

On Becoming Creative

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Abstract

The creative process in entrepreneurial work organisations may be approached from a developmental perspective that identifies the psychological conditions that facilitate creative productivity. Rogers (1954) identifies extensionality, an internal locus of evaluation, and the ability to toy with ideas as the conditions to nurture in order to develop an individual's creative potential. These seem to be the same conditions empirically identified by Csikszentmihalyi (1990, 1997) as the precursors of flow, a state of consciousness achieved during periods of optimal experience, often with creative results. The psychological processes of differentiation and integration seem to be the key to developing an individual's capacity for flow and creativity.

Introduction

The Entrepreneurship Initiative at the University of Strathclyde recently commissioned a telephone survey of over 100 small to medium sized science and technology-based businesses in the west of Scotland. We wanted to know what sorts of training or educational experiences the companies felt would most benefit their employees. Research results place training in creativity and innovation at the top of a list of a dozen topics within traditional business functions. Ninety percent of the companies we surveyed were interested in such training, putting creativity ahead of issues such as managing growth, finance, marketing, and strategic planning (Hamilton, 1998).

The value of creative work in an economy that is driven by information and rapid change is now rarely disputed. Less clear is whether companies are truly willing to discard the command-and-control mindset that has evolved over 200 years of mechanical industrialism. Seemingly, every textbook that addresses the issue of creativity in the workplace emphasises the inexplicable and unpredictable nature of the creative process. It is not surprising that companies may choose to encourage creative expression among only a limited number of work roles, or may dismiss altogether the value of creativity development among employees because of the difficulty of measuring results.

In fact, we know a great deal about the creative process and how to go about setting up conditions to encourage creativity and innovation. Psychologists have been working for decades on the problem of personal creativity and, upon analysis, some principles and approaches emerge from their findings with clear utility for work organisations. This paper provides a psychological framework for understanding the creative process, along with conclusions that may facilitate creative productivity within the context of work.

Starting with a discussion of the internal conditions for creativity that were identified by Carl Rogers over forty years ago, I will provide support for a developmental approach that assumes the presence of creative drive within every individual. Drawing from the work of theorists, therapists, analysts, and clinicians, I will attempt to provide a blueprint for the process

of becoming creative. My argument and my hope are that with genuine effort and some luck, the creative process may become a lifelong outlet for any individual's self-expression and personal fulfilment. Moreover, if organisational leadership is willing to reconstruct centuries of industrial-age assumptions, the creative process may become synonymous with "work."

Rogers' Internal Conditions for Creativity

Writing over 45 years ago, Carl Rogers observed:

"In industry, creation is reserved for the few – the manager, the designer, the head of the research department – while for the many life is devoid of original or creative effort. With scientific discovery and invention proceeding, we are told, at the rate of geometric progression, a generally passive and culture-bound people cannot cope with the multiplying issues and problems. Unless individuals, groups, and nations can imagine, construct, and creatively revise new ways of relating to these complex changes, the lights will go out (1954, p. 348)."

Rogers felt there was a desperate social need for the investigation of the process of creativity, the conditions under which it occurs, and ways to facilitate it. His concern, specifically in the context of work organisations, has been voiced repeatedly by occupational psychologists and scholars of management and organisation. Perhaps now, when creativity and innovation are linked more directly than ever to the bottom line, managerial leadership within work organisations will be more receptive to his message.

Three conditions within the individual, Rogers concluded from his observations, seem closely associated with the potential for constructive creativity: openness to experience, an internal locus of evaluation, and the ability to toy with concepts. In this section, I will discuss each of these conditions and provide links to supporting work in each area.

Extensionality: Openness to Experience

A basic psychological mechanism allows us to perceive the world in all its complexity without reacting to each stimulus as new information. Rogers called this mechanism psychological defensiveness. You may recognise it as patterning or categorising. In its darker forms, it results in stereotyping or prejudice. It is a process that allows us to protect the boundaries of what is familiar to us by fitting new information into pre-existing forms – even if the new information doesn't necessarily fit well. The first condition of creativity, **extensionality** – or openness to experience – is the opposite of this process.

