


Complexity in Simplicity: Darel Carey on Op Art and the Responsive Eye

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Abstract. This interview with visual artist Darel Carey explores his deep interest in optical perception and spatial illusions. He discusses how simple lines can generate complex planes and immersive environments, often producing a compelling sense of depth. He draws connections between op art and natural patterns, influenced by cosmology and psychology. Darel's work epitomizes this movement, manipulating lines and space to challenge the viewer's perception and create dynamic, shifting visual experiences. Through this dialogue, Darel provides insight into his artistic philosophy and the broader implications of his work for understanding perception and reality.

Keywords. M.C. Escher; Visual arts; Immersive space; Optical illusion; Bridget Riley, Space perception; Creativity.

Introduction

Darel Carey is a Los Angeles-based visual artist whose practice explores optical perception and spatial illusion. His installations and public artworks have received international exposure. Using lines as his primary medium, Darel manipulates perceived dimensionality, transforming static surfaces and architectural spaces into dynamic visual environments. His work spans tape installations, large-scale murals, and digital compositions, all aimed at expanding the viewer's perceptual boundaries.

Creativity involves generating new perspectives, developing ideas that are not only innovative but also practical and relevant, and formulating original questions, focusing not just on what works, but on why and how it works (Schellini et al., 2023; Schellini, 2025; Ben Ghida, 2024), a notion central to Darel's approach.

Inspired by Paul Klee's assertion that a line is "a dot that went for a walk," Darel's visual language activates space through linear progression, guiding and distorting spatial awareness.

His signature aesthetic, white surfaces disrupted by black tape lines, triggers optical effects such as motion illusion and spatial ambiguity, often employing Gestalt principles like closure to suggest curvature and depth.

Rooted in the foundations of Op Art, Darel's methodology uses rhythmic patterning and geometric abstraction to animate flat planes. His installations construct immersive environments that challenge spatial perception by transforming simple linear elements into complex geometries.

This interview, composed of ten questions, has been reorganized into five themes: Inspiration & Influence (Q1), Creative Process (Q2, Q3, Q4, and Q5), Artistic Innovation (Q6, and Q7), Impact (Q8, and Q9), and Evolution (Question 10), to provide a cohesive framework for understanding Darel's vision. The dialogue shows how his work continues and reimagines the legacy of Op Art, contributing to broader discussions on perception, illusion, and the spatial atmosphere.

Interview

Question: What sparked your interest in creating art that explores optical illusions and spatial perception? Could you discuss the major influences on your work, such as M.C. Escher's geometric illusions and tessellations, and any scientific concepts or writings that have shaped your artistic approach and perception of space?

A: It is difficult to pinpoint a particular event or thing that sparked my interest in "optical illusion". As far back as I can remember, I was always interested in optical illusions. It was one of those things where you have an interest in some subject, and maybe don't even realize it. But then you see or hear something, a picture, a book, a conversation, and you think, "This!" A moment of clarity. A realization that it is something you have

always been interested in but never been able to express. In an art class in junior high school, I saw “Relativity” by M.C. Escher. I was immediately intrigued by the different rules of gravity being followed and how they were interlaced. Soon after, I saw “Waterfall” and “Ascending Descending”, and was drawn to how something could look one way and another way at the same time. It interested me how our brains and eyes work together to interpret what we are looking at, and some things lie in gray areas, and our minds can be tricked. This idea, in its simplest form, similar to Escher’s “Impossible Cube”, is the Necker cube. A Necker cube can look like it is facing one direction or another depending on how you happen to first see it. As an artist or an illusionist, you can push a perspective to lead the viewer in a certain direction.

So, as far as artists that influenced me, it was Escher. People ask me about Bridget Riley, and I can understand why, because of the lines. But I did not know of Riley’s work until after I was making my art (I do love her work by the way). You can see that I was influenced by Escher’s work, with my interest in optical illusion and the psychology of perception, even though he is not considered an “Op Art” artist.

