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Exploring Organizational Creativity and Mindfulness with Ravi S. Kudesia

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"In a fractal conception, I am a cell-sized unit of the human organism, and I have to use my life to leverage a shift in the system by how I am, as much as with the things I do. This means actually being in my life, and it means bringing my values into my daily decision-making. Each day should be lived on purpose."

Adrienne Maree Brown

"The world shows up completely differently for an expert carpenter than a novice. To an expert carpenter, there is no me, the hammer, the nail, the hammering. There is just hammering. You're not thinking about it. The world fundamentally transforms when you become an expert."

- Ravi S. Kudesia

Introduction

Starting in 2016, this column on Rethinking Technology & *Creativity* has focused on interviews with creativity experts across different disciplines and threads of interest, allowing us to curate a nuanced, varied, and holistic understanding of the relationship between learning, creativity, and technology. In recent articles, we have taken a deeper dive into how mindfulness and creativity intersect-as related phenomena,

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as conceptual constructs, and practice. In upcoming/future issues, we will shift focus to other topical realms of creativity and technology, but this deeper dive over several issues has allowed for a better exploration of these topical and interrelated ideas, and to explore their implications for education. In this article, we explore Dr. Ravi S. Kudesia's scholarship in organizational theory, particularly as it sheds light on ideas of creativity, metacognition, and mindfulness as they play out in an organizational or collective context.

Dr. Kudesia is an Assistant Professor of Management at the Fox School of Business, Temple University. Before joining the Fox School, he was a research fellow at Future Resilient Systems, a think tank established collaboratively by ETH Zürich and the National Research Foundation of Singapore. He studies how collective cognitive processes can emerge from group human behaviors. In his words, "When people organize, seemingly individual cognitive processes like attention and interpretation transform into properties of collectives." The transformation of individualistic cognition into the collective also has implications for organizational creativity and mindfulness. Kudesia argues that organizations, similar to people, are selective about what information to attend to, how to interpret that information, and which interpretations to put their energy into. In this way, he says, "Organizing sustains itself over time on the quality of its cognition," which leads to the question that drives his scholarship, "...what then sustains the quality of cognition?" His work applies theoretical and practical metacognitive approaches (including conceptualization of mindfulness) to help organizations monitor and adjust their cognition. Thus, he looks for insight in contexts as diverse as meditative traditions and high-reliability organizations using both quantitative (experiments, surveys, simulations) and qualitative (interviews, observations, archival) methods. Our interview with Dr. Kudesia helped unpack some of the key paradigmatic shifts that are required to understand



creativity from a perspective of both individual and groupsocial dynamics.

Some key takeaways from our interview with Dr. Kudesia, include: (a) what is (or isn't) mindfulness, specifically how we parse between conflicting definitions of mindfulness and the consequences of that on how we understand and talk about cognition, (b) what conditions lead to organizational mindfulness and creativity, namely how organizational creativity and mindfulness emerge out of the architecture of relationships of people who make the organizations, (c) how technology and social media can be used mindfully to foster creativity, both in individual and organizational contexts and (d) the pedagogical implications of mindfulness.

Key Takeaways

Defining Mindfulness

Dr. Kudesia sees mindfulness as a practice related to metacognition, that helps you become aware of your own thoughts and feelings and adjust them to your current situation. According to Dr. Kudesia, mindfulness involves observing one's own thoughts and feelings from a distance. He argues that when a person can observe their thoughts and feelings from a distance, they are less identified with them, providing greater agency in how a person can engage with situations. This separation of thoughts and feelings from "the thinker" and "the feeler" is what Shapiro et al. (2006, p. 377) refer to as "reperceiving," which they identify as an outcome of practicing mindfulness:

Through the process of mindfulness, one is able to disidentify from the contents of consciousness (i.e., one's thoughts) and view his or her moment-by-moment experience with greater clarity and objectivity. We term this process *reperceiving* as it involves a fundamental *shift in perspective*. Rather than being immersed in the drama of our personal narrative or life story, we are able to stand back and simply witness it. As Goleman suggests, "The first realization in "meditation" is that the phenomena contemplated are distinct from the mind contemplating them" (1980, p. 146).

