



WONDER

50
YEARS
RISD
GLASS

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Hotnights event with Demetrius Oliver, 2015

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*Published in celebration of the 50th anniversary of RISD Glass,
this book brings together contributions from scholars, cultural critics, and artists
who have enriched the dialogue in this unique environment*



A CONVERSATION WITH LAWRENCE WESCHLER BY RACHEL BERWICK AND JOCELYNE PRINCE



Ximo Xiao, *Gaze*, 2015
Video installation

RACHEL BERWICK The impetus for this conversation is RISD's celebration of fifty years of glass. For that, we decided to create a book with Denise Markonish that would focus on five themes that have resonated with the department over the years. Wonder is the overarching theme, followed by alchemy, nature, science, the invisible/unseen. For this book, we asked artists, writers, and curators who have had connections to our program to contribute projects or essays to the book related to those themes. We originally had you in mind to write about wonder, but then, through our conversations, we realized that you were interested in all of the themes — which seems fitting, considering your work on convergences. So we thought, why not have something in the book that covers it all? And a conversation with you seemed the perfect vehicle.

LAWRENCE WESCHLER Actually, I was thinking about glass this morning, and it occurred to me that in some ways — and this was certainly my experience when I was at RISD recently and got to walk through the hot shop and studios — glass is uniquely tied to the eye itself. That of all the media (architecture, painting, and so on), glass affords the most uncanny replication of the processes of vision. This literally happens in terms of refraction or light diffusion. For example, looking at that glass of water over there reminds us of the ways in which many of the things that happen in vision are being replicated, and I think that must have something to do with accounting for the remarkably seductive quality of glass. What we love in glass is its limpidity, clarity, and lucidity. Light does the same things in the eyeball that it does in glass, and I believe that we just sense that.

RB Essentially this shows how glass is a material of wonder. It's imbued within its own physical properties, but it is also something that exists in nature: glass sponges, fulgurites, Venus flower baskets, and obsidian.

JOCELYNE PRINCE Tektites too, and even something as crazy as Trinitite, which is the result of massive atomic energy hitting the sand and creating glass.

RB And, you know, the qualities of glass also allow us to view nature and magnify it. This lets us see into nature in ways we couldn't before, through telescopes, microscopes, etc., so materially it really does become a means of discovering wonder.

LW But what is interesting is that while glass can be used as a tool to evoke wonder, it is in and of itself wondrous in the way that vision is wondrous. See those beautiful

glass balls over there, what are they? They're eyeballs! Or might as well be. And when you're watching someone working with molten glass, and they're stretching and pulling it, I think there is a quality of recognition to the experience. It resolutely has to do with vision; seeing glass doesn't immediately appeal to our sense of hearing or touch (though both can come later), but it really evokes the feel of vision, a sense that just courses through it.

JP Also, when I think of these properties, I am reminded of the molecular structure of glass, for glass is an amorphous solid, a hyper-cooled liquid, and those qualities, too, relate to the body. Glass exists in between states, which relates it strongly to both the body and the wondrous.

LW And another thing, though not all glass is done this way, is the way in which the drawing of form onto transparency provokes a very powerfully magic kind of feeling. It's not even wondrous exactly, it seems more like magic. We live in a world of glass, so much so that we could easily become inured to it, but I suspect that the first few weeks of school must just be a continual process of reminding people how simply amazing this stuff is.

JP Absolutely...it's this gooey weird stuff that can take shape. Students, at least the undergrads, experience molten glass for the first time. How many people actually have direct experience with molten glass? Of course we see the stuff everywhere, it is omnipresent; we look through it all the time, with windows and screens, we drink from it, and that is our daily relationship with it. But then that shifts when you can manipulate it firsthand. And I think that is the first moment when people just become awestruck with it. Add to that the fact that you can use it in optics to make lenses or you can blow into it.

