

Recovering Creativity: for Personal Evolution, Industry, and Society

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Abstract

This paper presents a process for recovering natural creativity based upon allocating time to balanced living, meditation, self-exploration, and the use of creativity exercises. Creative potential is lost as we construct our unique interpretation of reality through the process of conditioning. Negative distortions, conditioned early in our life, can have a dramatic impact upon our creative abilities later on. A case is made that historically prevalent behaviorist based teaching methodologies are out-dated in today's information age and can inhibit creative development. Interactive multimedia technology provides a scalable platform for the development of individualized, student centered teaching that not only disseminates knowledge but preserves students' natural creativity. The scalable nature of the platform makes it possible to achieve rapid global impact.

Introduction

Creativity is the ability of a person, or entity, to manifest or realize something that previously did not exist, or was not apparent. The ability to create lies at the source of our ability to plan, communicate, organize, and affect change. Creativity allows us to carve out from "what's out there" (Reality) an individual evolving identity. Creativity is essential to each individual's own personal evolution though life, from acquiring skills necessary to support one's existence to acquiring wisdom. Although creativity is our birthright, conditioning during our development can lead us to believe that the identity we are manifesting, and its output, is in alignment with our deepest natures and full, natural creative potential. Yet, there is always something "missing". Lack of a nurturing (safe, loving, personal attention) environment, distorting media and societal influences, and teaching methodologies (e.g., rote learning) that inhibit the individual's ability to explore for themselves are some of the conditioning factors that suppress our natural creative ability. Recovering the creativity that we were born with by re-exploring our relationship with our conditioning is essential for living a fulfilling life.

Creativity, manifested as innovation, is essential to companies, especially manufacturers in Hong Kong that seek to transition from Original Equipment Manufacturers (OEM) to

Original Design Manufacturers (ODM) to Brand Owners. Creativity is, by definition, essential to Hong Kong's creative industries, such as entertainment and design. The alternative is often little more than mimicry. Creativity is the source of leadership; mimicry is practiced by those who follow. Fostering creativity is especially challenging in Asian cultures that place great emphasis on conformity and uniformity [Lim]. Political and economic changes are demanding that Hong Kong citizens be more creative, to do more with less. This can be achieved by providing an organization structure that promotes exploration and rewards innovation. Innovation involves both personal and professional processes for distilling creativity into an implementation that others (e.g., customers) recognize as possessing value. Innovative organizations are composed of truly creative individuals working towards a common goal within a structured, but flexible environment. Ultimately, however, it is creative individuals that are central to eliciting innovation.

Since the dawn of civilization, creativity has been essential to our evolution as a species. It is through creativity that we have the world that we live in today. It will be through creativity that we will achieve the world to which we aspire. As a global population, we have grown from 500 million to over six billion over the past five hundred years, doubling from three to six billion over the last fifty years [Global Change]. Poverty continues to be a problem as the divide between rich and poor continues to increase [Worldbank]. Natural resources are being depleted at an alarming rate [Global Policy] and their allocation is a major cause of armed conflict. It is hypothesized that these factors, coupled with rising pollution, cause destabilizing conditions such as global warming [NRDC]. Many can argue that we are today living in a life out of balance [Reggio82], a life based upon the suffering of others [Reggio88], and a life as a continual state of conflict [Reggio02]. It is essential that we begin to develop and apply creative solutions to the challenges that face the world today.

Background

Abraham Maslow's seminal work proposed a hierarchy of human needs [Maslow] that defines an ordered sequence of pre-conditions (physiological needs, safety needs, belonging needs, esteem needs) necessary for an individual's path towards "self-actualization." Real or perceived deficiencies (he terms D-needs) in these pre-condition areas motivate action in an attempt to "self-correct" (homeostasis). Self-actualized people are "at peace" with their D-needs and motivated by the fulfillment of their destiny. The ultimate goal in education is to provide the necessary skills that facilitate a person's development towards becoming self-actualized. The development of education theory has thus evolved towards better achieving this objective.

Education theory today can be classified into three broad approaches. The behaviorist approach based upon conditioned responses or "conditioning" was originally observed in animals [Pavlov] and found to also drive human learning [Skinner]. The cognitive approach based upon the study of the mental processes views knowledge as symbolic mental constructions that are committed to memory and processed [Tolman]. The constructivist approach [Piaget] is based upon the notion that one can only know the

world as it is constructed in the individual's direct experiences and reflections upon these experiences (recalling prior knowledge which may or may not be correct). Studies have shown that while behaviorist approaches are suitable for teaching tasks in which the level of the learner's task knowledge is low and the cognitive processes required are also low, constructivist approaches are better suited where the level of the learner's task knowledge is high and the cognitive processes that are required are also high [Ertmer][Jonnassen]. Latent negative conditioning can "color" one's ability to experience, inhibit creativity (as well as "higher" levels of learning), and ultimately hinder one's ability to achieve self-actualization.

