

Close-Up-On-Art
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Title: Exploded View (Birds) – Condensed 2011
Artist: Jim Campbell, American, b. 1956 -
Owned by PSAM
Medium: LEDs and custom electronics
Completed 2011, San Francisco, CA



Exploded View (Birds)-Condensed 2011 (EV-B) is an excellent example of Meta-Art... Art about Art or Perceptions about Perception. Meta art can be appreciated on two levels. On one level we merely perceive it as artwork. On the Meta-level, we are drawn into a dialogue between the artwork and the viewer, asking what this work tells us about the ways in which we perceive. OK, enough generalities. Let us apply this to EV-B.

In this work, an array of LEDs hangs on wires to create a matrix of picture elements or pixels. As the pixels turn on and off, we perceive images of birds fluttering by. On the first level, we enjoy the dreamlike reverie of seeing birds in flight. On the Meta-level, we ask “Wait a minute... where are the birds?” The birds are elusive. Although the birds are clearly perceived, we cannot easily figure out where the bird images that exist in our minds, actually exist in the artwork.

EV-B is an example of the technical, psychological and artistic question that has been the foundation of Campbell’s work since 2000. That question is “What is the minimum amount of information the brain needs to recognize images?” Campbell’s body of Low-Resolution art runs from wall installations such as this, to large outdoor public installations.

Campbell’s education is in keeping with this focus. He earned a BS in Electronic Engineering and mathematics from MIT in 1978. This explains his technical expertise, but where did his artistic inspiration come from? This began when he read a Scientific American article (November 1973) by Leon Harmon titled “The Recognition of Faces” which stated that one of the subtler tasks of perception, can be investigated experimentally by asking how much information is required for recognition and what information is the most important.

Harmon is known for his Pixelated Lincoln as an example of mental/neural processing (image is shown, for the curious, on the last page). One aspect of Harmon’s career lends an interesting backstory to EV-B. In 1950, Harmon was employed as an electronics serviceperson at the Institute for Advanced Studies which was Albert Einstein’s base of operations for most of his tenure in the US. During this time, Harmon did encounter Einstein. So now for some idle speculation. Low resolution art provides a relativistic way of seeing. And, of course, Einstein is the creator of the Theories of Relativity. Any connection? Just saying.

And now, with apologies for running over the one-page limit, just three final points.

1. How low is Low Resolution? Campbell's works have approximately 1,200 pixels (LED lights) on display. Today's HD-TVs have about 2 million pixels on display. That means that Campbell provides only one pixel for every 170,000 HD-TV pixels. These birds take approx 100 pixels in EVB but an HD-TV would use 17 million.
2. In a matrix of lights, our "normal" expectation is to see the images conveyed by the lit-up lights. In EV-B, the images are conveyed by the lights that are not lit. The images arise out of the spaces between the lit lights. By negative space.
3. EV-B is partially displayed and partially hidden. Visible, is the crafting of the LED matrix. Hidden away is perhaps the real core of the creativity, the circuitry and circuit boards that time the LED illuminations to lead our brains into seeing the fluttering birds.

And now for Harmon's pixelated portrait. It is difficult to see the image in this pixilation. We think, if only if we could see it more clearly.... But the secret is to see it less clearly.



Simply squint your eyes so that they go somewhat out of focus. The image quickly resolves itself into a portrait of Abraham Lincoln (copied from a \$5 bill). Go figure.