Regarding scientific concepts that influenced my approach, I should mention that my art philosophy follows two tracks: *illusion* and *emergence*. I will delve into the emergence track later, but I found myself interested in psychology classes in college regarding “optical illusion”. I enjoyed learning about perception, how the mind works, and how our senses inform our brains of the outside world. While attending Otis College in LA California, I took a fascinating class called “The Psychology of Seeing” by Professor Rob Spruijt. In this class, I learned more about psychology from a visual perspective and how we can perceive things differently depending on context. A few years ago, I read a book, “Being You: A New Science of Consciousness” (Seth, 2021), which pushed my understanding and interest further. This book is primarily about consciousness, but it talks about how not only are our eyes taking information from the outside world and feeding it to our brains, but our brains are also actively generating what we expect to see, filling in blanks, and making assumptions.

This is how optical illusions can work so well because when we see something, our brains want to make sense of it and use context and experience to make shortcuts. For example, we evolved to see natural light coming from above us (rather than below), so when we see shapes with lighter and darker shades, we unconsciously make assumptions about their orientation based on where shadows or indentations seem to be. As an example, with my line art, in all the perceived forms that are created, when the lines are closer together, the area looks darker, and when they are farther apart, the area looks lighter. So when someone looks at it, their mind starts to decide which parts seem to be convex or concave. But then, to complicate things, due to the abstraction, my art also has the “Necker cube” effect, where the forms can look convex or concave depending on how you are looking at it.



Figure 1. Spatial Redshift Art Installation at Lux Art Institute, Encinitas, California (Darel Carey, 2020)

Q: Can you walk us through the creative approach behind the emergent properties in your work?

A: When I started making these installations, it was primarily about the optical illusion. I would make an anamorphic installation in the corner of a room, and the vantage point dictated the way I created it. From this one spot, everything lined up to look like the lined forms were all flowing from the wall down to the floor. However, I immediately noticed that these installations looked interesting from many different angles, not just the intended one. This led me to make more installations with no intended vantage point, which was freeing because I didn’t have to line up corners similarly. It became more of a continuous doodle with no necessary beginning or end. Before these immersive tape installations, I used to doodle lines on a much smaller scale. Much curvier and more organic, but it had similar topographical effects. This is what I was doing with the tape, but with straight lines, and on a larger scale. The more I made these installations, the more refined my process became.

I follow simple rules about distance between lines, consistency, and gradual change. Each line is placed based on the previous line’s location, making this an organic process. Each line on its own is just a line, but when you zoom out and look at the whole, curvature and dimensional forms emerge from the arrangements, Figure 1. Before beginning a new project, I look at the space to get a big-picture idea of what I am going to

do. Then I get started, and the focus is on the details, the precision. These emergent properties materialize somewhere between these details and the big picture.



Figure 2. "Sound Waves" mural. Paint was applied over tape, which was later removed to reveal Darel Carey's signature linear composition, Culver City, California (Darel Carey, 2022).

Q: What does the "natural process" in your approach entail, and how does it inform the way you create your Op Art installations?

A: When I place my lines, I follow basic rules with consistency and gradual change. From this simple, organic process, complexity emerges. Individual lines, bending at various points, arranged in a particular way, create something greater than the sum of design parts. From these straight, rigid lines, curvature emerges. From their arrangement, dimensional forms emerge. When you look at it, you don't just see lines next to each other. You also perceive three-dimensional depth on a two-dimensional surface, Figure 2.

The simple process I use is analogous to the way nature works, and the way everything in the world is built up. Individual, simple units arranged in particular ways form something more complex. Atoms form molecules, molecules form proteins and lipids, proteins and lipids form cells, cells form organisms, and so on. Throughout the universe, complex things are just arrangements of simple things. This is the beauty of complexity and the beauty of nature, and my art and philosophy are an ode to this beauty.

Q: How do you balance precision and spontaneity in your work, especially when creating complex patterns and illusions? Is your process pre-planned, with pre-calculations and/or pre-drawings, or is there room for discovery and improvisation along the way?

