VOCA Journal

NO END IN SIGHT

Robin Clark with Matthew Ritchie

Since the early 1990s, Matthew Ritchie has been developing an accumulative, complex narrative drawing from the vocabularies of science, sociology, anthropology, mythology and the history of art. Perhaps best known as a painter, Ritchie has also collaborated with physicists, musicians, and architects to create architectural environments, games of chance, and an epic orchestral work. In autumn of 2015, Ritchie spoke with VoCA's Robin Clark about how philosophies of time influence his work, the lure of the unfinished, and the compulsion to complete. Following is an edited transcript of those conversations.

Robin Clark: You've expressed an interest lately in considering "the ways that time changes work." What do you mean by that?

Matthew Ritchie: This probably has to do with getting older, having a depth of perspective not only on your own practice but how other practices around you of your own generation and earlier generations have evolved and to see what lasts and what doesn't. And that's been especially exaggerated in the contemporary condition–everyone's talked about this–the speeding up of both information reception and transmission. I think it's a significant milestone that more machines are now connected and communicating with each other than human beings are. So the question that comes up right away, something that I've been writing about, is the direct equivalence of information and material. In 1871 James Maxwell proposed a thought experiment in the form of a mathematical 'demon' that could violate thermodynamic laws by 'knowing' how to change the physical state of a system without paying a proportionate energy cost–a super-ordinatory force outside the material structure of the universe. For more than a century, this idea offered one last loophole for categorical thinkers inclined to a non-thermodynamic view of information theory. In a world without God, we hoped there might still be demons. But in 2010, the scientist Shoichi Toyabe demonstrated that every information transfer has an exactly equal price in expended energy.[1] So

information (or thought), energy and matter are interchangeable and subject to the first and second laws of thermodynamics–which state that nothing, whether it is information, energy, or matter, is ever truly lost, but everything must and will change. This is very significant for a society that has shifted to an information economy. We now have more data generated in a single year than in all of human history before. One tenth of the planetary energy output is consumed to support the internet. I think this has changed our way of thinking about things that are stable, like painting, and also things that are performative, conducted within time, but we haven't come to terms with any of that. We're just at the beginning of that process. The shift is so vast, to have an external memory, to have an understanding on an ever-more sophisticated basis that the very atomic constituents of things that we think of as stable are shifting at different rates. It's similar to geology, where there are lots of different rates of change, there's a solid core then magma, then there are layers of less stable rocks, and then more stable mantle floating on top of all that, and then you move up to the atmosphere and they're all shifting in relation to each other all the time. Our difficulty is accepting these changes in our world view sometimes leads to an odd but very anthropomorphic insistence that the world is broken in some essential way – just because we cannot articulate a coherent world view at this time. Scientists may sometimes describe the universe as 'decoherent' but this is only to distinguish it from its original state of total quantum coherence–it does not mean the universe is ever 'incoherent' although it may appear so to us.

Clark: I'm curious whether you can discuss the ways that these ideas might inform specific works of yours, such as *M Theory* (2000), a painting that is now entering SFMOMA's collection?

Ritchie: *M Theory* was the first in a body of work called the *Main Sequence* (started in 1997 and concluded in 2003) which aimed to describe the development of the universe through a fragmented narrative that incorporated elements from multiple and contradictory sources. The paintings served as both focal points and summaries of this project. Each one attempted to take on an entire field of knowledge, like biology or classical physics, and use a metaphoric vocabulary to characterize the field into a "story," using a final layer of indicative diagrams to create a simplified model of agency.

Matthew Ritchie, *M Theory*, 2000
Oil and marker on canvas, 81 ¾ x 109 ¾ x ¾ in
SFMOMA Collection, Gift of the artist

Clark: Can you explain how that worked in the example of *M Theory*?

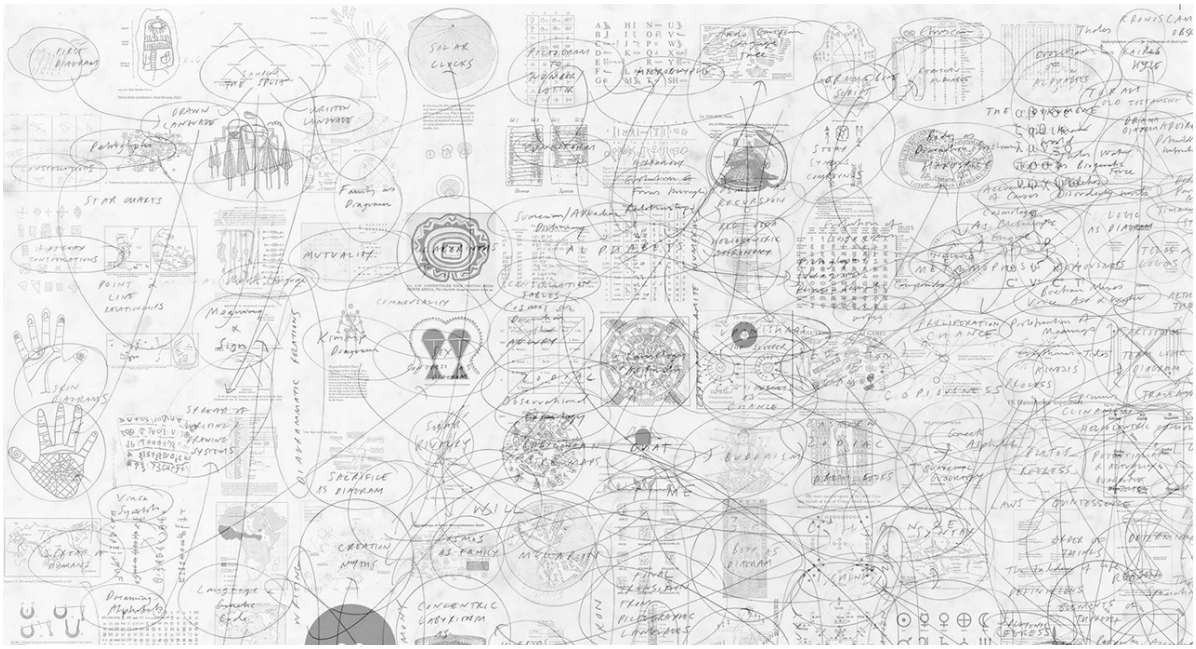
Ritchie: The formal structure of *M Theory* is similar to most of my paintings from that period. A hard ground, in this case a pale amethyst field, is overlaid with complex geometric pseudo-solids, each containing multiple color zones. Here, the crystalline red structure refers to "the landscape," a concept in string theory that allows for the separation of very distinct physics regimes. The rapidly painted marks on top of this tessellated surface indicate the smaller, rapidly inflated "bubble universes" proposed by theoretical physicist Andrei Linde. The red fingerprints refer to the thermal signature of the big bang, sometimes called "the fingerprint of the universe." The scribbled texts on the surface are string theory equations describing the relational terms through which our universe (and possibly many other variants) can exist. Many of these terms, such as surface, action, harmony, curvature, line, sheet, and even the idea of a vibrating, energetic, string itself seem to have a direct resonance with the history of painting.

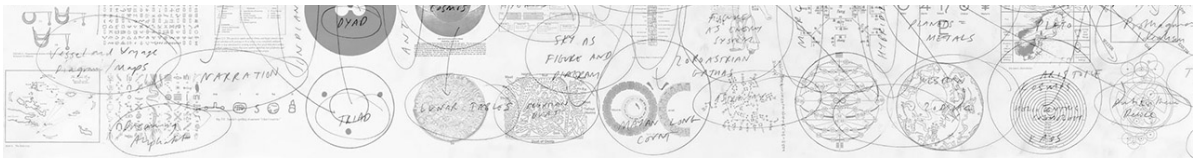
Clark: What is particularly compelling to you about "M Theory" as a concept?

Ritchie: The painting was made five years after Edward Witten proposed the real "M Theory," a possible theoretical framework for a unified "theory of everything." For a new and struggling immigrant in the United States, the liberating flow of newly available information in the emergent internet culture seemed to give the project a sense of meaning and timeliness. Artists like Matthew Barney and Kara Walker were appropriating and repurposing mythologies, sciences, and sociologies left and right, combining the take-no-prisoners confidence of neo-expressionism with the aesthetics of the pictures generation and reviving long-defunct installation and performance strategies of post-minimalism. It was an unusually open and spectacularly human moment, the end of a millennium.

Clark: What led to the end of the *Main Sequence*?

Ritchie: The meaning of the *Main Sequence* project was transformed over time by joy and tragedy, both personal and international. My work evolved into film, theater, and music and architecture projects, often based on related speculative sources such as the Mayan time-myth, Steinhardt & Turok's time-cosmology and Randall's dimensional space-time physics. But *M Theory* was, and remains, a very important painting for me. Not only because the conditions have never been quite right for the precise mixture of optimism, ambition, and absurdity that prevailed in the year 2000 AD, but because it symbolizes the difficulty, absurdity, and necessity of attempting the impossible.





Matthew Ritchie, Detail from *The Temptation of the Diagram*, 2014
Ink on paper leparello, 24 x 306 in overall
Edition of 75

Clark: Jumping to the present day, how are some of these themes expressed in your current work?

Ritchie: The *Main Sequence* works and my current paintings both convey the sense that something is emerging, but continually emerging. It never quite arrives. Rather than the classical model of music with a climax, which is sort of how traditional painting has continued to represent itself, I've always felt that my paintings are unfinished because they are trying to represent a totality that is impossible to represent. There are a lot of younger artists, whose work I love, whose work is sort of ostentatiously unfinished, as if to say, "hey look, I didn't finish it." To me that's a very dramatic and artful way of finishing something, to just stop–like Gogol ending *Dead Souls* in mid-sentence.

But I suppose I'm more interested in acknowledging that the only way to truly make something unfinished is to try to finish it, to acknowledge the incompleteness of any single worldview by attempting a proof. That's when it will truly fail!

Clark: There's going to be a show at the Metropolitan Museum of Art in spring of 2016 about unfinished painting, both things that are really unfinished and things that were perceived as unfinished because they didn't meet expectations of a certain moment.

Ritchie: When considering the potential longevity of an artwork, the notion of efficiency is more interesting to me than whether something is complete, or incomplete–or even "good" or "bad"–which are meaningless contemporary terms. If we can say that something is radically efficient at getting us to look at it, then it will still be in the Metropolitan Museum two thousand years from now because nobody threw it away. It was efficient at sustaining human attention over thousands of years. If it is not efficient, it hits the garbage heap in one way or another. If it's too fragile, it's too big, it got lost, somebody broke the nose off it… given how many audiences a work of art has

to survive over thousands of years it is remarkable that anything survives at all, because we are so fickle. There are a lot of “unfinished” works that are just a bunch of stuff and will just dissolve back into being a bunch of stuff because the absence of it being finished was not an inherent property. That’s not to say the organization and performance of many collected objects can’t cohere into something larger than its parts–only that it is very thermodynamically difficult. An artist like Jason Rhoades is someone I think of where each project was done to its conclusion. It’s confusing and its complex but its not incomplete. I’m always drawn to this: in a discipline like architecture or performance or science or philosophy, if you take it out of the art world you are sort of forced to complete some elements just to allow other people to access the process. There’s no tolerance for “well, like, I’m an artist, isn’t it cool that I stopped working?” In most other disciplines the answer will be, “no, it’s not cool, not cool at all, you have to *finish your work*.” At the same time I think there are artists of incompleteness who programmatically refuse to complete their projects, like Gedi Sibony. If you are taking incompleteness as your first premise, and it is inherent to the work–like wabi-sabi, that’s obviously a form of completeness. I’m drawn, obviously, to the opposite extreme, an absurd need to enforce completeness that will actually generate an unexpected proliferation of incompleteness.

Matthew Ritchie's studio during his residency at the Getty Research Institute

Clark: How are you exercising your "completionist" inclinations at the moment?

Ritchie: For several years I've been working on a comprehensive visual history of the diagram. I developed the project during a fellowship at the Getty Research Institute, have done a couple of installations and am working now on an edition with the Getty. Although organized loosely as a timeline of the use of diagrams across history, the project is primarily concerned with relating the diagram as a tool of inquiry to both its expressive and causal forms. If we can accept that 'form' and 'content' are the same thing, namely information and do not enjoy any inherent oppositions at any scale then diagrams are one way that the profound questions of relative time, scale, distance, gauge symmetry, proximity, and imagined immunity from discontinuity and relationality that define our use of any shared informational space become evident. The Getty project is both a history of the diagram, an art historical thought experiment and an anti-history–as the idea of the diagram itself constantly fights against the idea of linear development, preferring to proliferate in every direction, including across time. But to fully honor the central premise of my own diagrammatic enquiry and the doubled nature of diagrams as both vector and table, of course the project must immediately shed the comfort of its own completionist instincts and open itself back up to new and incomplete forms of diagrams–so there is no end in sight.

[1]Shoichi Toyabe, Takahiro Sagawa, Masahito Ueda, Eiro Muneyuki & Masaki Sano, "Experimental demonstration of information-to-energy conversion and validation of the generalized Jarzynski equality," *Nature Physics 6* (2010): 988–992.

Robin Clark is Director of the Artist Initiative at the San Francisco Museum of Modern Art, a Mellon-funded research grant that takes an interdisciplinary, team-based approach to collections research and care in collaboration with participating artists. She curates, writes, and teaches on a range of topics including the architectural imaginary in contemporary art, light as a medium, and museums proposed by artists.

Matthew Ritchie is a visual artist based in New York. His installations of painting, wall drawings, light boxes, sculpture and projections are investigations of how information assumes form over time and have been shown in numerous exhibitions including the Whitney Biennial, the Sydney Biennial, the Sao Paulo Bienal, BAM Next Wave, The Holland Festival, the Venice Architecture Biennale, the Seville Biennale and the Havana Biennale.

VoCA Home

Back to Top ^

The New York Times

Space, the Frontier Right in Front of Us

By NATALIE ANGIER NOV. 24, 2015

Matthew Ritchie's "Night Drawing." Artists are seeking to visualize more exotic concepts like hyperspace and quantum space. Credit Lance Brewer/Andrea Rosen Gallery

With the publication of his general theory of relativity a century ago, Albert Einstein swept aside traditional notions of a static and unchanging space and instead gave us the stretchy, supple miracle fabric of the space-time continuum.

No longer could space be seen as a featureless void, the nothingness between the somethingness of galaxies and stars. Einsteinian space has heft, shape and a sense of place. It bends around giant suns and plunges down the throats of black holes. It expands restlessly in all directions and drags us along for the ride.

Space refuses to be ignored, clamoring for attention even in human pursuits. In art, architecture, music, the designs of our cities and the psychology of the invisible, multistage privacy zones we construct around our bodies, space can speak volumes, and it demands to be explored.

Think you're comfortable with a colleague at work? Anat Perry, a postdoctoral fellow in psychology at the University of California, Berkeley, suggests you try this simple exercise. The next time you speak to the person, adjust the space between yourselves by the length of a pinkie, standing two inches closer or farther away than you normally would.

"Untitled (Library)," a 1999 work by the sculptor Rachel Whiteread.
Credit Lee Stalsworth/Hirshhorn Museum and Sculpture Garden, Smithsonian Institution

"It changes everything," Dr. Perry said. "You can't interact the same way."

The sculptor Rachel Whiteread expresses the pushiness of space graphically by creating what are often called negative spaces. She uses resin, plaster or other material to fill in the area under a table, behind a bookshelf, or an entire room.

The resulting three-dimensional impressions are like space trapped in amber, or the frozen ghost of a room, prompting the viewer to appreciate the specific power of interstitial space and to recall what it felt like to hide under tables as a child or to seek solace in the compartmentalized wilderness of a college library's stacks.

"Music is the space between notes," the French composer Claude Debussy is believed to have said — that is, only by the grace of precisely articulated pauses can the character of individual notes be perceived and music distinguished from noise.

In a slightly different take on the theme, jazz musicians often insist that the notes they choose not to play are as important as the ones they do. Music is tightly bound up with expectation, they say: You hear a sequence of notes in a familiar scale, and you anticipate the rest of the progression.

But then, ha-ha! The musician doesn't give it to you, and that absence of comfortable resolution is what transforms bromide into art.

In a collaborative art form like jazz, the pianist Geri Allen said, a willingness to listen closely to the other musicians on the stage is essential to success, and sometimes "not playing can be a greater contribution to the flow" than grabbing every chance for a solo.

Aesthetic Revolutions

Among painters, advances in spatial representation have often ushered in broad aesthetic revolutions. “The formulation of the laws of perspective in the 14th century gave artists permission to see everything in a new way,” the artist Matthew Ritchie said. “Now your sky isn’t flat. You’ve got a proper sky with depth, and now your angels can get up to some real mischief.”

In the mid-19th century, painters discovered anew the two-dimensional nature of the canvas, sparking the rise of abstract art.

“The flat surface was seen as a place for the arrangement of colors,” said Noam M. Elcott, an associate professor of art at Columbia University. For artists like Cézanne, he said, “the space between figures was granted equal weight to the so-called foreground.”

The concern with spatial democracy reached its apotheosis in the work of Jackson Pollock, in which there is no foreground, no background, “and every square inch of canvas is equal to every other,” said Dr. Elcott, the author of the coming book, “Artificial Darkness: An Obscure History of Modern Art and Media.”

