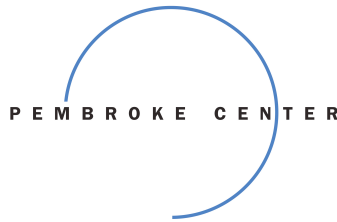


Pembroke Center Seed Grant 2017-18



Conference For Research on Choreographic Interfaces: Differential Recognition



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A few years ago, a motion-detection device for a popular videogame platform went to market with the promotional tagline “You are the controller!” Microsoft promised players that this new camera-based technology would recognize and respond to their every move, allowing for full-body gameplay experiences. But as players with Afro hairstyles or other “big hair” silhouettes soon discovered, the Kinect had not been calibrated to make sense of some of the bodies that entered its frame. If it locked onto their figures at all, it created a distorted map of their moving joints, identifying their hair silhouettes as disproportionately large heads and consequently misinterpreting the scale relationships among their other body parts. Meanwhile, other emerging surveillance technologies have no such trouble identifying black and brown bodies—though their recognition is as dehumanizing as the Kinect’s blindness, geared to serve the racial profiling needs of the carceral state.

Motion-detecting game systems, networked surveillance cameras, interactive robots running “affective computing” software, and virtual reality platforms are all technical interfaces that choreograph human bodies and hinge on forms of differential recognition. Machines are increasingly designed to identify humans and parse their intentions through algorithm-driven analysis of distinctive gestures, physical features, and vocal utterances. At the same time, these technologies often rely on universalizing assumptions: they conjure normative human bodies, liberal subjects promised sovereign control over their interactions with machines. The empathy hype around new virtual reality experiences likewise relies on seldom-interrogated ideas about sameness and difference: for instance, the idea that virtually occupying another kind of body might generate flashes of visceral understanding of another’s experience, magically transcending difference, and encouraging pleasurable claims of “I know exactly how you feel”—always at a safe distance.

The Conference for Research on Choreographic Interfaces (CRCI) was founded by Co-Project Director Sydney Skybetter in 2015 to address exactly such critical and inter-disciplinary complexity. CRCI aims to meaningfully engage expertise from the arts, sciences, and humanities, as well as individuals representing the widest possible spectrum of ability, gender identity and cultural heritage. The programmatic intention is to scaffold invited participants' equal sharing of their vast and differing expertise. Thus, instead of offering hierarchic academic programming, CRCI facilitates a "flipped" convening wherein participants are guided to discuss matters of greatest consequence to them, with interlocutors found on site.

For this new iteration of the CRCI conference, we propose to bring together scholars, designers, artists, and engineers working across technologies of choreography, control, and recognition to investigate how sameness and difference are functioning as organizing principles for choreographic interfaces—and how we might productively intervene in the ongoing development of these technologies. We are particularly interested in counter-choreographies that exceed the capacities of machinic perception; strategies for developing virtual reality experiences that engender challenging, unresolved engagements with various forms of difference; and theories of interaction that rely on the messy trial-and-error process of developing intimacy rather than the clean, controlled production of empathy-at-a-distance. We will be inviting 30 to 40 attendees to participate, most of whom will be self-funded. We hope to offer travel and stipend support to a core group of 8–12 participants who will play a leadership role in facilitating small-group discussions, take part in a public roundtable, and present separate public lectures and/or visit courses in the few days leading up to the conference (including visiting a 1000-level seminar course, "Digital Media and Virtual Performance," that Miller and Skybetter will be co-teaching that semester). In selecting this core group we are particularly interested in the perspectives of those who have personal, professional, and political reasons to be skeptical of techno-utopian promises of universal recognition—i.e., those pursuing multidisciplinary work grounded in the theory and practice of intersectional embodied difference.

The conference will be designed not only to catalyze further collaborations among faculty and students based at Brown, but to seed and nourish a network of individuals strategically placed to make a transformative difference in the design of new choreographic interfaces and their subsequent enculturation through artistic practice, popular entertainment platforms, and industrial and governmental applications. We have tentatively scheduled the conference for March 9–11, 2018.

Funded Participants

We aim to invite between four and six funded participants from the Hyphen-Labs and Deep Lab collectives. Depending on the level of funding we can raise, we hope to be able to support presentation of some of their recent work in Granoff Center studio spaces—for instance, the Hyphen-Labs virtual reality experience *Neurospeculative Afrofeminism*, recently featured at Sundance (see <http://www.sundance.org/projects/neurospeculative-afrofeminism>). The descriptions and biographical information below are drawn from each collective's or individual's website, with minor adaptations.

