodiment of the mind of God, was to be the poet-scientist's stepping-stone into the realm of the Real. Yet this posed a dilemma: to take that step was to leave the "real" world behind--the world of relations. Emerson's poetics solves this dilemma by turning truth into a performance, an approach to the real that is necessarily provisional, interpretive, and relational, building metaphor and imagination--fiction--into science as constitutive of truth. The effect was to unfix meanings and relations and allow the emergence of new truths, new knowledges, and "truer" fictions, a relational knowledge that in Emerson's hands led to the problematics of Pragmatism, and in Thoreau's hands to ecological networks.

Fictions and Explanatory Failure
Gordon M. Purves (Sacred Heart University; purvesg@sacredheart.edu)

As many have argued, fictions can be productively truth conducive. But this possibility certainly should not imply that all scientific fictions are beneficially explanatory. I will argue that some fictional are empirically adequate in their appropriate domain of applicability, but that they nonetheless are unsuccessful at providing insight into the structure of the system being modeled. More specifically and drawing on examples from quantum statistical mechanics and evolutionary game theory, I will argue that some models are successful at reproducing the physical events that

they are trying to explain, but nonetheless fail to adequately explain those events, even though the very same fictional elements may successfully explain other phenomena.

Imagination Extended and Embedded: An Artifactual Account of Models and Fiction
Tarja Knuuttila (University of South Carolina, University of Helsinki; knuuttil@mailbox.sc.edu)

The theme of fiction has been revived in the current discussion of scientific modeling. While in the discussion of models and representation, models have been considered as models of some real-world target systems, often such a determinable relationship between models and the real world cannot be found. Among the various theories of fiction, Kendall Walton's pretense theory has been especially popular among philosophers of science (e.g., Barberousse and Ludwig 2009; Frigg 2010; Toon 2011, 2012). However, although Waltonian approaches offer a solution to the problem of the ontology of fictional models, they tend to generate other problems. This paper presents a novel artifactual approach to fiction in science that addresses the shared features of models and fictions. It approaches both models and fictions as purposefully created entities, artifacts, which are constructed by making use of culturally established representational tools in their various modes and media. Three features that models and fictions share are discussed: constructedness, self-containment, and constrained constitution. The account proposed circumvents some problems of those approaches that consider models in terms of the imaginings of scientists.

Representation, Simulation and Acting: Henry James's "The Real Thing" and what is Right with Wrong Assumptions
Michael G. Festl (Universität St. Gallen; michael.festl@unisg.ch)

False assumptions play an important role for model-building in a number of scientific disciplines. They are omnipresent in economics where the assumption of 'economic man' is at the center. They have found their way into moral philosophy where they figure prominently in social contract theories of justice. They are important in the natural sciences where they are, among other things, instrumental in simulations that combine different subfields, such as molecular dynamics and continuum mechanics. Pertaining to research on simulation in the natural sciences, Winsberg determines that "[f]alse assumptions [...] can be systematically successful" (2006, p. 594). However, there is no theory which explains why false assumptions are indispensable to the sciences. I want to contribute to such a theory by taking a look at Henry James's 1892-short-story "The Real Thing". In it James demonstrates that the artistic representation of nobility can work better when performed by working class people than by real noblemen. In other words, under certain circumstances the unreal can represent what is crucial about the real better than the real itself can. Furthermore, James introduces a couple of remarks on why this could be the case. He, for example, argues that to get a good representation one must not stick too closely to the original. Thereby James implicitly draws a distinction between exact representation and crucial representation.