LW That business about blowing reminds me of that fantastic book by R. B. Onians, *The Origins of European Thought: About the Body, the Mind, the Soul, the World, Time and Fate*. He was a philologist and a bit of a nut! The book was first published around 1950, and he was looking at early Greek and Sanskrit to figure out the origins of human thought on the mind and all the things it does, but especially with regard to the body. I reference him towards the end of my book, *Mr. Wilson's Cabinet of Wonder*. He's really the guy who figures out that if you look at pre-Hippocratic, pre-Socratic Greek, it becomes obvious that the Greeks must have thought the fluid around the brain was the same as spinal fluid, which in turn was semen, or vaginal fluids. So in language we get "cerebral" and "cereal," we get "genes," "genetic," and "genius," and then you get "antlers," which reference getting horny. Freud simply ends up unpacking what's already in this language into his whole phenomenology of sublimation and the horny. But there's another part of the book that is more pertinent here, and that is the linguistics around respiration and inspiration.



Cooper O'Brien
Maestro, 2012
 Tossed water, blowpipe
Untitled, 2010
 Poured glass, plaster



Katie Stone, *Untitled (Hand Shell)*, 2012
Mold-blown and cold-worked glass

For Onians, it's clear that the seat of consciousness among those early peoples wasn't in the head but in the lungs and the chest, and that they believed that perception, and vision in particular, was a two-way thing—like breathing in and breathing out. The behaviorist believes that stuff comes in and we experience it on a blank slate, but Onians talks about the ancient Greek understanding that the world comes in through the pupil, these little black dots, these glass balls; but that then, at the same time and through the same glass balls, our gaze goes out. This process of two-way reciprocal experiencing is seen to be lodged in the chest and in turn tied to respiration, inspiration, breathing. It's fun, in this context, to think about the way kids blowing glass is like breathing an eyeball into being, in an almost primordial sense. Things aren't just magic because they stun us with something new, they're sometimes magic because they call out to something that's already there. They reawaken and re-enchant the world. Glass must be a fun place to do that.

- RB** It absolutely is! At RISD, we think a lot about the embodied properties of glass and how we can tap into these properties of material and the inherent meaning within them. Also, when thinking about the processes of glass and the idea of skill-building, there's a conundrum or conflict that exists because glass has so many distinct processes and requires so much skill that it builds in the necessity for muscle memory. So, at the same time that we are teaching students to maintain a sense of wonder and an openness to unknowing or not knowing, we still have to keep in mind skill building. It's a tricky juxtaposition.
- LW** It's what fifteenth-century philosopher Nicholas of Cusa dubbed "Learned Ignorance." I talked about this with your graduate students. Cusa posits that it is not that you don't know, it's that you *really* don't know. Not knowing is lazy, but really not knowing opens onto a heightened state of being.
- JP** Exactly, and I think asking questions and talking through not knowing taps into the primal quality of glass: not only in its finished form, but also in the shop, where there's a real kind of physicality.
- LW** And that takes us to alchemy...
- JP** You are so on target here. I believe that experimentation, that not knowing, that asking questions, is what maintains our interest in these topics. We ask these questions through material, and it doesn't matter if we reach the answers. Instead, it just leads to students asking more and more interesting questions. In the end, there's no sense of knowing the answer and that in itself is fascinating. It also leads to a lot of experimentation, which happens in the history of both glass and alchemy. For instance, in the 1450s Angelo Barovier was burning plants and studying with an alchemist to develop clear glass, because before that it had always been green or blue

because of the sand. Egyptian glass was always opaque. But at the heart of things, there had always been a deep-seated thought that this mutable material could become clear.

LW What's interesting is that in the history of alchemy there's a point where it's all about process, procedure, secret knowledge, techniques, and so on. The whole drama of the field revolves around getting to the philosophers' stone, and turning lead into gold. If water could become steam, why couldn't lead become gold? And eventually that whole discourse devolves into chemistry. But in another sense, another aspect of the development of the tradition, the actual procedures and techniques, in the end, aren't thought of as that interesting. Instead, people start thinking metaphorically, analogically, about taking the leaden parts of themselves and refining them through fire, as it were, so as to become a more refined person. So alchemy becomes a metaphor for self-fashioning, self-molding. What's fascinating, at this stage, is that glass is both literally and metaphorically a very transparent vehicle for this to happen through. It's a little like pottery; after all, when you're making pottery, you're centering yourself, and the same is true with glass — you are both fashioning an object and fashioning a soul. That kind of thing is going on with the artists; over time, they're becoming more refined.

