

## CHAPTER SIX

# CRAZY AS A FOX: FROM PATHOLOGY TO PRODUCTIVITY

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*Creativity and madness have been linked since the time of the Ancient Greeks. This analysis suggests that creativity and psychopathology are on a continuum with regard to shared mechanisms—but are clearly distinguishable from each other. The determination of crazy depends on the fit between people and their contexts. Creativity is typically operationalized as both difference and utility. In order for a novel idea to be seen as tenable, it must be perceived as useful. Given how much the judgment of utility depends on the fit between creative and environment, it is essential to seek acceptance finding within the context of culture.*

The story of creativity is resplendent with examples of creative people who are thought to have been “mad.” This is not a new phenomenon; the creative has been associated with madness since the time of Aristotle (Keynes, 1995). What is especially interesting about this is the contrast between someone or something that is unwell (or crazy) and the creative, which leads to the innovation so highly lauded in modern society. What is crazy? What is creative? And how does this play out in various environments? Answers to these questions are critical to attaining a firm grasp on how to enhance creative achievement.

As any creative individual knows firsthand, creative ideas are not uniformly well received. In fact, it often seems that *creative* is just one small step removed from *crazy*. Creative individuals are frequently described by others in such terms as *out there*, *quirky*, *dreamers*, *nutty*; in a word, different. Stereotypes of the eccentric artist and the mad scientist have been identified as far back as ancient Greece, where Plato reportedly remarked on the “eccentricities of playwrights and poets,” and Aristotle noted a relationship between creativity and depression (Andreasen, 2008).

Many more prominent examples of brilliant but tortured “creatives” come easily to mind: Vincent Van Gogh, Robert Schumann, Ludwig von Beethoven, and Virginia Woolf all appear to have suffered from bipolar disorder (previously called manic-depression), and more recently, celebrities Robin Williams and Jim Carey have publicly shared their diagnoses. Playwrights Eugene O’Neill and Tennessee Williams, author Charles Dickens, and poet Sylvia Plath all experienced severe depressions. And Nobel Prize-winning mathematician John Nash suffered from schizophrenia, as depicted in the movie *A Beautiful Mind*. Many other prominent creative individuals suffered from mental illnesses that have been less clearly specified, including Michelangelo, Tolstoy, and Sir Isaac Newton. In particular, the list of creative celebrities believed to be bipolar is quite long and includes, in addition to those noted above, Rossini, Tchaikovsky, Jackson Pollock, Francis Ford Coppola, Hemingway, Lord Byron, Kierkegaard, Abraham Lincoln, Winston Churchill, and Florence Nightingale (see Jamison, 1993, and NAMI, n.d., for documentation of these and many more examples).

Nor does the stereotype of the *crazy creative* appear to be illusory. A growing number of scientific studies have shown positive correlations between creativity and mental illness. This research began in Germany where, from 1927 to 1943, psychiatrist Adele Juda (1949) tracked psychiatric disorders among artists, scientists, and their relatives. Juda reported higher rates of mental illness as compared with the general population, noting that schizophrenic-type disorders were found more often among artists, while manic-depressive-type disorders were more commonly found among scientists. In both groups, Juda noted a higher suicide rate. She conducted a similar study in Iceland, examining close relatives of patients with diagnoses of schizophrenia or bipolar disorder. Compared to the general population, she found that relatives of schizophrenic patients were twice as likely to be recognized (eminent) creative people, while the relatives of bipolar patients were six times as likely to be recognized creatives. Karlsson (1970) interpreted this as suggesting that the gene for schizophrenia might, when balanced by a healthy gene, give rise to “increased cerebral stimulation” leading to giftedness and creativity.

In 1987, researcher Nancy Andreasen conducted essentially the inverse study. She examined rates of mental illness among creative writers and their first-degree relatives (i.e., one step removed genetically—parent, child, sibling), as compared with matched controls and their relatives. Andreasen reported a much higher rate of mental illness among the creative writers, and higher rates of both mental illness and creativity among their relatives, once again supporting the idea that creativity and mental illness might be genetically linked (Andreasen, 1987, 2008).

The evidence continues to accumulate with a spate of more recent studies on the topic, and an expanded focus. In 2005, Stanford University researchers Simeonova, Chang, Strong, and Ketter assessed creativity among 40 bipolar parents and 40 of their children, all of whom also had diagnoses evenly di-

vided between bipolar disorder and ADHD (Attention Deficit Hyperactivity Disorder). Compared with parents and children in the general population, the bipolar patients *and* their children all scored much higher on the BWAS (Barron-Welsh Art Scale), a test of creativity. This was regardless of whether the children were diagnosed with Bipolar Disorder or ADHD (Simeonova et al, 2005). In 2011, White and Shah (2011) replicated the findings of their earlier (2006) study finding that adults with ADHD did better on several tests of divergent thinking - although not on tests of convergent thinking. White and Shah explained their findings in terms of different levels of “inhibitory control,” an idea we will return to below.

