

## From Inspiration to Learning Cultures

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*Even the organization with many inspired and creative individuals working there will find that sometimes the creativity of these individuals may not translate into organizational learning and creativity. For those organizations wanting to maximize the impact of inspired individuals, there would be factors having to do with a culture of learning that might improve the individual-to-organizational translation of ideas, which is the subject of this article.*

### INSPIRATION

Inspiration is psychological combustion. When the first woman (or man) saw lightning strike something and then saw that thing immediately catch on fire, imagine the thrill and fear that charged through her (or him). There is not merely one source of fire in the universe, of course, but many, including lightning, friction, and the combination of ignition, combustible material, and oxygen.

Likewise, there is not one source of inspiration for the human mind. Ignition, combustible material and oxygen are necessary. Ignition can come from ideas shared directly (person-to-person, phenomenon-to-imagination) or indirectly (access to ideas recorded in some fashion). Inspiration is to understanding as combustion is to fire. New learning can inspire new ways of thinking and acting.

The 1.4-million-word opus of Marcel Proust, *In Search of Lost Time*, began with a childhood memory of the madeleines served to him by his aunt. All it took was for sensory input to trigger his memory and new ideas and concepts emerged. He simply rode that basic notion to create his prodigious masterpiece. Sensory input, a smell, a taste, leads to an internal feeling – an emotion, a memory, a random association, or a question, a conversation, or a challenge to our ideas, can ignite a thought process, and these ideas are the combustible material.

In the book, *Surfaces and Essences: Analogy as the Fuel and Fire of Thinking*, Hofstadter and Sander (2013) explore the idea that analogy is the core element of human thought, that is, fuel - information and ideas, and a process - analogy-making, can keep thought rolling toward new insights. Studies by Olguin, et.al. (2022), demonstrated that surface similarities between stories read by subjects were enough to elicit insight into deeper analogs.

But it is not just autobiographical connections that can serve as sources of fuel for igniting the fire of new insight. From work by Platania & Moran (2001), Zajonc (1965) and Allport (1924), we have strong indications that the presence of other people can inspire us to repeat dominant responses (social facilitation), i.e. we perform for the audience using the best thoughts and behaviors we have learned to date, on tasks that do not involve higher-order thinking. However, the presence of an immediate audience can undermine our clarity when it comes to higher-order thinking. Returning to the fire metaphor, for higher-order thinking,

we are apparently better off taking the lit fire back to our private domicile and using it to ignite combustible material we have there. We “respond” better when people are watching, but we “ruminate” better alone.

Higher-order thinking (HOT), refers to cognitive processes that go beyond simply recalling information. It involves complex thinking skills such as analysis: breaking down information into its parts and understanding their relationships; evaluation: critically examining information, weighing evidence, and forming judgments; synthesis: combining information from different sources to create new ideas; and problem-solving: developing and evaluating solutions to complex problems. These skills rely on the prefrontal cortex, which involves complex thought and planning (Kenett, et.al. 2021).

Nobel laureate and psychologist Daniel Kahneman (2011) described two thinking systems: system 1 - fast, automatic, and effortless; responsible for things like intuition, habits, and immediate emotional responses, and system 2 - slower, deliberate, and involving more mental effort, used for complex reasoning, problem-solving, and higher-order thinking.

When we're in front of an audience, particularly one where we feel judged, we often experience social anxiety: This can trigger a "fight-or-flight" response, diverting resources away from the prefrontal cortex. Evaluation apprehension may occur, meaning we become more concerned with appearing smart or avoiding mistakes, leading to a preference for quick, familiar responses.

These factors push us towards relying more on System 1 thinking, which favors dominant responses over novel ones. We give the first answer that comes to mind, often repeating commonly held beliefs or well-rehearsed arguments, demonstrating confirmation bias, focusing on information that confirms our existing beliefs and disregarding anything that challenges them, resulting in diminished effectiveness of our thinking.

Higher-order thinking, which involves focused attention and effort from System 2, gets sidelined. We struggle to analyze information critically, consider alternative perspectives, or form original ideas. We come across as less “intelligent” to our audience than if we were just talking to an intimate friend who posed much less of a threat to us than the large audience.

## **LEARNING CULTURES AND ORGANIZATIONAL INNOVATION**

Mitigating the effect of social anxiety can be critical to individual and organizational innovation. First, the more we engage in higher-order thinking tasks, the better we become at it, even under pressure. Also, thinking about potential questions or challenges beforehand allows us to engage System 2 in advance. Further, positive framing, such as viewing an audience as an opportunity to share knowledge, is not a threat to be overcome.

Perry-Smith & Mannucci, 2017) conceptualize four phases of the journey of an idea, from conception to completion: idea generation, idea elaboration, idea championing, and idea implementation, proposing that a creator has distinct primary needs in each phase: cognitive flexibility, support, influence, and shared vision, respectively. They maintain that Individual creators successfully move through a phase when the relational and structural elements of their networks match the distinct needs of the phase (Perry-Smith & Mannucci, 2017). Presumably, all these things do not spontaneously or fortuitously arise, but need cultivation by those with influence over the organization’s culture.

If a group of people are writing a paper that involves conceptualization, they would be better off thinking alone and assembling together, conceptualizing and then coordinating, rather than trying to conceptualize together and then having one person put the group-derived concepts together. But when this is not possible, then the pressure is on the organizational culture to mimic the safe context the socially anxious get from being alone.