Openness to experience requires a loosening of the boundaries that establish our sense of reality – our beliefs, perceptions, biases, etc. - at any given time. In contrast to psychological defensiveness, an extensional orientation is tolerant of ambiguity and hesitant to bring closure to situations that present conflicting information. The creative process flourishes among the

tension produced by inconsistencies that encourage an original perspective. An extensional orientation resists the deterministic influences of past experience, cultural boundaries, social norms, or our fears and anxieties about future consequences. The development of personal creativity seems closely associated with the ability to be open to what is happening at the moment, without falling back on efficient information processing that deadens awareness of unique experience.

The effort to strive for a state of consciousness that facilitates fresh, contextual perception and integration of new information can be found among the foundations of a number of philosophical, religious, and psychological traditions. From the ancient yogi disciplines of India emerged techniques for controlling consciousness through strict mental regulation. Popular interpretations of teachings from Zen Buddhism emphasise constant spontaneity in the effort to free consciousness from the restrictions of the past and our visions of the future. The psychological approach that is known loosely as Gestalt puts primacy on the process of becoming “clear,” or focusing on the present in order to be attentive to the sudden insight that precedes transformation. Perhaps the most influential work on this subject at the end of the 20th century is the study of optimal experience pioneered by Mihalyi Csikszentmihalyi.

Csikszentmihalyi (1990, 1997) uses the term “flow” to describe a state of consciousness characterised by feelings of deep enjoyment where our usual measures of time lose meaning, and we experience a sense of control and mastery that results from focused attention on the challenge at hand. Creative productivity seems to flourish during flow. These creative moments seem to occur when there is a suitable ratio between the complexity of the activity and the skill level of the actor. Flow marks a state of consciousness where our fears and anxieties about the unchangeable past and the unpredictable future are banished by our immersion in the present. The pursuit of *achievable*, yet challenging, goals lends order to consciousness, strengthens the self through frequent and regular success experiences, and establishes conditions for the increased complexity that marks psychological health and development.

The complexity of consciousness that lends itself to creative thinking and behaviour results from an individual’s experience with the psychological processes of differentiation and integration. Differentiation refers to any movement toward distinguishing oneself as unique or separate from others. Integration is movement toward union. Experiences that provide a break from the familiar produce differentiation. Our efforts to reconcile information gained from that unique experience with existing patterns of information produce integration. Together, differentiation and integration represent a cyclical pattern of psychological growth toward complexity and maturity. The combined processes discourage a black-and-white, either-or orientation to experience. Openness to new experience (differentiation) is tempered with the insight gained from previous experience and traditional sources of wisdom (integration). The creator steps out onto unbroken ground, then returns with the prize. The unique is delivered to the community for assimilation. The creator is strengthened by the encounter with optimal experience. The next opportunity to differentiate will be seized with more confidence.

How do individuals develop healthy processes of differentiation and integration? Why do some people search out opportunities to take risks or try new things, while others shy away from the uncertainties of life? The psychological process of balancing separateness/individuality

with union/community is directly manifest in the second condition for creativity identified by Rogers. In the search for sources of motivation to pursue optimal experience, an orientation that emphasises an internal locus of evaluation seems to facilitate the creative process.

Internal Locus of Evaluation

Rogers writes, “ Perhaps the most fundamental condition of creativity is that the source or locus of evaluative judgement is internal. The value of his product is, for the creative person, established not for the praise or criticism of others, but by himself (p. 354).” The strength of self that provides an individual with the courage to differentiate and value his own opinion, separate and apart from that of others, is developed with practice and the confidence that comes of experience. A healthy integration of our own evaluation with regard for the judgements of others completes a personal growth cycle that encourages creative productivity. Just as the processes of differentiation and integration encourage the complexity of consciousness that inspires flow, so too the ability to find within one’s self the motivation for creative endeavour.