Conditioning of the mind also affects the development of the body, just as an improper diet can affect the development of the mind [Edelson]. The mind and body are intimately connected through the nervous system. Recent research in biology lends support for the existence of electrical currents within the nervous system [Becker] that bear a resemblance to the "Chi flow" that forms the basis of acupuncture [Seem] and Chinese medicine. Work [Lowen] also suggests that the suppression of emotions (negative conditioning) block energy flow within an individual and can cause physical distress. Thus early "traumas" as an individual shapes their impression of reality (or their knowledge of the world) can leave lasting impressions in the mind that manifest in their physiology and energy flow.

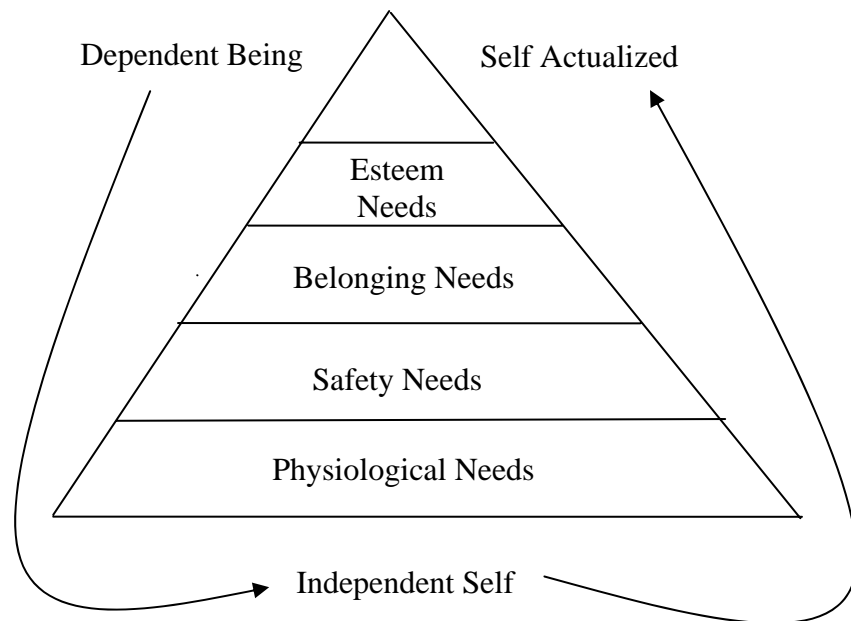
The growth of a tree is affected by its nutrition and environment and "summarized" in the concentric rings of a cross section, which can be studied to learn about the conditions at that time by dendrochronology [Fritts]. Similarly, an individual's development is also expressed in their physiology and energy flow, and can be "interpreted" through a process of self-exploration. Unlike trees, it is possible for the mind and body to correct negative conditioning by "loosening" existing perceptions at their source of distortion and providing the mental and physical awareness that enables the body's "self-correcting mechanism" to harmonize the relationship between mind and body (homeostasis). By doing so, the mind can develop both an understanding of, and a healthy relationship with, feelings. Through the natural balancing of the psycho-physical energy of feelings, the body can become a better channel for eliciting intuitive insight into the nature of reality. This is an approach for recovering one's natural creativity.

Recovering Creativity

The process of recovering creativity is a process of rediscovering the self, sometimes referred to as self-actualization. Conditioning through positive and negative reinforcement begins as our senses develop and we interact with the physical world. We gradually gain command over our ability to perceive and engage the world through the senses, speech, and motor skills. Children are generally more creative, enjoy play, and are open to new ideas and explanations. However, through conditioning and cognitive processing, we construct and identify with a reality of our own that is consistent with the world view imposed us by the environment and generally shared by those around us. Though this common semantic base does support communication and physical survival, a great deal (and certainly creativity) is compromised. Many of our deepest needs, such

as love, trust and self expression as well as our awareness of unconditioned being, are strongly influenced, if not negated, by our environment and those that provide for us. We adapt the beliefs of our family, our culture, our friends, our teachers, and media influences. An individual identity emerges from the conditioned patterns capable of supporting an independent self.

