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Eureka! Creativity Research Then and Now

Introduction

*The play’s the thing*
William Shakespeare *Hamlet* Act 2, Scene 2

This chapter examines the origins and growth of creativity as a research topic in a variety of disciplines which, until recently, was a neglected area of research. A number of factors have contributed to the neglect of creativity as a research topic. One of them is the belief that creativity is a mystical phenomenon or spiritual process that does not fit with academic scrutiny. The early twentieth century schools of psychology such as structuralism, functionalism and behaviourism ignored creativity; while populist creativity ‘experts’ promoted creative thinking without substantiation. However, there are now journals devoted to creativity research such as the *Journal of Creative Behavior* and the *Creativity Research Journal*, as well as innovation-related publications such as the *International Journal of Innovation Management* and *Creativity and Innovation Management*. There is a lack of agreement regarding the location of creativity (in an individual, as a product or as a process) but there is acknowledgement that it occurs on different levels such as the personal (P-Creativity), the historical/societal (H-Creativity), the organisational (O-Creativity) and even animal creativity (A-Creativity).

What is creativity?

Situations where only linear, algorithmic understandings are created do not permit meaningful creativity. Rather, creativity is best achieved when flexible, exploratory, non-predetermined paths are possible. Petrowski believes that there is an increasing call within academia to
embrace creativity. However, this is sadly lacking within the marketing academy.

There has been a call for the establishment of a Creativity University, focusing on the teaching and nurturing of the art and skills of creativity. A number of research centres have been formed, including the University of Colorado Center for Research on Creativity and Innovation, the Creative University Project on Fostering Creativity in Higher Education, and the International Center for Studies in Creativity at Buffalo State University. Research topics and programmes of study focus on a range of issues including: the interaction of creativity within innovation and entrepreneurship; how creativity can contribute to information system design; the development of knowledge through the implementation of creativity technique; an MSc in Creativity focusing on creative problem solving; the foundations of creativity; and research and development issues. The Edward de Bono Institute for the Design and Development of Thinking at the University of Malta offers an MA in Creativity and Innovation, covering topics such as lateral thinking, organisational creativity, foresight techniques, creative leadership, creativity and innovation in the media, literature, arts, science and technology.

Creativity is inherent in a number of disciplines and has become part of our everyday lives through the creation of innovative products as a response to insatiable consumer demand and in our individual creative thoughts. Creativity can be found in fields not automatically considered to be creative such as engineering and computer programming where it interacts with a number of tangible and intangible factors:

Engineering design ... involves the use of scientific principles, numeracy, synthesis, analysis, creativity, decision making, together with the timely consideration of human factors, technical information and market demand in the definition of a product...

A central issue is whether or not the personality of the artistic and scientific creator is significantly different from that of other people.

Within the sciences, the same ‘discovery’ can be made simultaneously by more than one person. In the arts, the creative discovery can be at the individual or group level; for example, the painter Monet is acclaimed as the founder of Impressionism but examination of artistic practice shows that impressionistic paintings had been in existence for some time beforehand. Paintings by J.M.W. Turner and William Blake produced years before Monet’s paintings convey natural impressions of light and weather conditions.
Meaningful creative ideas and products such as paintings, poems, music, theories and concepts are often derived from unusual juxtapositions. It is not simply a case of randomly selecting two seemingly unrelated ideas and then attempting to fit them together in order to derive a creative solution. There must be some sense in what is happening, together with the fact that this new combination could not, rather than did not, happen before. New ideas are considered by peer groups and the wider community in a subjective fashion and are really culture related value judgements. Therefore, what is deemed creative in one social group may be disregarded by another. A completely new idea is one that is not grounded or determined in any way from previous thinking; this compares to a novel idea which is shaped in part by previous rules and paradigm parameters.

**How is creativity defined?**

There are a wide variety of meanings of creativity. These meanings are clearly the result of its subjective nature, how we define it and the metaphors used to explain it. To assist in defining creativity, different authors emphasise one or more of the ‘six Ps’ of creativity in their writing. These are illustrated in Table 3.1. The sub-indicators and key authors who analyse each of the indicators are discussed in the following pages. These definitions have been summarised as place, people, property, process, practice and product. Definitions of creativity are thus influenced by the indicator or indicators emphasised by the researcher. Rhodes has identified over forty interpretations of creativity, so our classifications and definitions cannot be seen to be exhaustive. With this in mind, each indicator is explained briefly. However, some attempt at ordering the field is necessary if any progress is to be made in analysing it. Finally, we present our own definition of creativity and our view of the indicators appropriate to illustrate its application.

