

Testimony and Other “Wicked” Problems

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In recent years there have been glowing, breathless reports appearing in the media that speak of a new approach to problem solving. This method promises a competitive edge for businesses, organizations, and governments alike. Innovation consultants use the approach to tease out new ideas, collecting hefty fees in the process. *Time* magazine, *Harvard Business Review*, and a new binge-worthy Netflix series all extol its virtues.¹

In the corporate boardroom, the CDO, or the chief design officer, has joined the ranks of the CEO and the CFO. Design-driven companies like Apple, Nike, and Target consistently outperform their competitors.² It seems that “design thinking,” as it is known, is all the rage. Corporate profits alone, however, cannot explain all the new interest in design thinking.

In 1973 a German design theorist introduced the concept of a “wicked problem.”³ Contrary to what you might expect by the name, a wicked problem does not refer to something evil or sinister but instead describes something so tricky and complicated that it seems to defy solution. With a wicked problem, the situation is dynamic and often involves multiple variables. Both the exact nature of the problem and the solutions remain unknown when the project begins. Examples of wicked problems might include climate change, poverty, the Syrian civil war, or American

healthcare, to name a few. For these problems there are no easy answers, no silver bullets.

When other approaches fail, design thinking offers a fairly reliable process for solving wicked problems. It values empathy, understanding, and usability, all part of the human experience. Instead of counting widgets or poring over sales charts, design thinking takes a more anthropological approach, uncovering the human motivations behind complex problems.

As I thought about the message I could share with you today, I was reminded that many design principles offer insight into solving some of life’s great challenges. I believe that by applying these principles to your own wicked problems, your chance of solving them may improve. While this morning I have chosen to apply these principles to building a testimony, the methods are transferable to any problem you face in your life that you deem wicked.

Before we review these principles, take a moment to think. What is *your* wicked problem?

Maybe it is making your next tuition payment, choosing a new roommate, finding a summer internship, or even getting a date for Saturday night. Perhaps, though, your wicked problem

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is more complex—maybe it is a bit trickier. You struggle with certain Church doctrines, you doubt your testimony, or you wonder whether you will stay active in the Church after you graduate.

My maternal grandparents, Bill and Aleda Shulldberg, faced problems very similar to these. They were about the same age as many of you when they were courting in 1928. Although they did not have the luxury of attending college or know the stress of choosing a major, they both struggled with feelings of resentment toward the Church and toward their very active, devout parents.

As a boy, my grandfather posed with his mother and siblings for a family photo to be sent to his father, who was serving a mission in Sweden, his native country. What you do not see in the photo is the harsh poverty they endured while their father was away.

My fourteen-year-old grandfather and his sixteen-year-old brother were tasked with running a large dry farm all on their own. With no time left for schooling, my grandfather dropped out to carry the heavy burden of supporting the family on his young shoulders. He was particularly incensed at his father and Church leaders for the extra physical burden this placed on his mother, who at one point had to haul water for drinking, washing, and cooking from a well that was six miles from their home.

My Grandmother Aleda had also experienced hardship while she was growing up. She frequently recalled being left hungry and alone while her mother, the ward Relief Society president, traveled to help neighbors and friends during childbirth, distress, or illness. Her mother often stayed away for nights on end.

It is little wonder that both Bill and Aleda felt forgotten, marginalized, and bitter. They longed for escape and found comfort in their common circumstances. Against the advice of their parents and the bishop, and while they were expecting their first child, they struck off on their own for a place called Mud Lake, Idaho. Their timing could not have been worse, because just a few months later the stock market crash of 1929 ushered in the Great Depression.

On arriving in Mud Lake, my grandparents found much of the land abandoned. It had been devastated by drought, harsh weather, and crop-eating jackrabbits, so earlier homesteaders had picked up and moved away. Bill and Aleda had no money, no work, and very little education, so having a testimony at that point in their lives was not a priority. My grandparents had a wicked problem.

The allegory on testimony found in Alma 32:38–39 perfectly describes their circumstances:

If ye neglect the tree, and take no thought for its nourishment, behold it will not get any root; and when the heat of the sun cometh and scorseth it, because it hath no root it withers away, and ye pluck it up and cast it out.

. . . It is because your ground is barren, and ye will not nourish the tree, therefore ye cannot have the fruit thereof.