Reperceiving allows for greater freedom and flexibility in widening of perspective, which may lead to additional mechanisms of change: (1) self-regulation and self-management, (2) emotional, cognitive and behavioral flexibility, (3) values clarification and, (4) exposure (Shapiro et al., 2006). Relevant to this discussion, Dr. Kudesia highlights the emotional, cognitive, and behavioral flexibility that can result from mindfulness practice and have a significant impact on individual and relational functioning. These changes

to interpersonal and intrapersonal functioning can lead to changes at the organizational level as well:

In the fields of business and education, which tend to rely more on the work of Ellen Langer, mindfulness is seen as acts of noticing what is new, such as the difference between the last time we engaged in an action, and our current action. When we distinguish between past and present actions, we are noticing new information or identifying a different way to behave. This act of distinction offers us creative flexibility to adapt to even unexpected situations.

According to Dr. Kudesia, a correct understanding of cognition sheds insight into the nature of perception, which is relevant to mindfulness as well:

The wrong view of cognition considers it a linear sequence—that first we perceive a lot of information and then we narrow that information down into concepts. If we drop this assumption, what you start to realize is that human cognition is tied into social practices. I give the example of an expert chess player who can do extremely deep interpretations of what's going on simply through perception. They make their moves within seconds and you could wipe the board clean and they know exactly where everything is. Perception doesn't have to be shallow. Perception can be rich in interpretation.

This notion points to a bridge between social practices and the richness of human cognition. Dr. Kudesia pointed to the perceptiveness of a chess player which occurs because of their expertise. Engaging in a social practice, like playing chess, for a long period of time can sharpen perception and reduce their reliance on concepts, whereas for beginners, using concepts would be more appropriate. He further noted that:

It is better not to define mindfulness as one of the cognitive states of relying either on perception or on concepts, where one state is better than the other. Instead, mindfulness has to do with our ability to match these states to our current situations based on our expertise. If you're just starting out, if you're a beginner at something, you need concepts like 10 and 2 on the steering wheel. That's an important concept. I don't want a beginner to try driving without concepts. With learning to tie your shoes, you make "bunny ears," one goes in the other. We need concepts to learn things. Then as we start getting better at things, we start getting a little bit more perceptual.

This is similar to beginning mindfulness practitioners engaging in practices with focused attention, such as paying attention to the physical sensations of breathing. As practitioners



become more advanced, they often intuitively shift their focus into open awareness practices, where they are in an open, receptive state to whatever arises, whether that be thoughts, emotions, body sensations, etc. The field of what the practitioner perceives may widen and perception may become richer.

Emphasizing the role of social practice in becoming mindful, Dr. Kudesia describes mindfulness as a metacognitive process of noticing what a suitable way to engage with a situation is contingent upon your expertise. He argues that any singular fixed way of describing mindfulness will have downsides. A better understanding of mindfulness could come from a more contextual perspective. In his words, mindfulness is about skillfully responding to the needs of the present moment:

Noticing what's going on in your own mind and finding a way to align your cognition with the nature and demands of the situation. Here, a major factor is your level of expertise within the current practice. How good are you at doing what you are doing? That could be anything from cooking to parenting, to driving, to any sort of practice that you could be engaged in. Practice is going to fundamentally change based on your level of expertise. The world shows up completely differently for an expert carpenter than a novice. To an expert carpenter, there is no me, the hammer, the nail, the hammering. There is just hammering. You're not thinking about it. The world fundamentally transforms when you become an expert. You are not disconnected from your tools and your materials. You are not disconnected from your social interactions. It is all spontaneous and flowing, and rich and textured. Cognition looks fundamentally different depending on your level of expertise in a social practice.

This kind of fluid knowledge occurs in the perceptual and instinctive knowing of experts, who are operating so fluently that they don't have to consciously "think" out their thoughts in order to know what to do or assess a situation (Eisenhart, 2001). Mindfulness must therefore look very different for such experts than for novices. Mindfulness is its own nuanced way of being, and it is just as available to experts as nonexperts or novices: it just looks different depending on one's expertise in a current practice. This could suggest that mindfulness both requires withholding automatic judgment, and yet also being able to bring in judgment when needed depending on whether one's expertise is being acquired, implemented, or is breaking down.