As we grow to become independent, we consciously (intentionally) and unconsciously (unintentionally) acquire conditioning. Early conditioning that is continually reinforced becomes ingrained within our identity. “Positive” conditioning should be defined as conditioning that supports one’s physiology, state of being, and creativity, while “negative” conditioning inhibits those qualities. There are many factors today that can reinforce negative conditioning. Today’s technological and capitalistic society tends to place an emphasis on “thinking” rather than “feeling.” Blind commitment to scientific paradigms and many of the world’s religions have become dogmatic. The media and advertising are filled with images of sex, violence, vanity, and material wealth. Our education system is still predominantly driven by behaviorist teaching methodologies that compel us to conform to conditioning in a manner that compromises creativity. As a result of continual negative conditioning, many people today do not live a balanced life (evidenced by eating and sleeping disorders), do not feel safe, do not feel a sense of belonging, do not feel loved, and have low self-esteem. Today’s fast food culture also contributes to obesity and malnutrition, especially in the United States [Critser]. Much time and energy goes into trying to fulfill these conditioned and purely artificial D-needs. Creativity decreases as one’s “set pattern” actions continue to reinforce their own negative conditioning. The natural feedback cycles between the mind and body then result in addiction to the conditioning. If the mind continues to reinforce conditioning that is incompatible with our physiology and our deepest creative nature, unhappiness, stress, and ultimately disease can arise. Surveys have shown that between the ages of five and seventeen, creativity decreases from 90% (at age five) to 10% (at age seventeen) [Lim].



For many, the quest towards an independent self creates disharmony between our true nature, our mind, and our body. In that case, what one may consider to be self-actualization is really nothing more than another form of conditioning. Disharmony within propagates outward through our actions to cause disharmony both within our environment, and in our interactions with others. The path towards self-actualization involves liberation from negative conditioning and re-learning to develop a healthy *natural* relationship between our being, our mind, and our body. The word “natural” is of paramount importance here. The point being that health and creativity are attributes of a natural mode of function of the human physiology and psychology. Negative conditioning compromises the natural functioning of the individual. The art of discernment between what is positive and negative conditioning must wisely be raised to the highest possible level.

An Approach to Recovering Creativity

Because of the uniqueness of each individual’s perceived (conditioned) reality, developing a program that is common to everyone poses some challenges. The Multimedia Innovation Centre is currently refining a program that facilitates individuals’ natural instincts to recover their creativity, to bring a harmonious balance and nurturing relationship between one’s being, mind, and body. Although this program is being developed for post-graduate university students, it can be applied to everyone, independent of race, age, religion, and economic background.

Reclaiming Time – Most people, especially students in our program, live very busy lives and generally do not have time for themselves. Lack of time often engenders the feeling that there is little mental space within which to operate. This inhibits creativity. To enhance creativity, we must develop a healthy relationship with time, particularly the present. To make, or recover, time for one’s self involves exploration of the distinction between life-supporting action and life-damaging activity [Osho]. By favoring life-supporting actions that fulfill our needs and by reducing the time and effort spent on life-damaging activity, we can reclaim time for ourselves. Many people unfortunately equate their sense of self-worth (esteem) with how busy or popular/wanted/needed they are. For many people, much time is spent dwelling in the past (e.g., regrets, guilt) and future (e.g., expectations, fear), and not the present [Tolle]. In a very basic way, time is all one has, and it is for one to give as chosen. The benefit of giving time to oneself is to improve its experienced quality.

Balanced Living – As the body and mind are intimately connected by the nervous system, a healthy body and mind are essential to the recovery process. Proper diet, regular intake of fluids, and adequate sleep provide the body with rehabilitating energy and keeps the mind fresh and un-fatigued. Balanced living does not necessarily mean a strict diet, fixed sleeping hours, and a heavy workout regimen. It does mean living in a way that keeps the body energized and the mind alert in a natural and sustainable way. Through balanced living, our physiological needs are met, allowing one to address other needs of safety, belonging, and esteem.

Meditation – As mentioned above, the conventional approaches to the co-development of mind and body over time results in conditioned patterns that compromise our sense of self and our physiology. The mind's suppression of certain feelings and the mind's conviction and continual reassertion of one's mentally perceived reality inhibit aspects of our being and makes it difficult for one to appreciate other possibilities. Relaxing the mind's influence over the body in an awakened state through meditation facilitates homeostasis. Meditation also helps to clear or "quiet" the mind. During meditation, the mind and body rest into being [Maharishi]. Although we have observed that for most students the mind perceives the practice of meditation as "a waste of time," there is a growing body of research that documents the practical benefits of meditation beyond mere relaxation.[TM Research]. Meditation naturally enhances a state of open mindfulness which allows for more remote and/or abstract associations to be made in the mind, associations being one of the key qualities of the creative process.

