

The Hidden Cost of Workplace Trauma

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Although the emotional effects of trauma have been well publicized, we have just scratched the surface in our understanding of the damage it causes. The depth and breadth of trauma's effect on our workforce is far more serious than many people realize. Trauma impacts every aspect of a person's effectiveness in the workplace. Traumatized workers are compromised in their ability to learn, think, manage change, and relate to others. They are more likely to have mental and physical health problems, including depression and substance abuse, two of the costliest health problems in the workplace today.

By understanding and articulating to decision makers how their organization is affected by trauma, workplace wellness consultants can make a major economic and humanitarian impact on the workplace. By helping organizations both prevent and respond to trauma, workplace wellness consultants can help them cut costs and improve productivity. The most obvious impact on the bottom line would come from increased productivity and decreased health care costs. Organizations would also save training and organizational development dollars which are often wasted because traumatized workers' can't effectively integrate and implement these initiatives.

Regardless of how "state of the art" or "cutting edge" such programs may be, they fall far short of their potential when the people expected to utilize them are compromised emotionally, physically, and intellectually. Trying to teach communication skills, TQM, or team approaches to a traumatized worker is like giving gourmet cooking lessons to someone who has been ravaged by starvation. They will be too depleted, preoccupied, and overwhelmed to care about, absorb, or act on what they are taught.

To help organizations respond to this need, we need to understand how trauma affects people and how this translates into the workplace. In this article, we will explore how the cumulative effects of chronic and acute stressors result in worker trauma and how this trauma affects a worker's:

- Intellectual abilities
- Creativity
- Productivity
- Ability to manage change
- Response to diversity
- Interpersonal capabilities

What is Trauma?

Trauma is the experience of being psychologically overwhelmed. When traumatized, a person is rendered impotent. At that moment, they are incapable of coping either intellectually or emotionally.

Research has shown that trauma leaves a person changed both psychologically and physiologically (Van der Kolk and Van der Hart, 1991). Trauma alters a person's thinking patterns, emotional responses, and even biochemistry (Van der Kolk and Van der Hart, 1991; Van der Kolk, 1994). Trauma survivors frequently experience depression, anxiety, difficulty responding to new situations, rigid thinking, defensiveness, paranoia, aggressiveness, over-reactivity to mild stress, and increased health problems (Van der Kolk and Van der Hart, 1991; Van der Kolk, 1993; Van der Kolk, 1994).

Trauma can come from a single catastrophic event, such as violence in the workplace, or a series of less dramatic stressors which, through their cumulative effect, create debilitating psychological and physical changes. Cumulative Emotional Trauma is created by the combined effects of stressors such as demeaning work conditions, worker/job mismatch, prejudice, unclear job expectations, impossible workloads, abusive treatment by peers or superiors, emotionally draining interactions with difficult people, and job insecurity. Although not as cataclysmic as a major violent episode in the workplace or a natural disaster, these factors chisel away at a worker's sense of security, value and well-being.

Although we often refer to the more chronic sources of trauma as "stressors", we need to recognize their cumulative effect when assessing the damage they cause. Like Cumulative Trauma Injury sustained from repetitive movements, Cumulative Emotional Trauma doesn't result from a single dramatic incident, but from the accumulation of microtraumas over time. Although each individual incident is not incapacitating, when we add them together in an unrelenting stream; they create debilitating psychological and physical effects.

Thus, trauma can come from a single, cataclysmic event or the cumulative effect of multiple stressors. Whichever the cause, emotional trauma results in emotional, intellectual, and physiological damage which reverberates throughout a person's life.

What Determines Whether A Person Is Traumatized?

Not all stressful events are traumatic and not all people respond to the same stressful event the same way. Both individual and situational factors influence how a stressor affects a person. The following factors play a significant role in whether a person is traumatized.

Control – The less control a person feels they have over a stressful situation, the more traumatic it will be (Seligman, 1972; Sauter et al, 1989). Years of research has shown that when a person perceives they don't have control over a stressful situation, the deleterious effects are much more extreme than those experienced by people who are subjected to the same stressor, but perceive they have control (Pennebaker, 1990; Dientsbier, 1989).

