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The Creative Mythology

There is a mythology that surrounds creativity.

Myths are stories—usually very old stories—that are developed and passed down in an effort to explain why certain mysterious events occur or to affirm how we should behave and think. Cultures develop myths when they can't rely on existing knowledge to explain the world around them. The ancient Greeks told and retold stories of gods, supernatural creatures, and regular mortals as a way to explain how they thought the world worked. The myths they developed were an attempt to explain the mysteries they couldn't readily understand, such as the forces of nature, what happened after death, and even the mysterious process of creativity.

They created the muses, who received and answered the prayers of ancient writers, musicians, and even engineers.[1] The muses were the bearers of creativity's divine spark. They were the source of inspiration. Even thinkers as great as Plato

believed that poets drew all of their creativity from the muses, so that any works by the poets were really considered works of the muses.[2] As the Greeks' mythology developed, the muses did as well. Their mythology ultimately included nine muses who acted like patron saints of creativity, each providing mortals with inspired insights in a specific area. Calliope was the muse of epic poetry; Clio, the muse of history; Erato, the muse of love poetry; and so on.

The Greeks believed that all creative insight flowed from these muses, so they worshipped them in search of a creative source and the experience of creating something extraordinary. The act of creating something inspired by the muses was a divine privilege. Some of the greatest minds in Greece at the time, including Plato and Socrates, built shrines for or worshipped at temples dedicated to their muse of choice (or hedged their bets and prayed to them all). The classic Greek epic poems *The Iliad* and *The Odyssey* both open with prayers to a muse.

The Greeks even developed legends to warn against crossing the muses. In one story, Thamyris, a skilled singer, became overly proud of his musical skills. He boasted that he could outsing the muses and challenged them to a contest. The muses indulged his insolence and accepted the challenge. He competed against the muses and lost. The muses did not look kindly on his challenge. They blinded Thamyris and stole his ability to write poetry and play the lyre, leaving him unable to create art ever again. The legend of Thamyris was told to reinforce the belief that gods and the muses were the source of all talent and creative ability. Just as they could bestow it,

they could also take it away. The only means of sustaining a creative career, then, was to continue to worship the muses and thank the gods that created them as a means to send their gifts to mortals.

This belief that creativity is a divine gift isn't limited to the ancient Greeks. Theologians from a variety of religions throughout history, including Christianity, asserted that God was the sole source of creativity in the universe.[3] Even into the Middle Ages in Europe, the prevailing belief was that creative ideas were divine and that their derivatives were human. God's blessing was the explanation for all creative talent and inspiration. When one was asked where the idea for a song, poem, or invention came from, the answer of that time was always the same: from God.

Over time, the Greek influence on the Western world ensured that the legend of the muses continued on. It can be seen in literature throughout Western history. In Canto II of Dante's *Inferno*, he cries out to the muses for aid. In *Troilus and Criseyde*, Geoffrey Chaucer woos Clio, asking her to serve as his muse. William Shakespeare's *Henry V* opens with an invocation to the muses in the same style as *The Iliad* and *The Odyssey*. During the Enlightenment, many of the leading thinkers of the eighteenth century sought to reestablish a "cult of the muses" as a means to further their own intellectual pursuits. Voltaire, Danton, and even Benjamin Franklin attended meetings at a Masonic lodge named Les Neufs Soeurs, "the Nine Sisters." Our modern culture still feels the effects of their efforts in such words as *museum*, whose original meaning was "cult place of the muses" but has since come to refer to

any place where public knowledge or creative works are displayed.

The remnants of this original mythology appear in many of the conversations I find myself in, such as one I keep having with an old friend of mine from college. We've taken a few writing courses together, and she's always wanted to write a novel. When she came up with the initial concept over ten years ago, she did all the research but never got started on a manuscript. When last we spoke, she was still no closer to writing her novel. She had nothing but a notebook full of research and a blank page. When I ask about her writing, she always gives the same response: "I just couldn't find the inspiration to sit down and write." She may never outwardly say it, but her actions (or lack thereof) reveal a subtle belief that some outside force has to come to her to give her what she needs to write.

Every so often I have a similar conversation with another longtime acquaintance. He has always wanted to start his own business but has so far spent his entire career working inside the same large company. I've lost count of the number of entrepreneurship books he's read or start-up magazines he's purchased. He is always researching, but never creating. He can tell you the specific details of how so many great companies started small and how their growth exploded. "All you need," he tells me, "is a great idea." Just one great idea, and he'd have everything he'd need to become his own boss and start a company that would really make an impact on the world. If only that one idea would come to him from wherever it is waiting in the universe.