Rogers observed that people in facilitating roles such as a teacher or parent are successful at fostering creativity when they permit individuals to have freedom from the restrictions of external evaluation. Specifically, creativity flourishes under conditions of psychological safety, where the individual is accepted and valued apart from what he or she produces, where external evaluation is absent, and where role relationships are empathic. Far from the soft image of permissiveness, the conditions Rogers describes increase role responsibility and accountability. Along with freedom to take risks comes responsibility for the consequences. Internal standards of evaluation carry heavy penalties in terms of the psychological abuse we are capable of heaping on ourselves.

Feedback from others is not dismissed with this approach. Rather, it is of primary importance, *but* with an empathic understanding of the actor’s internal standards. External evaluation is done from a perspective that ignores the standards of the actor and imposes those of another. As Rogers points out, “...to cease evaluating another is not to cease having reactions...’I don’t like your idea’...is subtly but sharply different from a judgement which says, ‘What you are doing is bad, and this quality is assigned to you from some external source...’ (p. 358).”

Two researchers, working on the problem of creative productivity in the 1980’s, support Rogers’ view on the importance of independence from extrinsic motivation. Amabile (1983) found that people perform more creatively if they are motivated by interest in the activity itself, rather than the promise of rewards or threat of punishments. She called this ‘intrinsic motivation,’ and discovered evidence, through experiments and field studies, that competition and pressure actually reduce *creative* performance, as do rewards that are contingent on performance. Creative performance, Amabile discovered, is facilitated by giving individuals high levels of discretion, especially in the use of time. In other words, conditions that allow an individual to work in accordance with their own creative process – against their own internal standards - encourage and nurture creative performance.

The nature of an internal locus of achievement that inspires creative productivity and the condition of flow is not a new idea. Csikszentmihalyi notes, “The essential connection between something like happiness, enjoyment, and even virtue, on the one hand, and **intrinsic or autotelic rewards** (bold his) on the other has been generally recognised by thinkers in a variety of cultural traditions. It is essential to the Taoist concept of *yu*, or right living...to the Aristotelian concept of virtue...to the Hindu attitude toward life that infuses the *Bhagavad Gita*. More recently, Bandura’s (1982) research indicates an individual’s self-evaluation of their capacity to succeed – what he calls self-efficacy – is closely related to intrinsic motivation. Bandura discovered an individual’s self-efficacy could be strengthened through enactive attainment, where he or she experiences opportunities to succeed, as well as through vicarious experience where the individual only indirectly experiences success. Hence, the power of Scottish football! Bandura also finds evidence that an individual’s self-efficacy can be improved through verbal persuasion. Hence, the power of Jack Black and other motivational speakers.

Amabile’s work has implications for the organisation of work. Bandura’s suggests a process for developmental interventions that encourage self-efficacy and strengthen intrinsic motivation for creative work. The importance of experiential learning, personal growth opportunities, shared success stories, the visibility of local heroes, and the value of persuasive communication are emphasised from this perspective on creativity development. All of these developmental tools provide opportunities to not only strengthen intrinsic motivation, but also to engage in Rogers’ third internal condition for creativity – the ability to toy with ideas.

The Ability to Toy with Elements and Concepts

Rogers suspected this third element might be less important than the first two, but clearly identified it as a condition of creativity. He writes, “Associated with the openness and lack of rigidity described (as extensionality) is the ability to play spontaneously with ideas, colours, shapes, relationships – to juggle elements into impossible juxtapositions, to shape wild hypotheses, to make the given problematic, to express the ridiculous, to translate from one form to another, to transform into improbable equivalents. It is from this spontaneous toying and exploration that there arises the hunch, the creative seeing of life in a new and significant way (pp. 354-355).”

Csikszentmihalyi’s studies of optimal experience provide many examples of how play is conducive to creativity and flow. Most structured “play” activities – whose primary function is the provision of enjoyable experiences – are “designed to make optimal experience easier to achieve. They have rules that require the learning of skills, they set up goals, they provide feedback, they make control possible (p. 72).” He warns us, however, not to assume that ample access to enjoyable activities – play- necessarily results in frequent experiences of flow. If the level of play in which we choose to engage is insufficiently complex to challenge and hold our attention, play can be as deadening as the most mindless of work activities. In spite of our complaints about the drudgery of work, people experience flow, proportionately, four times more often at their jobs than when watching television. Play contributes to creative productivity only when it facilitates opportunities to increase the complexity of consciousness or the power of intrinsic motivation.

