THE ART OF GENIUS: SIX WAYS TO THINK LIKE EINSTEIN

How do geniuses come up with ideas? What links the thinking style that produced *Mona Lisa* with the one that spawned the *theory of relativity*? What can we learn from the thinking strategies of the *Galileos, Edisons,* and *Mozarts* of history?

By studying the notebooks, correspondence, and conversations of some of the world’s great thinkers in science, art, and industry, scholars have identified the following thinking strategies that enable geniuses to generate original ideas:

1. **Geniuses look at problems from all angles.** Sigmund Freud’s analytical methods were designed to find details that didn’t fit traditional paradigms in order to come up with a completely new point of view. To solve a problem creatively, you must abandon the first approach that comes to mind, which usually stems from past experience, and reconceptualize the problems. Geniuses do not merely solve existing problems; they identify new ones.

2. **Geniuses make their thought visible.** Geniuses developing visual and spatial abilities that allowed them to display information in the *Renaissance* was tied to the development of graphic illustration during that period, notably the scientific diagrams of *Leonardo da Vinci* and Galilei Galileo revolutionized science by making his thought graphically visible while his contemporaries used more conventional means.

3. **Geniuses produce.** Thomas Edison held 1,093 patents, still a record. He guaranteed a high level of productivity by giving himself idea quotas: one minor invention every 10 days and a major invention every six months. *Johann Sebastian Bach* wrote a cantata every week, even when he was sick or exhausted. Wolfgang Mozart produced more than 600 pieces of music.

4. **Geniuses make novel combinations.** Like playful children with buckets of building blocks, geniuses constantly combine and recombine ideas, images, and thoughts. The laws of heredity were developed by *Gregor Mendel,* who combined mathematics and biology to create a new science of genetics.

5. **Geniuses force relationships.** Their facility to connect the unconnected enables geniuses to see things others miss. Da Vinci noticed the similarity between the sound of a bell and a stone hitting water-and concluded that sound travels in waves.

6. **Geniuses prepare themselves for chance.** Whenever we attempt to do something and fail, we end up doing something else. That’s the first principle of creative accident. We may ask ourselves why we have failed to do what we intended, which is a reasonable question. But the creative accident leads to the question: What have we done? Answering that one in a novel, unexpected way is the essential creative act. It is not luck, but creative insight of the highest order.

This may be the most important lesson of all: When you find something interesting, drop everything and go with it. Too many talented people fail to make significant leaps of imagination because they’ve become fixated on their pre-conceived plan. But not the truly great minds. They don’t wait for gifts of chance; they make them happen.

—Michael Michalko
(出自 Select Readings)