Mindfulness in Creativity

Dr. Kudesia explains how our cognitive representations frame our worlds. The way we frame our perceptions limits

the possibilities for how we approach solutions to problems. Creativity requires breaking these frames and seeing the world in new, fresh ways, allowing us to conceptualize new solutions to old problems (Tillander, 2011). This is where mindfulness comes into play:

We get fixated on particular ways of viewing a problem and we don't have the ability to psychologically step back from that because we get stuck in a certain way of viewing them. And that way of viewing constrains the sorts of solutions we can search for. What if there was a good way to enhance that capacity to break the frame?

He noted that getting stuck in frames is a product of conditioning. Engaging in a repeated activity means we learn to dedicate less attention to it. With less attention, we notice fewer things, being less mindful of differences and new information. Stuck within these frames, we may even think that our ways to approach solutions are the only ways to approach solutions.

We may not search for alternative understandings of an activity and its meaning or for other ways of acting, and in that sense, we miss out on creative potential. It becomes a vicious cycle of limited attention to current information, limited search for alternate interpretations and repetition of action, similar to how it has been done before, as opposed to different creative alternatives. With repetition, automation and rigidity increase. But, rigidity can break down when the automated behavior does not work anymore. In that sense, mindful practice can potentially help break the conditioned cycle. On an organizational level, mindfulness can also help break old frames and automated approaches to problem solving that continue applying tired repeated frames to all problems. In that sense, mindfulness can also foster creativity by practicing metacognition to be attentive of difference and newness in a present moment, which helps identify awareness of our perceptual frames and their limitations.

From Individual to Organizational Creativity

Dr. Kudesia's organizational theory approach to mindfulness rests on a paradigmatic shift that takes cognition from an individual process to a collective, organizational process. He suggests that there are two ways of looking at organizations. The first is seeing them as a legal entity—one that can function as a quasi-independent agent in the social or economic terms. The second way, and the one he finds more productive, is to see them as collectives of people coming together with a broader purpose. It is when we take this second agentic view of organizations, he argues, that it becomes productive to map human cognitive attributes to the collective. This is most apparent in his work on emergent collectives (such as the Black Lives Matter movement)



described in greater detail below. He notes that, "Cognition is something that is a part and parcel of how humans organize," and frames do not merely reside in human cognition but are also organizational. When we see frames not as individual cognitive constructs, but as a systemic mechanism to organize and construct our social reality, creative processes that work on frames are not individual, but social. Dr. Kudesia explains with examples:

You can think about any of the major social movements that have arisen lately, like Black Lives Matter, or Me Too. These all gained popularity through a hashtag. What's a hashtag but a particular way of framing an issue? This way of framing an issue opens up new ways of thinking and behaving that weren't previously dominant. If we start thinking about frames that way, we start thinking about creativity as a process that breaks, realigns, enriches, refines, revises, or generates new frames. Then, all of a sudden, creativity is something that is working on social structure. Social structures are shared frames of interpretation and can change our patterns of interaction with each other. So, you find a new way of diagnosing a problem, which means that we can relate to each other in different ways.

Socially-structured organizations take the properties of the people that make them. Social structures, when facing problems, face them across all levels. The profound issues addressed in movements like Black Lives Matter or Me Too are scaled differently across individual and social levels, so creative solutions to these problems can be applied at multiple levels. Kudesia connects how creativity can inform social action, stating:

If creativity for an individual involves breaking a frame on an insight problem, what does creativity for a collective mean? Maybe it is about ways of breaking established frames that are shaping our social action and generating new ones creatively through interaction.

Creativity is not necessarily about lone geniuses but about collective creativity that emerges out of interactions that generate new frames–shifting paradigms that allow new actions (Sawyer, 2011). Dr. Kudesia unpacked the many implications of creativity as a social process using Black Lives Matter as an example:

We cannot talk about creativity meaningfully simply through the individual level. Not that individual-level factors don't matter, but I think *the properties of interaction* matter a lot. I was in St. Louis when the Black Lives Matter social movement started. I was going out to some of the earliest protests and I managed to

kind of collect a nice data set of the first 48 hours. I had minute-by-minute detailed data, an overview of what was happening. And I can show pretty compellingly that the social movement strategy that emerged out of Ferguson emerged exactly this way with people responding to each other's actions. There was no one person who came up with the strategy. It was truly an emergent property of a protest crowd, completely spontaneous and based, not on planning, but based on spontaneous expressions of emotions, especially moral anger.