Thus, it isn't the direct effect of the stressor which is so psychologically damaging, but the sense of having no control, which results in serious trauma. This has been demonstrated in the workplace, where the degree of control a person has over their job has been shown to affect their stress level and prevalence of occupational health problems (Sauter et al, 1989; Gehlman, 1992).

The less legitimate control a person has, the more likely they are to attempt inappropriate control through violence, territoriality, resistance to change, and other counterproductive behaviors. A 1986 study on how stress leads to counterproductive behaviors estimated the annual cost of such behaviors to business at \$50 billion (Kuhn, 1988).

The Ability to Comprehend and Make Sense Out a Situation – The more incomprehensible, the more “mind blowing” a situation, the more traumatic it will be. Events which are extremely confusing and disorienting render ineffective the person's accustomed ways of making sense out of the world (Tomb, 1994).

Predictability and Certainty – Research on both laboratory animals and humans has shown that the more uncertain and unpredictable a stressful situation, the more traumatic it will be (Seligman, 1972). Conversely, when people have enough information about a challenging situation to predict what is going to happen next, they are less likely to feel threatened and overwhelmed. Even if the information isn't pleasant, it is less stressful than not knowing.

A recent study on organizational change by Keita and Jones (1990) identified uncertainty and unpredictability as key factors in whether organizational change will result in employee mental and physical health problems.

Individual Resiliency or Emotional Toughness – Whether an event is traumatizing or not also depends on the individual. Not everyone responds identically to the same stressor. A person's “emotional toughness” mediates the effect of a stressor (Dientsbier, 1989; Dientsbier, 1991; Loehr, 1994). Research shows that emotionally resilient people not only have a different attitudinal response to stress, but a different biochemical response as well. The biochemical response of people with low resiliency not only makes them less likely to respond successfully to the stressor, but also makes them susceptible to illness later.

Although emotional resilience probably has an innate component, research has shown that emotional resiliency can be developed by programs which utilize the sequencing of activities involving moderate physical and emotional stress followed by recuperation (Loehr, 1994).

Self-Efficacy – A person's sense of self-efficacy understandably influences their emotional response to a stressor. Those with high self-efficacy, perceiving themselves as capable of responding effectively, tend to “rise to the occasion” when faced with a stressor (Dientsbier, 1989; Loehr, 1994). Stressful situations bring out their best. Those with low self-efficacy, on the other hand perceive themselves as incapable of responding effectively. Because they “know” they will fail; they feel threatened by the challenge and give a half-hearted effort which is not

representative of their true capabilities. Their ineffective responses, generated by their attitude, lead to unsuccessful outcomes, which then reinforce their sense of low self-efficacy.

This creates a vicious downward spiral; their deteriorating sense of self-efficacy makes them less capable of dealing with subsequent stressors, further reinforcing their sense of low self-efficacy. Conversely, people with high self-efficacy experience an upward “success spiral”. Because they bring a positive expectation to challenges, stressors bring out their best. Not only does this increase their chances of generating an effective response, it also decreases their chances of being overwhelmed by stressors, thus reinforcing their sense of self-efficacy.

A Support System – Not surprisingly, people with a good emotional support system can withstand stressful situations more easily than those who try to tough it out alone (Sarason et al, 1990). A good support system isn’t just measured by the number of people one can talk to, but the quality of the interactions. Friends and family who are negative or only reinforce a person’s helpless view of the world will obviously not have the kind of beneficial effect as people who can be supportive and encouraging.

The Context – If a potentially traumatic event takes place in a context where people can talk about it without having to pretend to be tough or unaffected; they can work through, and let go of, the painful emotions triggered by the event. If the incident takes place in a context where there is a “no talk rule” and being emotional means being weak, they are more likely to hang onto, ruminate about, and be traumatized by the event.

Trauma, The Mind, and The Brain

Understanding the problems trauma poses in the workplace is easier when one understands how trauma affects a person psychologically and neurologically. To keep this from becoming a technical treatise, we will only briefly discuss this topic. We will discuss enough, though, to help make sense of trauma’s effect on worker performance.

Our Three Brains

In his landmark research on the brain and behavior, Paul MacLean (1983,1993) coined the term Triune Brain to reflect how our brain acts like it is composed of three separate sub-brains. He labeled these brains the Reptilian Brain, the most primitive brain region, the Paleomammalian Brain, the next most primitive brain, and the Neomammalian Brain, the most recent “addition”, which corresponds to the Neocortex. He called the most primitive region the Reptilian Brain because of its hypothesized reptilian ancestry.

