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 Arlington Street Church
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Eureka!

“On August 5th, 1949, a team of [fifteen smokejumpers parachuted onto the rim of] Mann Gulch in Montana to extinguish what [everyone assumed was] a relatively small brush fire on one side of the gulch. They ... [descended into the gulch] with the wind at their backs. Then, [without warning], the wind reversed and the fire [crowned], ... jumping [the span] to ignite ... their side [of the gulch]. The flames [devoured the dry grass, racing] toward [them]. The men [scrambled] up the slope, [trying] to outrun the fire,” shedding their cumbersome equipment as they went. But it was moving too fast.¹

“[Foreman Wag] Dodge stopped running. When [his men] saw this, they must have thought he was giving up, [and continued their desperate] flight. But [Wag Dodge had] had a lifesaving insight. With his back to the flames, he took out a match and lit the grass in front of him. [It] caught immediately, and the wind blew [the] new fire up the side of the gulch, ... leaving a [trail] of charred ground. Dodge [called for his men to join him there, crouched down on the scorched earth, covered his head,] and waited. [Moments later, when the huge, roaring conflagration arrived, it parted and] flowed around [him, and then away from him].”²

Wag Dodge survived. All but two of the other men perished.

In John Kounios and Mark Beeman’s book *The Eureka Factor*, they write, “[Wag] Dodge’s ‘escape fire,’ though familiar to the Plains Indians, was unknown to the [United States] Forest Service at that time.... The other members of [his] team must have thought ... Dodge had lost his [mind].... The firefighters [couldn’t] couldn’t imagine any solution other

¹ John Kounios and Mark Beeman’s, *The Eureka Factor*, pp. 22-23. According to the entry for Mann Gulch Fire at Wikipedia.com, after the fire crowned, “during the next ten minutes, a ‘blow up’ of the fire devoured 3,000 acres.”

² Kounios and Beeman, *op cit*, pp. 22-23

than ... the most obvious one: Flee ... the flames. [They couldn't flip] their interpretation [of the problem] ... and see fire as the solution....

“[Wag Dodge’s] insight was a sudden, ... radical reinterpretation.... [Fire as problem and solution]. He fought fire with fire,”³ and lived to tell the story.

I don’t need to detail my years’-long obsession with the story of Wag Dodge and the Mann Gulch Fire; let’s just say it left me with a question: Was that just some crazy kind of outlying, lifesaving insight, or can we practice keeping our minds open, keeping ourselves alert and our thinking flexible, shifting and re-shifting perspective on a problem until a solution is surfaced?

Through studies that included analysis of EEGs and functional MRIs, John Kounios and Mark Beeman discovered that an area of the right hemisphere of the brain lights up just at the aha moment. *The Times of London*, simplifying this research, “enthusiastically proclaimed the discovery of the brain’s E-spot: E for Eureka!” When you have this experience, you can almost feel that sudden illumination, and we talk about it that way: It was like a spark of inspiration; a bolt of lightning; a flash of insight. And, adds Albert Einstein of the “light bulb” moment, it’s joyful; conceiving the theory of relativity, he said was “the happiest thought of my life.”⁴

If you’ve never seen *The Miracle Worker*, the 1962 film starring Patty Duke as Helen Keller and Anne Bancroft as Annie Sullivan, you want to at least take a look at the clip of their interpretation of the moment that Annie breaks in on Helen’s dark and silent world. Annie took Helen to the well house and had her hold a cup under the spout as Annie pumped. As the water poured into the mug and over Helen’s hand, Annie signed the letters W-A-T-E-R into Helen’s other hand.

“That’s when it happened. In Annie’s words, “The coming so close upon the sensation of the cold water rushing over her hand seemed to startle her. She dropped the mug and stood as one transfixed. A new light came into her face.” Helen later explained, “I stood still, my whole attention fixed upon the motions of her fingers. Suddenly, I felt a misty consciousness as of something forgotten – a thrill of returning thought; and somehow the

³ *ibid*, pp. 22-23

⁴ *ibid*, p. 125

mystery of language was revealed to me. I knew then that W-A-T-E-R meant the wonderful cool something that was flowing over my hand. That living joy awakened my world, gave it light, hope, ... [and] set it free! ... I left the well house eager to learn. Everything had a name, and each name gave birth to a new thought. As we returned to the house, every object ... I touched seemed to quiver with life. That was because I saw everything with the strange, new sight that had come to me.”⁵

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It may well be that some people are “analysts” and some people are “insightful;” these are the categories into which scientists have grouped people who tend to rely on deliberate, methodical thinking versus those who tend to see solutions that just suddenly pop into our awareness, seemingly out of nowhere. But I choose to believe that all of us can cultivate our “insightful” nature.

We know we can’t control the arrival of insight; it doesn’t respond to ordinary commands. But it can be coaxed, and it would seem that it yields a different way of looking at things,⁶ and, perhaps, that it comes from looking at things differently. That’s the theory behind Gestalt therapy: When we get stuck trying to solve a problem, it’s probably because we’re just not thinking about it the right way.⁷ And there is a way out.

