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Into the Void

Do usage standards for a new high-tech representation of the colour black efface the ideals of artistic freedom?

By Carolyn Black Illustration by Joey Guidone

Artists have always been in love with the colour black. Think of cave drawings in soot and charcoal, the chiaroscuro paintings of the Renaissance, the black inks used by printmakers. The reason for this affection? It's the way black can seem to absorb light. Dark colours create optical illusions of depth and infinity. For artists looking to represent a rich, dimensional experience of the world, the perfect black is the Holy Grail.

Earlier this year, the news broke that artist Anish Kapoor's studio had bought exclusive rights to a new material called Vantablack. It's not a pigment—the material is composed of a forest of vertical nanotubes that are "grown" in a lab. When light strikes Vantablack's surface, instead of bouncing off, it becomes trapped, continually deflected among the tubes until 99.965 percent of visible light is eventually absorbed. To the eye it appears to be a void, a visual absence.

Kapoor's talent is undeniable; in past works such as *Oracle* and *Void*, he used natural pigments to evoke a sense of depth where it did not physically exist. It is understandable that he should wish to explore this material. But a debate has arisen because other artists are excluded from doing the same.

Before Vantablack, carbon black was the blackest material available. I once saw some of this pigment—produced by the incomplete combustion of fossil fuels, biofuels and biomass. The jar containing it looked full from the outside, but when the lab technician lifted the lid, I couldn't see anything, neither the pigment nor the inside of the jar. It was uncanny.

If I want to buy some carbon black and experiment with it, I can. But the Vantablack licence limits its use to one artist (or, more precisely, one artist's studio). Anyone else can buy it, as long as they are non-artists. I studied fine art as a practitioner, but for the last 15 years have been a visual arts producer, commissioning artists and supporting them to create new work and hold exhibitions in unusual locations. Am I now a non-artist? Could I buy some Vantablack? If I did, might I be challenged about my status as an artist, or would the restriction only become enforceable if I exhibit or sell the artwork I make? Who decides who is an artist and who is not?

I think I have discovered a black hole in the licence agreement.

When multiple artists get the opportunity to respond to a common muse, the outcomes are fascinating. In 2015, The Burton Art Gallery & Museum in North Devon, U.K., held an exhibition (I was the project producer) on the natural earth pigment Bideford Black. Nine artists were commissioned to make new work using, or about, this local material. The art that resulted was wonderfully diverse: paintings, sounds, scents, films and prints. There was even a diamond made with it—modern science, directed by an artist, simulating millions of years of geological compression.

By severely narrowing the field of collaboration, the Vantablack agreement goes against the spirit of reciprocity that makes art and science ideal (if unexpected) bedfellows. Scientists often relish the opportunity to share their research with artists. Take CERN (European Organisation for Nuclear Research) and its Large Hadron Collider. The LHC is the world's most powerful particle collider, the most complex experimental facility ever built and the biggest single machine in the world. Arts@CERN creates opportunities for artists to work alongside collider scientists and engineers. According to the programme, "In the 21st century, arts, science and technology form the essential basis of our culture and are natural creative partners for innovation."

Dmitry Gelfand and Evelina Domnitch, artists in residence at the centre earlier this year, are creating installations and performances that probe quantum behaviour via exotic forms of light, such as sonoluminescence. When viewers encounter these works, they will learn about the science that inspired them. Another artist, Christoph Keller, visited CERN to film discussions with scientists about "the void." In her interview, physicist Tara Sheers said, "'Nothing' is the potential for *everything* in physics. It isn't an absence. It is full of activity."

Sadly, unless Kapoor's studio initiates it, artists will not have the chance to collectively explore such concepts using Vantablack. Preventing all but one artist's studio from interacting with such an exciting scientific breakthrough translates to a lack of imagination. The works that will never emerge are the biggest absence of all. ■

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