MacLean proposed that as the brain evolved and grew larger over millions of years, it retained the original structures of the more primitive brain possessed by reptiles. According to MacLean and others, we inherited not just these structures, but the instincts and survival responses hard-wired into these structures. MacLean named the Reptilian Brain the “Primal Brain” because it generates our most primal, instinctual urges and responses.

As evolution progressed and mammals evolved, the “latest model” of brain became more complex and capable of greater intelligence. This “new version,” the Paleomammalian Brain, enabled early mammals to engage in behaviors, and respond to the world in ways that reptiles, with their simpler brains, could not. Because nature doesn’t eliminate structures which are already working, the Paleomammalian Brain was “added onto” the Reptilian Brain like an addition to a rambling farmhouse.

This more modern, although still very primitive, brain surrounds the Reptilian Brain. The Paleomammalian Brain plays a major role in our emotional responses, memory, and our ability to form emotional bonds. MacLean referred to the Paleomammalian Brain as the “Emotional Brain” because of the integral role it plays in emotion.

Finally, as mammals evolved and became more intelligent, the Neomammalian Brain formed, surrounding the two more primitive brains. MacLean called the Neomammalian Brain, the neocortex, the “Rational Brain” because it is the neural seat of rational, logical, and abstract thought. The thought processes which appear to be uniquely human reside in this region.

Each of our three sub-brains has a different biochemistry, different responses to the world, and a different “mentality” (MacLean, 1993). The Reptilian Brain and the Paleomammalian Brain, having been around for millions of years longer than the neocortex, are much more primitive in their ability to process information and respond to the world. Their responses are more like one would expect from our Paleolithic ancestors or an animal.

To simplify our discussion, we will at times combine these two sub-brains and refer to this region as the Primitive Brain when we contrast the thought process of the neocortex, our Modern Brain, with these more primitive regions. Although the Primitive Brain affects many aspects of our life and helps explain many of our confusing, conflicting responses to situations, we will focus on how stress and trauma bring out the worst of these phenomena.

Our Emotional State, Intelligence, and Creativity

Our ability to think and function is directly related to the emotional state we are in. We have all experienced this when we were so upset we couldn’t think straight, words escaped us, and we mumbled inappropriate comments. Later when we calmed down, we could think again. Once out of that state, our intellectual abilities returned.

When we feel relaxed and safe, we have access to our full intellectual capabilities. Studies on creativity and learning show that emotional safety is essential to optimal use of the human intellect (Rose, 1985; Kline, 1988) When we are under stress, we begin to lose our more advanced intellectual capabilities. Leslie Hart (1983) labeled this “downshifting”. When we downshift, we operate in a more primitive, rigid, simple-minded way. Caine and Caine (1994) write:

When we downshift, we revert to the tried and true... Our responses become more automatic and limited. We are less able to access all that we know or see what is really there. Our ability to consider subtle environmental and internal cues is reduced. We also seem less able to engage in

complex intellectual tasks, those requiring creativity and the ability to engage in open-ended thinking and questioning. (pg. 72)

Thus, when a person is under extreme stress, they become less flexible, less creative, and less intelligent. In this state, they operate at only a fraction of their creative and productive potential.

Becoming Primitive

When we downshift, the brain region necessary for effective intellectual functioning, our Modern Brain, gets overwhelmed. Because we still need to function and respond, we use our Primitive Brain. As mentioned previously, this “brain within a brain” interprets and responds to the world in a much less intellectually sophisticated way than the Modern Brain.

The Reptilian region of the Primitive Brain is most relevant to our discussion because it is believed to be the repository of primitive “hard wired” survival responses related to executing daily routines, protecting one’s territory, and establishing dominance and control (MacLean,1983). We have all experienced Reptilian Brain responses. Two common examples are feeling uneasy when our routine has been interrupted and feeling angry when someone sits in our favorite chair or at our desk without asking. Despite telling ourselves we shouldn’t be upset, we are; the survival programs of the Primitive Brain have been activated, sending us signals that something is wrong.