Design-thinking principles are not the exclusive domain of designers. As my grandparents' story shows, they apply to everyone. Although they most likely would dismiss these ideas as hoity-toity nonsense, my grandparents actively employed them to great success in their lives. You will recognize many of these principles as natural, even obvious parts of your own problem-solving routine because, to a large extent, design thinking is simply gospel thinking.

Having Faith in Ambiguity

Before beginning the design process, we must agree to a few conditions. First, since solutions to wicked problems cannot be reduced to a series of linear steps, the uncertainty found in the beginning is to be expected. I have heard this phase referred to as “the fuzzy front end.”⁴ Another designer visualized the design process in a haphazard, chaotic drawing called the “design squiggle.”⁵ The squiggle accurately depicts every design problem I have faced, most discussions at our family dinner table, and, most important, my own search for a testimony. Although the design process begins with uncertainty, a designer recognizes ambiguity as an opportunity to innovate,

disrupt the status quo, or reframe a problem. A designer believes a solution to their problem will eventually appear. While the secular world would be loath to label this concept faith, the parallels are unmistakable.

When my grandparents began their fuzzy, complicated journey, they had few other options. Perhaps naïvely, they maintained enough faith to believe in a positive outcome, no matter how precarious their risk.

I feel certain that Joseph Smith would find the squiggle similar to his own experience as a young man searching for a solution to his wicked problem. Like some of us, he was confused by contradictory information. He struggled with Church doctrine, doubted his testimony, and was not sure if he would remain an active churchgoer.

As you consider the condition of your own testimony, do not overlook the importance of doubt. Doubt causes you to question. It causes you to study. It causes you to seek reassurance from loved ones and your leaders. Most important, it causes you to approach the Lord for guidance.

Rather than a sign of rebellion, I believe doubt to be an essential part of the testimony-building process. In James 1:5 we read:

If any of you lack wisdom, let him ask of God, that giveth to all men liberally, and upbraideth not.

“Upbraideth not” means the Lord will not find offense in your questions. Rather, He wants to guide us toward the answers. Doctrine and Covenants 9:8 suggests:

You must study it out in your mind; then you must ask me if it be right, and if it is right I will cause that your bosom shall burn within you; therefore, you shall feel that it is right.

While many of his initial questions were answered by the events of the First Vision, the uncertainty that Joseph Smith faced would remain with him for years. Like an effective design thinker, he had to stay curious and open while undertaking a new experiment. He had to embrace uncertainty

as both an opportunity and as a motivating force and maintain sufficient faith to proceed.

A Prepared Mind

The chemist Louis Pasteur identified our second condition when he said, “In the fields of observation, chance only favours the mind which is prepared.”⁶ Working to solve a particularly difficult problem, he said, “I am on the verge of mysteries, and . . . the veil which covers them is getting thinner and thinner.”⁷ Pasteur was referring to the intense preparation that precedes a significant breakthrough—the aha moment. Those moments typically come *after* a domain has been mastered, not before. In other words, Louis Pasteur didn’t just dabble in chemistry; he made it his life’s work. Before we can recognize an important insight into our own wicked problem, we have to first put in the effort required to study it out in our minds.

Bill and Aleda couldn’t dabble in farm work either. They had to show up for work seven days a week, no excuses. Dependent on favorable weather and a small herd of farm animals, they had to be all in.

With a slight change, could we not adapt the concept of a prepared mind to testimony and the spiritual realm? The work of building testimony comes through the everyday activities of Church membership—home teaching, serving as the ward nursery leader, personal prayer, and study. Chance dictates that if we choose to *engage* in the work of the Church rather than *dabble* in it, our minds will be prepared to recognize the Spirit’s confirmation.

Line upon Line

For my grandparents, their first steps together were tentative. After living and working in Mud Lake with extended family during their first year of marriage, Bill and Aleda decided to stay. One day while twenty miles out on the desert, my grandfather found a fixer-upper—an old, two-room house on an abandoned homestead. With eight borrowed horses, he and a friend hoisted the house up and put it on two sleds and dragged

it back twenty miles across the frozen desert. Later, when the family had outgrown that house, construction began on a new one. Before the house was finished, however, World War II broke out, and building materials were rationed. The family moved into the basement, where they lived for ten years until the house could be finished.

Whether they knew it or not, my grandparents were demonstrating another design principle. The term *heuristic* roughly translates to “find” or “discover.” It implies problem solving by active experimentation through a pattern of trial and error. In other words, fake it until you make it.