Other modernist painters like Picasso, Marcel Duchamp and Kazimir Malevich became fascinated with the idea of a higher fourth dimension — not the dimension of time that, through Einstein’s general theory of relativity, was merged with three spatial dimensions into space-time, but a fourth dimension of space, said Linda D. Henderson, a professor of art history at the University of Texas at Austin and the author of “The Fourth Dimension and Non-Euclidean Geometry in Modern Art.”

The theme arose from popular interest at the end of the 19th century with advances in geometry, the discovery of X-rays, and the 1884 publication of Edwin Abbott Abbott’s influential book “Flatland: A Romance of Many Dimensions,” an allegory of life in two dimensions.

“It becomes a huge cultural preoccupation,” Dr. Henderson said, “the idea that the human retina is seeing just a fraction of the electromagnetic spectrum, and that our world might be like Flatland or Plato’s cave, a shadow of a complex four-dimensional reality.”

Hence a Cubist work like Picasso’s 1910 “Portrait of a Woman,” with its shifting, multifocal forms dissolving into one another. “Picasso is doing everything possible to keep the image from being read as three-dimensional,” Dr. Henderson said.

Today, Mr. Ritchie and other artists seek to visualize even more exotic concepts like hyperspace or quantum space, and here, too, the quest can prove liberating.

“If we’re only seeing 5 percent of the universe, you can state freely what the other 95 percent might be, and nobody can say that it isn’t,” said Mr. Ritchie, who has collaborated with the physicists Lisa Randall of Harvard and Neil Turok of the Perimeter Institute, and whose work was included in a major exhibition, “The Shapes of Space,” several years ago at the Guggenheim Museum.

Mr. Ritchie stacks layers of semitransparent drawings that he later reshapes into sculptures and large installations — of lines snaking and wrapping together, for example, over the floor, up the wall, through the air, “like the traces we leave behind us, all the mistakes, all the good moments, that anticipate and follow us as we move through space and time,” he said.

Space in the Marketplace

More pragmatically, our movements through space and time concern architects and urban planners, who try to determine the often unspoken desires and assumptions we bring to a given space.

For example, said Tim Stock, a commercial anthropologist and a partner in the design research firm scenarioDNA, we want a hotel room to convey the sense both that we are at home and that we are the first person to use the room — an illusion fostered by small touches like the artful folding down of the bedspread to expose the sheets, as though to say, fresh and new and all for you.

The uncertainties of the labor market are reflected in shifting trends in office design. Until recently, one's position in a corporation was reflected by the size and location of one's office, a large corner office with breathtaking views signaling high status.

"Tech companies have changed all that," Mr. Stock said. "The people in charge don't necessarily have an office. They just float around, they just show up, they're everywhere."

Yet for people who are not in charge, an open office where employees float from one workstation to the next holds less appeal. "There's been some pushback against the Silicon Valley model," said Alice T. Friedman, a professor of art and architecture at Wellesley College. "When possible, people tend to wall off a little area they can call their own."

After all, people do exactly that with the air around them, metaphorically claiming the region surrounding their bodies as a mostly inviolable personal space. Researchers have determined that the size of our preferred spatial bubble varies somewhat according to culture.

"Israelis who travel to India might feel people were standing too close," said Dr. Perry, of the University of California, Berkeley, who is Israeli. "But when they go to Europe, personal space is larger; people may seem too cold."

On average, however, one's personal space — as measured by an experimenter walking slowly toward a subject until the subject feels on the verge of uncomfortable and says stop — extends about two feet in front of the body.

That distance happens to correspond to the length of the arm, suggesting that personal space amounts to defensible space. Personal space has been found to enlarge in people holding sticks or pointers, and to contract when they are burdened with weights.

Our personal space is human specific, said Dr. Daphne J. Holt, a psychiatrist and neuroscientist at Massachusetts General Hospital and Harvard Medical School.

She and her colleagues recently found that while the image of an approaching face will arouse the parts of the brain that monitor personal space, the image of an approaching car will not.

And when we're forced into uncomfortably close quarters with strangers aboard a crowded subway car, we reach for our smartphones and carve out some personal space-time online.

A version of this article appears in print on November 24, 2015, on page D1 of the New York edition with the headline: Arts and Architecture Explore Spatial Frontiers.

The New York Times

In Boston, Altering the Artist-in-Residence Concept

By HILARIE M. SHEETS MARCH 19, 2014

COLLABORATIONS among museums and artists-in-residence typically culminate in a single artwork or event. More unusual is the one between Matthew Ritchie and the Institute of Contemporary Art in Boston. During his 18-month residency, he is producing a series of related artworks and performances in and near the museum that weave Boston and the institute into an abstract narrative of past, present and future.

Matthew Ritchie working on "Remanence/Remonstrance," an installation on the Sandra and Gerald Fineberg Art Wall at the Institute of Contemporary Art in Boston. Liza Voll Photography

"I've never done a thing where I sort of seep into the fabric of the museum itself and the neighborhood around it, almost like an energy consultant coming in," said Mr. Ritchie, 50. "But instead of talking about heat, it's ideas." The artist is known for his densely layered, expansive paintings and installations that diagram systems of religion, science, history and cosmologies, sometimes all at the same time.

"Matthew heard from us that we're interested in activating more spaces in the museum and activating the museum in more spaces in the city," said Jill Medvedow, director of the 78-year-old institute, who oversaw its relocation to the edge of Boston harbor in 2006 in a luminous glass building designed by the architectural firm Diller Scofidio & Renfro. "He took that and completely embraced it and has incorporated those goals of ours into these new works of his, which are all one big body of work."

“Remanence: Salt and Light,” by Matthew Ritchie. Credit Geoff Hargadon

Leading the project is Jenelle Porter, senior curator at the contemporary art institute. She had seen Mr. Ritchie’s multimedia music production “The Long Count,” conceived with Bryce Dessner of the National, the indie rock band, at the Brooklyn Academy of Music in 2009. Having worked with him before, she knew Mr. Ritchie’s penchant for collaborating across disciplines with musicians, scientists, architects and judges. “I thought it would be great to bring someone in who has the skill set to work with a lot of different people in the museum,” Ms. Porter said, “but whose work also requires and desires that kind of collaboration.”

She initially proposed that Mr. Ritchie stage a version of “The Long Count” in the museum’s theater; paint a mural on the lobby’s Art Wall, and produce a project with the Teen Arts Council. “Visual arts, performing arts and education are the most important programming elements for the I.C.A.,” said Ms. Porter.

From there, Mr. Ritchie’s residency evolved to include an additional mural in Dewey Square, a park near the institute, and an additional performance with Mr. Dessner, all unfolding through the year. “I’m imagining moving people through time and having all these disparate moments understood as orbiting planets in a solar system,” said Mr. Ritchie, who has also donated a painting, “The Salt Pit,” on view now in the museum’s collection galleries.

Mr. Ritchie has just completed the lobby mural; it covers a 50-foot wall and extends across an adjacent stretch of windows. While the piece is abstract, it builds on visual themes in the Dewey Square mural, completed in September.

“On one level, this is the story of the beginning of time,” says Mr. Ritchie. A large atom form, or big bang, is exploding on the top right, with smaller atoms falling into a kind of primordial seascape. From the center arises a vessel-like form with dense scaffolding, suggesting the building of a complex society, which then begins to break down and return to a state of nature on the left.

Within this epic history, the artist suggests ideas of Boston and the institute as well. The shape of the vessel alludes to the ship where John Winthrop, the first governor of the Massachusetts Bay Colony, quoted the Sermon on the Mount to migrants from England in 1630 as he envisioned the future “city upon a hill.”

“The I.C.A. is also the model of the shining city on a hill,” said Mr. Ritchie, “clearly designed as a lantern that glows at night and was embedded with ideas of the future at that moment it was built.” Mr. Ritchie said he thought of museums as ocean liners moving through history and preserving things. He is interested in how the opening of the art institute’s building spurred rapid redevelopment of the once-dilapidated waterfront, with hotels, office buildings and condominiums going up all around it (the mural on the institute windows, in fact, obscures a construction site directly outside).

On March 29, the next episode of Mr. Ritchie’s complex vision comes to life in a performance that will begin in the museum lobby and conclude at a Roman Catholic chapel nearby, Our Lady of Good Voyage. Musicians on clarinet and guitar, including Mr. Dessner, will improvise a composition in front of the mural. When they proceed to the chapel, originally for seamen, the performance will develop into a choral work, with the vocalist singing Mr. Dessner’s composition “To the Sea,” accompanied by organ choir and imagery by Mr. Ritchie projected behind the altar.

It is meant to connect the innovative technological present, embodied by the museum and the contemporary art within it, to Boston’s maritime and religious roots, as well as the shift in art to a largely aesthetic experience from its more spiritual role in the past. The artist noted that the chapel itself would soon be relocated from its prime location in the middle of the redevelopment district.

Since the beginning of the residency last fall, Mr. Ritchie has met regularly with members of the Teen Arts Council at the museum and prompted them to think like him. “He’s directed us to take photographs of things in our day-to-day lives that might normally go unnoticed and connect them in this big photo map or web of overlapping concepts,” said Cecelia Halle, a high school sophomore on the council, which recently received the National Arts and Humanities Youth Program award from Michelle Obama. “Ultimately, we’re going to put these things into a video that documents the changing structure of Boston through the eyes of us teens.” The collaborative project, which will make use of the museum’s high-tech digital lab, will go on view this summer.

The artist has other surprises in store. He plans to embed an unannounced artwork somewhere in the museum later this year and is working with the bookstore about a way to provide an unexpected — and undefined — ghost text along with intended purchases. He’s also created a series of short films, which set his vocabulary of abstracted imagery in motion and can be seen and heard via smartphone at the site of each artwork and performance. The residency will conclude with a reprise of “The Long Count” in the museum’s theater in December.

“There are all these things swirling around each other and each person is going to be encouraged to solve it in a way,” said Mr. Ritchie. “It’s not about having a secret language but more to encourage exploration. Can you remember the mural you saw 15 minutes ago in Dewey Square when you walk into the lobby? Can you remember the performance you were at six months ago when you’re at another one that echoes it? Can these things have an algorithmic choral quality and build on each other not just in space but in time? It’s the sense of a haunting.”

The Boston Globe Theater & art

For Matthew Ritchie, it's playtime at the ICA

By Cate McQuaid | GLOBE CORRESPONDENT APRIL 03, 2014

ARAM BOGHOSIAN FOR THE BOSTON GLOBE

Matthew Ritchie at the ICA, where the British-born, New York-based artist has an 18-month residency.

Late last week, as the clatter and crunch of construction in front of the Institute of Contemporary Art seeped into the building, two artists, a couple of staffers, and I gathered in the lobby to try out a new interactive sound installation.

A grid had been mapped in blue on the floor, alongside a wheeling wall painting by Matthew Ritchie, which stretched around the corner onto the window bay looking out on the construction site. Wall painting and sound installation together are called "Remanence/Remonstrance."

If the racket outside punctuated the scene with a chaotic rumble, Ritchie's diagrammatic mural, similar to the public art piece he mounted last September in Dewey Square, mixes chaotic energy with elegance and intention. The Dewey Square mural and the lobby installation are components of the British-born, New York-based artist's 18-month artist residency at the ICA.

I was the first to step on the grid. A low, pleasing clarinet note filled the lobby, and began repeating. I stepped to another square, and a soothing, simple riff, also on clarinet, played over the repeating note. As others joined me, a clarinet chorus immersed us, driving away the noise outside. As the sounds multiplied, they built into rippling rhythms, and then blocks of chords.

Matthew Ritchie: Remanence/Remonstrance

Institute of Contemporary Art, 100 Northern Ave., 617-478-3100.
http://www.icaboston.org

Closing date: March 2015

More

- **9/21/13: Dewey Square gets Ritchie mural**

The music was a balm, and at the same time energizing. I found myself caught up, plotting where to step next, wondering what I would trigger.

"At the beginning, you feel like an individual affecting the piece," Ritchie said. "At the end, you still feel like you're affecting it, but now you know you are part of it."

The music, set off by motion sensors, comes from a larger piece, "Propolis," composed by Bryce Dessner of The National, sound designer David Sheppard, and Evan Ziporyn, professor of music at MIT.

The sounds generated are not as simple as cause-and-effect; computer programming makes it more nuanced than that.

“It plays lines and movements that repeat, or don’t,” said Sheppard. “Half of it won’t work until you’ve done the first half. Once it unlocks, then you can just play.”

Like the music, the wall painting builds momentum. Closer to the admissions desk, where you take your first step onto the music grid, the painting is spare. As it swoops toward the windows, it gets denser, with bold calligraphic gestures, spinning nebulae, and washes of orange and peach. On the window, there are suggestions of a broken landscape. A circle, radiating in gray-black tendrils, hovers high at the end, echoing the one at the top of the Dewey Square mural.

This is the first time the lobby art has extended to the window.

“There’s an implied dimensionality with two walls,” said Ritchie. “The music provides an extra dimension of time.”

“The way Matthew has used two surfaces of the lobby is a different experience of space,” said the ICA’s senior curator Jenelle Porter. “As soon as you walk in, it fully envelops you.”

It also does not hide the construction going on outside. Ritchie is as engaged with the city, and its changing face, as he is with the museum.

“It’s the last time this wall will be backlit,” said Ritchie. “The installation will be here for the duration of construction, and when it comes down, there will be a high-rise.”

Over the weekend, the composers performed “Propolis” in the ICA lobby, then walked to the nearby Chapel of Our Lady of Good Voyage, where the concert continued. The chapel, which was built in 1952, will move as the waterfront is developed, according to Porter. The performance there ties the piece to the past, as the window drawing ties it to the future.

Ritchie said the sound installation will be a kind of memory of the concert. “Remanence,” the title of every piece Ritchie makes at the ICA, is a scientific term for the magnetization that remains in computer chips or credit cards after the magnetic field has been removed: a trace, a memory, a resonance.

Other elements of the artist's residency include an ongoing project with the ICA's Teen Arts Council and Fast Forward new media students, and a multimedia performance in December.

All the works in the project tie together, and the key can be found in another diagrammatic painting Ritchie has made around the corner from the lobby, in the elevator bay. In it, a wild grid — arcs of time and space — twist upward through loosely drawn axes anchored to four poles. The horizontal axis stretches between object and concept. The vertical reaches from self to unknown.

"In every practice, you have to reconcile these two sets of opposites," Ritchie said. "How can you represent all four points rather than one or the other of the axes?"

Porter smiled. "Being slightly overwhelmed by this information is important," she said.

"It's like looking at the ocean. You can say, 'God, it's so big,' and you can go home," Ritchie said. "Or you can go swimming."

You just have to be willing to play — to immerse yourself — and become part of the composition.

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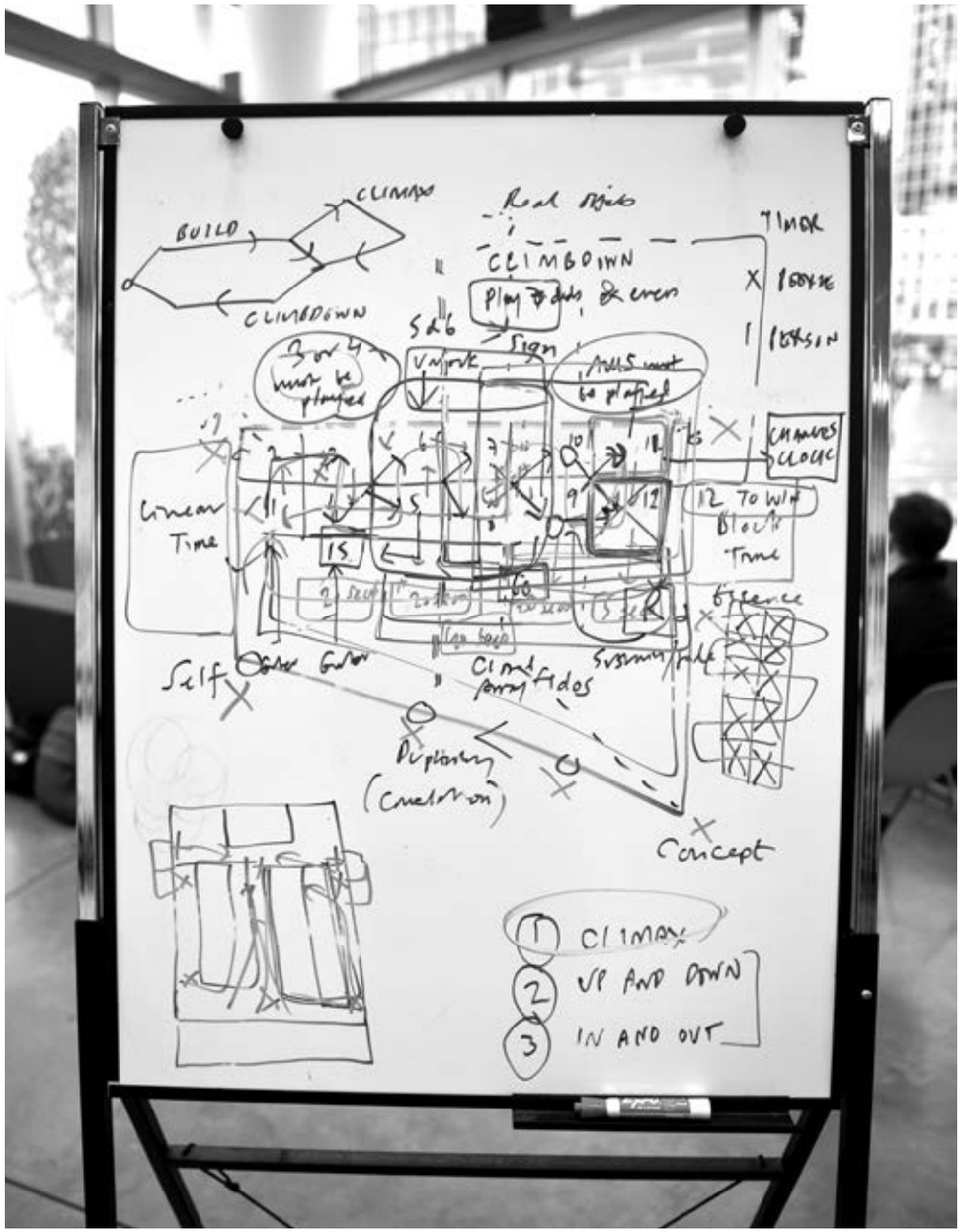


Jenelle Porter

UNKNOWN UNKNOWNS

Long interested in schematic representation, for the last few years Matthew Ritchie has endeavored to generate a diagram that maps all diagrammatic thought in art, science, and philosophy. Considering his avid enthusiasm for knowledge of all kinds—both real and fictional—it may be no surprise that this (seemingly impossible, even absurd) undertaking has had an impressive result, a sort of sketch of a unified theory, or diagram of diagrams he refers to as "The Temptation of the Diagram." In a series of works—so far, an installation, essay, and an exhibition—the concept of the diagram is presented as a universalizing connector that allows us to move beyond categories of "art" and "not-art," as well as to coherently relate aspects of past, present and future.