A: There is some pre-planning, but in a big-picture sense. I think of certain aspects of an installation when it comes to location, scale, and how people will interact with it. For example, will it be close to the viewer, and will they be walking alongside the installation, or will they see it straight on, from a distance? Another aspect is whether or not I am doing an anamorphic piece. There is more planning to this, but the actual process is still organic.

In every installation, the most important line is the first one. Because every other line follows that line's lead. And once the second line is laid, the rules of the piece have been established. Every line after that follows the same rules, and I try to remain consistent with precision in application.

After this, the only part I control and decide is when to make the gradual changes. Even though that is sort of a rule, it is just more arbitrarily applied. I decide how close one corner is to the previous one, how close the next one will be, when the corner will stop getting closer to the previous one, and when it will start getting farther. It is like constant improvisation. What I do in one corner has a cascading effect on the corner next to it, and so on. From this process, the perception of curvature emerges. It is like drawing with corners.

I don't usually make sketches or pre-drawings unless a client asks for them, or when I am doing an anamorphic installation. After doing this process many times, I have gotten pretty good at predicting generally how the finished product will look.

Throughout all of my work, precision is key. Any spontaneity is gradual, like spontaneously turning a large ship. One thing I can do is make the simple rules I follow more flexible. Typically, one installation has one set of rules, but I could use multiple sets. Like in one installation, suddenly changing my rules of distance between lines, or how quickly a corner changes direction, or the thickness of each line, which is usually the same. These changes can alter how my installations look. I don't do these things so often, because I have been trying to stick to the principle of doing the most with the least, to work with what I have and develop a good understanding of these phenomena. But there is more exploration in this realm for me.

Q: Many artists and architects listen to music while working. Do you also listen to something while you work?

A: I enjoy working solo and using headphones. What I listen to depends on the type and stage of the project, as well as my mood. During the more creative, brainstorming stage, I prefer music, usually electronic and instrumental, as lyrics can be distracting. When I move on to execution, I am usually on autopilot, so I

listen to audiobooks, podcasts, or YouTube videos. My interests vary widely, including science, technology, politics, economics, business, self-help, fiction, and more.

Q: How do you manage to maintain distinctiveness in your approach without repeating yourself, essentially, without creating the same op art? For example, “Emergence”, “Singularity in Bloom”, and “Dimensionalizing the Room” are distinct artistic installations, each unique in its way, yet they all use the same optical illusions and geometric patterns approach.



Figure 3. Dimensionalizing the Room tape installation at the Museum of Selfies, Glendale, California (Darel Carey, 2018).

A: There are certain differences, the same principle but different particular rules. I stick to simplicity in my rule-making a lot, and therefore have a “signature style”. But there are still ways to be distinct, the first of which is the orientation of the lines. I can arrange the lines vertically, which would make the direction of the “curving corners” horizontal, and vice versa. I can also start from a single point, or even make the entire piece a single-line spiral, all while still following my rules of engagement, Figure 3. Another aspect of distinctiveness is which set of rules I follow. I have different sets of rules that look different, but still speak the same language. Lines can be farther apart, more boxy, and more parallel, or I can make bands of lines to imply layers instead of one continuous layer. Things like this. I can also add color, whether it is two different colors instead of black and white, or transitioning from one color to another to create the perception of gradients.

Q: Op art emerged in the 1960s, characterized by geometric shapes and lines in either black and white or vibrant colors. However, most often, op artists use only black and white. In some of your works, instead of the usual black and white, you used red, blue, orange, and even purple in the case of Paris. Can you explain the reasons behind these choices?

A: There is Op Art that involves color as well, I just think that black and white is the simplest contrast, so most optical art may be black and white. Some of these choices to use color are just arbitrary. In the beginning, I did refrain from adding so much color because I wanted to do the most with the least; see what I could do with the least amount of variables: black lines, same width, simple rules, Figure 4. I also wanted to solidify my style. Then I started adding other variables, like color, to my works, Figure 5. Honestly, I never set out to be an “Op Art” artist. It is just that the art that I create fits best in the Op Art category.