RB With everything you say about alchemy and process, if you take out the word alchemy and replace it with glass, you will find that the history of this material is rife with stories of formulas, recipes, tools and intrigue, some of which are still pervasive today.

LW And you always run into students who won't tell you how they're doing what they're doing!

RB It strikes me that when working with glass, if someone asks, "Can I do this?" that there's always an insistence on invention and investigation in order to find the possibilities. This seems to happen with glass more than any other material I've known. Is this because people don't quite know what is possible, or is it about breaking some rule? The expectation is that everything is known, but the fact is that very little actually is, which leaves so much room for invention. For instance, in order to create structural color in glass (like that found in the sky, or in bird feathers) you have to break all the glass annealing rules. You have to make glass — a non-crystalline structure — crystallize. Structural color is about light scattering, which means that the glass is slightly crystallizing in order to allow light to scatter. That's known as devitrifying, which is technically a bad thing; however, that of course makes it more interesting in the process of invention.

LW But everything you just said could be said for the soul, too...



JP + RB Exactly!

LW The little speck of something dropped into the soul, just as easily turns into something wonderful. A little too much, and it could all go wrong. It's all about proportion and the right relation between things.

JP I like this idea that heat or energy, however you want to talk about it, is akin to a sensation of entering the body/soul. You can meter that, controlling how much devitrification, or how much a certain way of working is interpreted through the body. So, I like that you're bringing in the idea of refinement of the soul in some sense. Glass sits in that space, it's almost a meditative state; when you walk into that molten glass shop there is a kind of activity that is particular. It's measuring — measuring this heat, measuring energy, measuring time and movement.

RB It's time, space, movement, and action. People talk about glass as something that is very much choreographed. I think you noticed that when you visited the hot shop. There are these movements that play out; some of them are learned and interpretive in response to the glass, and some are relative to other movements in the shop. There's a kind of beauty to all of that, but it is also repetitive skill, which brings about this potential for wonder.

Doreen Garner, *Onika with Model*, 2014
Glass, teeth, Swarovski crystals, hair weave,
polyester fiber, glitter, petroleum jelly



Hannah Kirkpatrick, *Untitled*, 2011
Mold-blown glass

- LW** And also the Zen of things going bad, sometimes, in good ways.
- RB** Which goes back again to the process of unknowing...
- JP** It's also reactive. Especially when considering alchemy and why it comes up as subject matter on its own without our influencing it. It's important to constantly ask that question and constantly observe. It brings us back to the eye again; you observe what the glass does and you react.
- LW** I'd also suggest that alchemy mimics the relationship of the didactic quality of the university. School is both deference to and then having to kill the master, and the master stands in for the whole weight of tradition. It's an incredibly important metaphor for a sort of break.
- RB** What do you do to encourage a good student? Is breaking the rules the right way?
- LW** Maybe, at first, the student shouldn't break the rules because the student has to learn the tradition from which they can then break away. Traditionally, you aren't supposed to read Kabbalah before the age of forty, you have to have all this training before you can even begin understand what you're reading, otherwise you're a bull in a china shop.
- RB** Tara Nummedal is a historian of early modern Europe (1500–1800) with a particular interest in alchemy. She introduced me to the practice of reconstructing alchemical recipes from the fifteenth century — that is, actually trying to do the recipes in order to gain insight into our current understanding of material, its role in shaping culture, and our understanding of the world. The idea being that only so much of hands-on work can be transferred in writing. I find this to be such a lovely parallel to what we do in glass every day. That is one of the reasons we asked her to write for this book. Going back to the recipes to test and see what happens when you actually follow them is akin to the processes we encounter in the hot shop. It's about asking/posing questions to see what is possible, as opposed to trying to prove a truth or known result. Looking at the history of glass and alchemy, they are almost one and the same in this respect. For instance, gold being added to glass to make ruby-colored glass is the stuff of both alchemy and glass chemistry.
- JP** There are contemporary manifestations of this, for example Willow® glass, glass that does things you don't expect it to, like flexing and bending to extremes. Alchemists and historians try these recipes again and again as a way of interpreting old formulas, learning from the masters and then breaking the rules, which inevitably leads to innovation. But as you said, Lawrence, it's essential to understand there's a structure and format to break away from.