While the influence of the Greeks' mythology of creativity can still be seen in modern times, the modern scientific method has helped us move away from a belief in the muses. Research is moving us toward an empirically proven model of creativity that can be used to generate innovative ideas. We don't need to rely on belief in an outside force to generate great ideas. We have everything we need inside ourselves.

If these novel and useful ideas don't come from the divine, then where do they come from? What causes us to be creative in one moment and void in the next? What makes someone more or less creative than his or her peers? Where do our flashes of creative insight come from, and how can we generate more of them? The idea of a sacred being visiting us on occasion to bless us with a creative revelation or that the act of creation should be a near-religious experience might explain why creativity appears so fleeting, but for those who are challenged with being creative on demand, this mythology doesn't really help. Research on creative individuals and innovative organizations does.

Although there is still no precise and agreed-on definition of creativity despite nearly one hundred years of research on the subject, there appears to be at least a small consensus. Creativity is seen by most experts in the field as the process of developing ideas that are both novel and useful.[4] The novel is easily recognized, but the useful is just as important. The Mona Lisa is universally renowned as an important creative work, but a photocopy of the Mona Lisa is probably not considered quite as creative. However, photocopies themselves have been incredibly useful and were also novel when the first office

photocopier was released by Xerox in 1959. In organizations, developing ideas, projects, processes, or programs that are both novel and useful is the vital antecedent to leveraging innovation and staying competitive.

There is a unique relationship between creativity and innovation. Teresa Amabile, a Harvard Business School professor, believes that "creativity by individuals and teams is a starting point for innovation" and writes that "the first is a necessary but not sufficient condition for the second."[5] Amabile believes that creativity is the source of innovation, but she does not believe that it comes from the divine. Instead she champions what she calls the "componential model of creativity." Based on decades of research into creativity, this model was designed as a means of explaining the creative process and its various influences.

Amabile's assertion is that creativity is influenced by four separate components: domain-relevant skills, creativity-relevant processes, task motivation, and the surrounding social environment.[6] These four factors determine whether a creative insight will occur. Where they overlap is essentially where creative work happens. The degree to which these factors are present affects the level of creativity an individual will experience. Stated another way, creativity will be strongest when an intrinsically motivated person with significant creative thinking skills and a given level of expertise operates in an environment that supports creativity. Innovation happens when these factors align and the resulting creativity is applied.

Domain-relevant skills (commonly called expertise) are the knowledge, technical skills, or talent an individual possesses in a given domain. These are necessary resources that individuals

will utilize as they move through the creative process. Just as it is difficult to imagine a composer writing a symphony without some knowledge of musical keys, scales, and harmony, it is difficult to imagine an architect drafting an office building without knowledge of physics, engineering, building materials, and various other fields of knowledge. In many domains, such as the traditional fine arts, we can easily mistake domain-relevant skills for creativity itself. If we can't imagine being as good as the composer, then we assume that the composer is more creative than us. What we typically don't imagine is the years of deliberate practice required to gain such expertise.

Creativity-relevant processes are the methods people use to approach a given problem and generate solutions. These are the techniques employed to examine a problem from various angles, combine knowledge from various fields, and depart from status quo responses. These skills vary a little depending on personality. Independent risk-takers who can empathize with various perspectives tend to be better creative problem solvers. However, even though a given personality might lend itself to adopting these practices more quickly, the skills can also be learned. Even codependent, risk-averse narcissists can be taught how to generate ideas more easily and combine possible outputs to leverage synergy.

Task motivation is the willingness to engage. Simply put, it is passion. It is the desire to solve a problem for the challenge it poses or the mere satisfaction of working on it. Although expertise and creative thinking are the weapons used to attack creative challenges, no skirmish will be fought until the individual or team agrees to take to the battlefield. The architect

with all the right knowledge and the skill to generate new perspectives might be exactly what a client needs, but if she lacks the motivation to engage in the challenge, then those resources will go untapped or be utilized on some other project.

The final influencer, *social environment*, is the only component that exists entirely outside the individual. We all exist inside a larger environment, and that environment influences us more than we're probably aware. Research shows that the environment an individual operates in can either positively or negatively affect creative expression.[7] Are new ideas welcomed or harshly criticized within the organization? Does management emphasize continuous improvement or the status quo? Are there political problems within the organization? Are collaborative, cross-functional teams utilized? Is there freedom in how problems are approached? Are ideas actively shared throughout the organization? All these questions and more must be asked to assess whether the organization's social environment will increase or diminish the creativity of its members.