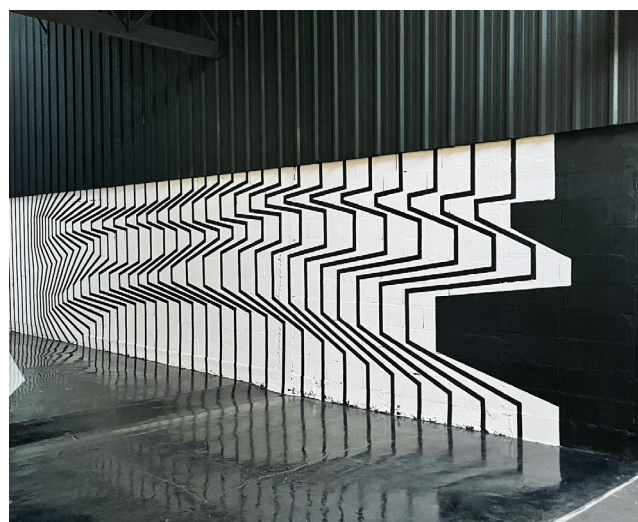


Figure 4. Untitled mural at the RentingArt Agency in Paris (Darel Carey, 2022).



Figure 5. Wave Theory Tape Installation at Anti Space Gallery, The Container Yard, Los Angeles, California (Darel Carey, 2019).

Q: Your installations and optical illusions often challenge viewers' perceptions of space and reality. What insights or experiences do you aim to provoke in your audience?

A: I have two aims, the first of which is about enjoyment and illusion. The majority of viewers respond and react to the optical effects of my art. They see the optical illusion, they understand their minds are being tricked, and they enjoy the experience. They walk around my installations, do a double-take, and like to take many pictures of and with the art. They are confronted with an array of lines that tell them the wall is bending or that the lines are floating in front of a wall, yet they know the lines are on a flat wall. This forces the viewer to reconcile the contradiction, or at least think about it, which requires self-reflection about the limits of one's senses and mind, Figure 6. Are things the way they appear to be? Not always.

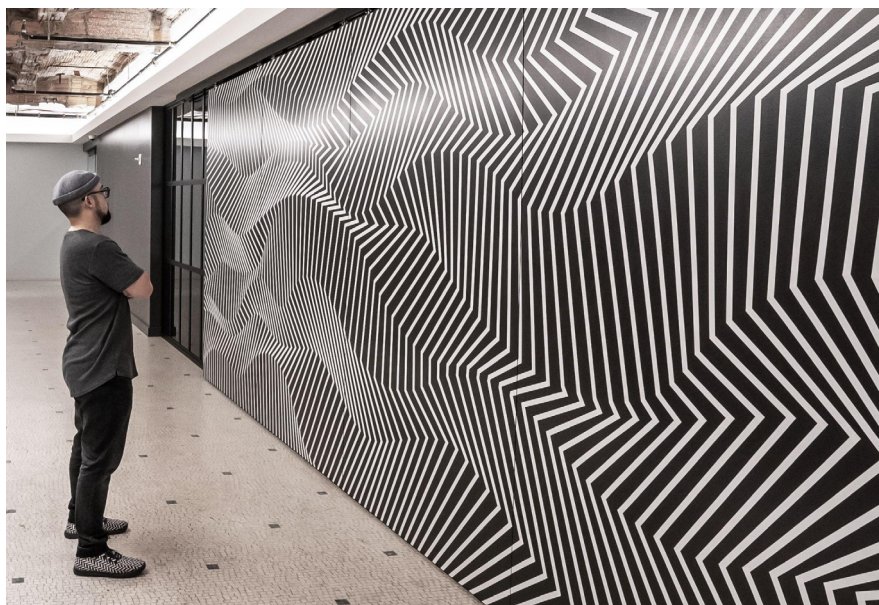


Figure 6. Untitled tape installation at the DDB NY office in Manhattan, New York City (Darel Carey, 2023)

My second aim is to spark wonder about the universe, how the world works, and our existence. This is less about the illusive properties of my art and more about the emergent properties.

