







PERSPECTIVES

"The *hypercube* or tesseract is described by moving the generating cube in the direction in which the fourth dimension extends."

- ROBERT T. BROWNE, THE MYSTERY OF SPACE

"Rotations through a fourth dimension can't affect a three-dimensional figure any more than you can shake letters off a printed page... As I see it, in a four-dimensional figure a three-dimensional man has two choices every time he crosses a line of juncture, like a wall or a threshold. Ordinarily he will make a ninety-degree turn through the fourth dimension, only he doesn't feel it with his three dimensions... it must be a matter of subconscious orientation."

- ROBERT A. HEINLEIN, AND HE BUILT A CROOKED HOUSE

Robert A. Heinlein's 1941 novella *And He Built a Crooked House* describes a California architect who designs a house based on a four-dimensional cube, a tesseract, comprised of eight cubed rooms. Unbeknownst to him or his clients, however, an earthquake has caused the invisible fourth dimension to shift prior to their first tour through the building. The tesseract house then takes its new inhabitants on a disorienting journey through multiple rooms, perspectives, and timescales that ends with another earthquake-induced slip of space/time as they are dropped with a jolt into the desert landscape of Joshua Tree National Park.

Charles Atlas, Rashaun Mitchell, and Silas Riener's *Tesseract* charts a similar course: worlds shift and flip, and dancers spin and fall across unstable planes. Parallel timescales are reflected back on themselves, and emotions run high as speed, scale, and gravity refuse to remain constant. This journey starts from the perspective of 3D stereoscopic vision and progresses to the performative dimensionality of the theater stage. Although the artists had previously worked together with Merce Cunningham, *Tesseract* marks their first independent collaboration, and like the architect's project in Heinlein's novella, this ambitious work is conceived of as a chance to explore the potential of imagined architectures that can drift from cinema screen to proscenium stage.

The long cinematic history of stereoscopic films constructs a shared language among those of us who watch them. Industrially produced science fiction, like the 3D-animated and live-action hybrid *Jupiter Ascending* (2015), the constrained



B-movie horror effects of *Cube2: Hypercube* (2002), and the world-bending stereoscopic effects of *Dr. Strange* (2016) all provide material inspiration through which each element of *Tesseract*—the choreography, the sets, the image manipulation—emerge. Far from a narrative that posits 3D as providing an on-screen duplicate of how we see in reality, the potential of the media is that it engenders a different sort of vision, one in which sci-fi dimensionality can be explored.

While Tesseract moves through these wildly divergent visual worlds in order to transport the protagonists, and us, into the fourth dimension, Tesseract takes the opposite approach. An empty black stage resists fantastical sets or CG environments to give sole focus to the choreography. As in the film, the dancers respond to divergent situations, but this time the environments are invisible to them while the choreography communicates entire new worlds. At times the performers come together to build and define spatial geometries. At others, they appear caught between dimensions, defined only by their responses to unusual atmospheric or gravitational effects. As Atlas projects the dancers' doubles back onto the space of the stage, we are sucked beyond the void to imagined environments as vivid as any Hollywood blockbuster. The dancers shape-shift, moving between roles and personalities, between affect and effect, marked as much by cinematic pathos as the recorded images previously on-screen.

Of course, in some ways this attention to extra-dimensionality is present in all three artists' previous work. Atlas, well known for his pioneering approach to the relationship between technology and the body, has developed a vivid cinematic language for articulating dance on screen through an active, mobile camera that not only mediates but also draws attention to the camera. In his work, the camera is not just witness but also dancer, resulting in an image wholly inseparable from the dance it records. Riener and Mitchell are equally driven by the potential of choreography to reach beyond the limits of its inherent language of dimensionality. *Tesseract* combines Riener's work at the interstitial space between language and movement with Mitchell's approach to choreographing at the edge of spiritual and physical transformation.

During the production of *Tesseract* this notion of differing timescales and parallel universes remained at the forefront of our discussions, although not only in terms of artistic inspiration. The friction between the necessary rhythms of those in front of the camera and that of those who work behind it to switch the lenses, adjust the lights, balance the rig, and review the footage, remains resolutely opposed. At a very practical level, the dancers need to stay warm and mobile for performance and to prevent injury. This organic, bodily timeframe works against the staccato starts and stops of a movie production. This is especially the case on a 3D film set, which requires an extra crew member, the stereographer, who measures the convergence of the two focal lengths before every take in order to have the image protrude or recede from the screen. Rather than deny or avoid these frictions, Atlas, Mitchell, and Riener incorporate these different modes of production into a multifaceted artwork that combines the contrasting timescales of the recorded and the live in order to use the material fact of the artwork's production as an underlying dramaturgical and choreographic methodology.