Bill and Aleda built their house line upon line as resources became available. For us, faced with a similar problem, it doesn’t really matter sometimes what your first step is. The important thing is that you have taken one. When things don’t go as planned, taking a single step can cause self-doubt, fear, and paralysis to fade. Your confidence will increase, and another step will then seem possible.

This process is described in 2 Nephi 28:30, when the Lord said:

I will give unto the children of men line upon line, precept upon precept, here a little and there a little; and blessed are those who hearken unto my precepts, and lend an ear unto my counsel, for they shall learn wisdom; for unto him that receiveth I will give more.

A cognitive scientist referred to this process as “incremental development.”⁸ We make our best guess based on the knowledge we have at the time and then move forward.

For a designer, the process looks something like this: We have an idea and start with a *thumbnail* sketch. Most of the time we fail. A wise designer shared this thought: “Fail early to succeed sooner.”⁹ After a slight adjustment, based on our first experience, we try again. This time we call it a *rough comp*. Again the process continues line upon line, sketch after sketch, as we make gradual adjustments. At some point one of our ideas bears fruit, and something interesting starts to happen. An idea takes shape and begins to appear. We

call it a *tight comp*. Although not perfect, our idea improves as we continue to refine until suddenly we are getting somewhere and have a *final comp*.

With no stable income, Bill and Aleda traded their extra eggs and butter to a local farmer for what they called “bum lambs.” Since the lambs’ mothers had died during birth and other ewes would not accept them, bum lambs were sometimes left to starve because they required constant attention. Bill and Aleda woke every two hours to hand-feed the lambs from a pop bottle filled with cow’s milk.

In the midst of these struggles they found refuge in the friendship of other Church members facing similar challenges. As more children came and hearts began to soften, they began to participate in activities with local branch members. Line upon line, precept upon precept, their fragile testimonies grew as they planted small seeds in their hearts:

If ye give place, that a seed may be planted in your heart, behold, if it be a true seed, or a good seed, if ye do not cast it out by your unbelief, that ye will resist the Spirit of the Lord, behold, it will begin to swell within your breasts. [Alma 32:28]

As a fourteen-year-old boy, Joseph Smith had no idea what he was getting himself into when he inquired of the Lord “which of all the sects was right, that I might know which to join” (Joseph Smith—History 1:18). Joseph said, “It was the first time in my life that I had made such an attempt, for amidst all my anxieties I had never as yet made the attempt to pray vocally” (Joseph Smith—History 1:14).

In his anxiety, Joseph had taken his first shaky step without knowing where it would lead. Then he waited for further direction. He was proceeding heuristically—he began with a thumbnail sketch. After years of building line upon line, he eventually restored the keys and the authority and the organization that brings us here today.

Now, if you are like me, comparing my own experience and spiritual maturity at age fourteen to Joseph Smith’s is, well, a little awkward. I don’t see much correlation. But I take great comfort in

Doctrine and Covenants 46:11–12, which explains that gifts of the Spirit are given to each of us in different ways:

For all have not every gift given unto them; for there are many gifts, and to every man is given a gift by the Spirit of God.

To some is given one, and to some is given another, that all may be profited thereby.

This scripture offers reassurance that I don't have to measure up to a prophet. My spiritual gifts and small steps toward building a testimony will be different than his and different than yours. We all start in different places, and the Lord will meet us wherever we are.

Alma invited us to begin

an experiment upon my words, and exercise a particle of faith, yea, even if ye can no more than desire to believe, let this desire work in you, even until ye believe in a manner that ye can give place for a portion of my words. [Alma 32:27]

Divergent Gospel Thinking

My favorite part of the design process is the “what if” or ideation phase of design thinking. Curiosity and an ability to generate many ideas is a key characteristic of a design thinker. In the words of the chemist and author Linus Pauling, “If you want to have good ideas, you must have *many* ideas.”¹⁰

Divergent thinking means thinking inside, outside, and under the box. Designers may change their perspective, reframe the problem, or challenge a widely held assumption. Using active methods that flip, invert, or reverse, they work to disrupt conventional ways of thinking.

One of my favorite divergent thinking methods is called *bisociation*.¹¹ More commonly known as a mash-up, it forces together two unrelated domains in an effort to find an unexpected combination. Your experience at BYU is an example of a mash-up. You could all receive an excellent education at another university, but instead you are combining a rigorous study of your major (one domain)

with matters of faith (another domain). The hope is that something innovative will result from this unique combination. The smartphone in your hand is also an example of bisociative thinking; it is a big, beautiful, addictive mash-up of many technologies.