If you look at my art, you will perceive dimensional forms and curvature where there are only straight lines with sharp bends. This is an example of emergence, where the whole is greater than the sum of its parts. The arrangement of the lines creates the illusion of curvature, and yet it is not an illusion because there is curvature there, just on another level. It is an emergent property.

The organic process of arranging simple units, following basic rules, with precision and gradual change, to create something more complex is the language of the universe. Everything from the physics of the stars to the biology of the Earth, to the consciousness of animals, to the organization of civilizations all follow this universal language. This is how our world is built up, from micro to macro, and it is fascinating. I hope that when people experience my art, they take a step back to think and wonder about the nature of our universe and its beauty.



Figure 7. An intervention on a pillar of the Périphérique at Porte de Clichy, Paris, transformed a previously unused urban void into a distinctive sense of place (Darel Carey, 2022).

Q: How can Op art influence architecture and cities' design, perception, and experience? Can you provide examples of how Op art techniques could enhance the engagement with buildings and structures?

A: I think Op Art can be integrated into architecture, as humans interpret and feel space through sight, scale, proportion, and movement, all of which are sensed visually. Op Art can be visually stimulating, can affect one's spatial awareness, and can create the perception of movement. These can be valuable tools in architectural design and experience, Figure 7. I can imagine using optical effects on a wall as leading lines in a long corridor, to spark interest in passers-by. Or an illusion in how an angular structure is built, making it look impossible to stand, or varying greatly in perceived size from different angles. For example, in my Equinox Yoga Studio project, I had to answer questions like: How will the flow translate from the inside and the outside? Since it is on a window, it is a two-sided experience. How do natural and artificial lights interact? What about the tint of the windows, the reflections, the shadows cast at different times of day and night? How does the perspective change from below on the street and from above on the High Line? There were so many considerations before, during, and after the process, Figures 8 and 9.



Figure 8. Façade design for the Equinox Yoga Studio, located adjacent to the High Line in Manhattan, New York City (Darel Carey, 2019).



Figure 9. Interior view of the Equinox Yoga Studio towards the High Line. The project creates a dual impact, enhancing the user experience through dynamic light and shadow within the interior while simultaneously activating the building façade from the street. Darel also designed the yoga mats, reflecting his signature artistic style (Darel Carey, 2019).

Q: How has your art evolved since you started your career? What new techniques or concepts are you eager to explore in your future work?

A: My art has evolved over the years. I used to doodle lines, then I made anamorphic tape installations of large-scale geometric shapes, and then I combined the two while I was in art school. At first, it was anamorphic, topographical lines, but then I got more familiar with the relationship between the lines and focused on their emergent properties. There are several things I would like to do. With this line of work, I mostly do room-scale installations, and I have recently started small and medium-sized paintings. However, I would also like to do larger murals at some point. I also want to experiment more with color combinations. Aside from that, I am interested in going three-dimensional and making sculptures using principles similar to those of my current art. I also enjoy doing digital animations, so I would like to do more of that. I know that there are a lot of different things, but hopefully, I will be able to explore these areas more in the future.

References

- Ben Ghida, D. (2024). Revitalizing urban spaces: Ten key lessons from the “Viaduc des arts” adaptive reuse and placemaking. *Frontiers of Architectural Research*, 13(5), 1095-1112.
- Schellini M. (2025). Unravelling Art Practice and Education Entanglements in Academia: An Interview with Marco Buti. *Arte, Individuo y Sociedad*, 37(2), 401-403. <https://doi.org/10.5209/aris.100436>
- Schellini M., BenGhida S., Ben Ghida D. y Romanelli Assumpção F. (2023). Academic Philistinism? The Challenges of Contemporary Artistic Research Inside Academia. Semi-structured Interviews with Visual Art Students in Brazil. *Arte, Individuo y Sociedad*, 35(3), 1081-1099. <https://doi.org/10.5209/aris.86280>
- Seth, A. K. (2021). *Being you: A new science of consciousness*. Dutton, an imprint of Penguin Random House LLC