Finally for purposes of our current review, a team of researchers at the Karolinska Institute led by Dr. Simon Kyaga (2013) reported results from a 40-year long prospective population study with a sample size of 1,173,763 participants. They compared the "occurrence of creative occupations" among patients and their relatives without psychiatric diagnoses, to matched controls. Creative professions were defined as “scientific and artistic occupations,” while a wide range of diagnoses were assessed, including but not limited to schizophrenia, bipolar disorder, anxiety disorders, drug and alcohol abuse, autism, and ADHD. Kyaga and colleagues found that individuals in creative professions in general were more likely to suffer from bipolar disorder, but not from any other diagnoses—although their close relatives were more likely to suffer from schizophrenia, bipolar disorder, anorexia nervosa, and autism. Furthermore, authors, specifically, showed "increased likelihood of schizophrenia, bipolar disorder, unipolar depression, anxiety disorders, substance abuse, and suicide" (Kyaga et al., 2013, p. 1).

A variety of explanations of the link between psychopathology and creativity have arisen to account for these findings. At the most general level, the relationship makes good sense when we consider what creativity requires. Depending on the measurement method, creativity tends to involve: making unusual/uncommon mental associations, fluency or flexibility of ideas, openness to new experiences, independence of thinking, and having the ability to bring together “remote associations.” Most current theories hold, in one way or another, that creativity results from subclinical, i.e., less severe, manifestations of the very same characteristics that constitute disorders. That is, mild manifestations confer advantage, while severe versions constitute illness. (See Preti & Miotto, 1997, for a thought-provoking analysis.)

Recent research attempts to identify the brain regions and functions involved in creativity, and perhaps shared between creativity and psychopathology. For example, Flaherty (2005) draws upon evidence from studies of brain abnormalities to identify the temporal lobes as responsible for idea generation and the frontal lobes as responsible for evaluating the quality of ideas (evaluative and inhibitory function). The balance between the two is managed by the mesolimbic system—the part of the brain circuitry underlying emotions and the dopamine-based reward system. Flaherty hypothesizes that the right balance results in creativity, the wrong balance in depression (over-

inhibition) or psychosis (overgeneration of ideas and under-inhibition, in other words, loosening of associations). (See also De Manzano, Cervenka, Karabanov, Farde, & Ullén, 2010, regarding neurobiological mechanisms of cognitive disinhibition).

Similarly (but with less neurobiology), cognitive psychologist Scott Barry Kaufman, Scientific Director of The Imagination Institute in the Positive Psychology Center at the University of Pennsylvania, writes:

Too much psychosis and one is at high risk of going mad. But everyone engages in psychosis-related thought any time they use their imagination. This type of thought activates particular regions of the brain and is especially prominent while day-dreaming and night-dreaming.... I do not think a “psychotic episode” is necessary for art, but mental processes such as a reduced latent inhibition can be very useful for art. The continuum aspect is key. Extreme psychosis can lead to a psychotic episode, completely detached from reality.... That isn’t very adaptive. But there is a sweet spot in which you still use your imagination but have a healthy foot in reality. That sweet spot is one which is heavily conducive to flow, a state that many artists (and other creative people) seek. (Kaufman, 2011, para. 3).

The issue is perhaps best summarized by Dean Keith Simonton: “Psychopathology and creativity are closely related, sharing many traits and antecedents, but they are not identical, and outright psychopathology is negatively associated with creativity” (Simonton, n.d., slide 36; see also Simonton’s 1999 book *Origins of Genius: Darwinian Perspectives on Creativity*.)

### What is crazy?

The foregoing review suggests that creativity and psychopathology are on a continuum with regard to shared mechanisms—but are clearly distinguishable from each other. In other words, we have assumed that the difference between *crazy* versus *creative/unusual* is clear-cut, and that while they may often go together, they are obviously not the same thing. However the definition of abnormality in the sense of mental illness (*psychopathology* or *crazy* in lay terms) is far from clear cut, even for experts in psychology and psychiatry.

The current diagnostic system used in the United States, and increasingly much of the rest of the world, is the DSM-V (*Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*). According to the DSM-V, which was released in May of 2013:

A mental disorder is a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that

reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress in social, occupational, or other important activities. An expectable or culturally approved response to a common stressor or loss, such as the death of a loved one, is not a mental disorder.

Socially deviant behavior (e.g., political, religious, or sexual) and conflicts that are primarily between the individual and society are not mental disorders unless the deviance or conflict results from a dysfunction in the individual, as described above (American Psychiatric Association, p. 20)

One can't help but notice the number of words in this definition that rely on the judgments of an evaluator: *clinically significant*, *disturbance*, *dysfunction*, usually associated with *distress* (but not always), *important activities*, *expectable* or *culturally approved response*. The definition attempts to distinguish deviance from disorders, but has to fall back on other difficult-to-define terms such as dysfunction, in order to do so. But who decides what is important? Clinically significant? Expectable or approved?