Panel 13D: Sun Nov 6, 10:15 AM-11:45 AM *Ansley 4* (projector and screen)

The Moral Dimensions of Health

Chair: Stephanie Shirilan

Strange Herbs and Spirits: Natural History and Indigenous Knowledge on the Early Modern Stage
Stephanie Shirilan (Syracuse University; shirilan@syr.edu)

Historians have traditionally argued that indigenous knowledge and belief systems were so effectively stripped from new world botanical resources as to have had no philosophical or epistemological impact on European consumers. The project to which this paper belongs builds on recent challenges to this argument by considering the ways in which indigenous techniques for sourcing, handling, cultivating, preparing, and consuming new world botanical resources made their way into early modern European ideas and practices. The chemical and biological impact of new world plants in European physic gardens and pharmacopeias has been widely noted but, insufficiently, I argue, in relation to contemporary medical and philosophical investigations concerning the nature of spirits, the properties of air, and the therapeutic powers of the imagination – all key aspects of indigenous medical beliefs about the potencies of these plants. In this paper, I argue that popular curiosity about the provenance of indigenous medical and botanical resources (as well as anxiety about the implications of their de-contextualization) may be witnessed in representations of strange herbs, their procurers, and dispensers, on the early modern English stage. I show how these representations echo contemporary debates about the powers and properties of new world plants and drugs in the natural and moral histories of the Americas and explore the resonances of these debates in the wider discourse about dangerous desires and beliefs.

The two-fisted fightin' poet doc": Poetry and Public Health in Sinclair Lewis's *Arrowsmith*
Stephanie Larson (Emory University; sa.larson@emory.edu)

Sinclair Lewis's 1925 Pulitzer Prize-winning novel, *Arrowsmith*, follows a young doctor, Martin Arrowsmith, who faces internal battles between scientific inquiry and clinical practice while making his way through various fields of medicine. The extant scholarship on *Arrowsmith* positions Lewis's novel as a time capsule that has preserved a historic moment in medicine, science, and public health. This approach prizes a fictional text as a transparent, historical document without recognizing Lewis's use of satire to produce social commentary. Arrowsmith is, no doubt, an essential historical document in the study of medicine and science in the United States. However, it is also a work of fiction and thus serves a larger purpose than recording a time in history. While my work will be informed by the history of public health, my hope is to show that literature can inform our understanding of the history and contemporary environment of medicine, science, and public health as much as history can inform our reading of literature. This paper examines Lewis's satirical representation of public health officials and campaigns in the early twentieth century. Of special interest is the character Almus Pickerbaugh, "The two-fisted fightin' poet doc" who views his nonsensical rhyming health "ditties" as a poetic art form for the public good. Using an interdisciplinary approach, I will argue that Pickerbaugh's public health ditties were not beneficent slogans used to promote healthy lifestyles, but rather, veiled threats that used emotional appeals to preserve a hegemonic, eugenically-based, notion of health, wellness, and "the public good."

Unnatural Selections: Synthetic Life and the Ethics of Artificial Evolution
Jeff Pruchnic (Wayne State University; inferentialkid@gmail.com)

The creation of ethical guidelines for regulating interventions into the human germline has become an increasingly pressing proposition for medical and legislative authorities in many countries. The two most prominent responses to this dilemma focus on divergent conceptions of what is known as "the self-understanding of the species" in ethical philosophy: the suggestion that the essential characteristic of humans is their ability to understand and recognize themselves as humans. In much UK bioethics research this self-understanding comes via the shared autonomy of humans (and thus suggests greater freedoms in genetic intervention). Jurgen Habermas, on the other hand, suggests that human self-understanding is dependent on a minimal recognition of the difference between the "natural" and "artificial" that should lead us to avoid genetic intervention. This talk critiques both of these views by demonstrating that (1) the "self-understanding" of the species has always been as much a matter of persuasion as of cognition and (2) as suggested by much archaeological research and early historical records, humans' sense of self has long been redefined around its interaction with inorganic objects. In this sense, then, the redefinition of human self-understanding via genetic manipulation and debates about its ethics may only be the most recent entry in a very "natural" process of human development.