In this regard, Rogers' reference to the ability to toy with elements and concepts seems more closely akin to his earlier description of extensionality where established boundaries are shifted in order to accommodate new experience and information. This image of permeable boundaries that provide flexibility to encourage recombination and risk-taking, absorb mistakes, and value diversity of perspective is characteristic of analytic psychology's model for psychological growth and creativity. An individual's psychological development is a pretty impressive act of creation in itself. When new ideas are welcome, rather than feared, we spend time with them, learn from them, internalise some aspects of them. Jung wrote, "The creation of something new is not accomplished by the intellect but by the play instinct acting from inner necessity. The creative mind plays with the objects it loves (in Cameron, 1992, p. 19).

The ability to toy with ideas, extensionality, and internal evaluation are interrelated and closely associated with the conditions of flow that Csikszentmihalyi has documented in recent years. In the next section, I will summarise the lessons we might learn from the research I have outlined above and consider direct applications to creative productivity in the world of work organisations.

Nurturing Creativity

In the search for creativity and innovation, work organisations that apply the lessons learned through psychological research on the creative process may find they are better able to attract and keep creative individuals, as well as develop the creative potential of every member of the organisation. I will outline below one framework that provides a blueprint for organisational efforts to improve creative productivity. This approach emphasises structures and processes that create permeable boundaries, encourage complexity, and establish safe psychological spaces.

Permeable Boundaries

A recurring theme in the search for conditions that foster creativity is that of flexible boundaries that shift and adapt to new information. Encourage a free flow of information and opportunities for collaboration that bridges divisions across all parts of the organisation. Blend and recompose ideas, biases, and perspectives by increasing diversity. Abandon the desire for boundaries to enforce control and cut out border patrols. Acknowledge the interrelatedness of work and emotion, smudging the boundary between work and the rest of living. A large body of research supports this approach. King and Anderson (1995) provide a literature review that results in a summary of major findings in regard to organisational characteristics that involve boundaries of one type or another. Please see Figure 1 below.

"Insert Figure 1 About Here"

Organisational characteristics that influence creativity are likely to encourage complexity of consciousness among organisational members and improve the quality of information available within the organisation. Following Csikszentmihalyi's consideration of complexity as integral to flow and creative productivity, let's have a closer look at ways to foster it.

Encourage Complexity

Information is the fuel that drives our creations and us toward growing complexity. It is worthwhile to remember that complexity may at times take on negative connotations as difficult or unmanageable, but in regard to organisational and personal development, complexity indicates how well information is differentiated and integrated. According to Csikszentmihalyi, a complex person is one "whose desires, emotions, thoughts, values, and actions are strongly individuated yet do not contradict each other (p. 249)." In other words, someone who is able to access many precise bits of information, then consider and act on them in relation to each other.

Complexity results, then, from a good supply of high quality information that is constantly reconfigured to fit a current context. Both differentiation and integration. Both separation and union. Both experience and tradition. Both logic and intuition. Both individuality and community. Both self and other. Both masculine and feminine. Complexity strives to transcend the ancient and restricting dichotomies that are the legacy of primitive consciousness. The information we find and make available to ourselves determines our potential for complex and creative thought and behaviour.

Organisational information encompasses far more than formal communications such as publications, electronic networks, or even the ubiquitous grapevine. It includes every conversation, meeting, casual exchange, training and development activity, opportunity available for new experiences, piece of reading material - every vehicle for access to people, ideas, objects, values, resources. The higher the quality of information, the more potential there is for complex and creative combinations to become manifest through thought and action. To improve the quality of information:

- Encourage the flow of stimulating information.
- Ensure informational feedback whenever possible, as quickly as possible.
- Provide new experiences and create sources of information.
- Process whatever learning occurs.
- Share stories of successes and failures.
- Tolerate mistakes as inevitable with learning through experience or trial-and-error.