The elegance of Amabile's model is that it is applicable in a variety of ways. These four factors can be used to adjust the positive or negative influence an organization has on the creativity of its members. If we want our people to generate great ideas, we can analyze our organization according to the four factors. Some of these factors have a wider range of influence than others and thus a more pronounced impact. However, if these four factors are designed with conscious intent, then they will eventually lead to an increase in creative ideas.

Domain skills can be improved. A photographer can learn a new technique for using light, or expand her knowledge into

the domain of filmmaking. Likewise a computer programmer can learn more about a specific coding language, learn to code in a new language, or even study a new field like industrial design. Many organizations already utilize the influencer of domain skills through corporate training, job rotation, and even outside learning programs such as tuition reimbursement. However, one requirement of these programs in most companies is that they be specifically relevant to the present job. As we'll examine later, sometimes a broader range of domain knowledge may be a better creativity enhancer than a deeper level of knowledge in the same domain.

Creativity-related processes can be learned. People can learn how to brainstorm (or, more likely, how to brainstorm properly). They can be taught problem-solving methods or lateral thinking techniques. If they can generate more ideas or develop a better ideation process, the quality of their creative work increases. The aforementioned photographer can be shown how to better imagine the staging of portraits or how to combine elements of multiple styles to develop a unique look. The coder can be taught how to design multiple versions of software or how to combine elements of various programs into a new and better offering.

Both expertise and creative methodology can be taught, but their presence is irrelevant without the motivation to work. The photographer may have an inherent understanding of how her lens captures the stories that only she can tell, or she may just sit behind a kiosk and snap portraits for lines of families. The programmer may be working diligently to change the world by designing the next interface between humans and

technology, or he may simply be making one more drop-down box to mark the user's country of origin. Fortunately, jobs and programs can be designed to better motivate individuals. In Chapter Six, we'll uncover why designing a job to be intrinsically motivating will yield a better creative return than designing the traditional corporate bonus program.

The social environment of the firm is usually the hardest component to redesign; however, it may also be the most important. The social environment enhances or detracts from creativity by influencing the other three internal components. The level of an organization's commitment to continuous improvement and learning has a direct effect on the ease with which individuals seek to grow their expertise. Likewise, the amount of cross-functional work within the organization affects whether individuals benefit from a broader, group expertise. The openness of top management to new ideas and the availability of resources affect how often creativity-relevant processes are used or how much the "same old, same old" remains the method of choice. Whether top management actively spreads a vision of continuous innovation and reinforces it with actions and policies determines how open individuals are to expressing their creativity. In addition, the emphasis on the impact and significance of the work being done throughout the organization affects how intrinsically motivated individuals are to show up every day and create or innovate.

This four-component model of creativity pulls back the veil on what many believe to be a mysterious and sacred endeavor. Creativity is less the outcome of a divine blessing or visitation

and more the result of designing the right ecosystem and filling it with properly trained people with diverse perspectives. While the creative mystics may still pray to the muses or look jealously on the blessed, the implications of this empirically based model are clear: under the right conditions, anyone can be creative. Everyone can generate great ideas.

Despite the empirical challenge Amabile's model provides to a creative mythology, creativity still appears to many as a mysterious process. Even though science has helped explain the original creative mythology, newer myths have developed to help explain away other mysterious elements of creativity and the process of innovation. Perhaps you've had a creative insight, a spark of inspiration, and it felt as though it came from outside yourself. Perhaps you look at another person, and it seems that she was just born with an innate creativity that you lack. Or maybe you look back at our history of progressive invention, and it seems that each idea was a revolutionary and unpredictable departure from the status quo. These things are difficult to explain, so, over time, we've developed a means to explain them. We've developed our own system of heuristics, of speculative formulations, on how creativity works. And these speculations have developed into myths.

One of the possible reasons for the original creative mythology is that new ideas can sometimes seem to appear as a flash of insight. This has also given rise to the *Eureka Myth*, illustrated in stories like the one about Isaac Newton and the falling apple. Instead of a quick spark, however, these insights are actually the result of hard work on a problem or project. The answers are there, but they often need time to incubate

in our subconscious as we connect ideas. Sometimes the connection comes from elements of older ideas.