Beyond this dismayingly subjective core definition, the manual lists an array of syndromes, which are diagnosed by matching an individual's behavior to lists of diagnostic criteria. One new diagnostic category in the DSM-V is Disruptive Mood Dysregulation Disorder (DMDD). According to its corresponding fact sheet from the American Psychiatric Association:

Its symptoms go beyond describing temperamental children to those with a severe impairment that requires clinical attention. Far beyond temper tantrums, DMDD is characterized by severe and recurrent temper outbursts that are grossly out of proportion in intensity or duration to the situation. These occur, on average, three or more times each week for one year or more. Between outbursts, children with DMDD display a persistently irritable or angry mood, most of the day and nearly every day, that is observable by parents, teachers, or peers. (2013, p. 1)

While the frequency and duration specifiers may provide a sense of measurement precision, and the diagnostic criteria include a laudable attempt to require agreement across multiple observers, there is still a disturbing amount of room for interpretation embedded in the criteria. Furthermore, it is fair to say that this is the case for a great many diagnostic categories.

In a scathing critique of the DSM, Eric Maisel (2013) argues that the definitions are essentially meaningless. While this is an extreme stance, his points are worth thinking about as he confronts the elusive dividing line between difference and illness:

Language has been employed to say absolutely nothing. A mental disorder is a psychological thing, or maybe it isn't. A mental disorder is a biological thing, or maybe it isn't. You can rail about your society unless you have a "dysfunction," at which point your railing is a mental disorder. You can have a conflict with your politicians unless you

have a “dysfunction,” at which point you are a mental deviant. (para. 7)

In other words, simply put, we do not have a clear-cut definition of *mental disorders*, a.k.a. *crazy*.

In one of the most thoughtful approaches to this issue, psychologists David Rosenhan and Martin Seligman (1984) identified a set of seven elements, or features, of abnormality, refined but essentially unchanged over ensuing decades. While no single feature is either necessary or sufficient to result in a clear cut identification of pathology, they suggested that the more of them we see in a particular person, the more certain we are that a *disorder* is present. These are:

- 1) Suffering: feeling pain or discomfort. Of course, being labeled as deviant or *crazy* can create this.
- 2) Maladaptiveness: “Behaviors that strongly interfere with individual well-being... the ability to work and the ability to conduct satisfying relationships” (Seligman, Walker, & Rosenhan, 2001, p. 21). Of course, the latter depends on whether one's ideas are valued in the various arenas of one's life.
- 3) Vivid/Unconventional Behavior: “Generally, people recognize as acceptable and conventional those actions that they themselves are willing to do” (Rosenhan & Seligman, 1984, p. 22).
- 4) Unpredictability and Loss of Control: Behavior in which “the ordinary guides of behavior suddenly break down” and “when we do not know what causes an action” (p. 22). In addition to the obvious judgment inherent in the phrase “ordinary guides of behavior,” it is also common for productive behavior (such as creativity) to be experienced as inconsistent, unpredictable, and even somewhat out of control.
- 5) Irrationality: “When a person's behavior seems to have no rational meaning” (Seligman, Walker, & Rosenhan, 2001, p. 21).
- 6) Observer Discomfort: The behavior makes others uncomfortable.
- 7) Violation of Moral and Ideal Standards: self-explanatory.

Rosenhan and Seligman argue that no single feature is enough in and of itself, but when several are present, a mental disorder is indicated.

Of particular concern for our argument is this: can the approach above adequately distinguish between a creative individual in an unsupportive environment and a person with a mental illness? Consider that seeing things differently may result in not being understood by others in one's immediate context (social or occupational). This is likely to make those others feel uncomfortable and perhaps to find one unpredictable—which in turn may result in one feeling distressed. Thus we achieve at least five of the seven elements of abnormality—more than enough to conclude that a mental disorder is present (although not which one).

The element that comes closest to being a defining feature is undoubtedly *maladaptiveness*, a close neighbor to *dysfunction*. But what does it mean? Arguably, being a member of the French Resistance would have been maladaptive in the middle of Vichy France! What makes something maladaptive, other than whether or not it worked; whether or not you survived; whether or not somebody trusted you enough to give you resources to get to an end point that was judged to be worthwhile?

By this point it should be excruciatingly obvious just how much the determination of *crazy* depends on the fit between a person and his or her context. Even the most unusual of psychological symptoms—hallucinations and delusions—can be very difficult to distinguish from mere unconventional belief systems (e.g., *hallucinating* versus *spirit channeling*, belief in conspiracies, etc.). It is not surprising, then, that as the frequency of psychiatric diagnoses continues to rise (see Levine, 2013, for an overview), a minority voice comprised of professionals and laypersons alike questions the utility of these diagnoses, and whether they may, in some or perhaps many cases, be doing more harm than good. As Webb et al. (2005) argue, “Some of our most brightest and most creative minds are not only going unrecognized, but they are being given diagnoses that indicate pathology” (*Conclusion, para. 1; see also Webb 2004*).

### **What is creative?**

The question of madness aside, what are the qualities of those we see as effective creatives? Csikszentmihalyi’s (1996a) highly cited study of the creative process presents ten antithetical traits found in exceptionally creative people, from scientists and politicians to business leaders and artists. Some of these are interesting but less directly relevant to our conversation: creatives are unusually energetic, but also know the importance of rest; creatives can be both playful and disciplined; creatives exhibit both extroverted and introverted behaviors; creatives have moments of great joy but also great pain; creatives reject rigidly defined gender roles. Of more direct importance to this discussion are the rest, the characteristics that root a creative in place.