This technique and its contradictions are especially foregrounded in one scene from *Tesseract*, in which the camera continually circles the dancers as dense fog swirls at their feet. However, by deliberately eschewing montage in favor of showing the continuous time of the dance, the Steadicam operator's body feels the double strain of the technical and the physical by undertaking a series of "straight-takes" while carrying a 75-pound, two-camera, 3D rig to frame the dancers' duet. While this work remains invisible, the effect on-screen is one of the camera's delicate switch from observer to participant, as its close-up and mobile viewpoint traces a liminal space beyond the theatrical language that the choreography implies.

In response, *Tesseract* reveals the means of production of *Tesseract*, as Mitchell and Riener's choreography places the Steadicam and its operator center stage. The

camera operator, Ryan Jenkins, now takes on the dual role of *operator-performer*, both foil and accompaniment to the dancers through his presence both in front of the audience and behind the camera. In essence he represents the collapse of two parallel universes. This gesture dramatizes the elliptical relationship between film time and theatrical time, between the technical and the artistic. *Tesseract* points to the rich history of this subjective camera, of which the development of Steadicam for complex tracking shots is key, while the use of the straight-take presents these two media timescales as one.

The word tesseract is derived from the Greek *tessares*, or four, and *aktis*, a ray of light. Atlas, Mitchell, and Riener's *Tesseract* alludes not only to the romance of science fiction's beaming rays, but also to light as the principal element of cinematography, projection, and theatrical technique. The artists combine *aktis* with the fourth dimension, usually understood as time. However, there is an extra-dimensionality here that is revealed through the interaction of the real and the imaged, the live and the recorded. In the midst of *Tesseract* the dancers find themselves in a sci-fi desert landscape, which recalls both the end of Heinlein's novella and also Edwin Abbott Abbott's 1884 society-baiting satirical novel *Flatland*. Yet as *Flatland* describes a class society in which the protagonists' geometry equals hierarchy, here the interaction of the dancers with their designated geometries is imagined with humor as an alternate framework. Like the space between our two eyes that nevertheless see as one, this framework articulates an alternate fourth dimension with the potential to become visible.

VICTORIA BROOKS

CURATOR OF TIME-BASED VISUAL ARTS, 2017







BIOGRAPHIES

Charles Atlas has been a pioneering figure in the creation of time-based visual art for over four decades, extending the limits of his media and forging new territory in a far-reaching range of genres, stylistic approaches, and techniques. Over the years he has made media/dance works, multichannel video installations, feature-length documentaries, video art works for television, and live electronic performances. Throughout his career, he has consistently fostered collaborative relationships, working intimately with such artists and performers as Leigh Bowery, Michael Clark, Douglas Dunn, Marina Abramovic, Yvonne Rainer, Anohni, and most notably Merce Cunningham, for whom he served as filmmaker-in-residence for a decade from the early 1970s through 1983. Since 2003, Atlas has been interested in exploring different contexts that exploit the use of live video. Instant Fame (2003-06), consisted of a series of real-time video portraits of performers and artists created live in the gallery space. Recent live video/installations include: The Pedestrians, in collaboration with Mika Tajima at The South London Gallery (2011), and Charles Atlas and Collaborators at the Tate Modern (2013). Atlas has received a Guggenheim Fellowship, three "Bessie" (New York Dance and Performance) Awards, the Foundation for Contemporary Art's John Cage Award and a 2016 USA Artists' Gracie Fellowship.

Since 2010, Rashaun Mitchell and Silas Riener have created dance in response to complex and active spatial environments, often merging elements of fantasy, absurdity, and quiet contemplation into challenging multifaceted performance. After working together for years in the Merce Cunningham Dance Company, Mitchell and Riener developed a keen interest in the way abstraction and representation coincide in the body. Their collaborative work takes many forms, from site-specific installations, improvisational dances, and traditional proscenium pieces to highly crafted and intimate, immersive experiences. Historical influences and aesthetic forms collapse into a visually charged hybrid physical language. Together they have been part of Lower Manhattan Cultural Council's Extended Life Dance Development program, the New York City Center Choreographic Fellowship, and have been artists in residence at EMPAC, Mount Tremper Arts, Wellesley College, Jacob's Pillow, and Pieter. Their work has been presented at MOMA PS1 as part of Greater NY, The Chocolate Factory, New York Live Arts, Danspace Project, the Vail International Dance Festival, REDCAT, ICA Boston, and the O Miami Poetry Festival.

Ryan Jenkins is Senior Video Technician at the Experimental Media and Performing Arts Center (EMPAC) at Rensselaer Polytechnic Institute (since 2008), and is a recent MFA graduate of Rensselaer Polytechnic Institute with a focus in sculpture and moving image. Over the past decade Jenkins has worked in all aspects of multidisciplinary performance and film production but specializes in Steadicam, gimbal, and camera operation. He has had the pleasure to be behind the lens shooting, building sculpture, and touring for artists such as Laurie Anderson, Charles Atlas, Jem Cohen, Brent Green, Cally Spooner, Eve Sussman, Martine Syms, The Wooster Group, and many more. Ryan currently lives in upstate New York with his wife, dog, and two young boys. He tries very, very hard not to drop the camera.