Self-exploration and Self-correction – Balanced living provides energy and a healthy state of mind. Meditation loosens any disharmony in the relationship between mind and body. Self-exploration of the psyche enables the mind to develop a healthy relationship with our feelings, emotions and inherent intuition. It's well-known that the innate inner intelligence of the physiology carries with it the ability to maintain homeostasis and healing. For example, when someone cuts their finger, an intelligence within the body directs the healing of that cut. This self-correcting process is also functional within the psyche and is facilitated through the process of self-exploration. This process is imperative to the nurturance of creativity. The danger with incorrectly applied self-exploration lies in using specific models, or conceptual overlays, to facilitate the exploration process which do nothing except replace one form of conditioning with another. Self-exploration should flow naturally otherwise creativity is, once again, restricted. Reflecting on events that have left an impression upon the mind and exploring feelings around these events (e.g., "mad, sad, glad, scared" introspection, art therapy, etc.) help one to free the psyche of negative conditioning. [Mamas99][Mamas00]. Through the process of exploration, the individual becomes aware of cyclic thoughts, feelings, and behavioral patterns that repeat throughout their life. As the mind and emotions harmonize, those that are more sensitive may become aware that these patterns also correspond to patterns of energy circulation through the body. Other areas of exploration include the impact of media, such as music, images, and advertising [Aivanhov].

Creativity Enhancing Exercises – Creativity enhancing exercises help one develop and become confident with their unique creative voice. There are several "tools" that facilitate the cognitive process of creative exploration. Mind mapping [Buzan], Morning Pages [Cameron], and Brainstorming [Meadow] are a few such tools that help one to collect and organize their creative output. Homework assignments and in-class exercises provide an impetus for creative exploration. In-class exercises also provide a nurturing environment for exploring communication, group dynamics, and belonging. Care must be taken, once again, that the exercises employed, and their mode of delivery, are

consistent with the principles expressed here. Otherwise, such exercises could, in fact, reinforce or even instill negative conditioning.

While this proposed program is intended to recover “lost” creative potential, it also compels us to explore new, more holistic, innovative, and personalized ways of raising and educating our children so that they may remain creative and less susceptible to negative conditioning. With creative freedom also comes responsibility for what we create. The ability for a single individual to affect the well being of others continues to grow as new technologies introduce more simple, efficient, and compact ways of killing and destroying (e.g., biological and chemical weapons). We need to be able to respond to others and our environment in a way that better supports life on this planet. Through enhanced creativity, and thereby our ability to realize greater possibilities, we become more tolerant and considerate towards “realities” which could be valid, even if different from our own. This is essential to facilitate communication and greater understanding, which is needed all around the world today.

Education in the Information Age

As we move from an agrarian age to an industrial age to an information age, it is imperative that we reform the way we raise and educate the next generation. During the industrial age, rote, behaviorist education was sufficient for transferring the skills needed for one to gain employment. A good worker of the industrial age is one that works hard and is complacent. Organizations tend to be static. This type of education is still much used in the world today. For those that live in parts of the world capable of enjoying today’s digital age (such as Hong Kong), information is ubiquitous. Technology is transient. People are more empowered to create and communicate. People realize that value is created not by possessing knowledge, but by quickly aggregating and applying new knowledge into processes. Employees of the information age are provided the tools to evoke a creative response and could be more innovative if they are truly encouraged and supported by their employers, which means that a certain amount of “failed attempts” are accepted.

The educational differences reflected in first world (information age) and third world (industrial and agrarian age) societies further increases the gap between them. The population explosion, depletion of natural resources, social unrest due to globalization, and increased pollution are some of the symptoms that indicate that this is not sustainable. Education for all is the only way to ensure our future. Just as our natural creativity is a birthright, deploying a new, more effective, approach toward education must be made a basic human right available to all children around the world. The ability to deliver personalized education on a global scale is becoming increasingly possible with the advancement of digital media technologies.

As pointed out by Gordon Moore, digital technology has advanced at an exponential pace since the invention of the transistor [Moore]. New technologies have enabled digital media and the possibility of globally distributed interactive multimedia. The reduction in costs and complexity has made it such that primary school children can affordably create

and publish their work to an international audience. Digital media, such as images, audio, and video, and advances in user interfaces, such as touch screens, speech and image recognition, have made digital information accessible to nearly anyone, including the illiterate. Furthermore, digital technology is one of the few industries in which innovative solutions can track the exponential growth of the world's population. Costs continue to drop with time. In many instances it has become easier to "wire" remote areas with access to information via satellite and powered by ecological energy sources than it is to provide other infrastructure such as water, logistics, and power.

Interactive multimedia enable the creation of mass media that can "personalize" and provide a unique experience tailored to each individual viewer. This enables the design of educational content that moves away from a behaviorist approach to delivering education in a more constructivist, student-centered approach. Educational content that provokes a greater individual, and group, creative response is necessary for growth and adaptability. Education and the dissemination of knowledge are important for people to begin the path towards self-actualization. For developing countries, this means providing a means for people to address their physiological needs (e.g., food, water, safety). For more prosperous countries, this means providing a means for people to address their higher level needs (e.g., belonging, esteem) so they can apply their industry in ways that are more beneficial to humanity. The cultivation of more self-actualized and creative people will increase our planet's harmony.

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