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ART OF MEDICINE

Muscle Memory as Embodied Record Keeping

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Abstract

Neon bending is arduous, requiring long-term cultivation of strong technical skill to express creative detail. This article describes how a neon crafter cuts glass tubing, heats it over an open flame, and bends it into right angles. Getting cut with glass shards, burned, or suffering repetitive stress injuries are all risks an artist takes to embody over time the skills of neon bending.

Neon Bending as Craft

Neon bending is a craft dating back to the early 1900s, when it was primarily used in storefront signs and advertising. By the 1960s, the practice had declined as signs made with light-emitting diodes became more widely available, offering cheaper, less craft-intensive alternatives to using illuminated neon.¹ Skill in neon bending became rare and is regarded today as a niche craft among artists captivated by its potential as an artistic medium.

Neon bending is difficult and can take years to master. Long glass tubes are slowly heated over an open flame until they become soft enough to angle. One end of a glass tube is plugged with a cork while the other is connected to a hose, into which the crafter must blow to prevent the glass tube from collapsing in on itself. This heating and bending process is repeated until the tube is shaped; finishing requires attaching electrodes to the glass tube's ends, filling the tube with a noble gas (eg, neon, argon, krypton, xenon), and then finally connecting it to a power source to create a glowing spectacle.

Muscle Memory

When learning this craft, I discovered that the material is unforgiving, the **process is physically taxing**, and it can take hours to create what looks like a few simple lines and angles. I would often leave the studio with a couple of new burns, covered in glass shards, and sweating from the heat generated by open flames. Neon bending is an intimate process between artist and material and requires patience and attention to detail. I was taught to bend neon by executing repeated movements. I learned 2 or 3 basic bend techniques and was assigned to practice each 50 times, or until I could successfully recreate each bend with confidence. My practice of this craft resulted in a lot of broken glass and, finally, in muscle memory, as each movement over time became

more natural and almost meditative. Muscle memory is the foundation of neon creations: precision is achieved by building muscle memory, which is a product of practice and repetition.

40.20

40.20 is a 3-dimensional light sculpture composed of 60 right-angle bends in 10 glass tubes filled with krypton gas. Despite its geometric rigidity, this work expresses my body's tactile memory. Indeed, the title 40.20 acknowledges and documents my experiences of cultivating muscle memory. At first glance, a viewer might see only simple, lit squares; a closer look reveals the squares' composition from 40 two-dimensional and 20 three-dimensional right-angle bends in 10 glass tubes.

40.20 features the spectacle of noble gases as captivating media that reliably attracts a viewer's attention to light and space, since the glass is clear and invites a viewer to move around the work and experience its effects from different perspectives. When observing the sculpture from the front, a viewer can see the row of 10 glowing squares. When observing the sculpture from the side, a viewer can become immersed in an optical illusion when the squares align to the point of concentricity.

Figure 1. 40.20, front view



Photo by Sherman White.

Media

Ten-millimeter clear glass tubes filled with krypton, mounted on painted wood panel.
Full-color digital photograph.

Caption

This photograph of 40.20 shows the 10 glowing, white concentric glass squares with a gray background.

Video. 40.20, front view, power on and off



Video by Jessica Delli Carpini.

[Click here to view the video.](#)

Figure 2. 40.20, close-up, front view

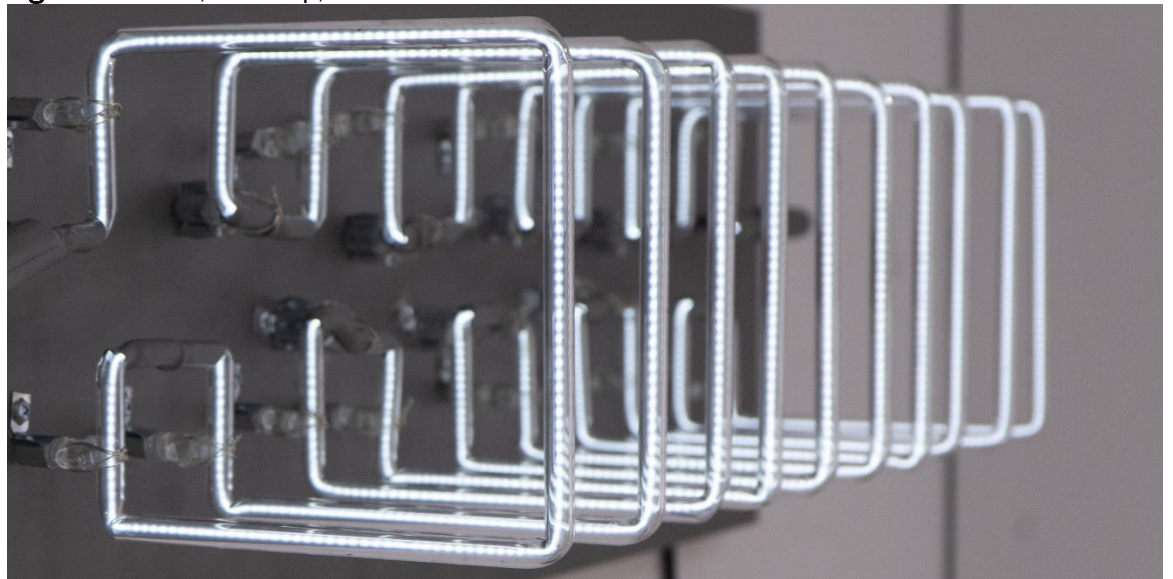


Photo by Sherman White.