Cori Kresge is a NYC-based dancer and teacher. She has a BFA in dance from SUNY Purchase and the Dean's Award. Kresge is a Darmasiswa International Scholarship recipient, studying Balinese dance in Indonesia. She has been a member of the Merce Cunningham Repertory Understudy Group, José Navas/Compagnie Flak, and Stephen Petronio Company. As a freelance dancer she currently performs with various artists including Esme Boyce, Bill Young, Sarah Skaggs, Ellen Cornfield, Rebecca Lazier, Wendy Osserman, multimedia artist Liz Magic Laser, and filmmaker Zuzka Kurtz. Kresge has been dancing with Rashaun Mitchell and Silas Riener since 2012.

Eleanor Hullihan is a dancer, teacher and maker living in Brooklyn, NY. Eleanor has created work and performed with Tere O'Connor, Lily Gold, Beth Gill, Sufjan Stevens/Jessica Dessner, Zeena Parkins, JMY Leary, Katy Pyle, Jennifer Monson, Mike Mills, Sarah Michelson, Andrew Ondrejcak, Neal Medlyn and John Jasperse among others. She has worked as a curator and teacher for Movement Research and presented work around NYC and Brooklyn. Eleanor creates dance and sound for performance and is currently exploring dance for video. She received early training at NCSA and NYU Tisch as well as pilates with Kathy Grant and Kelly Kane. She owns a Pilates studio in NYC and is on the body conditioning staff for American Ballet Theater's JKO training program. Current teachers/mentors include Clarice Marshall, Janet Panetta, Genny Kapuler and Christine Bratton.

Kate Jewett attended the University of North Carolina School of the Arts, receiving her BFA in 2002. While working with the Merce Cunningham Repertory Understudy Group, she participated in the creation of Split Sides and Views on Stage. Kate joined Shen Wei Dance Arts in 2005 and was named rehearsal director in 2009. As the former education director, she helped create a dance-in-education program for NYC public schools. Her own work has been performed at DeSales University, the United Nations, Park Avenue Armory, SCGSAH's Gunter Theater, Milano Teatro Scuola Paolo Grassi, Fabbrica Europa and Performatica festivals. Kate is founder and co-curator of Watusi Regime, a site-specific collaborative performance series in NYC. She is delighted to be working with Charles Atlas, Rashaun Mitchell, and Silas Riener.

David Rafael Botana has been with Rashaun and Silas since 2015. He is currently a cast member of Punchdrunk's *Sleep No More*, regularly performing a manifold of roles throughout the McKittrick Hotel since 2011. He has worked with Jonah Bokaer in *On Vanishing* (2011) at the Guggenheim Museum and *Filter* at festival de danse Les Hivernales in Avignon (2011). Mr. Botana was a part of the last of the Merce Cunningham Repertory Understudy Group (2010-2011). He has worked with Pam Tanowitz, Bill Young, sculpture/painter Jonathan Van Dyke, and has collaborated with Leslie Satin & Bradley Teal Ellis. Mr. Botana's training consists of a BFA in Dance Performance from New World School of the Arts (2006) under the direction of Daniel Lewis, as well as studies in tai chi and contact improvisation. His introduction to movement began with familial neighborhood Spanish dances, gymnastics, and Goju-Ryu Karate.

Davison Scandrett has supervised lighting and technical production for more than 1000 performances in 46 states and 28 countries. He met Silas Riener, Rashaun Mitchell, and Charles Atlas during his 2008-2012 tenure as Director of Production for the Merce Cunningham Dance Company. Since then he has created lighting and visual designs for Michell and Riener's works Nox, Veal, Interface, Taste, Way In, Performance, Light Years, and Blue Name. Other lighting design credits include works by Pam Tanowitz, Sarah Michelson, Andrew Ondrejcak, Rebecca Lazier, Paris Opera Ballet, and the Off-Broadway productions of Mike Birbiglia's Thank God for Jokes and Neal Brennan's 3 Mics. Production management credits include Wendy Whelan's Restless Creature, Marina Abramovic's Goldberg, Jennifer Monson's Live Dancing Archive, Denis O'Hare & Lisa Peterson's An Iliad, and numerous productions for Lincoln Center Festival. He was the recipient of a 2007 Bessie for his collaboration with Sarah Michelson and Parker Lutz on the visual design of DOGS. Davison would not have been able to do any of it without the guidance and support of his colleague and best friend Carrie J. Wood (1979-2016).