Hyphen-Labs is an international team of women of color working at the intersection of technology, art, science, and the future. Through our global vision and unique perspectives we are driven to create meaningful and engaging ways to explore emotional, human-centered and speculative design. In the process we challenge conventions and stimulate conversations, placing collective needs and experiences at the center of evolving narratives. The makers of *Neurospeculative Afrofeminism* include Carmen Aguilar y Wedge, an engineer, artist, and researcher (co-founder of Hyphen-Labs); Ashley Baccus-Clark, a molecular and cellular biologist and

multidisciplinary artist who uses new media and storytelling to explore themes of deep learning, cognition, memory, and systems of belief; Ece Tankal, an architect, moving image maker and multidisciplinary designer operating at the intersection of art and human interaction; and Nitzan Bartov, an architect, game designer and artist whose work is a mashup of architecture, spatial storytelling, and pop culture.

Deep Lab is a collaborative group of cyberfeminist researchers, artists, writers, engineers, and cultural producers that research privacy, surveillance, code, art, social hacking, race, capitalism, anonymity, and the infrastructures of the 21st century. Members of Deep Lab are engaged in ongoing critical assessments of contemporary digital culture, and work together to exploit the potential for creative inquiry lying dormant in the deep web. Deep Lab was founded by artist Addie Wagenknecht, who holds a Masters degree from the Interactive Telecommunications Program at New York University, and has previously held fellowships at Eyebeam Art + Technology Center in New York City, Culture Lab UK, Institute HyperWerk for Postindustrial Design Basel (CH), and The Frank-Ratchye STUDIO for Creative Inquiry at Carnegie Mellon University. Other prominent members of Deep Lab include Simone Browne (bio below), Kate Crawford, Principal Researcher at Microsoft Research New York City, a Visiting Professor at MIT's Center for Civic Media, and a Senior Fellow at NYU's Information Law Institute and Maryam al-Khawaja, a Bahraini human rights activist.

We also hope to invite the following individuals based at academic institutions, spanning a broad range of disciplines and career stages:

Sarah Bay-Cheng is Chair and Professor of Theater and Dance at Bowdoin College, where she teaches theater history and theory, dramatic literature, and intermedia performance. Her research focuses on the intersections among theater, performance, and media including cinema history, social media, and digital technologies in performance. Recent publications include *Performance and Media: Taxonomies for a Changing Field* (2015) and *Mapping Intermediality in Performance* (2010) as well as essays in *Theater*, *Contemporary Theatre Review*, and *Theatre Journal*, among others. She currently co-edits the Palgrave book series, *Avant-Gardes in Performance* with Martin Harries and is a co-host for On TAP: A Theatre and Performance Studies podcast. Bay-Cheng frequently lectures internationally and in 2015 was a Fulbright Visiting Professor at Utrecht University in the Netherlands.

Simone Browne began her faculty position in the Department of Sociology at the University of Texas at Austin in 2007. She is Associate Professor in the Department of African and African Diaspora Studies, where she teaches and researches surveillance studies and black diaspora studies. Her first book, *Dark Matters: On the Surveillance of Blackness*, examines surveillance with a focus on transatlantic slavery, biometric technologies, branding, airports and creative texts. She is an Executive Board member of HASTAC. She is also a member of Deep Lab, a feminist collaborative composed of artists, engineers, hackers, writers, and theorists. Along with Katherine McKittrick and Deborah Cowen she is co-editor of *Errantries*, a new series published by Duke University Press.

Ashley Ferro-Murray is a curator and scholar whose work investigates the intersections between movement, digital culture, and interactive technology. She is the curator of theater and dance at the Experimental Media and Performing Arts Center (EMPAC) at Rensselaer Polytechnic Institute (RPI) in Troy, NY. Previously, Ferro-Murray was the Andrew W. Mellon Creative Time Global Fellow at New York City's public arts organization, Creative Time. Ferro-Murray is at work on a book project titled *Choreography in the Digital Era: Dancing the*

Cultural Difference of Technology. This project charts international artists who make space for feminist, queer, disability, and postcolonial perspectives in the engineering industry, global networks, biomedicine, and borderlands.

Amy LaViers is an assistant professor in the Mechanical Science and Engineering Department at the University of Illinois at Urbana-Champaign and director of the Robotics, Automation, and Dance (RAD) Lab where she develops robotic algorithms inspired by movement and dance theory. She is the recipient of a 2015 DARPA Young Faculty Award (YFA). She has worked in the area of advanced manufacturing, through an industry-university consortium, the Commonwealth Center for Advanced Manufacturing (CCAM), defense, and healthcare, and forged interdisciplinary ties with the UVA and UIUC Dance Programs and the Laban/Bartenieff Institute for Movement Studies, where she completed a Certification in Movement Analysis (CMA) in 2016. She completed her Ph.D. in electrical and computer engineering at Georgia Tech where she was the recipient of the ECE Graduate Teaching Excellence Award and a finalist for the CETL/BP Outstanding Graduate Teaching Award. Her dissertation included a live performance exploring the concepts of style she developed there. Her research began at Princeton University where she earned a certificate in dance and a degree in mechanical and aerospace engineering.