Bill and Aleda perfected the mash-up by thinking divergently with humor and grace. When a family member needed a new dress, they went to the mill with Aleda to choose a flour sack. When the sack was empty, it was dismantled and sewn into their new dress. Aleda saved every scrap of fabric, no matter how worn. She remade tattered coats to fit smaller family members, turned Grandpa's old ties into what is called a crazy quilt, and braided the leftover scraps into rugs. When Grandma got her hands on a surplus parachute after the war, she was giddy about repurposing the fancy new fabric called nylon. Spreading out the parachute on the living room floor, she began to cut out patterns for all of her children, then for all of her nieces, and, finally, for all of the neighbors. Never mind that the nylon was hot and itchy, everyone was going to have a new blouse.

Not to be outdone, Grandpa's bum lambs grew into a mighty flock. During the harvest, lambing, and grazing seasons, he often hired extra farmhands and knew exactly where to find them. As a very tall deputy sheriff, he was in charge of crowd control at the local dance hall on Saturday night. His billy club knew exactly where to land when the drunken shepherders got out of hand. Then, on the next day, the Sabbath, he was the local bishop. In a beautiful mash-up of gospel teaching, farm work, and law enforcement, he took the *human* bum lambs into his home, his fields, and his ward. Many received their first introduction to the gospel through Brother Bill.

My grandparents also frequently prayed over their flocks and fields. For them, mashing together work and worship came naturally. While most of us no longer work in the fields or with the flocks, the principle is still valid. We can ask for divine guidance in any aspect of our lives—home, school, or family life.

The Prophet Joseph Smith is also an excellent example of a divergent thinker. The founding story of the Church reveals him to be a radical thinker who challenged long-held assumptions, questioned authority, and gave voice to highly divergent ideas. I find it slightly ironic that divergent thinking, questioning, or rethinking the status quo may appear to some as antithetical to Church culture. It is true that as small children we learn to sing:

*Follow the prophet, follow the prophet,
Follow the prophet; don't go astray.
Follow the prophet, follow the prophet,
Follow the prophet; he knows the way.*¹²

Yet the principle of obedience is distinct, complementary, and compatible with the principle of divergent thinking. In my experience, the most effective and obedient home or visiting teachers are the ones who break from the standard script. They use creativity to serve the needs of their families.

Thinking divergently about your testimony offers the chance to escape the familiar ruts and tired patterns of Church membership. If Church life is stale, it is time to disrupt your routine. Try home teaching on the *first* day of the month. Say one prayer without resorting to vain repetition. Sing harmony this Sunday instead of the melody, and do it as loud as you dare. Rather than say you know the Church is true when you might not, bear your testimony of a single point of doctrine that you do know is true.

Prototype Early to Succeed Sooner

After hovering in the ideation phase for as long as possible, we eventually converge upon our best ideas in the prototype and testing phase. Learning from mistakes and failures, we apply the knowledge to our next iteration; consequently, the veil gets thinner. By its very nature a prototype signifies a work in progress and implies that we will fail. To the experienced design thinker, failure is only temporary; it is simply part of the process. Henry Ford said, “Failure is only the opportunity more intelligently to begin again.”¹³

In his journal Joseph Smith described himself as “a huge, rough stone rolling down from a high mountain; and the only polishing I get is when some corner gets rubbed off by coming in contact with something else.”¹⁴

What did Joseph mean? He was undergoing user testing. His ideas were in the rapid prototyping department. He was a work in progress.

After the Lord has shown you line upon line, precept upon precept, He promises to “try you and prove you herewith” (D&C 98:12). Bill’s growth in the Church came incrementally. His leadership skills were prototyped and tested as he served as the first presiding elder, branch president, and finally bishop of Mud Lake—a position he held for ten years. When the time finally came to build a chapel, the work fell to local ward members. Since they were all farmers, they could only work on the building during the cold winter months. As the building neared completion, a date for its dedication was set.

But in the rush to finish, my grandfather realized in horror that they had forgotten to budget for chairs or pews, and the congregation was completely out of money. Faced with the approaching deadline, he remembered a coffee can sitting on the top shelf in his kitchen at home. To earn money for new winter coats, the children had cared for a new crop of bum lambs all summer and had just sold them at market. The tin can contained all their hard-earned money. The Shuldberg family quietly took the can down, consecrated their offering to the Lord, and bought chairs for the new chapel.