LW What do you see as the difference between somebody attending an engineering school or material science school to be trained to work at Corning, as opposed to somebody in a glass program at an art school? Should the more technical practitioners be interested in what's going on at RISD, or on the contrary, are you exactly the guys they don't want around?

RB I absolutely think they should want us around, and, in fact, at times they do. For example, Jamie Carpenter graduated from RISD and ended up collaborating with research scientists at Corning soon afterward. They were working with photo responsive glass, polychromatic glass, self-louvers glass, and so on. Jamie came out of a tradition early on in the Studio Glass Movement that involved playing with the material to see what happened. This was a key moment in placing glass alongside conceptual art rather than craft, as this same kind of material exploration was happening simultaneously with artists like Richard Serra and Robert Morris, working with the properties of lead or felt.

But there is a difference between what goes on here and what goes on in engineering. It comes back to the difference between science and art. In art it is all about the process by which we pose a question and follow it through, whatever the result, whereas in science or engineering there is a very different gauge for setting goals and assessing accomplishments.

LW It's the difference between ends and endlessness. James Baldwin says that art reveals the questions that have been occluded by the answers, relishing, or living in or at that sub-level. Art is much more at ease in uncertainties and much more suspect of dead certainties.

JP I think this dichotomy forms an interesting distinction between what we do at RISD and what happens at a technical school. Glass does have rules and techniques, and deviating from that structure does not happen in engineering or technical programs. That is the biggest difference — the introduction of material exploration, asking questions, and being open to failure.

RB It's like that great Samuel Beckett quote: "Ever tried. Ever failed. No matter. Fail again. Fail better."

JP We're *always* saying that.

LW This also makes me realize how your kind of glass program, versus an industrial material science program, brings up the fact that glass isn't taken seriously as an art form or gets relegated to "decorative" arts. I think this probably has to do with the



Jon Wang, *LAO BA DAO*, 2011
Tempered glass, vegetable cleaver

entire apparatus of dealers, technology, markets, academics, and historians, but it's kind of an arbitrary distinction, and a strange one.

RB Yes, and it's both a problem and an opportunity because it means that you can surprise people. When visitors come to the Glass Department at RISD, they don't really know what to expect. Their first assumption is Sturbridge Village — glass blowers making neat little goblets — but once they get here they realize that what's so interesting is how we focus on the discipline in a conceptual way. All the students and faculty agree that the starting point of our discussion has to do with a fascination with material. But having that starting point defined up front allows us to go much further afield. I've taught in sculpture programs, but it's different here at RISD Glass. It's easier to push our discussions into unforeseen realms much more quickly.

These distinctions are interesting because glass has a long history in the decorative arts and the functional ware realm. That is where glass is most often positioned within art history, and most easily defined. Then, in the 1960s, the Studio Glass Movement began and it changed the conversation around glass. This leads to the fiftieth anniversary of RISD's Glass Department in 2016. The American Studio Glass movement, which began in 1962, marked the first time people were asking new questions of glass.

LW Back in the Middle Ages, I imagine that the people fashioning stained-glass windows had exactly the same status as the people making sculptures on the portals, but none of them were thought of as "artists."

RB The role of art was very different then, which is interesting because here at RISD we look a lot at nature, alchemy, science, and natural history, as well as art. Those distinctions are a product of a time so they will inevitably change again. The change isn't always apparent, but let's see where we are in another fifty years.

LW Do you think that, because the glass world is slightly outside the traditional art world, there isn't the same pressure of the market?

RB Yes and no. The students that go through RISD Glass have a choice: they can, and many do, function in the fine-art world, while others stay more within the craft world. So I do think that those pressures are just as high, maybe more so because they are competing for something that is not already defined for them.

JP And, of course, this takes a lot of energy.