With an ancient, sacred source excluded from the equation, many still view creativity as a limited resource accessible only to a rare breed of individual. This is the *Breed Myth*, the belief that creative ability is a trait inherent in one's personality or genes. We label certain people as "creatives" and others as presumably not. There's little research to support this claim. In fact, the evidence supports the opposite; there is no creative breed. Several companies are structuring their organization to abolish the divide between creative jobs and noncreative ones and make innovation part of everyone's job description.

Often when a creative idea is generated, it becomes immediately viewed as proprietary to the person who thought of it. In business, this is part of the ever-increasing emphasis on intellectual property. This emphasis, however, is based on the *Originality Myth*—that creative ideas are totally original to their creators. The historical record, and empirical research, support a different notion. Ideas are combinations of older ideas, and sharing those ideas helps generate more innovation. This research has some interesting implications for how we treat ideas competitively and even inside an organization.

Most often we rely on a team of experts to generate consistently creative ideas. However, that doesn't always work. Sometimes we get trapped in the *Expert Myth*, the belief that harder problems call for more knowledgeable experts. Instead, research suggests that such wicked problems often require an outsider's perspective. Companies can find ways to tap into these outsiders to find more innovative solutions to difficult

problems. Companies that rely on their experts often fall for another myth—the *Incentive Myth*, which argues that incentives, monetary or otherwise, can increase the motivation of their people and hence increase their creative ability. These incentives can help, but often they do more harm than good. Fortunately, nearly fifty years of psychological research into motivation exists to help overcome the incentive-based programs and help design systems that are truly motivating.

When we examine creative work throughout history, certain genius individuals seem to stand out. The *Lone Creator Myth* reflects our tendency to rewrite history to attribute breakthrough inventions and striking creative works to a sole person, ignoring those individuals' influences and collaborations. Creativity is often a team effort, and recent research into creative teams can help leaders build the perfect creative troupe. But often when those teams work, they buy in to the *Brainstorming Myth*, believing that brainstorming alone will yield creative breakthroughs. Unfortunately, though, just "throwing ideas around" is not enough to produce consistently creative breakthroughs.

When we think of exceptionally creative teams working together, we visualize "zany" companies where employees play foosball and joke around while eating free lunches. We think that creative companies must prize safe and cohesive environments built on fun and sharing, but that may not be the case. Believers of this *Cohesive Myth* want everyone to get along and work happily together, when such cohesiveness can actually hinder innovative thinking. Many of the most creative companies have found ways to structure dissent and conflict into their

process in order to make sure they produce the best work possible. A similar faulty visualization is given to resources. We think that the companies that produce the most innovative results are those that give their people unlimited resources. This is the *Constraints Myth*—the notion that constraints hinder our creativity. Many companies, however, do just the opposite. They intentionally apply limits to leverage the creative potential of their people because, as research shows, creativity loves constraints.

Many of the myths concern how to be creative, but one myth concerns creativity itself. Many people falsely believe that once we have a creative idea, the work is done. The world will recognize the merit of that idea and help us bring it to life. This is the *Mousetrap Myth*, after the faulty proverb about building a better mousetrap. The world won't beat a path to the door of the most innovative among us. It's more likely that those people and their ideas will be ignored at best, or even actively destroyed and discredited at worst. It's not enough to know how to generate creative ideas; we need to understand how to overcome this phenomenon in order to drive innovation.

Like many traditional myths, the myths of creativity are useful for putting our minds at ease. They seem to explain our world and our creativity (or sometimes our lack thereof). Even if they are not a perfect explanation, embracing the myths is better than shrugging one's shoulders and admitting naïveté. However, as is true of many other myths, embracing them too tightly can hinder our understanding of reality. The myths of creativity might feel helpful, but stubborn belief in them

despite evidence to the contrary will hinder us from achieving our creative potential. Once we know the truth, however, we can discard these myths and better prepare ourselves and those we lead to produce real creative thinking. If we want to generate truly great ideas, we can't rely on heuristics or mythology. Instead, we need to closely examine scientific research into the creative mind and study the examples of the most innovative companies and people. We need creativity in organizations, but we need more than just myths of creativity.

Creativity is the starting point for all innovation, and most organizations rely on innovation to create a competitive advantage. Innovation is necessary for the successful development and implementation of new programs or better products. Because of this, leaders of organizations in all industries are asking more questions about creativity. Where does it come from? How can we get more of it? Where do we find creative people? All these questions are valid, but the myths about creativity often lead us to the wrong answers. In order to lead innovation efforts, we must have a better understanding of where creativity comes from and how to enhance the creativity of the people we lead.

We must rewrite the myths.