These concepts figure prominently in the two-year artist residency Ritchie began with ICA in 2013. The initial invitation included a new installation for the ICA lobby, a performance program, and workshops with our Teen Arts Council. From Ritchie's past works, I knew to consider this list merely a beginning—his approach is nothing if not expansive—and indeed, the project soon flowered into something physically and philosophically larger: a proposal to redefine the concept of an artist residency. As we've progressed through the residency (at the time of writing, months remain before it concludes) we've done nothing less than turn the museum inside out, so to speak, and ultimately use it as a physical medium for making art.

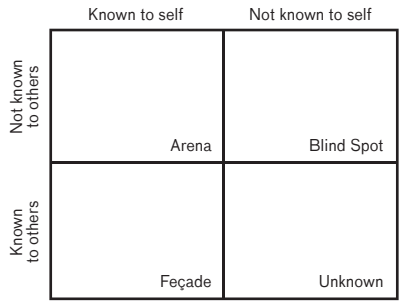
Familiar as I am with this artist, who brings drawing and painting to

the biggest theoretical explorations, consistently collaborating with architects, musicians, physicists, engineers, and theorists, I considered the museum a paradigm awaiting his unique sensibility. Deploying the traditional elements of art—gesture, line, and color—Ritchie explores the complexity of humankind's efforts to mimic, abstract, rationalize, fictionalize, or simply come to terms with the vastness of the universe. From his paintings to recent work in installation, landscape, architecture, performance, sound, video, and animation, Ritchie has adopted an inclusive approach to making objects, one that connects to an eccentric trajectory of artists who locate meaning through making (and vice versa). For Ritchie, this path begins in the modern era with William Blake and continues with artists as diverse as Paul Klee, Joseph Beuys, Öyvind Fahlström, Sigmar Polke, and Matt Mullican. What these artists share is a reliance on the production of objects—whether painting, film, sculpture, or drawing—to transmit their ideas and initiate social exchange. In Ritchie's case, specifically, his objects express ideas about the unknown, using a rhetorical mode that shifts according to their material—paint, ink, or pencil. Ritchie obliges material objects (his paintings and installations) to envelop more and more meanings, which begs the question, Are things becoming information, or is information becoming things?

To explicate the residency—one organized for specific sites as well as nonspecific universal concepts—we can use one of the simplest of all the diagrams Ritchie includes in his Diagram, the Johari window. The Johari window is a tool used in psychological tests to help people better understand their relationship to self and others.[1] It is a sort of modernized descendant of Artistotle's Four Humors (corresponding to the four elements), which have surfaced in Freud, Jung, and Lacan, and inform any number of personality tests administered by the hiring departments of major corporations.

To use the window, you begin by selecting descriptions of your own traits, while others select *their* descriptions of your traits; the results are then diagrammed on the chart. For example, the box labeled "Arena" contains features that you and your peers are both aware of: these can be called "known knowns." "Façade" lists those characteristics known only to you, not to others—secret, undisclosed, or seldom-disclosed traits: "known unknowns." (This category gained notoreity when former Secretary of Defense Donald Rumsfeld characterized the "known unknowns" of the

Johari Window



Afghanistan/Iraq war.) "Blind Spot" lists traits known to others but not to oneself: "unknown knowns." Peers determine whether or not to disclose blind spots to the subject. Traits not known by either subjects or peers are listed in the box marked "Unknown": these are "unknown unknowns" and may include characteristics that have been demonstrated but remain unidentified by self and others.

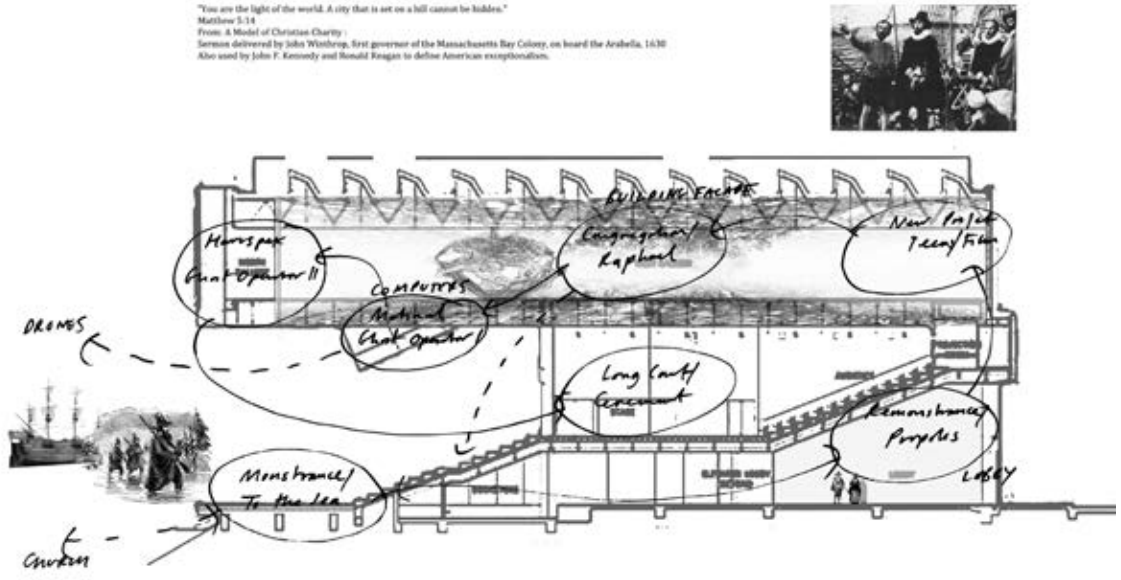
To begin, the idea of an "Arena," or public space, could be represented in one of Ritchie's simpler residency planning diagrams: the drawing below maps the physical locations of the residency project using a scaling system. Critically, Ritchie's sketch—drawn during one of the many planning meetings we conducted—can be read either left to right or right to left, yet visitors will typically encounter the individual project components in the prescribed order. From left to right: *The Salt Pit*, a large painting installed in the ICA's fourth-floor galleries; a diagrammatic painting in the stairwell that purports to code the project; Our Lady of Good Voyage, a nearby seamen's chapel;

Matthew Diagram

the lobby installation; and a mural in downtown Boston. Ritchie's residency project is primarily sited at the ICA, a venue associated with creative activities for the public that take place inside and outside the building—visual art, performance, scholarship, lectures, music, children's programs, fundraising, and festivities—but the arena here extends into the city as well.

This diagram also demonstrates the ways Ritchie combines image and site—as the reader will soon understand—"like a collection of stories that, much like a pack of cards, can be re-dealt and retold, an endless telescope of works."[2] In this mode, scale becomes a gesture, as Ritchie forces information through particular visual protocols—such as cropping, scaling, and modeling—moving, for example, from drawing to computer animation to monumental mural. This mode of facture pushes at an inquiry into gesture as carrier of meaning, and with regard to the residency, asks if gestural meaning can exist at the scale of a painting, a museum, and a city street. The largest work in Ritchie's scaling diagram is a 70-by-70-foot mural in Dewey Square in downtown Boston. Dewey Square is one section of the Rose F. Kennedy Greenway, a median strip of parks that replaced a raised highway that for forty years divided Boston from its seaport.[3] The Greenway organization and the ICA have recently partnered to present public art on a façade that anchors the square near the terminus of the Greenway.[4] Ritchie's monochromatic mural, titled *Remanence: Salt and Light*, depicts an information ecology where ideas (represented as atoms) rise and fall between a "sea" of undifferentiated lines.[5] The title evokes both science and scripture, and recognizes Boston's past and its present: "remanence" is a term for the trace memory left in magnetic materials, and here functions as a neologism evoking memory, remnant, and resonance.

In a second project diagram (opposite), showing the project mapped on to the ICA building, we see the phrase "salt and light," which refers to John Winthrop, first governor of the Massachusetts Bay Colony, who, on the deck of the vessel Arabella, quoted the Sermon on the Mount (Matthew 5:13–16) to arriving settlers. Winthrop called for Boston to become a "City on a Hill." Often quoted by politicians, most notably John F. Kennedy and Ronald Reagan, this famous expression has itself become a "remanence" of an idea, typically misinterpreted as a fable of American exceptionalism. More accurately, the sermon not only exhorts us to live up to the moral obligations



of being "the city on the hill," visible to all as an example, but to constantly work to retain the "salt," or complex flavor of life. Remanence links the entire project, as ideas about art, science, and history crisscross temporalities of experience as well as the local topography.

In the Johari window, the "Façade" contains secrets hidden behind the screen we erect to face others. But in the case of the ICA, a building almost entirely clad in glass, the façade is transparent. A beacon on the harbor, light floods through it, and at night, emanates from it. By opening the museum (inside and out) to Ritchie, we offered up this transparency for scrutiny. Among the many paradigm shifts the ICA has instigated and/or encountered in the last several years, the neighborhood is one of the most critical. In 2006, the ICA opened along a stretch of Boston harbor known as the Seaport, and in doing so transformed itself from a modest 70-year-old *kunsthalle* (located for the last thirty-odd years in Back Bay) to a thriving center for contemporary art that anchors a rapidly developing neighborhood. One of the first buildings erected in a multi-decade city master plan, it was until very recently surrounded by a desert of parking lots, all of which are slated for high-rises—which are rapidly

appearing. The neighborhood is temporarily dominated by trucks, cranes, scaffolding, excavation, and noise. This particular situation is one among the many ideas that inform the works Ritchie made during the residency, and resulted in his scheme for an art wall that would extend onto the adjacent glass façade to screen from view the construction directly behind the ICA.

Ritchie's installation on the lobby's Sandra and Gerald Fineberg Art Wall is an immersive environment titled *Remanence: Remonstrance*. It consists of digitally printed opaque and transparent vinyl films applied to the surfaces of the windows and the diagonally ascending art wall, and vinyl numerals affixed to the floor. Ritchie applied acrylic paint to the vinyl as line, fill, and particulate spray—and even a few "bloody" handprints—which adds materiality and an additional layer of information: touch registers time, and time is information. Though the installation is apparently two-dimensional, volume is gained through the imagery, the materials, and a new use of the museum's public space; all three axes (wall, window, floor) of the space are activated. Here, painting and drawing escape the conventional confines of material and space as they move across surfaces that are opaque (wall) and transparent (glass façade).

Deploying his signature visual lexicon—which should be considered less personal expression than a quasi-universal mapping of idea, system, and site—Ritchie in the lobby project concretizes ephemeral and intangible theories of information and time. Using traditions of "universal" abstraction whose practitioners range from Mark Rothko and Barnett Newman to Walt Disney and Darren Aronofsky, Ritchie's work depicts atoms, primordial life, buildings, diagrams of space-time, neural networks, written language, and unmanned drones. These collide and overlap, creating a densely layered ecosystem of ideas and themes. On the glass façade's upper right corner is a gray super-atom that generates a field of information; atoms float up from a red sea; rebar rises from the depths and becomes scaffolding, a foreshadowing of (or even a future shadow cast by) the real building rising across the street. The black, curving diagonals that span window and wall reference one of the earliest iterations of Einstein's space-time diagram. In Ritchie's expressive formation, the shape recalls ocean vessels and the artist's longstanding interest in the sea as a metaphor for infinity. Scrawled across the lower portion of the windows is the German word *Weltlinie* (world line), used by Einstein to

describe the path of our movement through time and space. On the left side of the wall, a floating seed, a symbol of life, moves toward the windows. A black shape—a highly abstracted "predator" drone—points to the drawn sea on the wall and the (actual) sea just beyond the ICA's walls. Backgrounding all of this imagery is a network of thin gray lines: Ritchie's massive "diagram of diagrams." Here, though the categories are absent, one can find reference to them in a wall painting in the stairwell, which serves as a key to both the artwork in the lobby and the entire project. In this diagram, the four corners of Ritchie's quadratic space are labeled "theory," "object," "society," and "light," with lines defining axes of time and space that refer to Graham Harman's Quadruple Object (another touchstone diagram for Ritchie).[6]

The space enclosed within the volume implied by the wall and window extends into time, the fourth dimension, via an interactive sound component conceived by Ritchie and executed in collaboration with composers Bryce Dessner, David Sheppard, and Evan Ziporyn. For Ritchie, collaboration unlocks hidden correlations among disciplines—in Johari window terms, the Blind Spot. Visitors are encouraged to activate the sound piece by stepping on stickers affixed to the floor, numbered 1 through 12, which trigger sonic forms that grow increasingly complex as participants move through the numerical sequence.[7] The amplified sounds are reconstitutions of elements in a longer work, "Propolis," a microcanon in which notes overlap, ascend, and descend in a mathematically prescribed way.[8] The sound installation, like the glass wall, masks the buzz of construction directly outside ICA's façade.

Ritchie's incorporation of sound indirectly connects drawing to the geometrical principles on which music, and the universe, is built. Like drawing, musical notation records time and implies the space of performance; they differ in that music, infinitely repeatable, transcends time whereas drawing takes place during a fixed segment of time. Ritchie's collaborative works evolve from such correspondences between ideas and mediums. Merging the visual with the aural, his works range in scale from animations viewed on handheld devices to performances experienced in theaters over multiple nights. At the ICA, the sound work generates an immaterial pavilion, a space within a space—but a space entirely absent unless activated by viewers who, in moving through the sequence, trace patterns in space.[9] Ritchie considers the lobby installation an enormous drawing to be completed by the viewer, and as such it points to his

desire to extend painting and drawing into the media of time, science, music, and the public: "I'm interested in gesturing toward the completely unknown, while bearing in mind that we all bring to the unknown our own stories—and we need these stories to make meaning of the unknown."

Ritchie's collaborations often feature multimedia music performances, and it was in part due to the ICA's performance program that the residency formed as it did. Ritchie imagined two different performance programs for the ICA. The first, in March 2014, was an evening of music with two performances in two venues: a live performance of "Propolis" in front of the art wall and of "Monstrance"—a work only once previously performed, on Venice Beach in California—at Our Lady of Good Voyage.[10] Between the two performances, the audience processed from the ICA to the church across the street—from one kind of reverential arena to another (for more, see text by John Andress in this volume). The second performance program will derive from *The Long Count*, a cosmological song cycle Ritchie authored and directed. With music by Aaron and Bryce Dessner, this major collaborative undertaking fuses Mesoamerican myth with baseball, experimental rock with classical music. *The Long Count* was first performed at the Brooklyn Academy of Music in 2009 and has subsequently toured in distinctive iterations. At the ICA, plans proceed to site the work in both the theater and the galleries.

Ritchie states that making drawings is like making time appear before your eyes, and his ICA residency demonstrates this complex notion in many ways. Encompassing as it does a wide range of works and locales, the project asks viewers to consider time in relation to experience and simultaneity. For example, we look at the art wall while activating the sound work with our physical movements (we don't often move in front of an artwork in such a way) and we hold in the mind the imagery encountered at Dewey Square as we view that at the ICA. We also experience time-based works such as the performances, which exist in real time and cannot be revisited like a static object, such as a painting. For Ritchie, this kind of temporality is akin to knowledge: some parts of the universe are accessible to us, and most are not.