Chemical Creation Stories: Rethinking Toxicity and Climate Change in Indigenous Science Fiction
Stina Attebery (University of California at Riverside; Satte001@ucr.edu)

Indigenous science fiction often imagines futures impacted by climate change and environmental pollution, exploring the consequences of human-created environments on human and non-human communities. These texts challenge Western conceptions of scientific progress by drawing attention to the ways science is coproduced alongside capital and by offering alternative scientific methodologies based in Indigenous ecological knowledges. One such text is Thomas King's science fiction novel *The Back of the Turtle*, which features a First Nations bioengineer confronting the environmental disaster created by his genetically modified bacterium "GreenSweep," a defoliant that wipes out plant, animal, and human life and poisons the environment around the Smokey River Reserve in Canada. King explicitly connects this destruction to other genocides and instances of environmental racism, but he also thematically links GreenSweep to the creation story of Sky Woman, who falls from one world to another and is rescued by the coordinated efforts of animal species building a new world for her on the back of a turtle. The indigenous scientific perspective in *The Back of the Turtle* suggests that environmental destruction can become a site of biocultural hope. In developing this reading of King's work, I draw on Mel Chen and Stacy Alaimo's work with toxicity and pollution as politically transformative spaces for rethinking human embodiment as part of a network of animals, environments, and objects. King's emphasis on Sky Woman as a story about scientific creation and inter-species biosociality offers an ethical framework for incorporating the technologies of genetic engineering into a relational, interdependent environment.

Panel 13E: Sun Nov 6, 10:15 AM-11:45 AM *Ansley 5* (projector and screen)

Modes of Creativity in Psychedelic Research

Scientific studies of psychedelic drugs and creativity emerged together in the early Cold War era. As Jamie Cohen-Cole has argued, creativity became a major theme in American psychological research when it was interpreted as a distinctly liberal trait that resisted the authoritarianisms of both right and left. During the same years, psychiatrists and other scientists became interested in how drugs like LSD and mescaline—which were not yet either illegal or associated specifically with countercultures—could be harnessed for everything from treating alcoholism to brainwashing to augmenting creativity. This session explores how scientists have constituted, utilized, and questioned creativity in psychedelic research past and present. It brings together three historians of science, a comparative literature scholar, and an anthropologist (serving as discussant) to consider how our disciplines differently address the common subjects of creativity, psychedelic experience, and their histories. We examine studies and debates on the effects of psychedelic drugs on creativity, the influence these studies had on policy research, and the role creativity could play in the the contemporary resurgence of psychedelic research.

Chair: Peter Sachs Collopy

Psychedelics and Technical Creativity in Cold War California
Peter Sachs Collopy (University of Southern California; pcollopy@usc.edu)

In the late 1950s, electrical engineers Myron Stolaroff, Don Allen, and Willis Harman began using psychedelic drugs to foster the creativity of engineers and other technical workers. They started their experiments in a religious movement called the Sequoia Seminar and in Ampex, the dominant manufacturer of magnetic tape recording equipment in the region that would become Silicon Valley. In 1961 these engineers founded the International Foundation for Advanced Study, where they and a handful of psychiatrists and psychologists administered psychedelic therapy and conducted more systematic research on the effects of LSD and mescaline on creativity. In the Foundation's publications, they framed their research as an extension of Henri Bergson's philosophy of the creative mind and Carl Rogers' humanistic psychology. Mescaline, they found, strengthened precisely the personality traits—such as "lack of rigidity… in concepts" and "satisfaction in self-expression"—that Rogers associated with creativity. The architects, physicists, and engineers on whom they experimented reported that they were able to consider projects from new perspectives, sometimes literally, as many were more able to imagine and visualize complex systems. Unlike Bergson and Rogers, though, the Foundation conceptualized creativity primarily as a technical resource, oriented towards problem-solving rather than aesthetic production or psychological well-being. Although Stolaroff and Harman were also interested in mystical uses of psychedelic drugs, in their professional roles as engineers they sought to legitimize their practical applications as technologies that would enhance the cognition of their fellow technical workers.