Mas Ysa is the moniker of artist and composer Thomas Arsenault. Born in Montreal Canada, Arsenault spent his formative years in Sao Paulo, Brazil before moving to the United States to study modern composition at the Oberlin Conservatory. Living between Brooklyn and Woodstock, NY, Mas Ysa released two albums: 2014's Worth and 2015's Seraph, both of which received critical acclaim. As Mas Ysa, Arsenault has toured internationally. Tesseract marks Arsenault's second collaboration with choreographer Rashaun Mitchell, having previously collaborated on Nox and Interface. Arsenault currently resides in New York City where he is working on a new collection of songs and compositions.

Fennesz uses guitar and computer to create shimmering, swirling electronic sound of enormous range and complex musicality. "Imagine the electric guitar severed from cliché and all of its physical limitations, shaping a bold new musical language," City Newspaper said of his work. His lush and luminant compositions are anything but sterile computer experiments. They resemble sensitive, telescopic recordings of rainforest insect life or natural atmospheric occurrences, an inherent naturalism permeating each piece. Christian Fennesz is published by Touch Music. He lives and works in Vienna.





PRODUCTION CREDITS

TESSERACT

Directed and Edited by Charles Atlas Choreography by Rashaun Mitchell + Silas Riener Music by Fennesz Set and Costume Design by Rashaun Mitchell + Silas Riener

Performance by David Rafael Botana, Kristen Foote, Hiroki Ichinose, Cori Kresge, Rashaun Mitchell, Silas Riener, and Melissa Toogood

Produced by Victoria Brooks
Project Managed by Ian Hamelin

Camera Operator / Steadicam Operator /
Color Correction by Ryan Thomas Jenkins
Steadicam Operator for "Fog" by Victor Lazaro
Stereography by Andrew Parke
1st Assistant Camera by Alena Samoray
2nd Assistant Camera / Photography by Mick Bello
Lighting Direction by Dan Swalec
Dolly Grip by Dave DeLaRosa
DIT / Compositing by Eric Brucker
Assistant Editing by Lazar Bozic
Post Production Assistance by Collin Leitch
Digital Landscaping by James Siewert

Lead Audio Engineering by Stephen McLaughlin Audio Engineering by Jeff Svatek Direction of Stage Technologies by Geoff Abbas Assistant Technical Direction by Eric Lin Master Carpentry / Rigging by Willian Fritz Production Technician by Carl Lewandowski Production Technician by Michael Wells Grip / Scenic Assistance by Amanda Cherlebois Scenic Assistance by Daniela MacCallum Costume Fabrication by Julia Donaldson Black and white textile drops by Fraser Taylor

Artist Services Administration by Zhenelle Falk General Management for Rashaun Mitchell + Silas Riener by Katy Dammers

Special thanks to Penelope Armstead-Williams, Ali Naschke-Messing, and Joe Westmoreland.

TESSERACT ()

Choreography by Rashaun Mitchell + Silas Riener Video by Charles Atlas Music by Mas Ysa

Lighting Design by Davison Scandrett
Costume Design by Rashaun Mitchell + Silas Riener with Mary Jo Mecca
and Yvette Helin
Performance by David Rafael Botana, Eleanor Hullihan, Kate Jewett, Cori
Kresge, Rashaun Mitchell, and Silas Riener
Understudy by Kayla Farrish

Steadicam Operation by Ryan Thomas Jenkins
Assistant to Charles Atlas by Lazar Bozich
Assistant Camera by George MacLeod
Stage Management by Dani Prados
EMPAC Stage Management by Laura Gypson
Costume Construction by Yvette Hellin and Mary Jo Mecca

Scrim Courtesy of Juilliard

Special thanks to Melissa Toogood, Justin Faircloth, Stanley Gambucci, Xenia Mansour, Maddie Schimmel, Cassidy Wagner, Judy Fishman, Richard Feldman, Anonymous, Mary Fllardo, Ariane Harrison, Liz Radke, Dorothy Reilly, Katherine Sonnenborn, Vicki Mitchell + Greg Mitchell, and Cathy Reilly + Joe Riener.

Tesseract by Charles Atlas / Rashaun Mitchell / Silas Riener was commissioned and produced by EMPAC/ Experimental Media and Performing Arts Center at Rensselaer Polytechnic Institute and co-commissioned by Triangle France.

Tesseract O by Charles Atlas / Rashaun Mitchell / Silas Riener was co-commissioned by EMPAC / Experimental Media and Performing Arts Center at Rensselaer Polytechnic Institute, the Walker Art Center, the Museum of Contemporary Art Chicago, and On the Boards.

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ALL IMAGES:

Charles Atlas, Rashaun Mitchell, Silas Riener, *Tesseract* (2017) Production Stills, EMPAC. Photos: Mick Bello Courtesy of the artists

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