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Humanities 370-6: New Media Art
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December 8, 2016

Playing with Pixels: eBoy and the Maturation of the Computer as Artistic Tool

When one journalist secured the rare opportunity to profile eBoy, the German pixel art collective formed in 1996, he asked a simple, yet complicated question: How should he describe its three members, Kai Vermehr, Svend Smital, and Steffen Sauerteig? Are they computer artists? Artists who use computers? Something else? Vermehr offered his own take: "I think we are three guys who work with pixels and make images."[1] This awkward exchange is not new – for decades, the novel and somewhat arcane prospect of creating art with computers has puzzled everyone from critics to artists themselves. But eBoy seeks to distance itself from that tired conversation. Vermehr redirects conversation about eBoy away from its medium of choice – the pixel – to focus on the group's signature "pixoramas." Together, the trio constructs these expansive 8-bit renderings of famous cities pixel by pixel using Photoshop's pen tool. While their subject matter is always a real location, eBoy's fanciful pixoramas unsettle the viewer's existing relationship by reimagining familiar scenes as rich, cheeky, and retro environments bursting with colorful chaos. As eBoy puts it, they depict "something you know seen from a different side."[2] Pixoramas therefore represent a digital twist on the tradition of genre painting practiced by the likes of Pieter Bruegel, a Dutch Renaissance painter famous for his detailed scenes of peasant life. (Vermehr cites a Bruegel painting hanging in his childhood home as an unconscious influence.[3])

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[1] Amar Toor, "Pixel Perfect: The Story of EBoy," The Verge. June 17, 2014. Accessed December 05, 2016. http://www.theverge.com/2014/6/17/5803850/pixel-perfect-the-story-of-eboy.
[2] Ibid.
[3] Ibid.

Understood this way, pixel art as practiced by eBoy finds itself at a unique intersection of computer art and Western art painting, reconciling many of the initial anxieties regarding the role of computers in the creative realm. While they are admittedly produced with a computer, pixoramas more heavily rely on techniques and subjects long practiced by painters. eBoy's work is therefore uniquely concerned with the meaning constructed *through* rather than *by* computers; rather than probing the technology for new aesthetic potential, eBoy adopts a pointillist application of pixels to create its playful interpretations of urban landscapes.

Bell Labs and the technoalarmism thrust upon computer art

When mainframe computers became widely available to researchers in the 1960s, artist-scientist collaborations immediately harnessed computing power to create new kinds of work. At the time, art critics discounted that work – things like visual representations of algorithms – for its "mechanical sterility" and judged it to be "tediously repetitious."[4] One of the central debates focused on the question of authorship, specifically whether computer art had authors at all. For example, in 1962, Bell Labs engineer A. Michael Noll attempted to patent a computer-generated print following its appearance in a gallery showing. The Library of Congress initially rejected Noll's application on grounds that his print was machine-made; Noll appealed the decision and eventually won the copyright after explaining that his algorithm, not randomness, generated the print.[5] Despite this victory, the continued back and forth between computer art's proponents and critics interrogated the role of machines in the art world and beyond. More generally, the 1960s marked the onset of a still-present anxiety about the role of automation in daily life. Opposition

[4] Grant Taylor, "The Soulless Usurper: Reception and Criticism of Early Computer Art," In *Mainframe Experimentalism: Early Computing and the Foundations of the Digital Arts*, edited by Hannah Higgins and Douglas Kahn, 17-33, Berkeley: University of California Press, 2012, 20.

[5] Ibid, 23.

to "soulless" machines in the creative realm seemed particularly strong due to how, as art historian Grant Taylor puts it, "the arts are usually presented as our last refuge from the onslaughts of our whole machine civilization."[6]

Still, intrepid individuals such as artist Lillian Schwartz and Bell Labs researcher Kenneth Knowlton continued to explore the aesthetic potential of these new computers. Schwartz's film *Pixillation* (1970) mixes the digital and analog as she supplements the output of computer code with hand-painted slides. Set to instrumental sounds defined by a motivating syncopation, the four-minute film operates at a variety of scales and alternates between organic and inorganic motifs. It opens with a title slide that displays "PIXILLATION" in an angular monospace font to declare its digital origins and then immediately begins to flash between reddish oozes of shapeless texture and crisp, blue patterns resembling a circuit. At some points, a single image appears as if to showcase the contents of a microscope slide. But as time progresses, moving tessellations become more prominent to generate a sense of scale, zooming out for the viewer to appreciate the detail and complexity of some unknown system. The visual and sonic rhythm gradually builds to a fever pitch, flashing and banging at such a pace to hold anxious viewers rapt until, ultimately – release. Through this sequence, Schwartz successfully manipulates the unfamiliar appearance of computer graphics to create an embodied experience in her audience that leaves some tacit understanding of what computers can do.