"The Real Revolution is in People's Heads": Stimulating Unconscious Processes in 1960s Educational Policy Research
Bretton Fosbrook (York University; bfosbro@yorku.ca)

This talk examines one of the inspirations for Stanford Research Institute's (SRI) Educational Policy Research Center, a private-sector institute dedicated to the development of alternative

long-range futures sponsored by the U.S. Department of Education and headed by systems engineer Willis Harman in the 1960s. Before joining SRI, Willis Harman was a professor of electrical engineering at Stanford University, where he also taught human potential movement courses and co-authored papers on psychedelic experience and creativity with researchers at the International Foundation for Advanced Study. Instead of offering direct policy suggestions at SRI, Harman and associates argued that a large portion of subjective experience is comprised of unconscious processes, embodying things like creativity, that the current educational system ignores. Relying heavily on humanistic psychologists, SRI's educational policy documents relocated the systemic problems the U.S faced from the outer world to the inner world: a problem of limited access to unconscious processes. I analyze how how Harman's background in psychedelic research not only informed his educational policy research but was a key reason he was hired by the U.S. Department of Education to direct the short-lived research center. Harman believed the "mind-expanding" properties of psychedelic agents could help solve the complex problems facing the United States educational system in the late 1960s by accessing and stimulating unconscious cognitive functions, like creative problem-solving.

Creativity and Poetic Language in Psychedelic Science Research
Nese Devenot (University of Puget Sound; ndevenot@pugetsound.edu)

This presentation argues that poetry (i.e., experimental and creative uses of language) represents crucial data about the content of psychedelic experiences within the context of scientific research. I call for the need to develop psychedelic studies in the humanities, since the discourse of science is essential but insufficient for exploring these liminal realms of consciousness. Although the majority of recent work in psychedelic studies relies on quantitative, objectively verifiable measures, my research demonstrates that psychedelic science is frequently characterized by a necessary reliance on both science and poetry. The process of exploring non-ordinary states of consciousness depends upon the communication of unprecedented subjective experiences—a process that necessarily relies on metaphor and other creative uses of language, since no ready-made vocabulary exists to describe these experiences. For this reason, I argue that literary theory and poetic interpretation are as crucial as chemical analysis for generating data in psychedelic science and the scientific study of consciousness more generally. Drawing on my recent scholarship as a Research Fellow with the New York Public Library's Timothy Leary Papers, I demonstrate that psychedelic scientists have theorized about the experimental value of poetic language since the first wave of psychedelic research in the twentieth century. My presentation ends by proposing future directions for clinical research based on Neiloufar Family's call for renewed scholarship on the relationships between psychedelics, neurochemistry, language, and creativity.

Panel 13F: Sun Nov 6, 10:15 AM-11:45 AM *Ansley 6* (projector, screen, and speakers)

Listening Away from Intelligible Thinking

In a 2006 interview, the Australian performance artist Stelarc claimed that the central limitation in the development of artificial intelligence is not intelligence per se, but that algorithms have trouble understanding how to be stupid, implying that the secret to human-like behavior

(including creativity) in artificial systems has less to do with programming intelligence and more to do with the technical challenges posed by affect, illogic and lateral thinking. That same year, for different but related reasons, Jean Baudrillard declared that the age of intelligent solutions was over and that henceforth only unintelligible ideas would be capable of generating sovereign thought. Any intelligent or useful insight, for Baudrillard, can be instantly coded, co-opted and commodified, hence the importance of developing relationships with useless ideas, failed ambitions and the speculative imagination. Too often, the study of creativity is not itself a creative endeavor, mobilizing scientific methods designed for repeatable results instead of creative methods that yield often exactly the opposite. The implicit (and ironic) claim such studies make that creativity cannot be understood creatively, or better, that understanding itself is not a creative activity. Against this tendency to privilege intelligible methods over imaginative interventions, this panel explores the ways that listening to the unintelligible can generate insights into questions of art, technology and politics. Focusing on the resonance between creativity and the unintelligible, this panel explores the ways in which nonsense, hyperstition, stupidity and imaginary solutions are capable of generating creative alternatives to measured and logical thinking.