Yet another type of temporality is represented by animated videos built from the artist's drawings, with music by Bryce Dessner. The videos take form at all scales, from mural-like projections in the performances to playback on handheld mobile devices. The latter expands static works when accessed with a

QR code at project locales: the mural at Dewey Square, the art wall, and in the ICA galleries, where *The Salt Pit* is on view.[11] The painting's title references the first disclosed CIA "black," or "known unknown," detention site in Afghanistan. Its imagery (atoms, a fallen tower) and facture (paint particles and varying types of mark making) link it to the murals in the lobby and in downtown Boston, as well as the visuals experienced during the performances and online.

For Ritchie, "the key issue raised by the Johari window and all universalizing systems—no matter how comprehensive, accepted, real, or unreal to us or others (The Bible, quantum mechanics, climate change, Wikipedia, consciousness)—is not whether it is humanly possible to define all levels of reality, but whether it is possible to represent the absence of what we do not yet know, the 'unknown unknowns,' as spaces of potential meaning." Though institutions typically prefer the "known knowns," the museum is historically a site of creation and exchange, as well as a generator of information, experience, and meaning. Considering such exchanges in contrast to the practice of relational aesthetics that has defined a generation of artistic production, Ritchie explains that he "repeatedly reverses the polarity between audience and artist, creating a kind of alternating current between the unknown and the experienced. Whether indulging a desire for novelty, or pure experience, or restating the clichéd inaccessibility of art, the project aims to place the viewer on a gradient of potentials, with the possibility of increased access to multiple meanings becoming available at every energy level within the terms of art. From arena to façade, from narrative to performance, from architecture to music, from painting to installation, categories are shuffled and boundaries redrawn."

With such goals in mind, Ritchie has created an intensely collaborative residency that asks: What is a museum for the twenty-first century? How does one make meaning within this paradigm? What is public engagement? Viewer experience? What is an artist? What can one artist's project accomplish in the form of answers to such questions? These are just some of the questions and ideas that inform the sea of information that has served as the basis for art making. Ritchie's creations for the ICA residency—murals, installations, paintings, sound works, live performances, and teen, staff, and public engagement—provide specific experiences within a vast arena of knowledge.

Notes

1. The Johari window was created in 1955 by American psychologists Joseph Luft and Harrington Ingham.
2. Unless otherwise noted, all quotes by Matthew Ritchie are from conversations with the author, June 2012–June 2014.
3. A plaque on the remaining column, which identifies it as "Dewey Square Pylon," describes the John F. Fitzgerald Expressway as a massive urban development scheme built between 1951 and 1959. By 1990, the expressway was transporting 200,000 vehicles through Boston and, with them, traffic snarls, grime, and pollution. From 1990 to 2007, the "Big Dig" buried the Expressway under the city. The column remains as a memorial to the elevated expressway.
4. The inaugural mural was executed by Os Gemeos in conjunction with their eponymous 2012 ICA exhibition.
5. The mural is entirely composed in gray (fittingly, Benjamin Moore Paint's Harbor Fog and Pilgrim Haze), creating a kind of shadowy realm that contrasts with Ritchie's colorful interventions at the ICA.
6. A diagram created by Graham Harman which has four poles labeled "real objects," "real qualities," "sensual objects," and "sensual qualities." Among these poles are ten possible links that explicate a metaphysical movement called "object-oriented ontology." It's very complicated. Please see Wikipedia.
7. The sound piece uses motion-activated cameras and a computer program to capture visitor movement across a field of space. The composition plays as visitors step within these numbered fields, denoted by numbers affixed to the floor. Different parts of the composition are assigned numerically, with accumulated complexity as one moves through the sequence. For example, when you trigger numbers 1 to 3 single note sounds play but eventually stop after a short time if there is no more movement. The game is that you need to trigger 2 to keep 1 going, 3 to keep 2 going, and when number 4 is triggered, everything loops. The sound ceases if you stop at 4. Triggering 5 through 12 activates additional segments. The big moment is 12, which unlocks part two of the composition, a four-minute sequence. You can "turn off" the piece by reversing the sequence of numbers (but only after you trigger 12).
8. "Propolis" was commissioned for and performed live in the outdoor installation *The Morning Line*. Created in collaboration with architects Aranda/Lasch, the Arup Advanced Geometry Unit, and the Music Research Centre of York University, the installation has been exhibited in public spaces in Seville (2008) Istanbul (2010), and Vienna (2011).
9. The space is immaterial in comparison with that of *The Morning Line*, a scalable, interactive structure fitted with multiple speakers that can broadcast sound as well as host performances.
10. "Monstrance" is another Ritchie/Dessner collaboration, with lyrics by Ritchie adapted from Milton. A masked angel representing Uriel, angel of the sun, performs a series of eight choreographed gestures.
11. *The Salt Pit* was shown in Ritchie's 2008 exhibition *Ghost Operator*, one of the first exhibitions for which Aaron and Bryce Dessner performed. In terms of Ritchie's generous donation of *The Salt Pit* to the ICA collection, there is a long story that involves not only the war on terror, but also Hurricane Sandy, art restoration, insurance policies, a generous artist, forthright curators, and the vision of the residency.

U

224

E. Gtr.

E. Gtr.

E. Gtr.

E. Gtr.

Flat metric $ds^2 = dx^2 + dy^2 + dz^2 - c^2 dt^2$

d = dimension

224

S. D.

Tom-t.

B. D.

x y z = 1, 2, 3 dimensions

c = light

t = time

Harm.

U

Fl.

Warped metric $ds^2 = e^{-k|r|}(dx^2 + dy^2 + dz^2 - c^2 dt^2) + dr^2$

B. Cl.

Bsn.

k = energy

r = 5th dimension

Hn.

C Tpt.

Tbn.

DM

K = Boltzmann constant

Vln. I

Vln. II

Vla.

Vc.

ARTFORUM

Systems Theory

SANFORD KWINTER ON MATTHEW RITCHIE'S *THE MORNING LINE*

Matthew Ritchie in collaboration with Aranda\ Lasch and Arup AGU, *The Morning Line*, 2008, mixed media. Installation view, Centro Andaluz de Arte Contemporaneo, Seville. Photo: Benjamin Aranda.

AMONG THE PROMINENT DEVELOPMENTS that have marked recent art has been the incursion of "method" into the heart of what has long appeared as an array of miscellaneous, even random art practices. By method, I mean nothing more than an approach in which a certain discipline is sustained over a range of executions, sustained, that is, long enough both to leave a trace of "system" in the deposited production and for that systematic quality to serve as a principal rhetorical feature of the work. In contrast to the more circumscribed and puritanical routines we saw set in motion by the American Minimalists of the 1960s and '70s, much current work remains rooted in identity production the inward, capricious, ego-particular idiosyncrasies of slacker-generated and decidedly untestable " theories." While there remain practices of enormous power at the cool end of this spectrum (the enterprising yet sober and disciplined engagements of Studio Olafur Eliasson are a principal example), there are also emerging a number of art-cosmology practices that make reference to historical positions and campaigns-those of Buckminster Fuller, for example, and Archigram or Futurism, etc.-particularly to their imaginative components and less so to their (non-art) rationalism. Weirdest, and most notable, is the inexorable drift of much artmaking to both the domains (the city, unsentimentally defined public space, building- and worldscale interventions, infrastructure, interiors) and the mental habits (geometric, algorithmic, behavioral, systematic) that have increasingly characterized design theory and practice since the advent of digitization and globalization. The boundary, and necessary distinction, between art and design is one that has lately been defended with unexpected vehemence, in notable contradistinction to the foundational work of post-Minimalist theory that once successfully sought to invigorate art by espousing the range and scope of ambition that had till then been the sole province of the architect (and which is a prime legacy of the early October group). If such defenses today have started to border on the strident, it is a sign that the boundaryfor better and worse-is being lost.

Somewhere amid this tangle of incomplete emancipations lies a great deal of the work that we call emergent today. A prime example is Matthew Ritchie's current traveling or is it self-replicating project, a series of structures including, most recently, The Morning Line in Seville and The Dawn Line in London (now on view in New York). An earli er, sca led-down iteration, titled The Evening Line, was presented at last year's Venice Architecture Biennale, with the larger, more expansive and centrifugal Morning Line following soon after. This trajectory itselfis a sign that Ritchie's work has found clear and unapologetic interest among architects, but, more germanely, Ritchie himself developed, resolved, and realized these structures only with the collaboration of Benjamin Aranda and Christopher Lasch, two young researchers who specialize in algorithmic design. While The Morning Line initially appears as a snarled tumbleweed of metal filigree accidentally forming both interior and exterior cavities for inhabitation, as well as the structure of transfers and arches necessary to keep it stable and upright, it quickly resolves in one's perception as a pattern of modules that is rotated, displaced, and scaled at every level and along what appear to be determined paths. This is the moment when an underlying predisposition is sensed, which transforms one's understanding of the work (the modules, in fact, are hand-generated cartoons that are computationally "grown "). Ritchie bro ught to the table a taste for med ieval knowledge systems and the dream of their comprehensive resolution within a pageantry of materials and narrative characters. His interest in the figures or actors of knowledge as points of compression of historical understanding and imagin ation, or simply as convenient ways of presenting these to the mind, belies a profound belief th at the world encodes itself in its productions and that this code represents an asset and resource that could and ought to be tapped, if only we knew how.

On the one hand, this is not something you can make "sense" of. It is largely a framework of heroic delirium, not too different from the cryptic scenography played out in Marcel Duchamp's "Large Glass," only here writ across the universe, across all space and time. Yet it is also disturbingly reminiscent of the derisory project of Edward Casaubon, the sterile, deluded figure at the center of the first half of George Eliot's novel Middlemarch, whose dream of a "key to all mythologies" is shown to be little more than a pedant's need to impose order on materi al in the fla grant absence of living concepts. On the other hand, Ritchie's world theater marks an unmistakable commitment to the principle of a matrix or diagram that makes form (or space) and information into a single continuum. I hesi tate to see a mere continuation of two decades of cultural eclecticism in this tendency, but ra ther see in it-at least perhaps-the provocation one might have felt before the mystery of Isaac Newton's predominating interest in alchemical transformation during the three most (scie ntifically) productive decades of his life. Ritchie's interest in painting as a language-that is, as a writing in and an embedding of world into form, an d decidedly not as on ly a signifying element in the semi otic sense-that espouses the logic and procedures of film, as well as of music and, yes, of nucleic acids, is as profound and potentially productive a delirium as any in our time. That Ritchie sees these all as " information structures" and seems to understand that there are "efficiencies" within even phenomenological experience that can be tapped with mathematical, or at least regular, devices, turnsout to be the very sobriety that saves him-and just in time. With the collabora tion of Aranda and Lasch (and

Matthew Ritchie in collaboratlon with Aranda\ Lasch and Arup AGU, ***The Morning Line***, , mixed media installation view, Centro Andaluz de Arte Contemporaneo, Seville. Photo: Todd Eberle

the Advanced Geometry Unit at the engineering firm Arup), the glyphs of free-form writingldrawing that typify much of Ritchie's work are captured within "virtual" modules (the digital-mathematical scaffold supplied by Aranda and Lasch), then manipulated with the help of formal instructions (code, keystrokes, and so on), just as such instructions have, over the centuries, become embedded into the syntax of natural languages to be deployed with every speech act. Through its expression of variation at all levels (scale, orientation, density, number, etc.) and in every combination, the project becomes an inchoate study in the syntax of pattern, offering the possibility to see in the world what Sergei Eisenstein, in his early days, asserted for film: that everything-i.e., meaning-happens in the conjunction of frames, in the in-between.

Ritchie will reproduce and transform The Morning Line in a variety of locales, including Vienna in May 2010 and then New York in September, and each work in this line-or phylum, as it were, should one wish to press the evolutionary metaphor-represents a kind of performance in wh ich a score is reanimated within, and in response to, a given set of spatial and temporal conditions (variations in physical and social site). (This posture could hypothetically be strengthened to include the specific historical conditions of place and time and their nontransmutable meanings. Though it is not in Ritchie's worldview to do this, he opens the possibility of a practice that would.) There is an undeniable experience of beauty and lyricism as one surveys the work, genera ted by the dislocations one cannot help but discern and play with within one's own internal rhythm section, between the beats and syncopations of the absent but insistent (because virtual) modules and the glissandi and arabesques of the drawn lines in aluminum that are all one litera lly sees. To begin, this provokes a different habit of seeing- different at least from what has become routine in the media and art worlds-in that it is a type of what Theodor Adorno might have ca lied structural seeing, which reads primarily the generative formations that underlie appearance. Second, it introduces a new type of object into our world: environmental but not burdened by rationale and utility as would be a standard work of architecturej logical in its propagation and organization yet also in astate of magic compression, like the cosmological constants that characterize at once the universe of the late-medieval cosmologist Nicholas of Cusa and the contemporary "scientific" universes of string and brane theory. These cosmolgies are in one sense no more coherent or less arbitrary than, say, the ever-expanding universe of the fictional Pokernon legend (a world that is relentless in its commitment to evolution yet that is also now endowed with papal benediction), and they are certainly closer kin to today's omnipresent RPGs (role-playing games, generally video games) than to the masterworks of the panoramic novel that figured so strongly as cultural references-and as philosophical and aesthetic guideposts- as late as the 1980s. If playing the role of primitive or naive "seer" or visionary and cosmologist has become a legitimate posture for contemporary artists, it may, ironically, be asymptom of the recent wh olesale abandonment of the will to theorize in systematic fashion in the first place. Yet here is where the ethos of that interloper "design" is beginning to play an increasingly prevalent and enchanted role within some contemporary art practices. Although it will initially appear unsophisticated to say so, the reality of adding a certain modicum of formalist reflection to the production of objects and environments in today's largely individual ist and nombrilistic art practices has been no bad thing. (Think preeminently here of Thomas Demand, whose practice serves as a beacon in the darkness.) Design thinking, especially over the past decade, has become an increasingly trenchant and analytic practice of engagement with economic, technological, and sociological developments at virtually every scale. Part of its newfound responsibility to think and rethink the modern environment in its manifold crises-urban, economic, technological, natural, and, yes, anthropo-ecological- is indisputably a principal factor explaining its recent transgression into certain areas of art practice, most notably, the physiological aspects of perception. lt is interesting to see how the sometimes guileless utopian movements of 1960s design milieus have begun to form a massive bloc of reference and a historical anchor point for so me contemporary art practices, such as those of Tomas Saraceno, Carsten Höller, Ai Weiwei, Tobias Putrih & MOS, and even the whole mongrel pack of relational-aesthetics producers. The crisis of art, long forecast by Marxist critics, albeit during moments when such cries carried little convincing power, has indeed arrived in our midst, and it is, as the best of them (Debord et al.) prophesied, a crisis of experience, not representation. The crisis was brought about not by philosophers or cultural producers, and not even directly by economic developments (not, that is, in the predictable "vulgar" sense), but by the transformation of human communicational and even epistemological (knowledge) ecologies, the direct product of, at once, a society given over to the cult of automatic processes and apopulace exiled from the reasons and realities of nature. In works like the (endless?) suite announced by The Morning Line, one may weil glimpse not only an open world but perhaps a new way of working and thinking, one in wh ich imagination and science, method and caprice, the sociocultural and the natural, are inseparable and no longer subject to the scolds and disciplinary distinctions that seek to protect the sanctity of artistic practice even if such protection will surely destroy art for good. Art's occasional but growing fascination with design methodology and thinking is partly a recognition of an ancient but unacknowledged complicity and partly a dawning recognition that the problems and issues that matter today are presenting themselves at a scale, depth, and technicity that art can no longer afford to ignore-nor can it remain entirely reliant on its own history, or on its stale commitment to irony, as a guide to action. □

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The New York Times

November 13, 2009

MATTHEW RITCHIE

'Line Shot'

Andrea Rosen Gallery

525 West 24th Street, Chelsea

Through Nov. 21

Rorschach-like symmetry: "Weep in Light" (2009), a work by Matthew Ritchie, at the Andrea Rosen Gallery in Chelsea.

It is hard to know if Matthew Ritchie is a genuine polymath or a painter with too many ideas for his own good. The canvases in his latest New York gallery show are some of the best of his career. They have lost the small mythological figures, scribbled equations and sky-chart compositions that once signaled obscure narratives. Instead their cosmic implications inhabit semi-abstract forms and light-rinsed colors, suggesting wheeling planets, meteors, toxic atmospheres and sun showers. "Weep in Light" and "Initial Series" take things a little further with fantastical Rorschach compositions that could be elegantly monstrous heads or crystal formations.

Mr. Ritchie's narrative lives on in large-scale multimedia musical works like "The Long Count," which was part of the New Wave Festival at the Brooklyn Academy of Music last month. Synthesizing various American creation myths, it was written and directed by Mr. Ritchie with wonderful music by Aaron and Bryce Dessner. Mr. Ritchie also provided a three-screen video whose images suggest rushing landscapes and aerial views that form the work's highly effective backdrop.

A related video accompanied by music and text dominates one corner at Rosen. It is surrounded and bisected by lattice-like tangles of line drawn directly on the wall, so the rushing seems to be viewed through fancy goggles. Some of the ink-and-pencil drawings in a second gallery also have Rorschach-like symmetry, and despite the long text keeping them company are most interesting as studies for future paintings. When all is said and done it is still painting that would most benefit from Mr. Ritchie's undivided attention.