Whitney Pow is a doctoral candidate in the Screen Cultures program at Northwestern University, where she studies queerness, embodiment, phenomenology, surveillance, interface, affect, and video games. She was a 2014-2016 research fellow at the University of Chicago's Game Changer Chicago Design Lab, and has presented her work as a game designer and scholar at the NYU Different Games Conference, the Society for Cinema and Media Studies conference, the Console-ing Passions conference, the Embodiment and Intersectionality in Games Studies Workshop at the University of Illinois Chicago, and the Queerness in Games Conference at the University of Southern California. She regularly speaks on panels about race, queerness, gender, video games and social media, and currently serves on the Editorial Board of the Video Game Art Reader, a peer-reviewed journal focused on video games as art through history, theory, criticism and practice. She is a former contributing editor and writer at Autostraddle.

Research Group Participant Bios

Kiri Miller is an ethnomusicologist whose work focuses on participatory culture, popular music, interactive digital media, and virtual/visceral performance practices. She is Associate Professor of Music at Brown, with additional faculty affiliations with American Studies, the Center for Race and Ethnicity in America, and Theatre Arts and Performance Studies. Her latest book, *Playable Bodies: Dance Games and Intimate Media* (Oxford, 2017), investigates how motion-sensing interfaces teach choreography, cultivate new embodied experiences of popular music, and stage domestic surveillance as intimate recognition. Her previous monographs are *Playing Along: Digital Games, YouTube, and Virtual Performance* (Oxford, 2012) and *Traveling Home: Sacred Harp Singing and American Pluralism* (Illinois, 2008). She has published articles in *Ethnomusicology*, *New Media & Society*, *Game Studies*, *American Music*, the *Journal of American Folklore*, and *Oral Tradition*, among other journals. Her research has been supported by fellowships from the Radcliffe Institute for Advanced Study and the American Council of Learned Societies. Miller's course offerings at Brown include Musical Youth Cultures, Digital Media and Virtual Performance, Black Sound, Introduction to Ethnomusicology, Music and Technoculture, and Ethnography of Popular Music.

Sydney Skybetter is a choreographer. His dances have been performed around the country at such venues as The John F. Kennedy Center for the Performing Arts, The Boston Center for the Arts, Jacob's Pillow and The Joyce Theater. He has consulted on issues of cultural change and technology for The National Ballet of Canada, The Jerome Robbins Foundation, Bloomberg Philanthropies, Hasbro, New York University and The University of Southern California, among others. A sought-after speaker, he lectures on everything from dance history to cultural futurism, most recently at Harvard University, South by Southwest Interactive, TEDx, Saatchi and Saatchi, Dance/USA, NYU and MVR5. He is a Public Humanities Fellow and Professor at Brown University, where he researches the problematics of human computer interfaces and mixed reality systems. He is the founder of the Conference for Research on Choreographic Interfaces (CRCI), which convenes ethnographers, anthropologists, speculative designers and performing artists to discuss the choreography of the Internet of Things. He produces shows at Joe's Pub, SteelStacks and OBERON with DanceNOW[NYC], has served as a Grant Panelist for the National Endowment of the Arts, is a Curatorial Advisor for Fractured Atlas' Exponential Creativity Fund, and is the winner of a RISCA Fellowship in Choreography from the State of Rhode Island.

Sarah Wilbur is a choreographer and dance scholar and the Mellon Postdoctoral Fellow in Dance Studies at Brown University for the 2016-2017 academic year. She received her M.F.A in Dance and her Ph.D. in Culture and Performance Studies from UCLA's Department of World Arts and Cultures/Dance. She researches infrastructure and dance performance in a US context with particular attention to how the practical and corporeal dynamics of institutional belonging shape opportunities in the dance field. Her research areas include dance studies, performance studies, cultural studies, social theory, political philosophy, U.S. art/cultural policy, cultural materialism, cultural production, socially-engaged performance, institutional ethnography, and theories of institutionality and corporeality. In addition to preparing a book manuscript based on her ethnographic and archival research on policymaking practices and relations in the Dance Program at the US National Endowment for the Arts, Sarah is currently at work on essays about regimes of competition in US dance funding (Oxford Handbook on Dance & Competition), and on rationales for infrastructural ethnography as a dance-based analytic (Futures of Dance Studies Collection/Oxford U Press)