Chair: Ted Hiebert

EVIL DISPOSITIONS: AN ABUSER'S GUIDE TO BECOMING UNINTELLIGIBLE
Marc Couroux (York University, Canada; couroux@yorku.ca)

Veritas modo coniecturis subieci rogat ut omnes complere possit. (Reality asks to be submitted to hypotheses, so that it can fulfill them all). One of many slogans populating a visionary emblem (Egregorus Occulturalis) attributed to Mercurius 'Scurra (c. 1620), this invocation speaks to present-day imperatives of ubiquitous verification. Indeed, the contemporary moment is rife with paeans to transparency—in neo-rationalist quarters, cybercapitalism and the military-industrial complex alike—compatible with control ideologies if not already in their service. In this context, artistic practice would do well to redouble its affinities with ambiguity, opacity and inaudibility, thereby complicating its cooptation as yet another agent of categorization, quantization and normalization. While recent sonic theorizations describe modalities by which chaotic, unassigned, pre-conceptual vibrational fields are organized into coded percepts—rendering them *audible*and prone to instrumental logics—the causal chain might be reversed to grasp how the unintelligible remainders in excess of any transitory rational capture might be enlisted as heretical vectors. According to 'Scurra's diagram, four modes of becoming-unintelligible present themselves in a möbiusoidal interplay, each associated with a particular method: lusus (*play, mètis* (cunning intelligence): navigation of catastrophic bifurcations via just-noticeable differences); intercession (*mediation*: punctual recalibrations of signal-noise ratio); hyperstitio (*hyperstition*: modulation of legibility via anachronic displacement); and imago (*illusion*: exploitation of material affordances in their compact with perceptual aporias). Finally, in the stratagematic spirit of Fuller and Goffey's *Evil Media*, this paper asks what political vectors become available when a sonic praxis asymptotically inclines towards strategies that forestall the integral rationalization of the world.

Out-of-body Speculations
Ted Hiebert (University of Washington at Bothell; thiebert@uw.edu)

Two chairs stand facing in an empty room. I sit in one and, still seated, imagine standing and walking towards the other chair, turning to sit facing the chair I currently occupy. Next I *actually* stand and walk to the other chair, just like I imagined. I sit and look back at the chair I just left. Then I repeat the exercise, imagining myself walking across the room, sitting, and staring at the chair I presently sit in, as I did a moment ago. The next step, however is not to stand again where I am. Instead, I imagine standing on the other side of the room and walking back to the chair that I am currently in. I imagine sitting down where I already sit to look at the chair that is now empty on the opposite side of the room. Then I repeat the process. This exercise is suggested by new age visionary Robert Bruce as a way to cultivate out-of-body experiences. The idea is to alternately imagine and walk from one chair to the other, until one sees oneself already sitting where one was planning to sit. At this point, says Bruce, one is out of body. This paper thinks through what kinds of speculative contributions such an exercise might make, taking seriously the concept of out-of-body experience to propose a form of disembodied multiplicity that remains proximate to itself while capitalizing on the speculative possibilities of performative vertigo.

Static, Flicker, and Other Modes of Noncognition
Rebekah Sheldon (Indiana University; rsheldon@indiana.edu)

In *Science Fiction and Critical Theory*, Carl Freedman makes a compelling case for considering science fiction a form of critical theory. He points out that science fiction is such a fecund genre for literary analysis because it uses cognitive estrangement to produce new and lasting judgments (xv-xvi). Yet science fiction gives a different account of cognitive estrangement, one which takes aim at the notion that ideas are transmitted through rational apprehension. Again and again, I will argue, science fiction thematizes what I will call "embodied reception." Through thematic incorporation of nonrepresentational elements such as static, it urges us to see that its effects take hold not at the level of ratiocination but rather as bodily inhabitation that bypasses cognition altogether. To the extent that we see SF as engaged in the work of criticism by other means, then, we should be drawn to ask whether this motif is legible not just as a historical symptom in need of interpretation, but as an alternative methodology and an immanent theorization. My presentation will look at several texts that take embodied reception as a theme and as a meta-theoretical intervention: Neal Stephenson's novel *Snow Crash* (1992), David Cronenberg's film *Videodrome* (1982), Mark Z. Danielewski's *House of Leaves* (2000) and William Burroughs's *Cities of the Red Night* (1981). This sequence will move us up the scales from the individual to the historical.