The least appealing element in this show is three-dimensional: the lattice motif recurs on perforated polygonal sculptures that pile up unpleasantly at the entrance and sprawl about the gallery. Made of cast aluminum covered with black epoxy, they look like nothing so much as hip wrought-iron garden furniture. **ROBERTA SMITH**

Matthew Ritchie

ANDREA ROSEN GALLERY
525 West 24th Street
October 23–December 2

ARTFORUM

View of "Matthew Ritchie," 2009. From left: Augur, 2008; Line Shot, 2009; Itself Surprised, 2009.

In this exhibition, Matthew Ritchie gives new meaning to William Blake's "eternity in an hour." Line Shot, 2009, the show's titular focus, is an animated opus that guides viewers on a dreamlike tour of space and time, meandering from creation to apocalypse, submicroscopic realms to infinite vastness (think Powers of Ten on acid)—in just more than sixty minutes.

Projected into the gallery's corner, with the image split across two walls, the video is matched by an oscillating, out-of-sync score by Aaron and Bryce Dessner of the National (who performed live with Ritchie's video work October 28–31 at the Brooklyn Academy of Music). Evading consistent rhythms and aligned harmonies, the sound track also uses overdubbed voices that reference topics as disparate as ancient creation myths and twin-brother baseball players. Though the latter seems a non sequitur alone, the lilting delivery of all the ideas in succession sets a unified, stream-of-consciousness tone within an overall theme of broken symmetry.

Digitally compiled but based on actual drawings, the swirling imagery in Line Shot maintains just enough of the artist's gesture to save it from slipping into too-slick territory. The sculptures on view, however—a sprawling modular piece titled The Dawn Line (Sun Dog Variant), 2009, part of a larger, structural music and film installation, The Morning Line, which was made with architects Aranda\Lasch and global engineering firm Arup AGU and premiered in Seville's 2008 biennial; plus a ceiling-suspended bronze cast resembling a meteorite or the head of an astronaut lost in space—do not grasp any such handholds in this gallery setting and recall instead props from a sci-fi movie set.

A series of large paintings provide the sense of multidimensionality (formally and metaphorically) that the sculptures lack. These are composed of peculiar forms—huge gothic architectures of the future, perhaps, or curled, subatomic dimensions—where splattered swaths of bright paint stream like light beams. Brushstrokes are visible, and splatters clearly come from the flick of the artist's wrist, revealing a dynamic human involvement in what could otherwise be construed as aloof, scientific speculation. Works such as these, which evince Ritchie's aesthetic alongside his zeal for the more mind-boggling concepts of physics, elegantly bridge a rift in the art-science continuum.

— Emily Weiner

theguardian

The Long Count – review

Barbican, London

Kitty Empire
The Observer, Saturday 4 February 2012

It all ends on the count of "one". At one point, a swinging guitar gets whacked by baseball bats, like a particularly unyielding piñata. At another, Kelley Deal (best known as one of the Breeders) stabs at the mirrored floor with a knife.

This is (some of) *The Long Count*, a performance of music and visuals by artist Matthew Ritchie and brothers Aaron and Bryce Dessner of the National. Erudite doom-mongers may recognise *The Long Count* as the system by which the Mayans measured time, a cycle apparently due to reset on 21 December 2012. The time before Mayan time begins provides the dreamlike setting here for a baffling, but periodically thrilling, set of songs inspired by Mesoamerican myth, played out by indie-rock luminaries accompanied by (in this latest run) the Heritage Orchestra. First performed in 2009 at the Brooklyn Academy of Music (BAM), it was revived in Holland last summer. Now – in the apocalypse year – *The Long Count* arrives at the Barbican.

Although Ritchie's personal interest in creation myths and his organic, replicating visuals form the origins of this collaboration, *The Long Count*'s song cycle, and its momentum, belongs to the Dessners, two of the hardest-networking figures in contemporary American music. They run a label. They curated the celebrated Dark Was the Night compilation in aid of Red Hot and Blue in 2009, which served as a who's who of the international Brooklyn scene. Aaron has just produced a terrific record, Tramp (see review below), by Sharon Van Etten; Bryce has worked with Kronos Quartet and Philip Glass. A song cycle with Sufjan Stevens and Nico Muhly is in the works.

If tonight's performance is bewildering, the surging music really impresses, particularly when guitars, strings, woodwind and brass reach full pelt as on "Aheym", tonight's penultimate track. The twins' guitars frequently chase each other around repetitive cycles, a theme taken up by the strings. There are drones and grooves, and nods to Steve Reich, for whose 75th birthday "Aheym" was, apparently, originally composed.

Both Dessners have been at pains to explain the non-linear abstractedness of the work in recent interviews. But tonight

The National's Bryce, left, and Aaron Dessner: 'two of the hardest-networking figures in American music'. Photograph: Mark Allan

The Long Count's great backstory – featuring twins and baseball – remains painfully disjointed from its practice.

Ritchie sets events in motion by coming onstage to precis the Popol Vuh – the Mesoamerican creation myth. He notes that *The Long Count* has been "remade" every time it has been performed, something of an understatement.

Tonight's rendition differs from reports of the original in several respects. The National's singer, the brilliantly lugubrious Matt Berninger, is absent, replaced by TV on the Radio's Tunde Adebimpe, owner of one of the most psychedelically soulful voices in rock.

Kelley is without her better-known twin, Kim Deal, absent on Pixies duty (or, possibly, a solo album). The classically trained singer Shara Worden, of My Brightest Diamond, is a constant, wearing masks whose lace and filigree recalls Ritchie's organic, fractally replicating, hole-y visuals. The stage set resembles slices of grey Emmenthal bolted together into stools.

In the original BAM performance, the twin brothers mirrored each other stage right and left, as did the Deal twins. Ritchie's visuals were symmetrical and reflected from the screen on to the mirrored floor. The meticulous duplication all made engaging sense, given that the Popol Vuh prominently features two "hero twins". The young Dessners were crazy about baseball, and a soundtrack of baseball commentary plays out as the audience enters, suggesting the ball game that the hero twins play in the Popol Vuh.

You glean much of this from the programme notes, rather than what goes on onstage. The symmetry has gone, with the Dessners both playing guitar on the lunar cheese structures to the left, and the orchestra arrayed on the right. Kelley is by herself, distortedly half-rapping two songs, "Bull Run" and "When You Were Born".

The mighty Adebimpe is perhaps the biggest disappointment. This powerhouse is made to sing "Tests" – the standout track from previous performances – too stagily, in a costume accessorised with beads and feathers. We may be in the former London home of the Royal Shakespeare Company, but still.

It is best to forget all about the Popol Vuh, the baseball and the absentees, and just feel the orchestra. At one point, midway through, percussionist Sam Solomon doubles up on drums and xylophone, two sticks in each hand. "Mathilde" – over-sung by Worden – ends in a gloriously dissonant flurry of saxophone, looped and distorted.

There is no question the Dessner brothers have a musical reach well beyond the saturated rock songs of their day job. Tonight's obtuse retelling of their *Long Count* falls far short of heroic, but it is by no means the end of the world.

December 2011

MATTHEW RITCHIE:
ARTIST STUDIO VISIT

THE BIG BANG

For an artist who takes no less than the concept of the cosmos as the starting point for his artistic exploration, and refers to his canon of work thus far as, “a constantly evolving drawing of my personal universe,” Matthew Ritchie’s studio in a nondescript building in the Garment district of midtown Manhattan seems, at first glance, wholly unassuming.

Ritchie welcomes me into a large rectangular sun-filled room -- orderly and extremely peaceful -- especially considering the cacophony of New York noise and chaos just outside the building, Ritchie is alone, cradling a cup of steaming herbal tea, and apologizing for a confusion about our meeting time. The studio holds few clues to the workings of Ritchie’s ever-churning mind.

A boyish looking 47-year old British-born American transplant, Ritchie is surprisingly humble and lacking in arrogance. With a thatch of thick gray hair and a warm and open smile and style, the artist who is currently thriving in a mid-career. Garnering rave reviews and spawning a plethora of articles seeking to explain his work, Ritchie appears and behaves more like a nurturing English professor than an artistic genius.

There are drawings stacked neatly against walls, several uncluttered work tables with computers. A few sequined and feathered masks scattered on a counter that Ritchie explains he is designing for an upcoming performance of his latest show “Monstrance” in Venice Beach, California are the only clue towards Ritchie’s bent towards the theatrical.

THE INTIMIDATION FACTOR

For a man chosen in 2001 by Time Magazine as “one of 100 innovators for the new millennium, for exploring “the unthinkable or the not-yet-thought,” I was understandably intimidated by our first meeting, certain that my lack of scientific or mathematical knowledge would make me feel tongue-tied. Yet that initial intimidation is immediately wiped away by the artist’s eagerness to talk about his work, his patient explanations, and his lack of condescension. It occurs to me that Ritchie is used to meeting people who are not as smart as he is and the fact that humor and irony are a large part of what make Matthew Ritchie tick, makes him approachable. Coupled with this his voracious curiosity and obvious love of life and intellectual inquiry is infectious.

Ritchie’s “art”, an inadequate word to describe his multi-media output of drawings, paintings, large scale public pavilions, light installations and performances -- is based, he explains, on what he describes as “My journey to explore: ‘systems of knowledge’ -- those that already exist and those that I make up. Ritchie uses these systems, he says, “to create the personal ‘working model’ on which my visual language is based.I perpetually recombines these systems into a ‘super-positional state’ that both extends the space of painting and I attempt to recover meaning from the complexity and entropy of modern life. I work across multiple disciplines, applying this model to a specific “site”; which can be an idea, a place or a time”.

This theory-laden explanation, however, belies Ritchie’s equal fervor for a sense of fun in his work.

For example, in the midst of an explanation of how he came to the idea of using modular fractal geometry as a modular template for work exploring the elasticity (or lack thereof of the universe), he casually throws in the fact that his latest paintings, slated for his inaugural show in LA he has created a series of paintings based on “angels” and monsters”. “I have tried to evoke representations of ‘high energy states’ in the angel works which include as references, pole dancers, solar storms and female athletes, while my “monster” paintings are meant to reflect of ‘negative energy states.’ They are each devoted to a famous monster from a popular film,” he speeds up. “Dracula, Frankenstein, Mummy and the Wolfman and are also address the negative energy theme with sources from surgery, terror attacks and video games to ecological disasters”.

After this litany, delivered with almost child-like enthusiasm, I come to the conclusion that although Ritchie is clearly the savant he has been anointed, he has somehow avoided being an insular academic. It is the injection of the baroque, the beautiful, the painful, the joyous and the emotional that saves Ritchie, the person, and Ritchie the artist, from the sterility and pomposity that I had anticipated.

To accomplish this, Ritchie relies on his encyclopedic knowledge of (and this is a short list) particle physics, high-level mathematics, Greek and Roman Classics, noir and neo-noir film, astrology, psychology, popular culture. comics, porn, religion, politics, biology and ecology. To say that Ritchie defies easy categorization is an understatement.

THE MORNING LINE

Perhaps the best example of the way in which Ritchie is able to equally engage MIT scientists and the man on the street is the artist’s large pavilion, The Morning Line, commissioned by Thyssen Bornemisza Art Contemporary, Vienna -- the foundation founded in 2002 by art patroness and collector, Francesca von Habsburg,

The Morning Line is a modular structure, the idea being that it can be infinitely reconfigured as each module, or “building block” is constructed according to an exact calculation drawn from fractal geometry that is a microcosm of the universe. To actually build the piece, Ritchie worked with his friends, the innovative architectural team made up of Benjamin Aranda and Christopher Lasch -- also men of daunting intellect.

The ideas for the piece were constantly amended (and they are still in flux today). Ritchie worked closely with Ms. von Habsburg and her chief curator, Daniela Zyman. He absorbed ideas and suggestions from colleagues across many disciplines and pivoted mid-project expanding the original idea of a pure architectural outdoor installation adding vitality and interactivity to it with the inclusion of “sound art.” In its next iteration, he explains, he would like to expand that even further with the ability for input from visitors.

The structure. which was launched in Seville, Spain, has subsequently traveled to Istanbul, Turkey and is currently on view in the Schwarzenbergplatz in Vienna, Austria.

One of the compelling things about the completed pavilion is that its lacy, black silhouette, open for visitors to wander its interior spaces or “rooms” -- now replete with projection screens and fitted with 52 sophisticated sound speakers -- is that it evokes wildly divergent reactions from its visitors. Those who see and spend time in the pavilion tend to find references based on their own culture, and in some cases see things in it that Ritchie himself never anticipated, an unforeseen result that delights the artist.

Ritchie tells me that when the pavilion stood in front of a monastery in Spain, many saw it as a Christian, or anti-Christian symbol, yet while it held pride of place in busy Eminou Square in Istanbul, many of the citizens of that city -- saw Arabic and Islamic references in its shapes and sounds.

This interaction is important to Ritchie, as he explains, “I love to take my work to places where a ‘void’ of some kind has developed, or decay, or a lack of dynamism and torpor has set in an urban setting. My hope is” he continues, “that my work will bring the people who live in that particular place to come and engage with the piece, the sound and music. The result, if I am successful is that it will in some way revitalize the place in which it is installed in a very specific way, only possible in that place and at that time”.

Ritchie’s desire for this type of reaction has thus far been realized. In fact, he tells me, after initial wariness from some of the government bureaucrats in the cities in which The Morning Line has been exhibited: “Every Mayor has actually asked to buy the work and keep it there when it was time to leave”.

“When something like that happens organically, I know I have succeeded to some degree in making a work of art that can be transformed from something that might initially be perceived as alien or intrusive to something that becomes not just tolerated, but accepted to the degree that it has become a part of the visual and cultural landscape of the city and the people don’t want it to leave”.

MAN OF MIT/MAN OF THE PEOPLE

Before I met Ritchie, I read a lot about him, and a lot of what has been written has been by the greatest scientific minds at universities across the world and by architects, urban planners, sound art composers and critics, all wholly immersed in the highest levels of discourse in their chosen disciplines.

Therefore, I came to the premature conclusion that although Ritchie might be able to excite those who “think” for a living, he might miss the mark with a more Populist audience. I was wrong.

Ritchie avoids intellectual and academic inaccessibility for several reasons, but one of the most important, in my view is that he is not just a scientist but a sensualist. He is not all about “systems”. He is also wallows in color, texture and sound. Throw in Ritchie’s genuine love of the dramatic, the absurd and a visceral enjoyment of life and people, and you are left with a artist who is a hybrid of -- to use crude shorthand -- Quentin Tarantino and Stephen Hawkins.

REFLECTIONS ON THE BEACH

After visiting with Ritchie in New York, my instincts about were confirmed when I attended a performance he gave on Venice Beach in California. Ritchie’s ridiculously dramatic, grandiose and yes, “unthinkable” performance, required that I, and other attendees, don high-fidelity earphones, a black cardboard mask, with cutouts mimicking Morning Line modules, and black plastic ponchos silkscreened in white with the constellations, as they would appear in the heavens at the precise time of the performance, .

Eerie yet beautiful music begins to pipe into my ears, (composed by Indie rocker, Bryce Dessner). As the music rises and falls, figures representing the moons and the sun and, yes, “the beginning of time” walk slowly across the expanse of sand co-starring in a spectacle headlined by the enormous orange ball of California sun descending towards the horizon.

As the music crescendos, Ritchie himself appears in the middle of the beach. Sporting a John Dillinger style gangster suit and skinny tie, with serious deliberation and barely concealing his glee, Ritchie begins to “shoot” a gun (fake) into a quartet of enormous, terrifying looking dummies that have been doused in gasoline, igniting them and creating a true fire and smoke storm.

As the effigies burn and the grey and black smoke begins to wisp and screen the view of the ocean and the exquisite Southern Californian sunset, Ritchie somewhat miraculously creates exactly what he intended: a palimpsest of sights, sounds and smells, evoking both creation and the dawn of time, while simultaneously heralding utter destruction and perhaps the end of time.

The performance has both those who know what is going on, and those who are just passers-by, rapt with attention and many seem stunned into a state of personal reverie.

This is no ivory tower academic, I think to myself, watching the spectacle, and I can’t wait to find out what is next in Mr. Ritchie’s bag of magic tricks and what intellectual and artistic pyrotechnics he will thrill us with next.

Wallpaper*
*DESIGN INTERIORS FASHION ART LIFESTYLE

The Morning Line sonic temple, Istanbul

ARCHITECTURE

By Chris Sullivan

As I stood in Eminönü Square, Istanbul, experiencing what might only be described as an experiment in sound, art and architecture, I was approached by a rather trepidacious Turkish teenager. “What’s going on?” he enquired. “It’s a sound installation,” I replied. “I don’t know what that is,” he answered, obviously puzzled. “But it’s not love is it?” And certainly for that moment in time it was not as, sitting behind a MacBook, was Aphex Twin collaborator and eminent sonic artist Russell Haswell, playing a sound poem by Yasunao Tone, entitled Paramedia, that sounded like a million arcade computer games at war.

INFORMATION

The Morning Line is in Eminönü Square, Istanbul, until September 19th

Photography by Jakob Polacsek / T-B A21 2010

Website
http://www.tba21.org

The occasion was the launch of a sonic temple christened The Morning Line that was created by artist Matthew Ritchie, in collaboration with award winning architect, Ben Aranda, and Arup AGU. The launch was held over five days and featured a series of exciting new works by some of the world's greatest sonic artists. A formidable, almost foreboding Gothic-like construction, The Morning Line is basically an eight-metre high, 20m long, perforated coated aluminium modular tent weighing in at 17 tons, that can be dismntled and transported over borders and re-assembled in a variety of new shapes - almost like a box of Lego.