Creatives must possess both imagination and a grounded sense of reality. Obviously, imagination is required to think beyond the ideas that currently exist. The special talent that creatives possess is to take an idea that others perceive (in their reality) as simply bizarre and connect it firmly to the present, so that all may see a new reality. Similarly, creatives tend to be both naive and smart, exhibiting both childishness and wisdom. From this lens, we see a willingness to play with ideas—the fluency, flexibility, and originality that are essential to divergent thought—contrasted with equally important abilities in convergence, the skill to sort good ideas from bad ones.

Creatives are quite passionate and yet reasonably objective about their work. Passion is necessary to keep forging into the unknown, driven largely

by intrinsic motivation. Objectivity allows us to know when an idea is not worth pursuing or needs criticism and appropriate response. Creatives are simultaneously proud and humble. They are cognizant of the fact that their work is supported by the work of others who have come before them, yet they are rightly proud of their contributions. This sense of place in their areas of endeavor grounds them and gives them the security to surge ahead.

Creatives are both rebels and conservative. Csikszentmihalyi (1996b) argues that “it is impossible to be creative without having first internalized an area of culture” (p. 40). Creatives are willing to take risks, to challenge the status quo, but keep an eye on what has been. Generating ideas that are original but not acknowledged as useful is not creativity. Generating ideas that are useful but not original is not creativity. Creativity requires both originality and acceptability. It is only then that we see a clear interplay between divergence and convergence, breaking out of the norm and then fitting back into the norm so that new ideas can be recognized and appreciated by others.

The majority of creativity researchers operationalize creativity in this way, as a two part phenomenon requiring both novelty and utility. An idea is considered original if it is notably different from that which has come before in any given area. It is considered useful if it solves a problem or meets a need (Simonton, 2011). While this operationalization appears to focus on an end product, the end product is not creativity in and of itself. What it is is the end result of creativity, the product of the creative *process*. Most contemporary definitions of creativity are rooted in the model Morris Stein put forth in the 1950s (Runco & Jaeger, 2012), that creativity is a “process which results in a novel work that is accepted as tenable or useful or satisfying by a group at some point in time” (1953, p. 311).

To understand how we got to where we are in our understanding of creativity, it is helpful to take a step back and look at the evolution of the study of creativity in its own right. The concept of creativity really took hold in the 1700’s when debates about freedom of thought amid social and political constraints unlocked the concept of creativity from that of talent (Albert & Runco, 1999). By the end of that century, it was widely held that while mere talent would be guided by rules, customs, and obligations; genius was unleashed from these constraints. More specifically, it was thought that genius (and later creativity) is:

- Not connected to the supernatural
- A possibility for any individual
- Not the same thing as talent
- Exercised dependent upon political pressures.

In the 1800’s and early 1900’s the importance of adaptability entered into the conversation. Of great concern were the effects of the rapid innovation of the Industrial Revolution on communities. Basic questions guiding the work on creativity at this time and going forward were: what is it? who has it? who

should benefit from it? and can it be taught? (Albert & Runco, 1999).

This last query (i.e., can it be taught) led us more even firmly from concepts of creativity as inherent in particular individuals or those in certain stations of life to a more deliberate exploration of the creative process and how this process can be enabled by a variety of tools and techniques. In the decades after the mid-20<sup>th</sup> century there was a flurry of work on how creativity could be taught. Highlights of this included the work of Osborn on Brainstorming (1953), Gordon on Synectics (1961), Debono on Lateral Thinking (1970), Altshuller on TRIZ (1973/1999), and Buzan on Mindmaps (1977). Later publications spotlight the work of Torrance (1995) and Gardner (1994) who further delved into how creativity may be developed.

Although the best applications of deliberate creativity models emphasize both divergence and convergence, much of the work in deliberate creativity has focused largely on the generation of new ideas. Of course, idea generation is not of much use unless one can determine which ideas are worthwhile to pursue. The most effective techniques are effective at placing ideas in context. Why is an idea good? What makes it extraordinary? Why should others perceive it to be of special value? Csikszentmihalyi (1996b) suggests that “at the highest levels of creative achievement the generation of novelty is not the main issue” (p. 38). And we agree.

Let us go back to Stein’s 1953 definition of creativity: creativity is a “process which results in a novel work that is accepted as tenable or useful or satisfying by a group at some point in time” (p. 311). Who is this group? What is this time? The group and the time determine the audience of the idea, an audience which is firmly positioned in the place that they hold. In order for an idea to be seen as *tenable* or *useful* or *satisfying*, it must speak to the culture (and subcultures) in which it is presented. What do these people believe in? How do they see themselves? What do they perceive to have value? An idea that does not mesh well with the cultural realities of its audience will not be recognized as having utility. In short, *creativity is culturally defined*.

### **What is culture?**

As daunting as it was to pin down mental illness and creativity, it can be equally challenging to define the concept of *culture*, notwithstanding the fact that the term is commonly used in everyday language, along with *subculture*, *Western culture*, and even *hipster culture*. The first accepted historical definition within anthropology was offered by E. B. Tylor in 1871: “that complex whole which includes knowledge, belief, art, morals, law, custom and any other capabilities and habits acquired by man as a member of society” (p. 1).