Suidic Dreaming (I Am Written in a Doom)
David Cecchetto (York University, Canada; dcecchet@yorku.ca)
Listening is always muddy, but sometimes you have to get your ears dirty to tune into just what this means…or so the echo of my suidic dream told me one morning. And indeed, certain oto-acoustic emissions—certain sounds produced by my hearing that interacted with the "heard" acoustic world but which were not of either—once attuned me to what might be called a primary relationality of listening in general: sound particularizes in individual bodies such that it occupies the abstract space through which those bodies relate, which is to say the intervals, tempos, intensities, amplitudes, contours, and boundaries through which they become bodies in the first place. A sound makes no demands except to be heard, such that a muddy black box isn't just a

problem for communication, but is rather the problematic form of communication itself: the form through which an informatic paradigm wherein relations are mere connections—indifferent to their content, and qualitatively equivalent—is denaturalized. And from this denaturalization it becomes clear—clear as mud—that to listen is to attend to the effects of a reality the cause of which can never be singly determined, even as a coming together of more than one: the proverbial sound of one hand clapping isn't the limit case of sound, but rather its basic enabling condition…providing that we accept that every singular hand is itself a multiplicity. A sound is less than the sum of its parts, but more so.

Panel 13G: Sun Nov 6, 10:15 AM-11:45 AM *Ansley 7* (projector, screen, and speakers)

Reimagining Poetic Creation 2

Chair: C. M. Foltz

The Poetic as a Biosemiotic System Relation
C. M. Foltz (University of Texas at Dallas; cmfoltz@utdallas.edu)

This paper will present a new definition for what it means to be poetic. Certainly, poetry deals with representation and imitation (as described by Aristotle), but the source of poetic action should be understood in terms of biological entanglement. Works from Terrence Deacon, Kalevi Kull, Nelson Goodman, and Karen Barad are considered to build a framework where biological action and semiotic processes are thought of as aspects of our environmental embodiment. A second-order systems-theory model is utilized to orient the idea of umwelt (Jakob von Uexküll, Sebeok) with Ilya Prigogine's notion of dissipative structures as a model for understanding semiosis. The paper presents a case that poetry is part of a larger continuum bound in the Poetic, the meaning-making process of all organismic embodiment. Terrtiary attention is given to Goodman's concept of Irrealism and Dale Purves's work on empirical perception. This paper stems from my ongoing dissertation project.

The Poetics of the "Virtual Fragment": On the Digital Object in Judd Morrissey's *The Operature*
Jamal Russell (University of California at Santa Barbara; jamalsrussell@umail.ucsb.edu)

When discussing his 2014 performance piece/augmented reality poem The Operature, Judd Morrissey describes its procedures of generating text as "a system of sources in circulation" that are "cut up and distributed as geo-spatially arranged virtual fragments" (207). This description brings to mind many questions, the most pertinent being: just what is the nature of the "virtual fragments" produced by those systems of Morrissey's performance/poem? I argue that these virtual fragments are sets of digital object produced as a function of what Benjamin Bratton would call the work's interface design, data objects rendered to a human user's mobile device by the processes by which the various human and non-human actants of The Operature work in concert. As a function of this process, these digital objects are also digital machines that produce digital objects according to contingent parameters such as the user's location and the Layar app that allows the user's device to scan the performance space of Morrissey's performance/poem. Furthermore, the processes by which The Operature produces its digital objects can be examined

in the context of more general cloud computing operations such as virtualization. Apprenehding the processes of The Operature in this manner allows the performance/poem to be read as a sociological experiment that uses the methods through which The Operature produces digital objects to investigate how virtualization operations "isolates users from one another and...makes manifest an economic system of individual agency" (Hu 64).

Sculpting an Ecodigital Poetics of Play
Sean Matharoo (University of California at Riverside; smath006@ucr.edu)