Media

Ten-millimeter clear tubes filled with krypton, mounted on painted wood panel. Full-color digital photograph.

Caption

This photograph of 40.20 shows 10 glowing, white concentric glass squares mounted on a gray wooden panel on a wall.

Figure 3. 40.20, close-up, side view

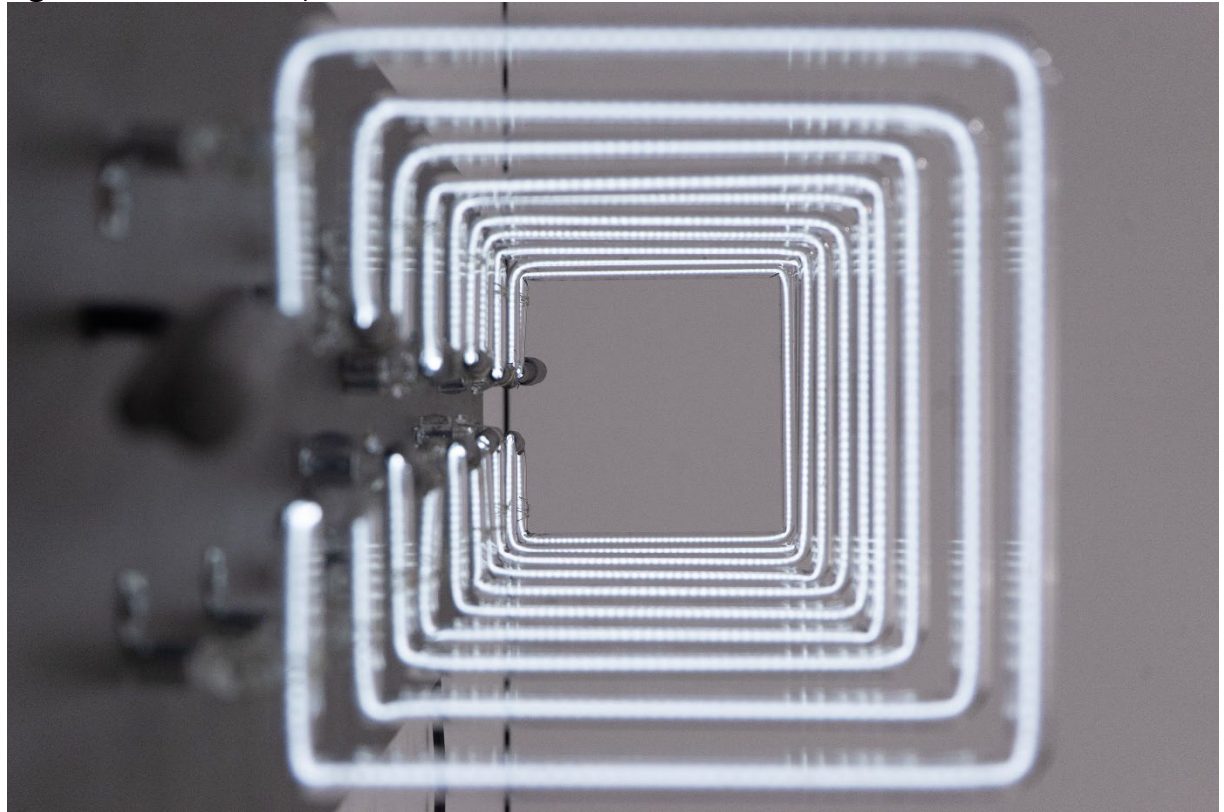


Photo by Sherman White.

Media

Ten-millimeter clear tubes filled with krypton, mounted on painted wood panel. Full-color digital photograph.

Caption

This close-up of 40.20 shows a side view of 10 glowing, white concentric glass squares with a gray background.

References

1. The evolution of neon signs: from vintage to modern. Neon Museum Las Vegas. August 14, 2023. Accessed October 6, 2024.
<https://neonmuseum.org/news/the-evolution-of-neon-signs-from-vintage-to-modern/>

Jessica Delli Carpini is an interdisciplinary artist currently based in Chicago, Illinois. In 2022, she received a bachelor of fine arts degree from the School of the Art Institute of Chicago, with an emphasis in sculpture and visual communication. Much of her work explores repetition of the body and its relationship to space through media, including neon bending and woodworking.

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