

INTERVIEW WITH JULIA CARRILLO ESCALERA

BY CATALINA RESTREPO LEONGÓMEZ

Almaaz, 2015. Selected work for XII Bienal FEMSA. Photography Roberto Ortiz. Courtesy Bienal FEMSA

Catalina Restrepo: *What does an artist have in common with a scientist?*

Julia Carrillo Escalera: Perhaps what links us together is the pursuit of knowledge, the curiosity that leads to comprehension and creation, it's the questioning of the world and the passion for investigation. The creative and imaginative possibility to construct representations that lets us understand our relationship to the world.

CR: *How do you understand scientific thinking in relationship to the artistic one?*

JCE: To me, talking about the scientific and artistic fields is an ambitious idea. The universe in each of those is immense, impossible to encompass in its totality. It's important to highlight and understand the amplitude in each of them. To me, it's important to think of them as separate spheres with a common junction that share common strategies.

To talk about the limits of scientific and artistic thought is to restrict oneself in order to understand them as separate spheres. The "Scientific Sphere" or the "Artistic Sphere" averts us from understanding that both can be used to push into the development of an investigation where both spaces can be found.

In my case, artistic thought allows me to link the processes of my own investigations to science and relate it to phenomena where several scopes mix, like perception and the physical process, or sensoriality and abstraction.

The artistic field is flexible, elastic, transdisciplinary, and binding. I'm interested in this point of convergence and not so much in the difference between them. The possibility isn't in the difference but in the closeness of them, in the possibility of linking all the spheres of knowledge and their different methodologies towards the same direction. These are the intersections that allow a dialogue and coexistence to happen.

CR: *Do you think creation can be talked about from a scientific perspective?*

JCE: I do, I think science is creation itself, a convention or a human construct, and as such, it's always developing or expanding. I think science is a consequence of human creativity.

CR: *What do you think came first for you, science or art?*

JCE: I think both have accompanied me since childhood, in part because of the environment I grew up in. Academically speaking, I started my studies in science with a degree in mathematics and then did my postgrad in visual arts. I consider both part of my life.

I think at one point, I found myself limited by scientific methodology and I found in art more possibilities to express myself and distinct directions to take my investigations; they connect more to daily life than to equations.

When I initiated my first art projects, I tried to get away from mathematics and ended up making kaleidoscopes. I think for me, these two spheres (that separate art and science) are a unity without a border between them, it's a space where I feel comfortable to get to know different parts of the same phenomenon. I think my practice isn't strictly scientific at its core, my way of working has to do with bonding scientific theories with methodologies and artistic representation.

From the arts I can take my concerns, many of them largely motivated by scientific theories that intrigue me to places that are more attuned to my needs. I found a space where I can explore both aspects; the formal and sensorial aspect of a phenomenon and the physical, mathematical aspect: its geometric aspect and its possible correlation to the world.

CR: *Describe a first encounter —be it with art or with science— that shaped your statement in general.*

JCE: I remember the first time I saw a work by James Turrell, I had near zero knowledge about him and his work and at this moment I'd just started my mathematics studies. I was visiting a museum and one of the works was a room that had a huge rectangular cutout on the ceiling, it was barely a small edge left, that look like a frame. On the floor, surrounding the walls was a bench with inclination in the back so that you could appreciate the sky. I sat for a while and suddenly the clouds began to transform. It seemed to me like an hallucination, we can watch the sky from nearly anywhere, but here it was emphasized, in a light and plain experience.

It's one of the works that have most impressed me. I'd never seen anything like it. This work had it all, I was surprised by all the places and questions a work like that could transport me to: to show the sky and its beauty with the simple gesture of framing it, the perception of the light's changes after only minutes could be perceived within the room, the transformation of image, the abundance you could feel in a museum room as if I were sitting outside observing the landscape.

CR: *Where do you think, if it exists, is the limit between the real and the imaginary?*

JCE: I don't know if there's a limit, and if there is, I don't know it. To me, experiences are part of my reality.

CR: *What are you working on currently or recently concluded?*

JCE: I'm working on a project that's about what are called *minimal surfaces*, it's an investigation that departs from a mathematical theory about certain surfaces' behavior in space, it includes both sculpture and installation. I'm building devices that generate soap bodies and for a brief period of time sculpt and model certain spaces.

In mathematics, *minimal surfaces* are what you name the membranes that are capable of containing the most amount of volume within the least amount of surface possible. That's what's called a "stable form" and the stabilisation is achieved thanks to the conservation of energy inside the membranes.

The sphere is the simplest minimal surface and can be observed in a soap bubble. When there's a mass of bubbles, they stop being spherical and change their geometry always maintaining the most amount of volume and making sure the soap's surface spans the least amount of area.

When bubbles touch, they generate a mass whose interior tends to be made of polygonal compartments with hexagonal or pentagonal faces. This happens because the membranes tend to reduce the surface tension and the surface energy that maintains them. Soap bubbles are sufficiently transparent so that we can see its interior structure and thus, with the naked eye, we appreciate the geometry with which they behave. They're diaphanous structures that model certain spaces and complex behaviors that mathematics studies.

The project's intention is to generate tentatives to define the space and the matter's behavior according to mathematical notions and the possible sculptural and constructive possibilities.

CR: *Lastly, I'd like you to say whatever comes to mind with the following five concepts.*

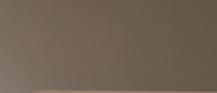
Intuition: Sensoriality.

Creativity: Imagination.