RB It comes back to that idea of slippage that kept recurring when I reread *Mr. Wilson's Cabinet of Wonder*. It made me think about the artists who have gone through our program who are doing what we are most excited by. They are taking what they learned here and integrating it into their work in ways that reveal the influence of

wonder and their fascination with material and manifestations of glass. For example, look at Tavares Strachan's work. The philosophy of this program (material and questioning) is evident in everything he does. By that I mean the essence of glass; as material, immaterial, process, and even state of mind. Tavares uses it as a vehicle for letting the viewer into a way of thinking that is uniquely his own. This makes me think of slippage, because the artwork doesn't dismiss the origins of glass, nor is it resolutely tied to an idea about glass as craft. Quite the contrary, he uses glass and all its implications to draw us into a way of thinking, seeing, and experiencing the world. Glass is embedded in that work in startling ways.

LW People get entrapped. The slippage is most evident in that Socratic moment where you're brought up short. That seems to be what's going on here, which is a marvelous practice. It seems to me that glass is constantly inviting that kind of moment, and people who work or train to do it go, Hunh . . . what was that?

JP Thinking of that distinction between art/artist and craft relates to how we often joke that we shouldn't call ourselves the Glass Department, we should call ourselves the Transparency Department! This, of course, has other political implications. Even so, thinking about Marcel Duchamp's "large glass" makes me realize that there exists a suspension of abstract thought, and that by way of transparency, things are suspended in space and are magically or abstractly there: floating.

LW It reminds me of the old story of how Jean-Paul Sartre became a phenomenologist and existentialist. Sartre famously recalled how he was at a cocktail party in the late 1920s or the early 1930s. He was with Raymond Aron, I believe, who'd just gotten back from Germany after studying with Edmund Husserl. And Aron said to Sartre, "You see that glass of apricot brandy in your hand? Go study with Husserl, he'll show you how to make philosophy out of that." So the glass of apricot brandy, and the notion that it could be a starting place for philosophy, really gets to the heart of the fact that it was a glass, a reflecting and transparent thing. Had the vessel been opaque, the story may have been different. In this example, the thing is liquid, and the quiddity of it, the suchness of it, was of its essence, which is also true of glass.

JP This also links to one of the other themes in this book: the unseen/invisible.

LW It's like the way in which the wind is invisible, but you know it's there when you see the tree bending..

RB It is also reflected in the materially immaterial quality of glass, an idea that relates to transparency.

LW It reminds me of another great story, this time regarding Ludwig Wittgenstein, who at a certain point gave it all up to study and teach kindergarten in the Austrian equivalent of Appalachia. His sister, who was very wealthy (they were part of a very



established industrial family, but he had given up his money), thought what he was doing was crazy, that it was like taking a finely tuned precision instrument and opening cans with it. His answer to her, and here I paraphrase, was, “But you’re like a person sitting inside a luxurious living room looking out at somebody on the street who is flailing away in an almost spasmodic way, and you just think this person must be crazy because you can’t even sense the storm that is swirling out there and how he is just barely succeeding in negotiating it at all.” But what I like about that statement is how it’s the glass of the window that she’d be looking through. It would be fun to do a study of all the times glass shows up in philosophical metaphors.

RB It would keep you very, very busy, I’d think.

In your volume *Everything That Rises: A Book of Convergences*, there is an essay about trees, eyeballs, and the camera obscura. I’ve used that essay a number of times for discussions with students. I love the way the device unfolds, through your own description of it, but it also gets at the idea of the artist as transmitter, because it goes from the device into the artist him or herself.

LW Exactly, and of course the tree likewise pierces the earth and has a whole root system below. We always think of trees as things that come out of the ground, but they are

(this page) Keunae Song, *The Statue of Kwansun Yu*, 2008
Installation: glass, mirror-film, transparency
(facing page) Kotoro Hamada, *Untitled*, 1993
Blown glass



actually doubled objects. The living thing is the doubled object, the trunk and the roots, and the piercing point is the equivalent of what happens with the world entering the eyeball. So in that sense one imagines the entire surface of the earth as a great glass surface, in which you get refraction on both sides, a big ball.

JP In that sort of imagining, what we see with glass is a mirroring — the tree and the camera obscura take us there because they remind us that we are walking around in a world projected upside down inside of our eyes.

LW But it also relates to how glass is a wall or barrier, something that separates you from all the chaos out there.

RB I like to think of it as a membrane. It’s the membrane where the artist stops and the rest of the world begins.

JP It’s like the phenomena of looking *through* versus looking at.