When our more sophisticated, intellectually advanced neocortical capabilities get overwhelmed; these primitive responses engage; resulting in aggressive, inflexible, and territorial reactions. We see the Reptilian Brain in action when people feel emotionally threatened. They become aggressive, defensive, and rigid. We see it in people who are feeling insecure and become “control freaks”. We see it in turf battles, power struggles, and mindless insistence on doing things “like we’ve always done them.”

The effects of trauma on the brain pose serious problems for employers who are trying to cultivate a productive workforce. Chronically stressed employees, because of downshifting, end up operating out of their Primitive Brain. Unless we want employees who are acting according to the law of the jungle and who are using a small fraction of their intellectual capabilities, we need to create environments which allow the more intellectually and socially advanced processes of the neocortex to be engaged.

What Happens When We Don’t Address Trauma?

To illustrate how trauma affects our efforts at cultivating more effective workers and organizations, let’s take a few of today’s popular training and organizational development initiatives and examine how they are compromised by employee trauma.

Dealing With Change

Personal and corporate survival requires the ability to embrace and respond effectively to rapid change. The accelerating rate of change are usually cited as the greatest source of stress for

today's workers. The interplay between the brain and overwhelming stress creates a vicious cycle which interferes with a person's ability to cope with stress. The overwhelmed person, operating out of their Primitive Brain; will likely be very rigid, territorial, and wedded to the "old ways". The more threatened a person feels, the more they need to stick to their routines and familiar ways for security.

Responding from the Primitive Brain, the traumatized person fights change. The more they fight it, the less effective they will be in responding to the inevitable, thus reducing their sense of self-efficacy and mastery. This further reduces their ability to respond effectively when future changes occur, adding to their Cumulative Emotional Trauma.

Diversity

The ability to appreciate, respect, and value diversity is becoming increasingly more important in our increasingly more diverse workplace. Yet, when a person is operating from their Primitive Brain, they don't have access to the higher cognitive functions which make this possible. Our modern brain enables us to make logical assessments of people and generate intelligent interpretations of their character and intentions. It also enables us to reflect on our emotional responses to people and challenge them when they appear irrational and unfounded.

Our Primitive Brain operates very differently. It was designed to see the world in simplistic, stereotyped ways (Ornstein and Ehrlich, 1989). In prehistoric times, our ancestor's survival depended upon their ability to quickly size up a situation with minimal information and then respond immediately. They couldn't sit, study, and analyze whether the animal running toward them was dangerous or a potential meal. They had to get just enough information to make a decision, and then act quickly. Contemplation and analysis would have resulted in death. Our survival needs resulted in the ability to form "caricatures" – simplistic templates which contained just enough detail to dictate a response (Ornstein and Ehrlich, 1989).

While this served a significant purpose during a time when our survival was constantly in jeopardy, it can cause us serious problems in today's very different world. When we downshift and revert to Primitive Brain thinking, we don't take the time to understand a person. With minimal information about them as an individual; we fit them into a simplistic caricature of their gender, ethnic, religious, or socioeconomic group; and then come to a conclusion about who they are. We don't bother and take in any more information because we already "know" what they are like. Our caricature has "informed" us all about them.

The categorization of people into "Us" versus "Them" is the most simplistic level of caricatures we engage in. In his studies of xenophobia throughout the animal kingdom, Holloway (1974) notes the remnants of this hard-wired response in humans: "We overcome this to some extent through cultural learning, and a pride in and positive value on tolerance and goodwill. But put stress on the system, and the age-old dispositions are dominant." pg. 8

Once the primitive "Us versus Them" Schema engage, anyone who does not fit the significant characteristics of the "Us" template becomes one of "Them". This becomes more damaging when combined with the Primitive Brain's hard-wired survival orientation. When the Primitive

Brain's defensive, survival programs engage; people who are one of "Them" are viewed as a threat. Empathy, understanding, and open communication are replaced by territoriality, prejudice, power games, and protectionistic gambits.

Creativity

Studies on creativity show undeniably that a low threat environment is essential for creative thought (Martindale,1990; Russ, 1993). When people are feeling threatened, their thought process becomes rigid and tradition bound, both Reptilian Brain qualities. Furthermore, when stressed, the mind becomes focused on the stressor. This prevents divergent thinking – the ability to broaden one's perspective to include less obvious associations and possibilities, which is the hallmark of creative thought (Martindale, 1990; Russ, 1993).