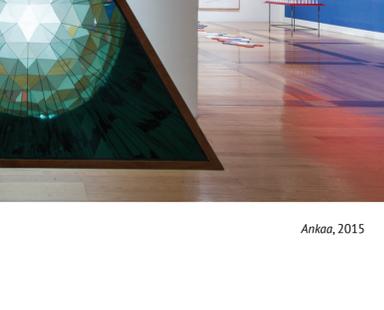
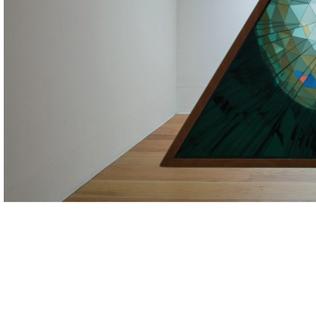
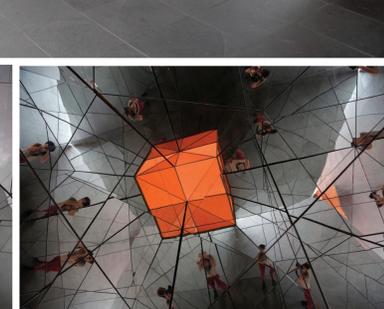
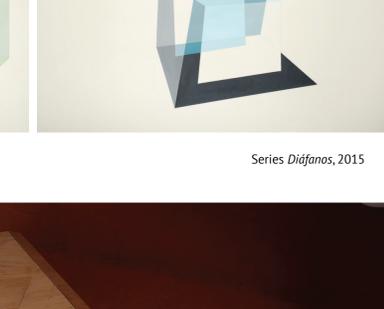
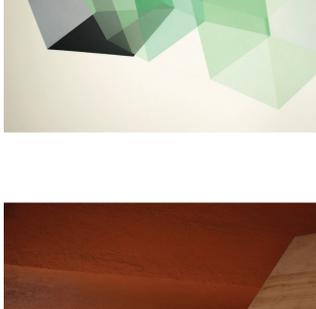
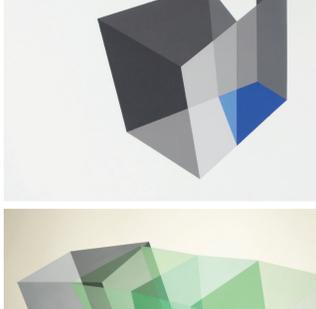
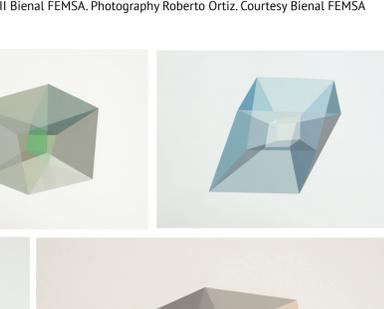
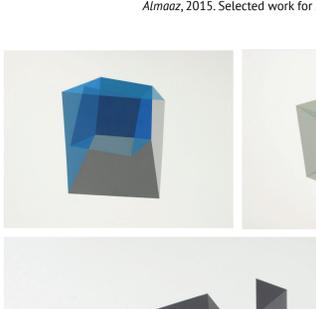
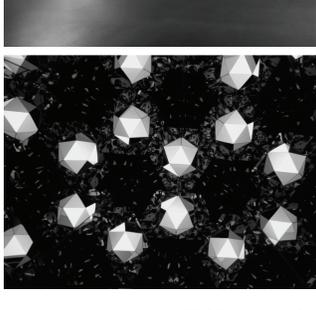
Result: Consequence.

Creation vs Discovery: Imagine vs Unveil.

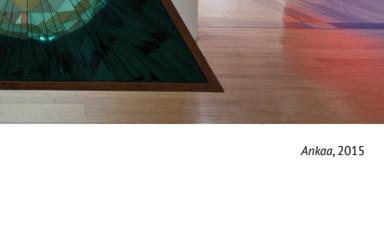
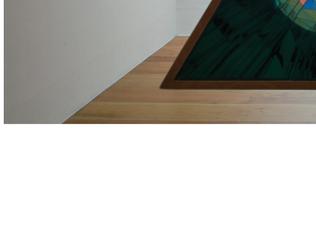
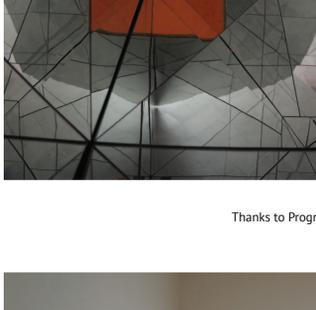
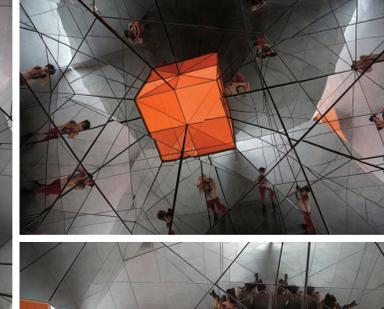
Accuracy vs Randomness: Rigor vs Uncertainty. 🍷



Almaaz, 2015. Selected work for XII Bienal FEMSA. Photography Roberto Ortiz. Courtesy Bienal FEMSA



Series Diáfanos, 2015



Sirio, 2016. Thanks to Programa de Apoyo a la Producción e Investigación en Arte y Medios 2014 Centro Multimedia, Centro Nacional de las Artes.



Ankaa, 2015