LW Or the notion of the music of the spheres. The idea here begins with nested spheres; one such sphere has the Moon embedded in it, another the Sun, and so on, one for each planet, with the final one containing the outer galaxy. The spheres, as a whole, moved around, and the material they were made out of was neither fire, earth, air nor water, it was a fifth essence, it was *quintessence*. These nested planets scraped against each other’s spheres as the latter moved, and that was the music of the spheres. And because God would never do something that wasn’t perfect, it would have been a gorgeous music which could only be heard by angels. This ravishingly beautiful



music had to do with the planets' locational relation to one another, reminding us that at this time the astrological existed alongside the alchemical. And it goes back to the alchemists trying to figure out what quintessence was. The whole rhetoric leads to quintessence becoming synonymous with perfection.

- RB** This brings me back to convergences, and when you lectured here I thought a lot about the idea of collective memory and how, even with artists, the process of making is one of tapping or mining it, in order to bring it to light.
- LW** Well, I don't think in Jungian terms like archetypes, although one certainly could, even if it's not the language I use. Rather I'm interested in the fact that culture is itself, and not always the known — the names of Leonardo, Vermeer, and so forth — but the way in which those people's existence permeates culture, and how we have always had them and it in the back of our minds. Phrased differently, it's very hard to see anything except in the context of what you've already seen. That again is the breathing in and breathing out that Onians and the Greeks talked about. Why is our eye drawn to that thing over there, and hardly drawn at all to that other thing? Is it because we already know it? We are continually seeing things we are prepared to see, and, conversely, the revolutionaries are people who see slightly differently. We see by way of what we've already seen, by what we forget we've seen, and that is what culture is. We are all immersed in the cultural bath.
- RB** Knowing is forgetting the name of the thing one sees . . .
- JP** Those loose synaptic moments we are talking about also happen to the maker. You are influenced by vision, knowledge, and culture, but you have to not see how, or else it becomes self-conscious.

Gayle Forman, *Balanced Meal*, 2013
Video still

- RB** In some ways it all comes to systems of belief, something that is very evident in David Wilson's Museum of Jurassic Technology (MJT). Both in reading *Mr. Wilson's Cabinet of Wonder* and going through the museum, you keep asking yourself, "Is that true? Isn't it true?" It both fascinates you and puts you in the position of wanting to believe.
- LW** But also not wanting to be had and then vacillating toward longing to be had after all.
- JP** Exactly, I think that is a particularly fertile place in which to exist.
- RB** There is a moment in the book when you were talking about Ralph Rugoff and how he said that the MJT is the best piece of performance art he'd ever seen, and then David's wife responds, "Except that he believes everything he's saying." I just love the idea that the importance of believing is essentially what David is proposing.
- LW** But it's not a naive belief, it's a decidedly *learned* ignorance.
- RB + JP** Exactly!
- LW** Again, it's important here that this is not lazy ignorance; it is an active, impassioned ignorance. David may be one of the most brilliant people I know: he's no idiot, in much the way that Socrates deemed himself the wisest person in the world simply because he knew that he didn't know. My companion book to *Mr. Wilson — Boggs: A Comedy of Values* — does for money what David does for museums. The book follows the artist J. S. G. Boggs, who was known for his hand-drawn bank notes. If he drew a \$100 bill, he wouldn't sell it, he would only spend it, trying to find someone who would treat the drawing at face value, giving him, in that instance, precisely \$100 of value for the drawing: dinner, say, and the change. But these are drawings, and his interlocutors found themselves asking, "Why would I or would I not take this drawing, as opposed to these standardized prints that I'm accustomed to taking? What is the one worth as opposed to the other? And what is worth worth? What's going on here?" It starts to become absurd, like Wile E. Coyote running off the edge of the cliff. He's able to keep running for the longest time, but when he looks down, it is only in noticing the absence of the cliff that gravity takes hold. And, by the way, it is as if the cliff he was running on turns to glass and becomes transparent. It reminds me of those bridges at the Grand Canyon that are made of glass.
- JP** And suddenly, you're there, suspended just like Wile E. Coyote.
- LW** And you have this lovely vertiginous moment, a moment that only glass can induce. It can get to be literally breathtaking, and that's what we love.