While there have been many definitions offered for the term (Kroeber & Kluckhohn identified 162 definitions used in anthropological literature in 1952!), most eventually allude to culture as transmitted through social learning and involving categorization and symbolic systems. These may include

social, political, and religious systems; kinship, marriage, and gender relations; expressive forms and rituals; technologies; material artifacts; and shared narratives. (See, for example, Geertz, 1973.)

In the present day, Wikipedia (“Culture,” n.d.) offers an overview that captures how the term is used in everyday conversation:

When used as a noun “a culture” is the set of customs, traditions, and values of a society or community, such as an ethnic group or nation. In this sense, the concept of multiculturalism is a political ideology that values the peaceful coexistence and mutual respect between different cultures inhabiting the same territory. (para. 4)

However, an ideal state where difference is a non-issue is rarely, if ever, truly achieved. Difference is often seen as counter-culture, as dangerous and something that must be controlled to prevent disruption and trauma to the dominant culture.

With both *creative* and *pathological* so heavily determined by culture, it is clear that in order to come to be identified as the first rather than the second, it is necessary to present oneself and one’s novel ideas in a way that deviates optimally—not too little, not too much—from the current thinking of those in a position to evaluate. Too little, and we will seem run-of-the-mill, *normal*. Too much, and we will be written off as invalid (crazy, or at least odd)—and the consequences of that can be dire.

People who are different are often experienced as threatening. People like and crave order, predictability, and (ideally) control, in everything from their bedtime routines and religious practices to everyday social interactions (see Carpenter, 2000; Evans, Wener, & Phillips, 2002). Why is it so stressful to walk by homeless people on the street as they rant things we don’t understand? Mainly it is because we don’t know what to expect from them. Are they dangerous? Are they going to confront us? If so, how should we act? All bets are off, and because the normal rules don’t apply, we feel unsettled and uncertain.

People don’t like difference because they don’t like unpredictability, and they don’t like unpredictability because one cannot control what one cannot predict. We can see just how uncomfortable this is in the research on depression, anxiety, and stress. Although some people (*sensation seekers*) get an enjoyable sense of adventure out of this sort of thing, most experience feeling out of control as negative and frightening—to the point where we delude ourselves on a regular basis about how much control we have in our lives. A consistent finding within the fields of clinical and health psychology is that, in laboratory studies, psychologically healthy people distort reality to exaggerate their perceptions of predictability and control. In contrast, depressed people may be more accurate judges of the extent to which they are in control of things (Abramson & Alloy, 1980; Bandura, 1989; Langer & Roth, 1975; Taylor & Brown, 1988).

People not only differ from each other in the extent to which they feel

threatened by difference and lack of predictability, but also in the extent to which they crave novelty. A personality dimension called *need for structure* describes the extent to which one can tolerate ambiguity and lack of structure without experiencing anxiety (Thompson, Naccarato, & Parker, 1989) while a similar dimension called *openness to experience* is widely accepted as one of the five personality traits that characterize humans across cultures (McCrae & Costa, 1987). Items from the *need for structure* scale include questions such as:

*It upsets me to go into a situation without knowing what I can expect from it.*

*I find that a well-ordered life with regular hours makes my life tedious. (reverse coded)*

*I don't like situations that are uncertain.*

*I hate to be with people who are unpredictable.*

Especially for high need for structure individuals, something new, different, and apparently out of left field (because their own thinking doesn't go there) is likely to generate anxiety. Anxiety as a biopsychological state is geared to survival and associated with many cognitive and perceptual changes—most of which are exactly the opposite of creativity/acceptance enhancing. Anxiety narrows the field of attention, triggers previously learned habits, and boosts rigidity of thinking (see Robinson, Vytal, Cornwell, & Grillon, 2013). Depending on how much anxiety is evoked, people may passively or actively resist that which is different, and/or react with anger.

Beyond these personality dimensions, society as a whole and social groups on a smaller scale can and do react negatively, even brutally, to others who are identified as deviant—that is, on the negative/threatening side of different. The psychological and sociological literatures abound with studies of marginalized groups, the devastating effects of social ostracism, and the lengths to which people will go to enact and enforce conformity (e.g., Baumeister & Tice, 1990; Baumeister & Leary, 1995; Park, 1937).

Humans are seen by evolutionary psychologists as "social animals" that must be part of a group in order to survive (Axelrod & Hamilton, 1981; Barash, 1977); most social institutions and culture itself exist mainly to synchronize and systematize human behavior. Groups of people generate and maintain shared sets of cognitive schemas among their members, and may come together in the first place because of shared ways of thinking. This means that acceptance is also, by its very nature, culturally defined.

The take home message is this: If you don't want to be seen as crazy, it is important to be able to sell your ideas to people less creative than you in ways that are non-threatening, building bridges from their current ways of thinking to the new vision.

## Acceptance Finding

The process of persuading others that one's ideas are worthwhile is called *acceptance-finding*. Following problem definition, idea generation, and solution evaluation, it is the final stage of the creative process, also called idea implementation (Parnes, 1981). Clearly, this is a critical skill for creatives in general, but all the more so for those operating in less than creative contexts, where gate-keepers and/or budget-holders can and often do quash creative ideas before they can even reach those who might adopt or promote them.