With this paper, I study the digital poetry of J. R. Carpenter to demonstrate what I call an ecodigital poetics of play. I propose that this heuristic contracts segments of the Anthropocene into the here-now by performing a nomadic line of flight away from the striations of humanism—including its proliferations of dualisms, anthropomorphic representations, and affective despair—and towards multi-modal freeplay, constituting itself instead in an ontology of trans-relationality. When engaging with Carpenter's works, each act of creative translation on the part of the player carries with it a self-reflexive call to recognize Dasein as being immanent to a world of material things. Players find themselves entangled in multi-modal audiovisual environments and human-nonhuman interfaces, which together draw attention to the vitality of inorganic matter. The vertigo this engenders carries over from the game-world to players as they fail to relate to intelligent machines. Yet, an ontology of trans-relationality prompts players to become-ecosophical, thereby conjugating what they know with what they hear, see, and do. Throughout this paper, I mobilize the writings of Aarseth, Caillois, Deleuze, Deleuze and Guattari, Guattari, and Glissant to help generate an ecodigital poetics of play, which I argue naturalizes the limitations of humanist modes of writing and reading when contending with problems beyond those of species-being. In taking seriously the nomadism of this heuristic, I have created a poem in 3D-Coat, a digital sculpting application. By way of conclusion, I consider its process of creation and encourage further use of this heuristic in other contexts.

"Irritable Reaching," Poetic Creativity
Jeanne Britton (University of South Carolina; jbritton@mailbox.sc.edu)

In a well-known description of the poetic creative impulse, John Keats defines "negative capability" as the ability to remain in "uncertainties, Mysteries, doubts, without any irritable reaching after fact and reason" and rest "content with half knowledge." By reading negative capability through discourses to which it subtly gestures—physiology, literary history, and forms of mediation—we can see the indeterminacy of Keats's poetry as a feature of his relationship to literary history. I argue that negative capability maps the trajectory between conceptual indeterminacy and aesthetic mediation, between inconclusive conclusions and indirect literary experience. In this light, the indirect aesthetic experience acquires a positive value; the "half knowledge" that satisfies the negatively capable poet suggests the "in-betweenness" of mediated experience; and irresolution offers temporary satisfaction. The cultural history of sensibility explores both its physiological and its literary permutations. The cultural history of irritability, which also touches on the physiological and the literary, simply doesn't exist. These circumstances are in direct opposition to the long history of irritability's association with the character of poets and its postulation, in eighteenth-century medicine, as the origin of muscular mobility. Irritability has a long but neglected history of literary and medical significance, and

negative capability draws on that history. This new account of negative capability initiates an assessment of Romantic-period mediation that its attentive to its dual nature—its appealing and creative aspects on one hand and its limiting and melancholy effects on another.

Panel 13H: Sun Nov 6, 10:15 AM-11:45 AM *Ansley 8* (projector, screen, and speakers)

Imagining Futures 2

Chair: Brian Cantrell

Realism and Creative Constraint: Speculative Design Methodologies for Posthuman Futures
Brian Cantrell (University of Southern California; brn.cntrll@gmail.com)

This paper will examine the creative potential of realist constraints in the processes of Speculative Design and related, theoretically-informed, design methodologies. Borrowing from my experience in, and drawing examples from, Alex McDowell's World Building Media Lab at USC, in which we designed a future version of Makoko—a floating slum in Lagos, Nigeria—set in 2036, I will demonstrate the ways in which the adoption of realist constraints can be a creative act—one that is politically accountable and holds much promise for design speculation around the future of technologically-augmented humans and their relationship to the ecological and cultural systems in which they are embedded. Unlike most future-oriented R&D undertaken by technologists and designers, Speculative Design seeks not to predict cultural and technological trends, but to provoke debate concerning the possible futures suggested by current socio-technological circumstances. This paper will put the aims of Speculative Design in conversation with those of Speculative Posthumanism—a strain of posthumanist thought that seeks to understand philosophically the potential, radically "other," posthumans that may someday walk the planet. Both schools of speculation mobilize concepts and representations drawn from the world of hard science fiction and, accordingly, ground their practices in a realist ontology. This realism, I will argue, is the source of each system's creative reach in that it renders each capable of opening as many windows of insight upon the present as they are of opening windows upon unexpected futures.