From Organization to Organizing

Organizations can be seen as collective bodies (a noun), but organizing is an act (a verb) and Dr. Kudesia argues that this, seeing the action of organizing as a process, is an important frame-shift. The act of organizing is a cognitive process whereby "People start to notice the same things. They then interpret those things in ways that allow them to interact. And then, as they interact, they change the environment and the things they notice." He describes the process of organizing as a big feedback loop where people try to make sense of their environment and in process change their environment and their relationship with it. The organizing process, depending on how it creates change can be seen as more creative or more rigid. According to him, this framing helps organizations be more creative in their approach. The same is true for mindfulness. Organizations can be more mindful by engaging in mindful organizing processes-mindfully accommodating and adjusting in relation to their environment and each other. Kudesia recommends we design systems to be mindful, noticing the challenge of being stuck in individualistic framing, "the problem is that mindfulness is so trapped within psychology that we are designing people to be mindful and setting them up to fail when, in fact, we need to design our systems to be mindful. And that's where these collective practices matter."

From Mind to Body

In our conversation, Dr. Kudesia also connected with another recurring theme in our series, namely the role of the body in the creative process (Warr et al., 2019). This shift from a Cartesian emphasis on just the mind calls for a reimagining of cognition as an embodied process not limited to the brain and linguistic activity. He further narrowed into the roles of cognitive school of thought and linguistic forms of knowing:

Elite institutions are trapped in a linguistic form of knowing. You see this in our social theories—post-structuralist theories are language-based. What about the body? What about perception? What about coming



back to your actual sensory experience? Academia is a huge part of it because our medium is so verbal, so linguistic. It's enabled partly by technology; our technologies of representation have gotten so sophisticated. We are creating these complex worlds in our heads that don't have a lot of connection oftentimes to any sort of grounded reality. I think what that's based on is the predominance of a verbal-linguistic way of knowing and processing the world.

Word-based processing can be a narrow mental process that does not fully represent human potential to make sense of reality. Something as straightforward as visuals get little attention in educational settings as linguistic forms of knowing. Body and senses are rarely directly engaged in educational processes and meaning making, unless they are central to the profession. Mindfulness helps bring attention, not just to one's own thoughts, but also one's own body-feelings, sensations, breath, stillness, rhythm. Kudesia reminds us that "Embodied practice, whatever that looks like, if it's yoga, breathing, jogging, mixed martial arts, that's one way to get brought back to reality." As he noted, "Spar with someone if you get pinned, you can't live in your abstract conceptions about reality." Mindfulness lets a person step out of verbal modes of engagement to learning from observation of ongoing processes in the body and its environment.

Mindful Use of Technology

With an increasingly inseparable role of technology in our daily lives, social media use has become the norm for many. Kudesia reminds us that technology use, if lacking in a sense of awareness, can be detrimental; but when done mindfully can be constructive:

There is a difference between sort of active versus passive technology use. Passive would be sort of just like scrolling through Facebook or Twitter or watching Netflix, but active would be actively writing on a word processor, looking stuff up on Wikipedia. People who tended to be in general less mindful tend to do a lot more of that sort of passive social media use. Also, in the moments where people are feeling least mindful relative to their baseline, they also tend to go on social media. So there seems to be something linked to that kind of passive use, but there wasn't the same sort of effect with active use. It is hard to establish the directionality, but maybe if we are more mindful, we can use technologies that help us maintain our mindfulness.