No ordinary construction, the structure comprises 40 speakers within its confines and uses an interactive ambi-sonic sound system (made by the Music Research Centre Of York University) that serves to broadcast said 'music' in the shadow of the Yeni Cami Mosque, next to the Spice Bazaar and overlooking the Bosphorous.

The whole shooting match has been put together and sponsored by, Francesca von Habsburg, international patron of the arts, heir to the Thyssen Bornemisza Collection and founder of TBA 21 contemporary arts foundation, along with Turkey's Vehbi Koç Foundation.

A rather spectacular event, its curated by Haswell, who chose the 16 individual works to be broadcast on an irregular basis in between prayers until September 19th. Amongst the works are a soothing electronic classical opus, Bridges from Somewhere, by Peter Zinovieff (who in the 1960s invented the VCS3 synthesizer so popular amongst the likes of Kraftwerk, Pink Floyd and David Bowie) and composer Carl Michael von Hausswolff's, No Rest Even for the Static Matter, that employs sine waves voiced into 40 different compositions - one for each speaker - all to be played simultaneously.

A quite dazzling array of talent, amongst the other works are: Maelstrom by Lee Ranaldo - co-founder of Sonic Youth; Cannibal in Tuxedo, by Icelandic duo, Ghostigital (Einar Örn of The Sugarcubes and Curver the Sigur Ros remixer); Timeless Wave by Erdem Helvacıoğlu; and Snaefellsnes by Cabaret Voltaire founder Chris Wilson.

Indeed, the event fields the full disparity of modern sonic art - some pieces almost lull one to sleep, others create an inner turmoil - but all are created to provoke an emotional effect and all within the confines of a rather radical piece of architectural art that sits in a very important heritage site.

"The location of these pavilions are as important as the pavilions themselves and here we are with this very contemporary construction and concept in the middle of this very historical square casting a calligraphic shadow over the Bosphorous."

explains Francesca von Habsburg.

“This was a chance to do something on a large scale and experiment with the relationship between sound and architecture. I hate compromise and this was the opportunity not to do so.”

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30 July 2010 | Architecure

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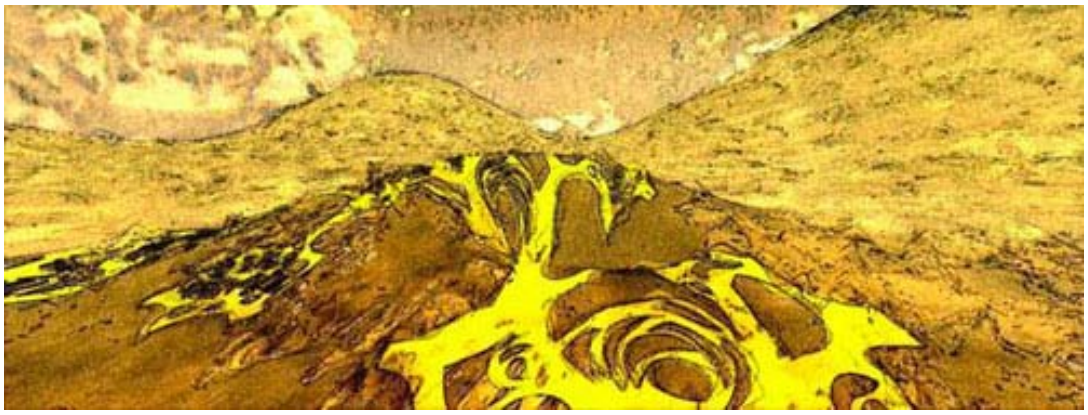
http://www.wallpaper.com/architecture/the-morning-line-sonic-temple-istanbul/4747

THE HUFFINGTON POST

MARCH 9, 2010

Matthew Ritchie
Artist
Posted: March 9, 2010 01:58 PM

A Perilous Intellectual High Wire Act



Last Saturday evening I sat in the silver-painted Lower East Side studio of clothing designers Three As Four, listening to Gabi Asfour cryptically explain how their 2006 season was based on the E8 fractal group. I came here looking for a costume for an opera singer, playing a physicist about to enter higher dimensional space. I've clearly found the right designer for this project. I arrived with only one criteria, the costume should not be black. When I leave, I will have not a 'costume' but an 'aura' for the singer. It's beautiful. And it's black.

This Thursday, March 11, the noted physicist Lisa Randall, the composer Hector Parra and myself are going to try and perform one of the most perilous intellectual high wire acts possible; the simultaneous presentation and interaction of art, music and science. Unlike *Einstein on the Beach*, or *Doctor Atomic*, this collaboration doesn't just present the history of science; it references a contemporary and highly advanced theory of extra dimensional space. Not only that, we're going to do it in the Guggenheim Museum, built as the big top for abstract ideas, home base for the higher dimensional aspirations of Wassily Kandinsky and Hilla Rebay.

The key to this project is balancing Hector Parra's music, which took its formal cues from the ideas in Lisa's book *Warped Passages* and her libretto, which is a kind of science-romance and giving both a visual form that helps the audience to follow the concepts. In Paris we performed this piece at the Pompidou Center with subtitles, two singers articulating the story, an orchestra and a four-part stage divided between the world and the higher dimensional space. At the Guggenheim there will be one singer, whose voice will be completely distorted by the nautiloid curves of the museum and a PA system, so I'm going to have to break down the visual vocabulary of abstraction and directly connect it to the forces and geometry described in the Randall/Sundrum model.

Why are we doing it? For a hundred thousand years, humanity has wrestled with two urges; to both understand the universe and to narrate it. It is not enough to simply describe the universe; we have to make sense of it, to share what we learn by telling stories. The real story of the real universe is just too strange and interesting to allow the fantasists, denialists and know-nothings to tell a fake story instead.

PART 2

On Sunday I was in Dallas for the formal opening of the Dallas Cowboys Art Collection. Just about the time this project got started I began to try and imagine a cultural space where narrative and science could overlap, and where animated abstraction could offer a coherent visual space for these complex but fundamental ideas. I made this piece for Dallas during the same period. What, you might ask, can football and physics possibly have to do with each other?

Well, both involve the consequences of things hitting each other very hard. And both are representations of hierarchical rule based systems involving transitions through carefully divided spaces, much like myths. In some significant ways, complex ideas of multi-dimensional space have subtly supported every representation of the universe since human culture began. From the abyssal deeps of Mesopotamia to the void of El , with their sun-pulling chariots, rainbow bridges and crystal spheres, every culture has sought to describe a cosmic infrastructure, a hierarchy of spaces and agencies that contain and harness the fundamental forces of light, matter and entropy. The falls of Icarus and Seven Macaw are not just about pride, they are about gravity too. And in all these stories, movement through the secret forces and spaces of the universe defines the narratives. No matter their details or their various and peculiar heavens and hells, myths evolved to try and explain why things move around each other, why the Evenstar, whether you called her Astarte or Lucifer, rose at dawn and returned at dusk, to summon the night of the world. No wonder all mythology often seems like one vast overlapping story.

PART 3

Bringing science into the larger culture is not for the timid. Lisa Randall and I first met at an Einstein centennial conference in Berlin. I was filled with a mixture of traumatized pride and ecstatic dread at being the only artist invited to speak to the gathered Nobel laureates as they put forward the implications of Einstein's theories for the 21st century. In an audience of intellectual giants, Lisa stood out by virtue of her kindness and curiosity. She was about to publish her game-changing book that introduced a logical and plausible argument for the existence of a new, fifth, dimension, occupied by gravity. It turns out that space isn't the final frontier. In passing, in a kind and curious way, she expressed an interest in visual art along with her belief that an inaccurate image was worse than a thousand words. Her book had almost no pictures.

Despite this, we kept in touch and a few years later, I met with her and the composer Hector Parra in the gardens of the university in Barcelona to discuss their idea of presenting elements of what had become widely known as the Randall/Sundrum model, or five-dimensional warped geometry, as an opera. A warped space-time opera.

PART 4

Lisa's point about inaccurate images was perfectly reasonable. Can these kinds of advanced ideas really be visualized? Pure abstraction, as everyone who saw the Kandinsky show at the Guggenheim knows, began as a modern attempt to visualize similar higher orders of reality. But along the way, most artists became deeply confused about the difference between inner and outer orders of reality, possibly because the mathematics grew too hard. The journal of the theosophists was called *Lucifer* after all, not "Einstein." As high abstraction grappled with the counter-culture, it fatally mixed process with content, and confused the idea of a journey with a trip. Ironically this all happened just as the groundwork was being laid in physics for a new understanding of real higher dimensional orders. The language to describe a new form of physical reality amazing was developed prematurely and exiled in its youth.

But I'm convinced it's just waiting to be properly used, map and vessel both, ready for the real voyage. Not the journey towards some mythic self, beloved of Jung, Campbell and George Lucas. Not the trip into the body delivered by chemicals and Terence McKenna but the real final frontier. Not some transcendental mumbo-jumbo but the operating system of reality itself. Despite their complexity, easily distorted by new-age philosophy and episodes of *Lost*, these theories are potentially real. They are being subjected to real experiments at real places like CERN. Depending on what we find out, the whole idea of what the universe really is--and how human thought is part of it--may change profoundly in our lifetimes. Trying to tell the story of this moment, to grasp how we are dealing with the changing ideas of the universe, seems to me one of the most wonderful ways I, as a non-scientist, can enter the greatest story of human culture, at one of its greatest moments. Politically too, this is a vital moment for science. At a time when everything, from warfare to farming, is defined by whose information is the most believable, we must seize the opportunity to present science and experimental thinking as both challenge and inspiration.

I'm not sure if we'll be able to do all that on March 11, but we can try. At least the costumes will be great!

Hypermusic: Ascension will be presented by Works & Process at the Guggenheim on Thursday, March 11, 2010, at 6:30pm and 8:30pm. For tickets and more information please visit www.worksandprocess.org.

THE HUFFINGTON POST

MARCH 9, 2010

Matthew Ritchie

Get Matthew Ritchie's RSS Feed

Matthew Ritchie's installations of painting, wall drawings, light boxes, sculpture, and projections are investigations of the idea of information; explored through science, architecture, history and the dynamics of culture, defined equally by their range and their lyrical visual language. In 2001, *Time* magazine listed Ritchie as one of 100 innovators for the new millennium, for exploring "the unthinkable or the not-yet-thought." More omnivorous than omnipotent, encompassing everything from cutting-edge physics, ancient myth, neo-noir short stories and medieval alchemy to climate change, contemporary politics and economic theory, his installations fuse unique narrative forms with our constantly changing factual understanding of our universe. His most recent exhibitions in New York and London; 'Universal Adversary' and 'Ghost Operator', incorporated architectural interventions and chance based interactive digital projections to explore an alternate history of time.

His work has been shown in numerous exhibitions worldwide including the Whitney Biennial, the Sao Paulo Bienal and the Sydney Biennial. Solo shows include the Dallas Museum of Art; the Miami Museum of Contemporary Art; the Contemporary Arts Museum, Houston; the Massachusetts Museum of Contemporary Art, Portikus, Frankfurt and The Fabric Workshop and Museum. His work is in the collections of the Museum of Modern Art, the Guggenheim Museum, the Whitney Museum of American Art and numerous other institutions worldwide; including a permanent large-scale installation at MIT. An award winning permanent installation opened in December 2006 in a new Federal Courthouse in Eugene, Oregon. In 2009 Ritchie collaborated with Aaron and Bryce Dessner on a performance work at the Brooklyn Academy of Music. For more information please visit www.matthewritchie.com.

Headshot by Nancy Palmieri.

What opera and physics may have in common, more than anything else, is their tendency to make most people cringe or fall asleep. Can an avant-garde opera that compares self-exploration to the physics of multiple dimensions invigorate audiences? The creators of *Hypermusic Prologue, A Projective Opera in Seven Planes* seem to think so.

Baritone James Bobby and soprano Charlotte Ellett explore their relationship in extra dimensions.

Hector Parra learned about physics from his father and studied it until he was 18, when, as he says, "The piano took all of my energy." Now a composer, Parra has an unmistakable passion for opera's grand expression of human emotion. Yet he also rebels against traditional styles of composition. His latest work, called *Hypermusic Prologue, A Projective Opera in Seven Planes*, is so different from classical opera in subject matter and musical style that Parra says, "I don't know if it's an opera. It's an experience."

Hypermusic Prologue is about the physics of extra dimensions. It was inspired by the book *Warped Passages* by Lisa Randall, a professor of theoretical physics at Harvard University. Parra was so moved by the book that he asked Randall to write the libretto—something she had never done before. But she hopped on board and wrote a love story sprinkled with ideas from her physics research. Based on that story, Parra composed music that expresses frustration, desire, passion, and the experience of traveling into the fifth dimension.

The two characters, a soprano and a baritone, live on the same stage and interact day to day. But the soprano is searching for change and depth, and longs to explore higher dimensions. The baritone is satisfied with a static world, where he remains while his companion finally breaks through. To save the relationship, he must also make the leap and follow her.

At times, Parra's score is a collection of disjointed noises. It is rarely melodic, and segments often stop before any kind of recognizable song structure develops. The percussionist uses odd instruments such as broken glass in a crystal container, wood scratching on a chalkboard, and a makeshift instrument that sounds like a furiously scribbling pen. Yet this style works well to illustrate the characters' inner turmoil and rocky relationship.

The baritone's half of the stage, a static world of concrete objects and pale colors, is ruled by classical physics. On the other half, the soprano journeys through vibrant colors, warping shapes, and twisting scenery. Both sometimes express themselves in physics terms:

Text by Calla Cofield
Photography by Aymeric Warmé-Janville

Soprano: *The forces change*
[She moves across the stage. Different colors converge.]

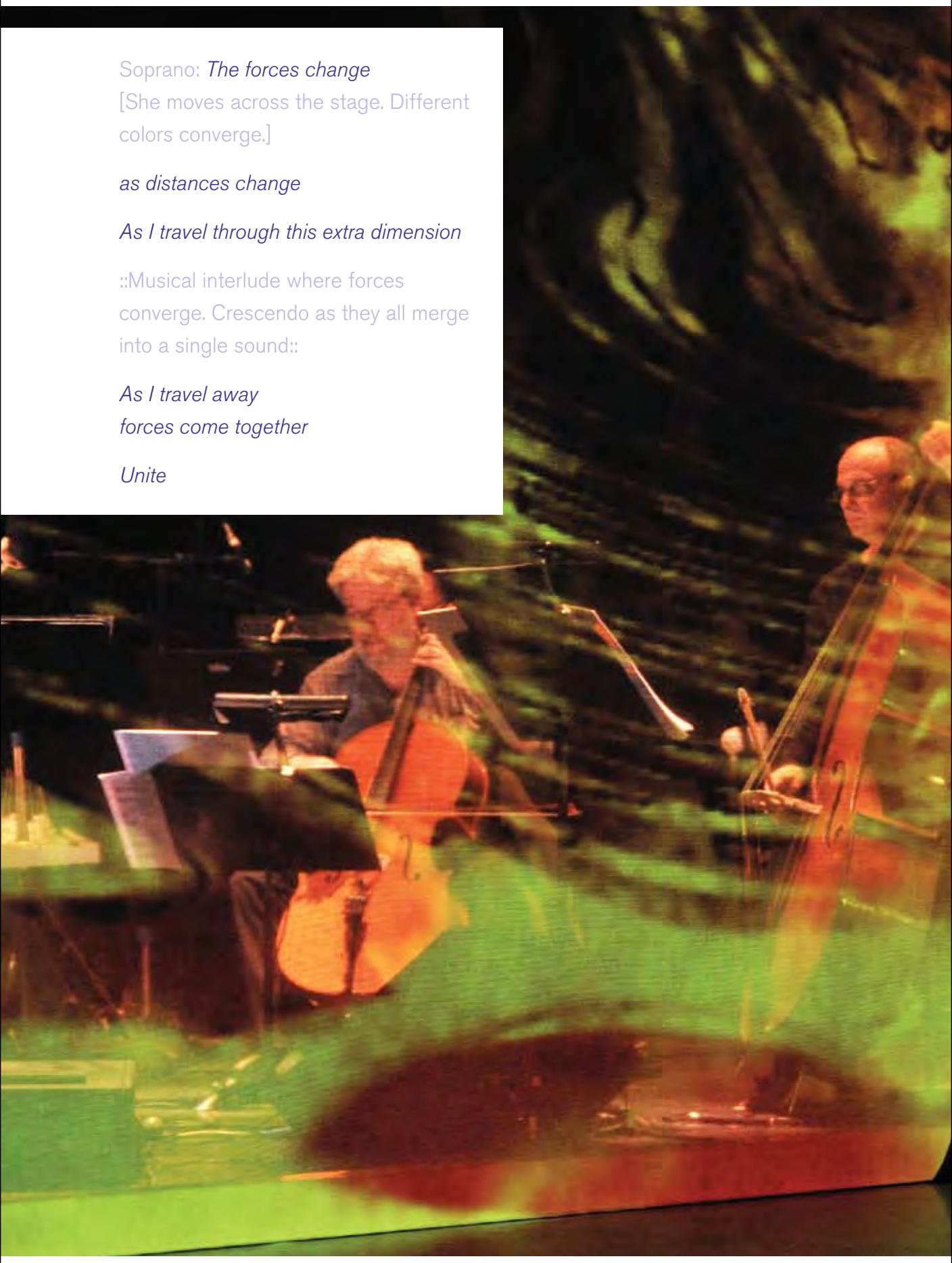
as distances change

As I travel through this extra dimension

::Musical interlude where forces converge. Crescendo as they all merge into a single sound::

As I travel away
forces come together

Unite



Rather than concealing the orchestra in a pit, set designer Matthew Ritchie put it on stage behind a screen that becomes translucent when the lighting is right.