Studies on uncontrollable stressors have shown that people in situations of uncontrollable stress demonstrate very shallow, simplistic thought processes (Pennebaker, 1990). Other studies have linked uncontrollable stressors to a subsequent decrease in cognitive abilities (Seligman,1972).

As a way to defend against trauma, some people develop a thinking style which prevents them from intellectually and emotionally acknowledging the pain of their experiences. This results in thought processes which are concrete, superficial, and unimaginative (Pennebaker,1990); hardly the breeding ground of creative breakthroughs. At the most basic intellectual level, trauma strips a person of their creative capacity.

Total Quality Management

TQM requires workers to have both a high level of functioning and commitment. An ability to see the big picture, a recognition of process, and a commitment to customer satisfaction are a few of the necessary ingredients for successful TQM implementation. Because of the cognitive deficits brought about by trauma induced downshifting; the more conceptual, lofty ideas become unimportant and probably unfathomable.

Traumatized workers are focused on survival; not on long range plans or other people's well-being. They are like the drowning person who is so frantic, they pull their would be rescuer underwater. The drowning person's typical altruism or empathy isn't available in their overwhelmed, terrified state. They are interested in, and can focus on, only one thing – survival.

With the inability to conceptualize due to downshifting and the primal drive for individual survival activated, traumatized workers are not in a position to contribute to, or make use of, the kinds of paradigm and process shifts advocated in TQM.

Team Approaches

The interpersonal arena is often the most challenging aspect of work for people. Dealing effectively with another person who has a different communication style, unresolved personal issues, and their own agenda requires exceptional communication skills. Even more demanding than dealing with another person is dealing with several people simultaneously. Effective

teamwork requires a person to be at their interpersonal best. With the increased use of teams, more workers are finding themselves in demanding interpersonal situations requiring excellent communication skills.

When we are stressed, we are far from our interpersonal best. When overwhelmed, we slip into the survival mentality characteristic of downshifting. Our interpersonal style is more likely to be defensive, protectionistic, and paranoid (Bernstein and Rozen, 1989). This interpersonal style certainly doesn't lend itself to positive human interactions.

Qualities which lead to productive interactions: being vulnerable, honest, and open are not part of the survival communication repertoire. With this interpersonal orientation, the traumatized worker is guaranteed to fail in a team setting. This failure will be another example of their inability to act effectively; furthering their sense of low self-efficacy and minimal control over their world, leading to further stress.

The Learning Organization

By now it is probably evident that trauma wreaks havoc on an organization's efforts to create lifelong learning environments. An environment which results in downshifting can't facilitate the development of integrative learning and the accumulation of wisdom. Even if the workplace environment is a positive one, the cumulative effects of employees' previous trauma need to be addressed. Without treating employee trauma, only a fraction of a workforce's intellectual and creative abilities will be accessed.

What Can We Do?

Educate decision makers about the price they and their workers pay – This is the most important step. Unless decision makers are cognizant of how trauma affects their employees and their bottom line, the following suggestions will not be acted upon. Some of the ideas listed below are not new or original. However, as we all know, many organizations don't follow them because it's leaders do not believe they are necessary. By articulating how trauma affects a person's intellectual, creative, productive, and interpersonal capabilities; workplace wellness consultants can provide the important link between the "why" and the "how" of trauma prevention.

Help the organization develop clear, open communication; especially during times of significant change – Because the degree of unpredictability and uncertainty influences how traumatic a stressor is, measures which reduce both factors minimize the negative effects of major change. The more information workers have about what is going on, the more in control they feel. As decades of research has shown, the more in control a person feels, the less affected they are by potentially traumatic incidents.

Help management learn how to deal with discussing difficult subjects – Most people do not like to be the "bearer of bad news". Managers, feeling uncomfortable with telling workers about unpleasant workplace developments, are often reluctant to bring up such topics. When

they don't get discussed and employees are left in the dark, the sense of unpredictability and uncertainty only makes the situation worse.

Help management develop clear connections between cause and effect – Efforts which result in no positive outcome and rewards which aren't the direct result of effort lead to a sense of helplessness. The person learns what they do doesn't really make a difference, whether it is positive or negative. Their good efforts make no difference, their rewards have nothing to do with their effort. There is no sense of "If I do x, y will happen. If I do w instead of x, z will happen instead of y." Research has demonstrated that undeserved rewards can be just as damaging as unrewarded efforts in creating the sense of helplessness and disempowerment (Seligman, 1972).

