In the 1960’s, the gifted painter Harold Cohen retreated from his worldwide success into the wilderness. After several years the ascetic returns, and transforms himself through the art of computer programming. Like painting, programming is a form of representation: information, gesture, and perhaps intention. By the mid 80’s Cohen presents his masterpiece Aaron, a computer program that draws! What is fascinating about Aaron is that it mimics some aspects of intelligence. But, is it semi-intelligent?

The first chapter “The Painter’s Tale” in Pamela McCorduck’s book *Aaron’s Code* unequivocally states, that “Aaron is artificial intelligence, intelligence in vitro…”¹ McCorduck acknowledges that Aaron doesn’t see, and questions whether intelligence is an all or nothing qualifier. However, she doesn’t elaborate on what intelligence, semi-intelligence, and artificial intelligence are, or can be. Instead, she makes the leap of faith that behavior tied to action constitutes a form of intelligence. Is a rice cooker intelligent, because it shuts off when the rice is *properly* cooked, thanks to its fuzzy-logic “brain”?

Aaron’s behavior is controlled by a *contingent system*, random events generated from a set of rules. It is unpredictable. Arbitrary actions do not constitute behavior². McCorduck marvels at the concept that Aaron can generate innumerable, *unique* artifacts. I’ll accept too many to count (too many worth counting), but I am skeptical about the claim that each piece is unique. What prevents Aaron from repeating the same drawing — statistical improbability? If Aaron kept a log of all the drawings, and each new drawing avoided recreating the image (even through a different path), then I would appreciate the unique quality of the drawings. Otherwise, I’ll accept that each drawing appears to be different.

Furthermore, I am intrigued by the logistics of how Aaron’s contingent system operates. The philosophical question is how a finite system generates an infinite output. How does Aaron know when to stop? What prevents Aaron from falling into an infinite loop of operations? Does Aaron conceive a drawing simply by applying a series of randomly, linked rules. Although the medium is pen and ink, I wonder if Aaron is really drawing? Does a camera draw an image onto the film. Drawing embodies intention, and feedback during the drawing process. Although Jackson Pollock’s work may be inferior to Aaron’s images, at least his intention was more than “I will throw paint in different ways at different times with different colors.” One may not buy Pollock’s attempt toward abstraction, but he did make decisions during the process of his art.

**Related References:**

² Doesn’t behavior require a pattern of action, continuity and coherence? I would further propose that intelligence allows the conscious modification of behavior based on context.