With their prototyping and test complete, a promised blessing now awaited them. Aleda made over their old winter coats and they attended the dedication, sitting in new chairs that others barely noticed. On the day of the dedication, the apostle Joseph F. Merrill came from Salt Lake City to offer the dedicatory prayer. Unaware that the farmers usually ran out of irrigation water long before the growing season was over, he blessed the stunned members that there would always be sufficient water for their crops. Shortly thereafter one of the

largest underground aquifers in the United States was discovered below Mud Lake.

In the words of Alma:

And because of your diligence and your faith and your patience with the word in nourishing it, that it may take root in you, behold, by and by ye shall pluck the fruit thereof, which is most precious, which is sweet above all that is sweet . . . ; and ye shall feast upon this fruit even until ye are filled, that ye hunger not, neither shall ye thirst. [Alma 32:42]

Conclusion

By applying basic principles of design and gospel thinking, we can accept Alma's advice to experiment upon the word. Like the braided rug made with Aleda's scraps of fabric, a testimony only becomes durable and resilient when the small, individual experiences of gospel living are woven together. What was once discarded, worn, and insignificant on its own can offer great strength and comfort in the face of wicked problems.

So when the trial of your faith or any other wicked problem comes, remember to do the following:

- Embrace doubt and uncertainty as essential elements in problem solving. Let them motivate you to seek greater understanding.
- Remember that a testimony as well as knowledge are built line upon line. Rather than focusing on what may seem like an unreachable goal, incremental development comes from small, well-placed steps.
- If chance favors the prepared mind, your preparation will come through *immersing* yourself in Church life rather than through *dabbling* in it.
- If gospel living has become routine and uninspiring or if you feel stuck with a problem, look to change your perspective through divergent gospel thinking.
- Finally, growth in your testimony comes only through the tests and trials of life. Prototype early and often to succeed sooner.

From my own personal experience, if you have even a desire to believe, the seed of testimony can grow and take root within your heart. Of this I testify in the name of Jesus Christ, amen.

Notes

1. See The Rebirth of Design issue of *Time*, 20 March 2000; also The Evolution of Design Thinking issue of *Harvard Business Review* 93, no. 9 (September 2015). See also the Netflix documentary series *Abstract: The Art of Design* (2017).

2. See Michael Westcott, "Design-Driven Companies Outperform S&P by 228% over Ten Years—The 'DMI Design Value Index,'" DMI: Design Management Institute blog, 10 March 2014, dmi.org/blogpost/1093220/182956/Design-Driven-Companies-Outperform-S-P-by-228-Over-Ten-Years--The-DMI-Design-Value-Index.

3. Horst W. J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4, no. 2 (June 1973), 155–69; see also "wicked problem," Wikipedia, en.wikipedia.org/wiki/Wicked_problem.

4. Peter Koen and others, "Providing Clarity and a Common Language to the 'Fuzzy Front End,'" *Research Technology Management* 44, no. 2 (March–April 2001): 46–55.

5. Damien Newman, "The Squiggle of Design," July 2010, cargocollective.com/central/The-Design-Squiggle.

6. Louis Pasteur, in René Vallery-Radot, *The Life of Pasteur*, trans. R. L. Devonshire (New York: McClure, Phillips, and Company, 1902), 1:102.

7. Pasteur, in Vallery-Radot, *Life of Pasteur*, 1:75.

8. Vinod Goel, *Sketches of Thought* (Cambridge, Massachusetts: MIT Press, 1995), 107; quoted in Nigel Cross, *Design Thinking: Understanding How Designers Think and Work* (New York: Bloomsbury Academic, 2011), 125.

9. Tim Brown, *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation* (New York: Harper Business, 2009), 17.

10. Linus Pauling, quoted by Francis Crick in "The Impact of Linus Pauling on Molecular Biology," Pauling Symposium, Oregon State

University, 28 February 1995, address delivered on the occasion of the official dedication of Pauling’s birthday, February 28, as Linus Pauling Day; emphasis added, oregonstate.edu/dept/Special_Collections/subpages/ahp/1995symposium/crick.html.

11. See Arthur Koestler, *The Act of Creation* (New York: Macmillan, 1964), 35–38.

12. “Follow the Prophet,” *Songbook*, 110–11.

13. Henry Ford in collaboration with Samuel Crowther, *My Life and Work* (Garden City, New York: Garden City Publishing, 1922), 19.

14. Joseph Smith, *Teachings*, 304.