Each of the two singers occupies half of the stage. The baritone lives in the static, concrete world of classical physics. The soprano's colorful, vibrant world reflects her longing for change and depth.

The set was designed by artist Matthew Ritchie, who is based in New York City and knew Randall from previous ventures into artistic representation of science. While the set incorporates physics ideas—distortion of the fabric of space-time, for instance, is reflected in spiraling images and tie-dye swirls of color—he says the visuals were not meant to be direct translations of those ideas. "I want to tread carefully because it's not science," Ritchie says. "It's a kind of emblem."

To create the illusion of traveling through a different dimension, Ritchie projected video onto a gray stage. This allowed rapid background changes and intricate, morphing color schemes. While the orchestras for most opera performances are concealed in a pit in front of the stage, the musicians in *Hypermusic* sit onstage behind a screen that becomes translucent when the lighting is right, so they appear in the same space as the singers.

With three creative minds completing most of the work for the opera from different locations—Parra in France, Randall in Massachusetts, and Ritchie in New York—*Hypermusic Prologue* could have been a train wreck of ideas; instead it manages to be harmonious, engaging, and adventurous.

The production debuted in Europe in the summer of 2009 and continues to tour. Excerpts from the opera are scheduled for performance January 11th and 12th at the Guggenheim Museum's Spiral Hall in New York City. Parra says he hopes to bring the full production to the United States in 2011.

The New York Times

November 13, 2009

MATTHEW RITCHIE

'Line Shot'

Andrea Rosen Gallery

525 West 24th Street, Chelsea

Through Nov. 21

Rorschach-like symmetry: "Weep in Light" (2009), a work by Matthew Ritchie, at the Andrea Rosen Gallery in Chelsea.

It is hard to know if Matthew Ritchie is a genuine polymath or a painter with too many ideas for his own good. The canvases in his latest New York gallery show are some of the best of his career. They have lost the small mythological figures, scribbled equations and sky-chart compositions that once signaled obscure narratives. Instead their cosmic implications inhabit semi-abstract forms and light-rinsed colors, suggesting wheeling planets, meteors, toxic atmospheres and sun showers. "Weep in Light" and "Initial Series" take things a little further with fantastical Rorschach compositions that could be elegantly monstrous heads or crystal formations.

Mr. Ritchie's narrative lives on in large-scale multimedia musical works like "The Long Count," which was part of the New Wave Festival at the Brooklyn Academy of Music last month. Synthesizing various American creation myths, it was written and directed by Mr. Ritchie with wonderful music by Aaron and Bryce Dessner. Mr. Ritchie also provided a three-screen video whose images suggest rushing landscapes and aerial views that form the work's highly effective backdrop.

A related video accompanied by music and text dominates one corner at Rosen. It is surrounded and bisected by lattice-like tangles of line drawn directly on the wall, so the rushing seems to be viewed through fancy goggles. Some of the ink-and-pencil drawings in a second gallery also have Rorschach-like symmetry, and despite the long text keeping them company are most interesting as studies for future paintings. When all is said and done it is still painting that would most benefit from Mr. Ritchie's undivided attention.

The least appealing element in this show is three-dimensional: the lattice motif recurs on perforated polygonal sculptures that pile up unpleasantly at the entrance and sprawl about the gallery. Made of cast aluminum covered with black epoxy, they look like nothing so much as hip wrought-iron garden furniture. **ROBERTA SMITH**

Matthew Ritchie

ANDREA ROSEN GALLERY
525 West 24th Street
October 23–December 2

ARTFORUM

View of "Matthew Ritchie," 2009. From left: Augur, 2008; Line Shot, 2009; Itself Surprised, 2009.

In this exhibition, Matthew Ritchie gives new meaning to William Blake's "eternity in an hour." Line Shot, 2009, the show's titular focus, is an animated opus that guides viewers on a dreamlike tour of space and time, meandering from creation to apocalypse, submicroscopic realms to infinite vastness (think Powers of Ten on acid)—in just more than sixty minutes.

Projected into the gallery's corner, with the image split across two walls, the video is matched by an oscillating, out-of-sync score by Aaron and Bryce Dessner of the National (who performed live with Ritchie's video work October 28–31 at the Brooklyn Academy of Music). Evading consistent rhythms and aligned harmonies, the sound track also uses overdubbed voices that reference topics as disparate as ancient creation myths and twin-brother baseball players. Though the latter seems a non sequitur alone, the lilting delivery of all the ideas in succession sets a unified, stream-of-consciousness tone within an overall theme of broken symmetry.

Digitally compiled but based on actual drawings, the swirling imagery in Line Shot maintains just enough of the artist's gesture to save it from slipping into too-slick territory. The sculptures on view, however—a sprawling modular piece titled The Dawn Line (Sun Dog Variant), 2009, part of a larger, structural music and film installation, The Morning Line, which was made with architects Aranda\Lasch and global engineering firm Arup AGU and premiered in Seville's 2008 biennial; plus a ceiling-suspended bronze cast resembling a meteorite or the head of an astronaut lost in space—do not grasp any such handholds in this gallery setting and recall instead props from a sci-fi movie set.

A series of large paintings provide the sense of multidimensionality (formally and metaphorically) that the sculptures lack. These are composed of peculiar forms—huge gothic architectures of the future, perhaps, or curled, subatomic dimensions—where splattered swaths of bright paint stream like light beams. Brushstrokes are visible, and splatters clearly come from the flick of the artist's wrist, revealing a dynamic human involvement in what could otherwise be construed as aloof, scientific speculation. Works such as these, which evince Ritchie's aesthetic alongside his zeal for the more mind-boggling concepts of physics, elegantly bridge a rift in the art-science continuum.

— Emily Weiner

SPIN

The National and Breeders Perform Together

Hero twins is the theme of a powerful performance of a Mayan creation myth from twin Dessners and Deals in Brooklyn.

By John S.W. MacDonald 10.29.09 10:21 AM

Thursday night, six indie-rock luminaries—including two sets of twins—debuted their unique collaboration with renowned visual artist Matthew Ritchie at the Brooklyn Academy of Music. The Long Count, a 70-minute multi-media piece, featured the guitar work of Bryce and Aaron Dessner (both from The National), and the vocal talents of Kim and Kelley Deal, of Pixies and Breeders fame, My Brightest Diamond's Shara Worden, and Matt Berninger, also of The National -- along with a 12-piece orchestra.

The Long Count is inspired by Popol Vuh, the Mayan creation myth featuring "hero twins," and, improbably, the Cincinnati Reds—specifically the team, known as "The Big Red Machine," that won back-to-back World Series in '75 and '76. (The Dessner brothers, both from Cincinnati, are big fans.)

The Dessners and Deals were BAM's hero twins last night: Bryce and Aaron wrote the music for The Long Count, while Kim and Kelley provided the lyrics and most of the vocals. Ritchie set the scene with a riot of hallucinatory digital video projected on to three giant screens that enveloped the musicians on stage.

The Dessners, sitting at opposite ends of the stage, were also the evening's de facto conductors—though instead of batons, they wielded guitars. The orchestra answered to the brothers every pluck and strum.

Sometimes the music seemed perfectly recognizable: The brooding pop of "Tests" (The Long Count consisted of 13 songs strung seamlessly together), which featured Berninger behind the mic, would fit easily on the next National record. Other times, when the string section wailed away and the Dessners savaged their guitars, the brutal apocalyptica of Godspeed You! Black Emperor seemed the best comparison.

Amid such otherworldly (or rather pre-worldly) surroundings, it was nice to hear Kim and Kelley's familiar voices—each distorted, "Cannonball"-style—cut through the madness.

But it may have been Shara Worden singing that stole the show. Breathy, ethereal, unpredictable, Worden's voice was the perfect fit for Ritchie's mad tale of creation and resurrection. On the haunting "Ninth," Worden took on the guise of Venus as she welcomed the dawning of the new world: "Simple words brought it forth like mist," she sang, while overhead, Ritchie's projections seemed to form whole trees out of roots and earth. And later, dressed as the evil deity Macaw, Worden declared: "I am the sun and the moon for those who are born."

At least as far as their wide-eyed audience was concerned, Worden and the rest of Ritchie's crew certainly deserved their night of worship.

SEED

A NEW BREED OF ARCHITECTURAL OBJECTS, INSPIRED BY THEORETICAL SCIENCE, IS CHANGING HOW WE THINK ABOUT BUILDING AND WHAT COUNTS AS ART

Building Without Walls
Artifacts / by **Elizabeth Cline** / July 9, 2009

Matthew Ritchie, Aranda/Lasch and Daniel Bosia (Arup AGU) An assembly of modules from a previous installation, "The Evening Line, 2008," made of aluminium alloy and black epoxy with aggregate coating; 300 x 600 x 320 cm (118 x 236 x 126 in)

"Transitory Objects," the latest exhibit at Vienna's influential Thyssen-Bornemisza Art Contemporary gallery, features some of the most innovative and splendidly unconventional forms coming out of the architectural world today, including works from Matthew Ritchie, Neri Oxman, Alisa Andrasek, François Roche, Greg Lynn, and Hernan Diaz Alonso. To have these mesmerizing structures together in one exhibit is remarkable in itself, but to have them positioned alongside works of contemporary art, as this exhibit has done, raises a provocative point about how boundaries have collapsed between architectural objects, conceptual art, and theoretical science. The exhibit aims to look at those architectural works that "have achieved an appearance of being autonomous forms," says curator Daniela Zyman, suggesting that these works are meaningful outside of a specific context or place.

Ritchie, Oxman, Roche, and their colleagues split deeply from the finite, permanent, and utilitarian tradition of architecture. Not to say their end products are not useful or habitable. In fact, their structures are arguably better suited to the constantly morphing, impermanent, and aesthetically driven needs and desires of modern society. Rather than working with an end product or useful context in mind, they focus on the process of producing a structure that follows certain laws or principles. These resulting objects rise from computational models and algorithms whose inputs are being drawn from or at least inspired by some of the most boundary-pushing and abstract ideas in science, like quantum physics or the multiverse theory.

"Transitory Objects" includes two elegant models from Alisa Andrasek/BIOTHING that are part of a design project called "Mesonic Emission," a reference to mesons, subatomic particles composed of quarks. These designs are made from an algorithm that is based on behaviors of electro-magnetic fields and is sophisticated enough to respond to the shape of the environment and to "grow" around obstructing objects. [For details about the algorithm, click here].

Matthew Ritchie's two pieces in the exhibit are based on cosmologists Paul Steinhardt and Neil Turok's cyclic universe theory. Speaking about his modular architecture at Seed's Design Series last year, Ritchie told the audience, "I want to make a physicalized model of everything in the universe…. [I]t will be a superposed structure in the sense that it has multiple options contained within it at any given time and that it can be rebuilt." The resulting black-aluminum modules are assembled using the logic of language and form a web-like tangle that can be reassembled in an infinite number of ways. For "Transitory Objects" close to 100 of the pieces have been assembled for an entirely unique 10' x 20' x 10' structure.

R&Sie(n)/François Roche, Stéphanie Lavaux, and their design team's coral-like work "'I've heard about,' a flat, fat, growing urban experiment" is displayed as a 3D print model of random and contingent secretions of fusing deposition modeling. It appears, like most of the architectural pieces featured in the exhibit, permanently unfinished, a reference to letting go of determinist ideas of structural planning—suggesting that a city's infrastructure should always be adapting. Neri Oxman's [Watch the Revolutionary Minds video] design group Materialecology studies the physics of building materials and offers designs that correspond with and react to their environment. Here, she has provided a scale reproduction of "Raycounting," the ethereal vase-like structure displayed in MOMA's "Design and the Elastic Mind" exhibit last year. The algorithm behind the 3D double-curvature design registers the intensity and orientation of light rays and assigns them to geometric principles.

This new culture of architecture, which Thyssen-Bornemisza has boldly funded and fostered since opening in 2002, creates structures that are intentionally fragmented and incomplete with no clear end point. "The architect has to decide at which point the algorithm stops," Zyman says. "At which point does the artist/architect decide this is the fundamental moment of maturation, this is the moment where the form becomes the outcome of my vision." The architectural objects in "Transitory Forms" are like quanta or subatomic particles popping in and out of existence or a universe being born again and again. They are open, flexible systems that can be moved or modified with changes in a society's needs or in the environment, and in that sense they are ecological, systems-based, and socially responsible. What's more, these architectural objects are art in ways that architecture perhaps has never been before—if we accept that art is partly defined as an object able to stand alone and whose meaning or purpose is open to infinite interpretation.

SEED

IN HYPERMUSIC PROLOGUE, PHYSICIST LISA RANDALL RE-IMAGINES HER EXTRA-DIMENSIONAL THEORIES OF THE UNIVERSE AS OPERA

Opera in the Fifth Dimension
Artifacts / by **Elizabeth Cline** / August 10, 2009

Since writing a bestselling book on her fascinating and complex extra-dimensional theory of the universe, Harvard physicist Lisa Randall has been busy re-imagining it as an appropriately cerebral art form—opera. After three years of development, Hypermusic Prologue: A Projective Opera in Seven Planes premiered at Paris's prestigious Centre Pompidou in June and, like Randall's book Warped Passages: Unraveling the Mysteries of the Universe's Hidden Dimensions [Buy], it manages to translate the impenetrable world of theoretical physics into something that not only appeals to scientists, but to anyone willing to look beyond the obvious for clues about the nature of reality.

Spanish composer Hèctor Parra, 33, first saw artistic potential in Randall's ideas after reading Warped Passages, which uses plain language to describe how hidden dimensions may explain some of physics' greatest quandaries—such as why the gravitational force is so weak. When the book was released in Europe in 2006, Parra met up with Randall in Berlin to ask her to write a libretto based on her work. Randall admits she was "a little uncomfortable focusing so much on the physics," she says, because she didn't want to alienate the audience. "But I did see that the exploration of an extra dimension could be very nice as a metaphor. It seemed exciting."

The soprano questions the nature of reality, and the baritone (James Bobby) engages in a fast and sharp argument with her about a universe that "lies outside our perceptions."Audio courtesy of Hèctor Parra Photographs © Aymeric Warme-Janville

As its title suggests, Hypermusic Prologue doesn't simply make art out of hard-to-grasp scientific theory, it inverts and renovates the genre of opera with an experimental score, a two-person cast, and minimalist and abstract stage design. Randall asked artist Matthew Ritchie [Video], whose sculptures often reference inflationary universe theory, to design the sets. Ritchie also developed a series of video projections for the performance: The industrial imagery projected behind baritone James Bobby represents the lower four-dimensional universe while the soprano, Charlotte Ellett, is often surrounded by projections of wildly colored celestial shapes, suggesting the expanded reality of a fifth dimension.

Parra, who composed the score, is the son of a physicist and his prior works have been influenced by particle physics. For Hypermusic Prologue, he uses an array of intricately thought-out sounds and instrumentations to communicate warped spacetime, as well as to signal changes in energy, mass, time, and gravity. As the soprano approaches a gravitationally strong part of the of the universe, for example, her voice is electronically treated to make her phrases shorter in mathematically precise increments and the orchestra matches this shorter phrasing. As she enters a hidden fifth dimension, her voice gets louder and the music gets sonically richer, while Bobby's voice—stuck in the lower-dimensional universe—remains digitally untreated and becomes softer and thinner.

As for Randall's libretto, it does not shy away from referencing how spacetime or gravity is altered in these hidden dimensions, but her ideas always manage to operate metaphorically. When the soprano sings, "The scale of my experience is altered," this is partly a literal reference to the way physical scaling changes in Randall's hidden dimensions. But Ellet is singing to her close-minded partner, baritone James Bobby, who keeps arguing the value of Newtonian physics until he finally has his own brief encounter with her unseen world. In this way, he becomes more open-minded and his perspective is altered.

Over the course of an hour, the soprano and baritone both experience a paradigm shift, and talk excitedly of "another view" that's "hidden yet true." In the final scenes, they are imbued with the sense of fearless exploration that drives both scientists and artists, amidst swirling hexagons of colors, digitally altered sounds, and ascending jittery strings. "It has a little bit to do with why I do science and about why I think there's more out there," Randall says of Hypermusic Prologue. "I've met a lot of other people in creative fields, and it is interesting to see how the same things drive them: The sense that there's something missing, that there's more to be done, that there's more to be known."

Hypermusic Prologue will move to Barcelona in November and from there will move to Luxembourg and Brussels. In January, New York's Guggenheim museum will host a special adaptation of of the opera as the finale of their "Universe Resounds: Art & Synesthesia" symposium.