There are many thinkers who have explored the concept of finding new ideas through encounters with different paradigms. Here are a few prominent examples. Thomas Kuhn (1962), in *The Structure of Scientific Revolutions* explores how scientific progress occurs through paradigm shifts, where new ideas challenge dominant ways of thinking. Ilya Prigogine (1984), Nobel laureate in chemistry, delved into complex systems, where order emerges from chaos, suggesting far-from-equilibrium systems, where disparate elements interact, can be fertile ground for new discoveries.

Likewise, Stephen Toulmin (1972), philosopher of science, emphasized the importance of "rational reconstruction" in understanding scientific arguments, examining arguments across different paradigms and arguing for a richer understanding of scientific progress through the process of multi-paradigmatic thinking.

A lot of inspiration is still not thoroughly understood. Some people appear to be autocatalytic (capable of self-inspiration), but most require interaction with people or ideas to become inspired, which helps explain the role of memetics in creativity and innovation (Roy, 2017).

Also, it is likely that people who disagree with us but not to the point that we are emotionally distracted by the disagreement will inspire us to better insights. Furthermore, people whose dominant paradigm of thought or whose habitual responses are dissimilar - obviously a relative term- to ours, will be more likely to catalyze us into "new thinking," even though they may not disagree with us. You might say that inter-paradigm exchange can catalyze our thinking in ways reminiscent of intra-paradigm disagreement or inter-paradigm disagreement.

Donald Schön (1992) wrote about "reflective practice," a process where individuals learn by reflecting on experiences and challenging assumptions. This aligns with the idea of autocatalytic thinking as it involves using experiences to generate new ideas. This may strain the meaning of autocatalytic, if experiences are being used to generate new ideas, but even autocatalysis presumably originate somewhere.

Edward de Bono (1992), known for his work on lateral thinking, explored techniques to deliberately break out of rigid thinking patterns and generate creative solutions, aligning with the concept of overcoming stagnant thinking and thus becoming capable of system 2 or higher order thinking, even in the face of social anxiety provoked by a judgmental audience. Again, though, the right group or organizational culture can play a role in promoting lateral thinking.

We are more likely to be inspired by the unique than the familiar and we are probably also more likely to be inspired by being challenged in our thinking than by being affirmed in it, when the context is not combative. If I say inspiration comes from friction between two rough things being rubbed together like sticks and you say, no, I think it comes from a flow process sort of like the siphoning of gas through a hose, from a gas tank, we may be able to prove that both of us are correct.

During idea brainstorming, sometimes I follow the moves of others and work with similarities, but sometimes I seek to contradict others, that is, I appear to be working with dissimilarities. The former is like hose siphoning and the latter more like rubbing two sticks together. Inspiration can be either making more out of the same or making something new out of a difference. Seeber et.al., (2017) explored how convergence resulting from collaborative competition can be optimum.

For inspiration to be useful, it must be contained, it must be channeled. If I can perform rapidly at idea-association, the way Robin Williams was, for example, that ability does me no good if the associations I am making are not on the theme under consideration, if they are apropos of nothing. The difference between creative genius and creative insanity concerns the presence or absence of a theme.

When a team of engineers brainstorm, the results of their session will likely be nearly incomprehensible to a group of laypeople. They will use jargon and shared understandings to create subtle meanings that those who do not share their language will be unable to appreciate. Their effort is likely to produce a lot of "inside jokes".

Comedy begets comedy, moralizing begets moralizing, deep thinking leads to more deep thinking. I have noticed, for example, that during my Kurt Vonnegut years (months at a time spent reading one Vonnegut novel after another), when I sat down to write, a good deal of what I wrote, sounded a lot like Vonnegut-lite, not as good as his masterful products, but in that direction.

Stel and Baaren (2016) proposed the Associated Reactions to Actions in Context model (ARAC) to explain why and when mimicry is facilitated and attenuated, asserting that reaction-to-action neurons fire when people observe an action. Which reaction is elicited depends on the association, learned or innate, with an action in that context. That is, when mimicry is rewarding in a specific context, this response is facilitated, whereas when mimicry is damaging or harmful, this response is attenuated, and another reaction may be facilitated instead. Their theory is almost behavioralist.

What happens, for example, if I put a comedian in the room with brilliant scientists? Is it not possible that permitting the comedian to have control over the conversation at intervals may keep the ideas flowing

or keep the experts disagreeing enough to create something like eloquent suspension. That is, might it not be the case that the scientist mimics, to some extent, the comic in freewheeling style, although not in content?

However, suppose I put a scientist into a roomful of comedians and arranged to give the scientist the floor ever so often. The comedians, especially if they are the types that feed off one another, may well create an almost new genre of humor, humor based on the science of the odd man out, so that in this case, it might be the content that gets mimicked by the comedians, and not the style.

What I need is a culture or context wherein everyone in the room makes maximum use of the knowledge they have on the theme we are discussing while doing so in a playful style, a manner most likely to elicit spontaneous -idea-combustion among those present. I need flow, form and friction. I need piggy-backing, a clear theme or direction for the creativity, and enough variety or paradigm difference among those in the room, to suspend the mood at a high level long enough to generate powerful new understandings.

If you want to turn out inspired products and services as an individual or as a corporation, put flow, form, and friction together in the right blend, which might increase the chances. And between those times when you are generating especially high-level output, the interaction is likely to be enough fun and engaging, that you stay together long enough for inspiration to return.

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