When technological tools are designed in the right way, they can help us learn new things and engage in personal growth and wellness (Henriksen et al., 2022). However,

most social media and digital technologies today, are designed with a scarce view of attention—to compete with other media to capture and keep attention. Kudesia challenges this scarcity of attention to remind that attention is sufficient:

We "pay" attention as though it is a currency, and we talk about the attention economy. We are trapped in these cultural metaphors where attention is a currency. If I spend it now, I can't use it later. But that circumvents the evidence. There is evidence to show that demanding tasks that are challenging, engaging, and interesting can sustain our attention for a long amount of time, but it's really hard to sustain your attention on boring tasks.

People have a choice to change their relationship with and through technology. Part of the issue, Dr. Kudesia argues, is not that technology is a problem but people can train to be more mindful in how they interact with technology. Designing technologies in a way that elicits mindful use is helpful, too, but the nature of its use still depends on the individual. This change in the intent and use of technology also requires a breaking of the frame in the big tech and Silicon Valley culture that is framed by a scarce view of attention:

You can design technologies to be profitable and to be beneficial and engaging for people in ways that facilitate mindfulness. The fear I have is that all this research in consumer behavior is designing ways for marketers to capture eyeballs and to extract value, to accumulate impressions. But there are very few people in the organizational mindfulness or the psychological mindfulness space asking ... "How do we design technologies to enhance mindfulness?" It is not just about mindfulness apps. It has got to be more, it has to be about designing. Like, here's one example. I will frequently turn my phone and my computer to black and white instead of color. And when it's on grayscale, it just doesn't have the same pull. It is every bit as functional, but I just don't get sucked into it the same way.

Sharing his own mindful use with technology, he recommends a focus on design of new technologies with a sufficient view of attention that allow for mindful practice and use.

Mindfulness doesn't have to mean being anti-tech. It doesn't mean being anti-organization or anti-business. It is about how you design things. We have to think about technologies that organize our spaces more mindfully regardless of what those spaces are and they will apply more widely.



On Mind Wandering

Based on our previous interview with Dr. Jonathan Schooler where mind wandering was a prominent factor in the creative process, often in tension with mindfulness (Mehta et al., 2022), we discussed with Dr. Kudesia some potential tensions between mindfulness and mind wandering. In a recent unusual tasks study conducted by Kudesia and his colleagues, they found that relative to the control group, mind wandering led people to come up with new ideas. However, all their new ideas were variations of existing categories because of a spreading activation process. For example,

What can you do with the brick? Well you can use it to beat people up, you can use it to smash things. Well, those are all weapon uses, right? So, they're filling out their existing categories more fully.

With mindfulness, on the other hand, people also came up with new ideas, and these new ideas belonged to new categories, like uses for art. In these studies, Kudesia found that mindfulness seems to help people break frames or to selectively forget their initial ideas to come up with new ones. He explained:

Our argument was basically that you can shape which one of these happens by the tasks that you do while you're incubating. Mindfulness would lead to selective forgetting. So you'd forget your initial ideas and you could approach things fresh. Tasks that really didn't require a lot of attention, that allowed you to mind wander, would lead to spreading activation.

Conclusion

Based on Dr. Kudesia's work and scholarship, we can form a richer understanding of mindfulness. Mindfulness itself has roots that are several thousand years old, in Buddhist Asian beliefs, philosophies, truths, and practices. Dr. Kudesia's work draws upon elements of this to bring it into contemporary and organizational contexts, and he notes that mindfulness is not simply being present but training attention to be aware of cognitive and embodied states and to adjust them dynamically in light of the situation at hand. With practice, mindfulness can help achieve and sustain a state of flow and help foster creativity.

When practiced and perceived in a social context, mindfulness and creativity can transform into organizational behavior and practice. Organizations can behave like mindful and creative beings. When we see creativity on a social and collective level, we can identify it as a phenomenon that is bigger than individual genius often framed in studies in psychology. Understanding creativity as a social phenomenon also reveals trends and impact of organizations as agentic beings. Thus, there is a need for more mindful organizations, and not unconscious ones that are unaware of its collective action and impact. The implications for education are plenty. Teaching students to be mindful and practice creative skills mindfully can help them not only achieve flow in challenging situations but also collaborate as a social creative body. In addition, some of the aspects of collective creativity and mindfulness that Dr. Kudesia speaks of can be relevant to the design of better educational organizations, those that are sensitive to the needs of the people within them (students, teachers, administration and more).

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