Surveying an Archeology of the Future: The Ideological Force of Model Railroading in East Germany
Mario Bianchini (Georgia Institute of Technology; mbianchini6@gatech.edu)

The creation of models for public or private viewing has a detailed history ranging from burial practices, the iconic representation of divine pantheons, digital games, toys, and the 'Maker's Movement.' The reflexive nature of modeling invites us to consider how models function as vehicles for the miniaturization of history comparable to literary genres or digital games. We focus on the miniaturization of German history, and how the practice of model railroading represents a hybrid configuration that integrates technology, media, economics, and ethnology. The construction of elaborate train layouts serve as ideological expressions steeped in nostalgia for the past and as expressions for the future. The recreation of scenes in a train layout shapes in miniature a social environment, be it in accord or disagreement with the state. This paper, part of

a larger project on East German configurations of space, looks at the ways model trains and their layouts in East Germany worked as ideologically marked technologies for the creation of good socialist citizens. Drawing on East German archives, documents from the DDR Ministry of Education, and newspaper advertisements, the paper bears witness to how model railroading served as a vehicle for integrating an idea about the future together with the development of the skills necessary to create it. In this way, we show that space is never ideologically neutral, but the consequence of complex ideological constructions.

Post-Apocalyptic Desire and Creative World-Building in *Adventure Time*
Jeff Karnicky (Drake University; jeff.karnicky@drake.edu)

Princess Bonnibel Bubblegum, one of the stars of the post-apocalyptic cartoon Adventure Time, is a scientist, and creator and ruler of the Candy Kingdom. And true to her name, she is made out of mutated bubble gum—"Mother Gum," to be more precise. Viewers of the show learn how Princess Bubblegum was born sometime after the apocalyptic event known as the "Mushroom War," which created a giant crater in the Earth and killed nearly all forms of life. We learn how Princess Bubblegum made the Candy Kingdom and all its citizens, in the part of Earth known as "The Land of Ooo." More interesting, for my purposes, though, is why Bubblegum desired this creation in the first place. Exploring how and why the Candy Kingdom comes into being can point toward a formulation of a post-apocalyptic and post-human form of desire that can prove immensely relevant to thinking about the human desire to destroy (and re-create) the world through ecological catastrophe. Adventure Time is almost literally post-human; Finn, a 13-year old boy, is the only living human in the Land of Ooo. Humans do not save the world in this story—a vampire and multitudes of sentient beings inhabit the land. Flames, clouds, berries, hot dogs, bananas, all have something to say. Life and consciousness have redistributed themselves everywhere. Adventure Time shows that sentience has never belonged to just humans. It has always been a kind of hyperobject, or a form of what Steven Shaviro calls "discognition."

The Oracle, the Omen, and the Future: What Do We Speak of When We Speak of Divination? Sandra Huber (Concordia University; sandra.j.huber@gmail.com)

What exactly is divination? How, in a so-called post-ideological era, does the technology of the omen function, and in what contexts? Drawing on thought by David Abram, Mel Y. Chen, Laboria Cuboniks, Starhawk, and others, this presentation will explore contemporary technologies of divination and the figure of the oracle as radical forms of knowledge-making that are emerging from the grimoire and crossing over into arenas not normally associated with the practice. In a move that Isabelle Stengers may call "an adventure of the sciences," divination has recently shown up in the unlikely locale of empiricism, where the Ouija board and the automatic writer have been used as method and research question, respectively (Gauchou et al., Peres et al.). Finally, I will end by speaking of divination in art, particularly my own experience of performing "hot readings" as part of Mystic Insights Ltd., where we use information from social media, Tarot cards, and a bot programmed to speak through divinatory texts in order to create fortunes. Here, something unexpected emerged: a collection of memory, experience, and the longing that exists behind every act of communication extending into an occulted future—perhaps what we speak of when we speak of divination. Gauchou Hélène, et al. "Expression of Nonconscious Knowledge via Ideomotor Actions." Consciousness and Cognition 21.2 (June

2012): 976–82. Peres, Julio Fernando et al. “Neuroimaging during Trance State: A Contribution to the Study of Dissociation.” PLOS ONE 7.11 (November 2012): 1–9. Stengers, Isabelle. “Reclaiming Animism.” e-flux 36 (July 2012), http://www.e-flux.com/journal/reclaiming-animism.

Wrap-Up Session, 12:00 PM-1:00 PM, Ansley 1