Perhaps above all, affirm a developmental commitment that puts primacy on organisational and personal growth – then create the sort of environment that supports creativity and development. People need safe psychological spaces to play with information.

Create Safe Psychological Spaces

The relaxation of psychological boundaries may lead to creativity and flow, but it may also lead to anxiety and fear of invasion or separation from the safe and familiar. An organisation

that encourages its members to be creative is encouraging its members to have psychological courage and strength of self. That is what it takes to step outside of ordered consciousness, experience chaos (even if only momentarily) and return to consciousness a new order. The following principles should help improve the security and confidence of organisational members who step up to the challenge.

Vision is a way of being.

Organisational vision is far more than a succinct statement of business strategy. Vision is the essence of an organisation's nature, influentially shaped by the worldview and character of its leadership and the collective consciousness of its membership. Constructing and enacting a vision of creative productivity and innovation requires the membership of an organisation to internalise principles and values that support the development of individual and organisational creativity.

Engage, don't just interact.

When role expectations are suspended, and external evaluation is devalued, individuals are freer to participate in deeper, more authentic, levels of communication and understanding. Extensionality is a state of consciousness that demands engagement with full attention and a focusing of psychic energy. Concentrating on the here and now in every interpersonal interaction will lead to the exchange of higher quality information, empathic feedback and support, and reduce the conflicts that emerge from shallow and role-bound relationships. The key is to suspend judgements, personal agendas, and familiar patterns in order to focus on information as it unfolds in the here and now.

Value individual worth.

If an individual feels secure that their worth is appreciated and their work is valued, they are more likely to take risks, stretch into areas that are new for them, and learn from mistakes. In competitive environments where personal worth must be proven repeatedly, where you are only as valued as your last success, and where scapegoats carry the baggage of guilt and fear for an organisation, creativity withers along with self-efficacy and the strength of internal evaluation. Creative organisations take responsibility for their hires, assume talent and potential contribution, and provide whatever support and development members need to realise their capabilities.

Forgive mistakes.

From a developmental view, mistakes are learning opportunities. With supportive networks in place, individuals know their mistakes are not deadly. If communication is flowing freely with effective feedback and timely input from others, most mistakes will be caught before too much damage is done. Squeeze whatever learning you can from errors, but protect the self-efficacy of the actor who took the risk.

Communicate constructively.

Communication that is not interactive is seldom constructive. What is the intent of your e-mail message, memo, meeting, conversation, comment, etc? If there is a developmental intent, it will be clear in the opportunity for exchange that the communication provides. If it is offered

in a spirit of extensionality, the communication will be delivered in the here-and-now, free of assumptions or preconceptions based on past experience or predictions about the future.

Conclusion

The creative process may be approached from a developmental perspective that identifies the psychological conditions that facilitate creative productivity. Rogers (1954) identifies extensionality, an internal locus of evaluation, and the ability to toy with ideas as the conditions to nurture in order to develop an individual's creative potential. These seem to be the same conditions empirically identified by Csikszentmihalyi (1990, 1997) as the precursors of flow, a state of consciousness achieved during periods of optimal experience that results in creative productivity. The psychological processes of differentiation and integration seem to be the key to developing an individual's capacity for flow and creativity.

In work organisations, experiences of flow are facilitated when individuals are given maximum discretion in how they organise their work, when self-efficacy is strong, and when information is of high quality. Individual and organisational creative development is supported by structures and processes that ensure permeable boundaries, value increasing complexity, and provide safe psychological spaces.

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Table 1

**Organisational Characteristics Influencing Creativity
(King and Anderson, 1995)**

<i>Leadership</i> Democratic, participative styles facilitate creativity; authoritarian styles inhibit it
<i>Job characteristics</i> Discretion is positively associated with creativity
<i>Structure</i> Strongly hierarchical structures inhibit creativity; flat structures with permeable boundaries between subdivisions facilitate it
<i>Climate</i> Creativity is encouraged by climates which are playful about ideas, supportive of risk taking, challenging, and tolerant of debate
<i>Culture</i> Creativity is impeded by cultures that emphasise formal rules, respect for traditional ways of doing things, and clearly demarcated roles.