To be more explicit: *Pixillation* renders it impossible to discuss the film without analyzing its medium. "It is a gorgeous exploration of the possibilities inherent in constraint," summarized one critic, distilling the film's artistic merit to its engaging study of new

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[6] Ibid., 19.

technology.[7] The very title connects the work to its (partially) digital provenance, and the microscopic detail of its images dilates the feeling of all-encompassing anxiety generated by the onslaught of artificial textures and sounds. With certainty, that repeated interpolation of the computer throughout *Pixillation* signaled an intention to analyze the critical possibilities of the tools at hand. But this example and others that followed only exacerbated everyone's enduring, slightly paranoid questions: What else are computers capable of, and should I be worried?

eBoy's alternative approach to pixilation

Decades later, traces of those anxieties linger in the journalist's preoccupation with the computer-eBoy relationship, although eBoy seems to actively despise getting bogged down in methodology. Diverging from Schwartz's extensive engagement with medium, the pixel art collective expresses a surprising ambivalence toward pixels, framing them simply as a means to an end. Sauerteig, one of the eBoys, is emphatic on this point: "Pixels are just a tool just like a camera. The technique doesn't matter very much."[8] His frustrated repetition of the word "just" seems to emphasize the faulty logic of those who think otherwise, solidly dispelling any confusion about the matter. But his camera analogy is a particularly apt way to understand how eBoy perceives its work as an interpretive activity grounded in reality. Photographers use cameras to create images by capturing light. They can apply filters, stage a scene, and manipulate things however else, but both the setting – the world – and the requisite ingredient – light – never changes. At risk of sounding reductive, once they arrange the contents of the viewfinder just so and choose whatever device settings, photographers need only press a button to capture the

[7] Patterson, Zabet. "Pixillation." In *Peripheral Vision: Bell Labs, the S-C 4020, and the Origins of Computer Art*, 85-105. Cambridge, MA: MIT Press, 2015.
[8] Amar Toor, "Pixel Perfect: The Story of eBoy," The Verge. June 17, 2014, Accessed December 05, 2016, http://www.theverge.com/2014/6/17/5803850/pixel-perfect-the-story-of-eboy.

scene. Like eBoy, that labor works *through* a tool to capture external meaning. Schwartz, on the other hand, focuses internally on the construction of meaning *by* her tools; her labor is fundamentally arranged to riff on the nature of the material itself. eBoy rejects this orientation with its view that using a computer for art does not make said art a commentary on computers.

As an example, consider eBoy's New York City pixorama. Printed as an approximately meter-wide by meter-tall poster, the mural portrays a conglomeration of iconic sights geographically condensed to place the Chrysler Building, George Washington Bridge, and Statue of Liberty all within the immediate vicinity. Colors generally fall into one of two categories: subdued earth tones (usually dedicated to architecture or infrastructure) or strident hues of hot pink, electric blue, lime green and firetruck red (to highlight characters, commercial advertising, or various special effects). Corporate logos sit atop buildings, such as one skyscraper emblazoned with the "New Yorker" logo stylized with a backwards "k" (perhaps to invoke Cyrillic languages and hints of leftist propaganda). Another building hosts, in perfect harmony, both the logo for the New York Mets and the logo of the rival Yankees. These plays on familiar imagery introduce a paradoxical unreality to the characteristic realism of eBoy's work. Cars defy gravity to drive vertically astride the George Washington's suspension cables, and dozens of humans engage in wacky behavior such as lounging nude on a billboard platform or aimlessly tossing paper airplanes from a helipad nestled in Statue of Liberty's crown. The playful absurdity of these scenes is only buttressed by the serrated 8-bit quality of eBoy's pixel art that recalls the world of retro video games – one that was notoriously pleasant, if vapid. Considered as a whole, the pixorama advances New York as a Pollyanna-tinged *Garden of Earthly Delights* filled with endless and fascinating textures.

Still, despite the computer-based origins, this texture most prominently adopts the methods and style of landscape painting. Pixoramas, of course, are foremost constellations of pixels – the foundational unit of the bitmapped graphical user interface used on displays of all kinds. But eBoy employs a digital iteration of the pointillist approach commonly ascribed to George-Pierre Seurat to depict a fancifully imagined landscape in the tradition of Bruegel. Even though pixel art is plainly computer art, eBoy's process is in many ways identical to painting; to achieve this product, three artists together spent several years clicking the pixoarama into existence one pixel after another, mimicking the manual labor inherent to the brushstrokes of traditional painters. Adopting these techniques of Western art painting while utilizing the tools of computers art places eBoy at the intriguing intersection of two thought-to-be divergent categories.

Presciently, Schwartz telegraphed this future convergence when she observed flashing lights at a computer art exhibition and described it as "technological pointillism."[9] After that, she channeled much of her artistic energies toward controlling computers as an artistic medium through examples such as *Pixillation* – work laying groundwork for the precise and flexible tools essential to pixel art. But contrary to Schwartz's fascination with their artistic possibilities, eBoy favors computers for their utilitarian appeal. Using a standard implement such as the pen tool eliminates inconsistencies across eBoys, and it is impossible to ignore how software allowed the trio to collaborate remotely during the period Vermehr lived in Vancouver. The heart of their origin story is almost anti-climactic in its practicality: "We didn't pick out pixel art because it

[9] Patterson, "Pixillation," 88.

looked pretty," Sauerteig said, "but because it was technically logical to use for the work we wanted to do, and it's actually very enjoyable."[10]

At the same time, this subjugation of computers as a mundane artistic tool captures the maturation of computer art. The ubiquity and simplification of computers now allows artists to conveniently merge digital implements with traditional styles, finally focusing misdirected attention away from the novelty of the technology and back to the critical work of the artist. For example, as Sauerteig said, pixel art is "actually very enjoyable," and that feeling of pleasure is the lynchpin of eBoy's work. Pixoramas employ the jagged precision of technicolor pixels to distort cityscapes as playful places that emphasize the sheer possibility of the world; a sign that pixoramas still need tweaking, Vermehr said, is when "you look around it and you can't find anywhere you'd like to be."[11] Computers apparently just happened to be the tool eBoy selected to capture their playful interpretation of the world. With that and for better or worse, the answer to the journalist's question is deceptively simple: eBoy is three artists who use computers, just as countless others are artists who use paintbrush and canvas. The art necessitates the tool – not the other way around.

[10] Toor, "Pixel Perfect"
[11] Ibid.

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