John Kounios and Mark Beeman suggest a three-step process that begins with “immersion.” This is when we’re consciously grappling with the problem, and immerse ourselves in the facts, and the resources and tools we have to solve it. We’re studying it, or maybe we’re just kind of swimming in all the details. Immersion.

Next comes diversion: the moment when either we’re really stuck; we’ve reaching an impasse. Maybe we want to take a break. Maybe we need to attend to something else, or to sleep. Or maybe we’re just distracted. Diversion.

And then comes illumination. This is the “aha” moment in which the solution appears. Eureka!

⁵ Helen Keller, *The Story of My Life*, pp. 20-24 (Helen’s words) and p. 316 (Annie’s words)

⁶ Kounios and Beeman, *op cit*, p. 6-7

⁷ *ibid*, p. 8

In 1891, at his seventieth birthday party, the great German scientist and inventor Hermann von Helmholtz gave a speech containing one of the earliest accounts on record of personal strategies for achieving insights. He said,

“Often, ... [ideas] arrived suddenly, without any effort on my part, like an inspiration.... They never came to a fatigued brain and never at the writing desk. It was always necessary, first of all, that I should have turned my problem over on all sides to such an extent that I had all its angles and complexities ‘in my head.’ ... Then ... there must come a hour of complete physical freshness and quiet well-being, before the good ideas arrived. Often they were there in the morning when I first awoke.... But they [liked] especially to make their appearance while I was taking an easy walk over wooded hills in sunny weather.”⁸

Immersion, diversion, illumination.... This is exactly what happened to Andrew Stanton of Pixar Animation Studios. Among a string of hits are *Toy Story* and *Finding Nemo*. Stanton had a new idea for a movie about the last robot left on a hopelessly polluted earth, abandoned by humans, but he was stuck on what the robot should look like. He wanted it to have an expressive face.

He’d been at it for some time – immersion – when his editor gave him tickets to a baseball game – diversion. As it turned out, the tickets were for pretty terrible seats. He borrowed binoculars from the person sitting next to him, but distractedly turned them around before he put them up to his face, and found “the lenses on the wrong side staring at him.” Just then, he says, the answer “‘dropped into my lap.’ The binoculars looked like a face. [Forgetting the ball game, I] flexed the inner hinge a few times to create different facial expressions and saw ‘an entire character with a soul in it.’ [Eureka! Illumination!] The robot WALL-E would look like ‘binocular[s] on a stem.’”⁹

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For those of us who prize tenacity, it turns out that diversion is really important. It’s about incubation, but it’s also about changing our setting or mood.¹⁰ The research on this is dizzying. I could go on and on, but I won’t.

⁸ Hermann von Helmholtz in R.S. Woodworth, *Experimental Psychology*, p. 818 (Woodworth’s translation of Helmholtz)

⁹ Kounios and Beeman, *op cit*, pp. 23-24

¹⁰ *ibid*, p. 25

Just this: There are two mind-sets for solving problems. We can shift our attention inward or outward at will. Which to choose? It turns out that in situations calling for out-of-the-box thinking, we want to be focused inward.

“Our addiction to constant stimulation, ... hyper-connectedness, [and] hyper-availability [are] all enemies of insight.¹¹ Instead, standing in line, waiting in traffic, or tasks that demand minimal intellectual firepower, such as dishes or laundry, can be “repurposed” for creativity, commandeered for inspiration. Realizing a great idea “could [also] be as simple as a little solitude,” minimizing the distractions that might be keeping an insight from surfacing. After all, write Kounios and Beeman, “you can’t see the stars when the sun is out.”¹²

This is where the word Eureka comes from. The mathematician Archimedes, pondering the equation for calculating density while lounging in his bathtub was struck with the answer and ran naked into the streets of ancient Greece, proclaiming his discovery. Eureka! is Greek for “I’ve found it!”

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In these past months, we have been waking up to a country we don’t recognize. And I’ve heard the same question repeated more often than I had heard it in my whole life: *What do we do now?* I have been inspired, uplifted, and upheld by the ways in which we are devoted to choosing to do the right thing, if only just the next right thing, moment by moment. Apple computers’ storied founder, Steve Jobs, said, “Innovation has nothing to do with how many R+D dollars you have.... It’s not about money. [Innovation is] about the people you have....”¹³ It’s about the people. Thank g*d we have each other.

Beloved spiritual companions,

May we, like Wag Dodge,
fight fire with fire.
May we know a flash of insight;
a bolt of lightning.
And, like Helen Keller, may we know joy.

¹¹ *ibid*, p. 217

¹² *ibid*, p. 214, p. 91

¹³ Steve Jobs, quoted in *Fortune* magazine, 11/9/98

May we choose to do
the next right thing,
moment by moment.
Immersion, diversion, illumination: Eureka!

In the end, it's all about the people.
For me, it's all about you.