Sadly, creatives often struggle at the acceptance finding stage of the process. Here is what creative individuals might not know: the burden is on *them* to promote their ideas. To the extent that there is a gap between the idea/product and the vision or understanding of the person who needs to approve it, the creative's job is to close that gap.

In the field of cognitive psychology, researchers talk of cognitive schemas, mental structures that bring order and meaning to our thinking. The notion of *schema* was introduced by Frederic Bartlett who proposed that networks of abstract mental structures form the underpinnings for our understandings of the world (Carbon & Albrecht, 2012). In 1926, developmental psychologist Jean Piaget noted that through their interaction with the world, children develop initial schemas, then assimilate new information into their existing schemas until, as discrepancies grow, assimilation no longer suffices. At this point, the schemas are stretched to accommodate to the new reality (Piaget, 1952). The cognitive schema concept is quite helpful in our understanding of acceptance finding.

Acceptance-finding involves learning how to present your novel ideas in a way that is close enough to existing ways of thinking that it can be assimilated, rather than simply bouncing off of recipients' cognitive schemas and being met with indifference (e.g., appearing not to have heard; a brief, blank, pause in a conversation followed by continuing as though the creative hadn't spoken; etc.). If the novel idea is so discrepant from current thinking that it cannot be assimilated, the creative will need to build cognitive bridges to stretch existing schemas to the point where they can accommodate the new vision (called "scaffolding" in some contexts). That is, rather than simply presenting something new and expecting others to immediately see its obvious value, the creative must take the time to understand the current conceptual model from which others are operating and work through a logical progression of steps to bring the audience to the final vision.

Depending on how unique one's thinking is relative to one's context, this is not always easy to do. Sometimes, a poor reaction to creative ideas goes beyond indifference to "blind argument or outright obstruction<sup>1</sup>". When this occurs, you have crossed a line in the eyes of the other, and have become a threat. Key to avoiding this line is to do a thorough analysis of the decision

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<sup>1</sup> (see [http://creatingminds.org/articles/cps\\_framework.htm](http://creatingminds.org/articles/cps_framework.htm)).

makers, what they value, and who has access to their ears.

First, the creative must determine who the decision makers are. This might not always be who we think it is. Decision makers can come from all levels of a hierarchy, and it is important to correctly assess who has the keys to the gates. Is it your immediate supervisor? Is it the division manager? Is it the CFO? Who else might have a say in the matter? Taking the time to accurately uncover who has decision making power and the politics behind the decisions they will be making is essential to successfully taking a creative idea to implementation.

After the pool of decision makers has been determined, it is critically important to analyze what these people value. All that we communicate is filtered through the perceptions of our audiences. It is these perceptions rather than our intent that determines what our audience thinks of us and our ideas. Let us look at this through the lens of Uncertainty Reduction Theory which suggests that listeners will try to gather whatever information they can about a speaker so that the speaker's communication is more easily predictable and explainable (McCornack, 2007). It is at this point that it is best for creatives to present themselves, as best they can, in alignment with the shared values of the cultural orientations of their listeners.

Of course, it is not just the creative but the novel idea itself that must be perceived by the audience as a good fit. Schemata help each listener individually understand a concept's characteristics, but this understanding will also be heavily influenced by the beliefs, attitudes, and practices of the listeners' combined experience. Before pitching a new idea, the creative should define everything that makes up the new concept, both the elements that harken to a previous idea and that which makes it new. The more the new is linked to the old the easier it will be for the audience to accept, and eventually embrace, it. Representations such as the automobile as a horseless carriage, the flashlight as a new torch, and films as moving pictures are all examples of this technique.

Clearly, we are much more likely to achieve creative success if we position our ideas in terms of what our audiences already know, are comfortable with, and (even better) value. Remember, we want to reduce their uncertainty so that they don't perceive the novel as dangerous. If they are finance managers, position the new idea in terms of revenue increase. If they are educators, put the new idea in terms of important learning. If they are engineers put the new idea in terms of increased efficiency, and so on. Sell to the values of the listeners' cultural make-up, and you are likely to have a willing audience.

As we have argued, *crazy*, *creative*, and *acceptable* are all culturally defined. Creativity will no doubt be seen as different, by definition, because the core of the creative is that it is new. However, it is quite possible through careful, culturally sensitive positioning of creatives and their ideas that this difference is not seen as crazy or threatening, but instead is seen as an invaluable asset.

Wise creatives give their ideas a fighting chance by talking the following

steps to achieve successful idea implementation:

- A thorough audience analysis.
- A thorough values assessment.
- A thorough product definition.
- A matching of product characteristics to the values of the audience.

If creatives pitch to the values of the audience, the values inherent in the culture (or subcultures) it belongs to, then they have a much better chance of seeing their ideas reach full implementation.

Of course, creative people might always be seen as a little crazy. In truth, crazy represents a judgment of difference (or dysfunction) that is dictated by the culture in which the behavior occurs. However, creativity that is recognized as such represents a judgment of difference coupled with a determination of usefulness (i.e., optimal functioning, in fact). Given how much these judgments depend on the fit between the creative and an environment, it is crucial to pursue acceptance finding within the context of culture.