New York ENTERTAINMENT

HIGHBROW

Stephanie Seymour gets **$270,000 a month in alimony** to maintain her "lifestyle," which is about the same amount her ex, Peter Brant, pays a month to **maintain a farm for his polo ponies**.

Accused Ponzi schemer Allen Stanford has his knighthood **revoked by Antigua**. Too little, too late, Antigua.

An American wins the NYC marathon!

Complaints that the American marathon winner **isn't American enough** because he wasn't born here. Isn't that the point of America?

A **statue of Bill Clinton** is unveiled in Kosovo by grateful Koso ... Kosovite ... Kosovars.

Sotheby's of London sells a collection of **racy letters written by Lord Byron**.

Daylight savings ends: It's now **suicide-inducingly dark** at 3 p.m. because of, like, something about farming, or wartime rationing, or ... can we just scrap this thing?

The **brothers from the National and the sisters from the Breeders** put on a song cycle about longing, wheat, headdresses, and baseball at BAM.

One of the producers of *The Matrix* wants to make a $150 million biopic, sure to be historically accurate and sensitive, **about the Prophet Muhammad**.

David Gregory's transparent attempts to demonstrate that he's tough on liberals by inanely hectoring Geithner et al. on *Meet the Press*.

Kate Winslet **wins a settlement** against the *Daily Mail* for having suggested she works out more than she claims.

Look Both Ways, Debbie Millman's book of illustrated essays on design.

DESPICABLE

Blackface crops up in French *Vogue*, *V*, and on *America's Next Top Model*.

T-Mobile is trying to promote a trend called **"metrotextuality,"** and it actually got the *Times* to write about it.

Hyperlocal-news provider **DNAinfo.com**.

Tracy Morgan's emotional appearance on "Fresh Air" with Terry Gross.

BRILLIANT

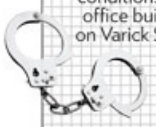
City Council candidate Joe Nardiello distributed **fliers that look like parking tickets**.

Our Front Pages, by *The Onion*, a selection of their best covers going back to 1988.

U2, Mick Jagger, and—really!—Fergie nail **"Gimme Shelter"** at the Rock and Roll Hall of Fame concert.

Fox News "reporter" **John Stossel** speaks against health-care reform at a conservative rally.

At least 80 illegal immigrants are awaiting deportation in shocking conditions in an office building on Varick Street.



Manipulative Sony execs extend what was allegedly going to be a limited, two-week run of the Michael Jackson doc *This Is It*.

Toronto punk-rockers **Fucked Up** play their entire awesome 2008 album *The Chemistry of Common Life* at Brooklyn Masonic Temple with a hand from Andrew W.K. and Vivian Girls.

Southland gets a **second lease on life** on TNT.

Julianna Margulies's gets-better-every-week performance in *The Good Wife*

A Chicago judge commuted a community-service sentence **in exchange for jerk chicken**. (The judge says it was a joke.)

Five-hour-long lines for the Tavern on the Green Halloween party.

Swine-flu panic causes its first case of actual violence (hair-pulling catfight) on the subway.

Jessica Simpson blasts *Melrose Place* for "crap" writing.

Mexican chain Zengo plans to invade New York with **500 brands of tequila**, topping Dos Caminos's 300.

The **light-up cow's head** on top of Diner in Williamsburg.

The Big Apple Circus's Picasso Jr. can **juggle Ping-Pong balls with his tongue**: Hey, ladies!

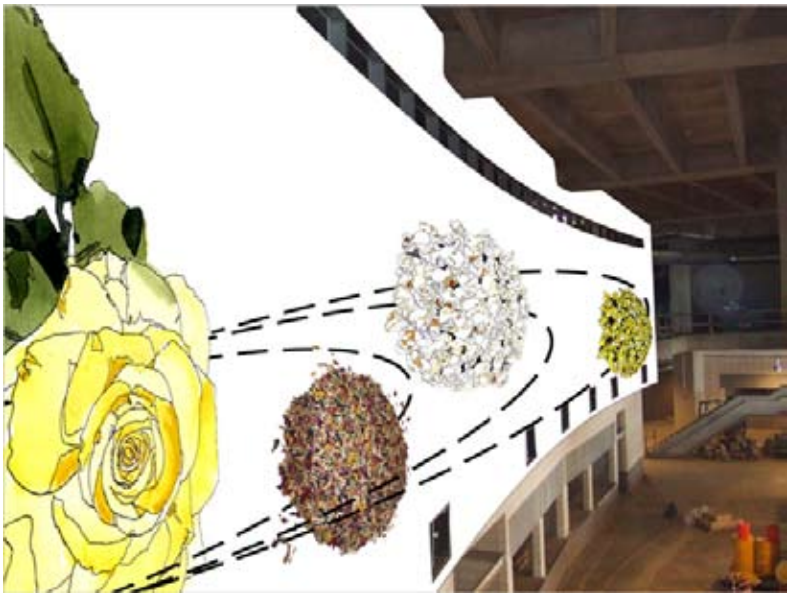
LOWBROW

The New York Times

INSIDE ART

Art Makes a Play Off the Gridiron

By CAROL VOGEL
Published: August 6, 2009



Art and football may not be obvious bedfellows, but all those sports fans on their way to grab a beer at the new $1.15 billion Cowboys Stadium in Arlington, Tex., will get an unexpected eyeful: at the top of a staircase is a monumental painting that spells “WIN” in giant letters; a panel above a concession stand depicts a solar system in which the planets take the form of balls of popcorn, clovers and leaves orbiting around a yellow rose.

These are just two of 14 site-specific works created by big-name artists — like Olafur Eliasson, Franz Ackermann, Mel Bochner, Daniel Buren, Matthew Ritchie, Dave Muller and Lawrence Weiner — that are being installed throughout the stadium. The team’s owner, Jerry Jones, and his wife, Gene, say it is perhaps a first for any sports arena in the United States.

The Dallas Cowboys Art Program is not a one-shot initiative, but is to continue with more installations and commissions. The first works are being installed this week in locations with the highest pedestrian traffic, including four of the entrances, two staircases and two pedestrian ramps as well as the main concession areas.

“This is a fabulous cutting-edge building, and we thought it needed art,” Ms. Jones said. Although not a collector, she is an art lover who, along with her husband; their daughter, Charlotte Anderson; and a niece, Melissa Meeks, became involved in the project. But not being art professionals, they turned to a group of people who are. Michael Auping, chief curator of the Modern Art Museum of Fort Worth; Charles Wylie, the contemporary art curator at the Dallas Museum of Art; and two Texas collectors, Howard Rachofsky and Gayle Stoffel, make up an art council overseeing the program. The Joneses also brought in Mary Zlot, a San Francisco art adviser.

“There wasn’t a great demand for a 65-year-old quarterback,” Mr. Rachofsky said when asked why he agreed to become involved with the art program. He said that when he was first approached by the Jones family, he quickly realized that “for artists to have work seen by millions of people a year is pretty exciting.”

ARTnews
OCTOBER 2008

reviews: international

Matthew Ritchie

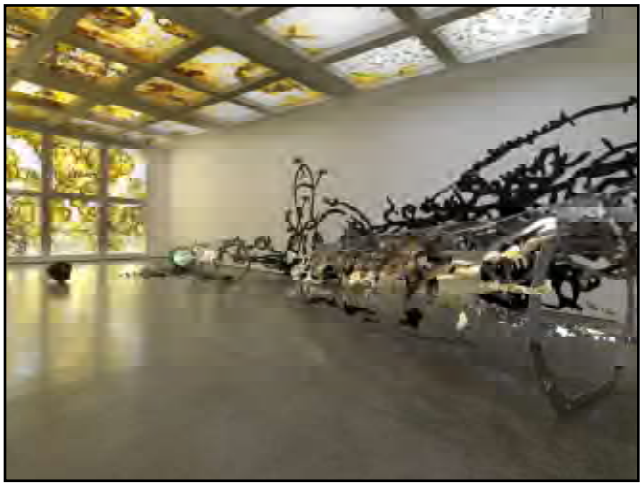
White Cube
London

Matthew Ritchie specializes in proliferation, setting medium against medium and deploying one idea to catch another. Filling the gallery with a variety of means and ends, he established a sense of laboratory conditions. His aim, he says, is "opening things up in an array of connecting things," an aspiration that manifested itself here in film, painting, drawing, defacement, and sculptural sprawl as well as in a giant light box that covered one wall and ceiling. In the end, however, his "continuum of ideas" may be stronger on effort than on credibility.

The disparate features served well enough individually. There were elements of sea and sky looming overhead and, underneath, squirming across the floor, a wrecked set of metallic parts named *The Holstein Manifesto* (2008). If that smacks of Matthew Barney blarney or Polke graphic initiatives, it is probably intentional, for Ritchie obviously thrives on quotation from the archives. In the upper gallery was a scattering of black plastic tarot cards that visitors could feed into a scorched wooden head in order to elicit news of their fate. Drawings were also provided, giving the viewer inklings as to what the artist had in mind.

Primarily Ritchie is an assembler of projections. His intention is to lay on a wealth of stimuli with a millennial entropic tinge. Given five weeks to refashion the blank interior of White Cube, the artist cast himself as a latter-day Pros-day Prospero, conjuring up images of breakdown and drowning and viral rapacity. Forget global: this is the stuff of cosmic speculation.

But such elaboration can only thrive in places of architect-designed seclusion from the outside world. Ritchie's voluminous bits and pieces amounted to a random trip through random parts, with matching musical accompaniment.
- William Feaver



Matthew Ritchie, The Holstein Manifesto, 2008, polished aluminum, tar, anodized brass, spent bullet shells, tarot cards, digital animation, Perspex, mirrored Perspex, and vinyl, dimensions variable. White Cube

VISIONARIES

the shape-shifter
matthew ritchie

remember the old joke about what the Zen Buddhist said to the hot dog vendor? if you answered, "Make me one with everything," you've already captured the thinking behind Matthew Ritchie's newest project, which is modeled after nothing les than the laws of the universe and realized by a motley mix of collaborators-theoretical physicists, tech-whiz engineers and expiramental musicians. "It has hubris written all over it, doesn't it?" the 44 year old artist says with a disarming, self effacing chuckle as he describes the dimension-blasting structure , The Morning Line, opening in October at the Seville Biennial.

The London-born Ritchie knows a thing or two about lines. As a painter showing regularly since 1995 in ew York (where he lives with his wife and young son), he became known for applying sinewy ropes of color that slink their way across gallery walls and coil like sleeping cobras on floors. In The Morning Line, Ritchie goes well beyond the 2-D world of painting. Commissioned to create a pavilion for the Seville show by Thyssen Bornemisza Art Contemporary in Vienna, Ritchie enlisted the design team of Aranda/ Lasch (see our June/July 2008 issue) and engineers from the firm Arup, who are known for mining computational models and molecular structure. Walking through the open-ended aluminum structure-"part monument, part ruin," in Ritchie's words-you become aware of a mutating soundtrack (provided by the likes of Sonic Youth's Lee Ranaldo and wunderkind composer ico Muhly) and the constantly changing dimensions of what you're seeing: "What appear to be volumes become lines. I imagine it's what it's like to walk into a drawing: It's not quite clear if something's real or not." You might find the math and science fuzzy (Heisenberg uncertainty principle, anyone?), but you don't have to be Stephen Hawking to relish the result.
-ERIC BANKS

OFF THE WALL

Ritchie, whose new three-dimensional project brings together design, engineering, and music, in his New York Studio with his son, Isen.

Read Ritchie's responses to our Visionaries Questionnaire at **mensvogue.com/go/visionaries**

MODERN PAINTERS
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MATTHEW RITCHIE

WHITE CUBE, LONDON

This London-born, New York-based artist is interested in our burgeoning systems and structures of information, and his works in various media delineate them in weblike forms that swoop and swirl, suggesting universes of ever-expanding proportions. Later this summer, his newest public work-"anti-pavilion"-will be unveiled in London's Hoxton Square. In the meantime, his apocalyptic solo, titled "Ghost Operator," will recast White Cube as a ruined metroplis, submerged under water. Three new large-scale paintings, a decal wall drawing, and a spectral light-box installation will contribute to this conceit, as will two fortune-telling machines that interpret Tarot cards covering the floor to spell out philosophical prophecies-inherently dark visions, one supposes-for gallery visitors who are game.

MAY 21-JUN. 21, 2008, WHITECUBE.COM

MATTHEW RITCHIE, FORGE, 2007. Oil and marker on linen, 83 3/16 x 99 1/16 in. Courtesy Jay JOpling/White Cube, Londn, and Andrea Rosen Gallery, New York ©the artist

It's easy to see why Matthew Ritchie ended up on the list of artists commissioned to create works for "In the Beginning: Artists Respond to Genesis," the inaugural exhibit at the new Contemporary Jewish Museum (CJM). The show's jumping-off point—the biblical story of creation—inhabits territory the artist has long explored in his installations, which incorporate painting, wall drawings, projections and intricate, room-sized structures based on computer models. (The fact that the Manhattan-based artist, 44, was included in Time magazine's 2001 list of 100 innovators of the new millennium and exhibited in the Whitney, Sydney and São Paolo biennales couldn't have hurt either.) His piece at the CJM, aptly titled "Day One," features digital animation equipped with sound that changes in response to the viewer's movement, and is structured to be a boundary-free exploration of the nature of information itself. If that makes your head hurt, fear not: He's happy to break it down for you.

CJM asks for a piece exploring Genesis. Where do you start?

You can't just make something up, like, "Here's a cardboard box full of rocks," and say, "Here—this is Genesis." I wanted to engage properly. The museum sent us to meet with some rabbis at the Jewish Theological Seminary, and a biblical scholar there said, "There are only two ideas in the Bible: cosmos and covenants." And I said, "Great, because I only have two ideas too." My work describes the related ideas of creation and information. [In Genesis,] God appears as a kind of information—there's a very natural overlap there.

How does your art relate to the show's more traditional works?

The medium may change, but the essential stories remain. The great flood turns into Waterworld, the great plague turns into I Am Legend. These are the stories of our civilization. They speak to some very profound need in us, and have for 5,000 years.

How do you take on a theme as broad as information and the way it's processed?

There's all this information about every single thing, from movie stars' driver's licenses to poison in drinking water; there is more information in one copy of The New York Times than an educated medieval person knew in his lifetime. Information becomes a currency. It's as vital to us as water and air, and as controlling of our lives. Processing all this is like trying to read the library every day, so you need a point of view; you have to build yourself a model of the universe that prioritizes information and turns it back into something legible. You have to conceive of yourself as a little ecosystem of information.

Do people call your work "meta"?

I'm not sure what that word even means. I know it was a popular word several years ago. Interestingly, Metatron was the angel of the book, the recording angel who keeps track of everything—like Santa Claus's rather unpleasant older brother, something larger than everything else. He was always aware that any story, no matter how big, is only part of the next story.

art on paper

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AN AESTHETICS OF PHYSICS

Talking with Matthew Ritchie about drawing and the inversion of consciousness

by Bridget Goodbody

Matthew Ritchie is an artist who thinks like a physicist. You're just as likely to get him talking about quantum mechanics as, say, Jackson Pollock, an artist with whom he is sometimes compared. The conversation is infinitely more complex when physics dominates, as Ritchie's artistic goal is to chart new territories of representation-which can be as difficult to conceptualize as outer space itself-in order to develop what could be called an aesthetics of physics.

Ritchie began his artistic investigation of the cosmos in the mid-1990s. On a gridded piece of paper, he listed all the tools he had at his disposal to understand the world among them science, sex, and solitude. This two-dimensional map quickly transformed into a creation story that charted the origin and history of the universe from the big bang to the present and soon thereafter morphed into large and often interactive, site-specific installations. One of his most recent works covers the roof and upper hallways of a federal courthouse in Oregon designed by the Pritzker Prize-winning architect Thom Mayne.

Physicists have long struggled, to little avail, to visually represent their theories in an accessible, transparent manner. How, for example, to represent quantum physics' concept of the space-time continuum-the idea that everything can be everywhere at any time? Or the tenets of string theory physics' latest, yet unproven, concept about the origin and evolution of the universe, which asserts that the cosmos consists of invisible loops of energy? For Ritchie, who sees the whole universe as one big experiment, art presents an equally strange and abstract space of investigation.

Installation view: "The Universal Adversary," Andrea Rosen Gallery, New York, 2006. All images ©Matthew Ritchie, courtesy Andrea Rosen Gallery

Bridget: I'm here to ask you about drawing, but it seems like a strange question to ask an artist whose goal is to explode traditional categories of art.

Matthew: Like Mondrian, Kandinsky, and Rauschenberg, I'm interested in creating my own self-generated meaning system. To me, a drawing is a small version of a painting, which is a small version of an installation, which is a small version of everything else. My work is explicitly involved with the notion that all drawing, all painting, and all sculpture are about lots of things.

Well, there certainly are a lot of things happening in your work, and you've got a big story behind it, which is not so easily perceived by viewers not intimately familiar with it.

Trying to make my artistic investigation legible from a mark or a drip strikes me as irrelevant. Which is more important: the fact that we can understand a wave particle or the momentum of light or whether or not we see the world? When I make a line with a frictional edge that looks kind