Encourage the organization to invest in employee self-efficacy – Because a person's self-efficacy plays such a significant role in whether a stressor is traumatic or merely a challenge; improving employee self-efficacy pays big dividends. Training and personal development programs which impacts on a person's self-image, self-esteem, and self-efficacy will help minimize the odds that employees will feel overwhelmed and impotent in the face of challenges.

Encourage the organization to invest in employee resiliency training – Besides general self-efficacy training; aerobic exercise, adventure based learning, and other challenging forms of mental and physical exercise provide the framework for developing emotional and physical resiliency, a core personal attribute which minimizes the effects of trauma.

Help employees expand their employment options – This may sound heretical, but the more confident employees are about their career options and marketability, the less time and energy will be diverted to worrying about their future. If they feel confident of their marketability, they can focus their attention on doing a good job, not on what they will do if they lose their job.

Teach interpersonal skills to both management and front-line workers – With our interpersonally more demanding workplace, communication skill training is not a luxury. Nor is it just for managers. Besides producing more effective interactions, excellent interpersonal skills minimize the chance that emotionally distressed people will interact counterproductively with their co-workers. Since much of the stress in the workplace is interpersonally generated, helping people improve in this area will reduce a significant source of emotional wear and tear.

Help employees develop an emotional support system – Having a strong emotional support system reduces the negative impact of stressors. At the organizational level, this means creating a climate where it is acceptable to not always "have it together", be in control, know the answer, etc. Policies which reduce career/family conflicts also address this issue by minimizing the potential of home problems exacerbating work problems. Consultants can help individuals recognize the importance of a support system and develop the interpersonal skills necessary to create and maintain one.

Encourage the organization to invest in change management training for all employees –

Since the rapid rate of change is rated as the top stressor for people, helping people at all levels deal with change will minimize the stress level throughout the organization.

Seeing These Principles in Action

Open Book Management embodies many of the principles presented in this article. This grass roots revolution has captured the imagination of the business community because of its commonsense approach and its effectiveness (Case, 1995). In the Open Book Management environment, employees have control over their fate. As previously mentioned, control is perhaps the most important characteristic of an empowering, non-traumatizing workplace. In workplaces which use this approach, employees aren't just told they are empowered or taught the latest techniques of excellence. They are provided a context and the tools to orchestrate change, influence their financial future, and determine if what they are doing is working.

With employees having access to the financials, they have clear information about the current status of their organization's financial health and direct feedback about the effects of their decisions. Thus, uncertainty and unpredictability are minimized. The direct relationship between cause and effect is clear. Employees can see the effects of their choices and actions. Rather than wondering if the newest management fad will bring better results, they can directly track their results.

They can also see why specific changes are needed; it is there in the numbers (Case,1995).By having access to this information, and getting the training necessary to understand it, employees experience empowerment born of knowing about cause and effect, and having the power to act upon this knowledge. They aren't just told they make a difference. They have the knowledge, tools, and processes in place to do so. Because they develop the tools to assess their situation and respond effectively, they develop self-efficacy. This increases their ability to "rise to the occasion" when challenges occur, rather than be confused and overwhelmed.

In such a collaborative environment, workers have a built-in support system and a context which promotes discussion and sharing of challenges and difficulties. No one needs to hide from the truth, the truth is recognized as necessary for successful problem diagnosis and implementation of strategy.

Although every aspect of Open Book Management might not be possible in some organizations, the principles it embodies dramatically demonstrates how the same workforce which had performed poorly in a traumatizing, disempowering workplace climate can perform with excellence in an empowering workplace climate.

Summary

Trauma impacts every aspect of an employee's emotional well-being and productivity. Workplace wellness consultants can provide a tremendous service to the organizations they serve by helping them recognize the sources and effects of trauma. By broadening their perspective to include Cumulative Emotional Trauma, consultants can provide more

comprehensive assistance to organizations in recognizing the sources of trauma in their workplace.

By recognizing and addressing the many less dramatic stressors, organizations can take action to prevent and treat trauma before the effects become catastrophic. By creating a workplace which does not traumatize its workers; employers can not only reduce the tremendous cost of trauma, they can also help access more of their employee's latent creative and productive potential.

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