#### **Authors' Brief Bio**

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## References

Abramson, L., & Alloy, L. B. (1980). The judgment of contingency: Errors and their implications. In A. Baum & J. E. Singer (Eds.), *Advances in Environmental Psychology: Applications of Personal Control* (Vol. 2, pp. 111-130). New York: Psychology Press.

Albert, R., & Runco, M. (1999). A history of research on creativity. In R. Sternberg (Ed.) *Handbook of creativity* (pp.16-31). Cambridge: Cambridge University Press.

Altshuller, G. (1999). *The innovation algorithm: TRIZ, systematic innovation and technical creativity*. (L. Shukyak & S. Rodman, Trans.). Worcester, MA: Technical Innovation Center. (Original work published 1973).

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, D.C.: Author.

Andreasen, N.C. (1987). Creativity and mental illness: Prevalence rates in writers and their first-degree relatives. *American Journal of Psychiatry*, *144* (10), 1288-92.

Andreasen, N. C. (2008). The relationship between creativity and mood disorders. *Dialogues in Clinical Neuroscience*, *10*(2), 251–255.

Axelrod, R., & Hamilton, W. D. (1981). The evolution of cooperation. *Science*, *211*, 1390-1396.

Bandura, A. (1989). Human agency in Social Cognitive Theory. *American Psychologist*, *44* (9), 1175–1184.

Barash, D.P. (1977). *Sociobiology and behavior*. New York: Elsevier.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497-529.

Baumeister, R. F., & Tice, D. M. (1990). Anxiety and social exclusion. *Journal of Social and Clinical Psychology*, *9*(2), 165-195.

Buzan, T. (1977). *How to make the most of your mind*. London: Encyclopaedia Britannica International.

Carbon, C. C., & Albrecht, S. (2012). Bartlett's schema theory: The unrepliated "portrait d'homme" series from 1932. *The Quarterly Journal of Experimental Psychology*, 65 (11), 2258–2270.

Carpenter, S. (2000). Preferring the predictable, *Monitor on Psychology*, 31 (11), 42.

Csikszentmihalyi, M. (1996a). *Creativity: Flow and the psychology of discovery and invention*. New York: Harper Collins.

Csikszentmihalyi, M. (1996b, July/August). The creative personality. *Psychology Today*, 29, 36-40.

Culture. (n.d.) *Wikipedia*. Retrieved from <http://en.wikipedia.org/wiki/Culture>.

de Bono, E. (1970). *Lateral thinking: Creativity step by step*. New York: Harper & Row.

De Manzano, Ö., Cervenka, S., Karabanov, A., Farde, L., & Ullén, F. (2010). Thinking outside a less intact box: Thalamic dopamine D2 receptor densities are negatively related to psychometric creativity in healthy individuals. *PLoS ONE*, 5(5), e10670.

*Disruptive mood dysregulation disorder*. (2013). Retrieved from <http://www.dsm5.org/Documents/Disruptive%20Mood%20Dysregulation%20Disorder%20Fact%20Sheet.pdf>.

Evans, G. W., Wener, R. E., & Phillips, D. (2002). The morning rush hour: Predictability and commuter stress. *Environment and Behavior*, 34 (4), 521-530.

Flaherty, A. W. (2005). Frontotemporal and dopaminergic control of idea generation and creative drive. *The Journal of Comparative Neurology*, 493 (1), 147–153.

Gardner, H. (1994). *Creating minds: The anatomy of creativity as seen through the lives of Freud, Einstein, Picasso, Stravinsky, Eliot, Graham, and Gandhi*. New York: Basic Books.

Geertz, C. (1973). *The interpretation of cultures*. New York: Basic Books.

Gordon, W. (1961). *Synectics: The development of creative capacity*. New York: Harper & Brothers.

Jamison, K. (1993). *Touched with fire: Manic-depressive illness and the artistic temperament*. New York: The Free Press.

Juda, A. (1949). The relationship between highest mental capacity and psychic abnormalities. *American Journal of Psychiatry*, 106, 296-304.

Karlsson, J. L. (1970). Genetic association of giftedness and creativity with schizophrenia. *Hereditas*, 66(2), 177-181.

Kaufman, S. B. (2011). Is psychosis a prerequisite for art? *Psychology Today*. Retrieved from <https://www.psychologytoday.com/blog/beautiful-minds/201103/is-psychosis-prerequisite-art-0>.

Kaufman, S. B. (2013) *Ungifted: Intelligence redefined: The truth about talent, practice, creativity and the many paths to greatness*. New York: Basic Books.

Kroeber, A. L., & Kluckhohn, C. (1952). Culture: A critical review of concepts and definitions. *Papers. Peabody Museum of Archaeology and Ethnology, Harvard University*.

Kyaga, S., Landén, M., Boman, M., Hultman, C. M., Långström, N., & Lichtenstein, P. (2013). Mental illness, suicide and creativity: 40-year prospective total population study. *Journal of Psychiatric Research*, 47(1), 83-90.

Keynes, M. (1995). Creativity and psychopathology. *The Lancet*, 345, 138-9.

Langer, E. J., & Roth, J. (1975). Heads I win, tails it's chance: The illusion of control as a function of the sequence of outcomes in a purely chance task. *Journal of Personality and Social Psychology*, 32 (6), 951-955.

Levine, B. (2013). How our society breeds anxiety, depression, and dysfunction. *Salon*. Retrieved from [http://www.salon.com/2013/08/26/how\\_our\\_society\\_breeds\\_anxiety\\_depression\\_and\\_dysfunction\\_partner](http://www.salon.com/2013/08/26/how_our_society_breeds_anxiety_depression_and_dysfunction_partner).

McCormack, S. (2007). *Reflect and relate*. Boston: Bedford.

McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52 (1), 81-90.

Maisel, E. (2013, July 23). The new definition of a mental disorder. *Psychology Today*. Retrieved from <https://www.psychologytoday.com/blog/rethinking-psychology/201307/the-new-definition-mental-disorder>.

National Alliance on Mental Illness (NAMI). (n.d.) *People with mental illness enrich our lives: Information about famous people throughout history who have had a serious mental illness*. Retrieved from <http://www2.nami.org/Template.cfm?Section=Helpline1&template=/ContentManagement/ContentDisplay.cfm&ContentID=4858>.

Osborn, A. (1953). *Applied imagination: Principles and procedures of creative problem solving*. New York: Scribner.

Park, R. E. (1937). Cultural conflict and the marginal man. In Everett V. Stonequist, *The marginal man* (Introduction). New York: Charles Scribner's Sons.

Parnes, S. (1997). *Optimize the magic of your mind*. Buffalo, NY: Creative Education Foundation.

*People with mental illness enrich our lives*. (n.d.). Retrieved from <http://www2.nami.org/Template.cfm?Section=Helpline1&template=/ContentManagement/ContentDisplay.cfm&ContentID=4858>.

Piaget, J. (1952). *The origins of intelligence in children*. New York: International University Press.

Preti, A., & Miotto, P. (1997). Creativity, evolution and mental illnesses. *Journal of Memetics: Evolutionary Models of Information Transmission*, 1. Retrieved from [http://cfpm.org/jom-emit/1997/vol1/preti\\_a&miotto\\_p.html](http://cfpm.org/jom-emit/1997/vol1/preti_a&miotto_p.html).

Puccio, G., Murdock, M., & Mance, M. (2007). *Creative leadership: Skills that drive change*. Thousand Oaks, CA: Sage.

Robinson, O. J., Vytal, K., Cornwell, B. R., & Grillon, C. (2013). The impact of anxiety upon cognition: Perspectives from human threat of shock studies. *Frontiers of Human Neuroscience*, 7. doi:10.3389/fnhum.2013.00203.

Rosenhan, D. L. & Seligman, M. E. P. (1984). *Abnormal psychology*. New York: W. W. Norton.

Runco, M., & Jaeger, G. (2012). The standard definition of creativity. *Creativity Research Journal*, 24 (1), 92-96.

Seligman, M.E.P., Walker, E.F., & Rosenhan, D. L. (2001). *Abnormal psychology* (4th ed.). New York: W.W. Norton.

Simeonova, D. I., Chang, K. D., Strong, C., & Ketter, T. A. (2005). Creativity in familial bipolar disorder. *Journal of Psychiatric Research*, 39(6), 623-631.

Simonton, D. (n.d.). *Creativity and madness: The myth and truth*. Retrieved from <http://psychology.ucdavis.edu/simonton/commonwealthclub.ppt>.

Simonton, D. (1999). *Origins of genius: Darwinian perspectives on creativity*. New York: Oxford University Press.

Simonton, D. (2011). Creativity and discovery as blind variation: Campbell's (1960) BVSR Model after the half-century mark. *Review of General Psychology, 15* (2), 158-174.

Stein, M. (1953). Creativity and culture. *The Journal of Psychology: Interdisciplinary and Applied, 36* (2), 311-322.

Taylor, S. E., Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin, 103* (2), 193-210.

Thompson, M. M., Naccarato, M. E., & Parker, K. E. (1989). Assessing cognitive need: The development of the personal need for structure and the personal fear of invalidity scales. Paper presented at the annual meeting of the Canadian Psychological Association, Halifax, Nova Scotia.

Torrance, E. P. (1995). Insights about creativity: Questioned, rejected, ridiculed, ignored. *Educational Psychology Review, 7*, 313-322.

Tylor, E. B. (1871). *Primitive culture: Researches into the development of mythology, philosophy, religion, art, and custom* (Vol. 1). London: John Murray.

Webb, J. T. (2005). Mis-diagnosis and dual diagnosis of gifted children: Gifted and LD, ADHD, OCD, Oppositional Defiant Disorder. Retrieved from <http://talentdevelop.com/articles/MADDOGC.html>.

Webb, J. T., Amend, E., Webb, N., Goerss, J., Beljan, P., & Olenchak, F. (2004). *Misdiagnosis and dual diagnoses of gifted children and adults: ADHD, bipolar, OCD, Asperger's, depression, and other disorders*. Tucson, AZ: Great Potential Press.

White, H. A., & Shah, P. (2011). Creative style and achievement in adults with attention-deficit/hyperactivity disorder. *Personality and Individual Differences, 50*(5), 673-677.