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<tr>
<th>Table 3.1</th>
<th>Six definitions of creativity research</th>
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<tr>
<td>Place</td>
<td>milieu to facilitate or inhibit creativity</td>
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<td>People</td>
<td>creativity embodied in individual ability, trait or role</td>
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<td>Property</td>
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The six Ps of creativity

**Place** sees creativity as embedded in the milieu or the context so that an innovative approach is facilitated or inhibited. Evidence of the wide ranging nature of creativity can be identified in the building of the pyramids, the painting of the ceiling of the Sistine Chapel by Michelangelo, contemporary writings on the Renaissance art world by Vasari and the way in which small firms can gain instant international market access by exploiting their creative competencies.

**People** focuses on creativity as embodied in the individual’s ability, trait or role. Creative individuals tend to produce products which often clash with what others expect or want. Rather than fitting in with existing ways of thinking, the majority of the best creative work is paradigm rejecting. **Property** pertains to creativity within the confines of the organisation, so that it creates a ‘brand’ and an organisational culture of problem solving and motivation. The creative **process** involves individuals analysing ideas, attempting to persuade others to accept their thinking, taking calculated risks and looking for unconventional connections. Further, it involves the rejection of current ways of performing tasks so that the most effective one is selected. **Practice** relates to the ways of doing things in the organisation. **Product** refers to the output, whether tangible or intangible in form.

**Place**

Creativity has been investigated from a social environmental perspective – place. Place is considered as either a positive or negative influence by different authors. Amabile et al believe that, rather than having a positive impact on creativity, the presence of others can be detrimental to the process. However, research on creative artists such as Salvador Dali, Pablo Picasso and Andy Warhol has shown that, although there is often a need for solitary thinking and space, creative people thrive on social interaction. Peer group acceptance of creative ideas may be crucial to the sustaining of creative practice. In the component model of creativity, consisting of domain- and creativity-relevant skills as well as intrinsic task motivation, it is the latter factor that can be most influenced by the immediate social environment. Individuals gathered together in a brainstorming group are socially influenced, with thinking being stimulated and a greater number of ideas generated than would have been possible had individual thinking been carried out.

Boden considers how creativity is initialised, noting that a new idea must be positively valued by a social group before recognition of its creative value. Social conditioning shapes our thinking; in marketing,
this social impact contributes towards the perpetuation of the dominant quantitative marketing management paradigm. Some researchers, however, have been socially shaped to question the dominant paradigm and to investigate alternative explanations. A creative act or person is often socially sanctioned and yet there are examples of courageous creative acts where this sanctioning has not occurred until long after the individual’s death (for instance Vincent Van Gogh).

The notion of fame is not ascribed solely by merit alone but is also socially ascribed and is therefore given a mutually agreed status by a number of people. The status of the famous scientist, for instance, as an intellectual hero can be compared to the famous entrepreneur and artist. Scientific discovery involves a large amount of hard work over a considerable period and this is carried out within a sophisticated social network. Intellectual discovery in marketing research and creative discovery in marketing practice are also socially shaped. Today’s creative marketer achieves competitive advantage through successful exploitation of personal contact, business contact and knowledge networks. For a creative idea to be accepted, there must be agreement among a particular social group which shares similar values, attitudes, beliefs and culture.

Any paradigm is partly socially constructed. The act of recognition by an avant garde group or potential group members determines whether or not the current dominant paradigm is deemed no longer useful. As long as there are certain favourable environmental conditions, creative discovery will take place despite the ‘strictures of authoritative personalities, restrictive methodologies and cannons of rationality’. The Creative Marketing Paradigm has been constructed partly on the basis of social pressure – pressure stemming from place – to produce an alternative mode of understanding that closely matches the realities of actual business practice, rather than the prescriptions of the marketing textbook.

People
There has been a considerable amount of recent attention from within the psychology literature on researching creativity. Creativity consists of tangible and intangible elements, grounded in conscious and unconscious thought. Schredl, for example, investigates the relationship between creativity and dream recall, while Schonbar views creative, introverted individuals as having a richer inner life. Creativity theory has been grounded culturally, with linkages to ability, skills and motivation. Each person is born with domain-specific abilities such as musical, analytical or artistic talent. If creativity is viewed as a skill,
then it is proposed that it can be taught. The link between creativity and intelligence has been both confirmed and disputed. Intelligence is viewed as a subset of creativity, since creativity also consists of thinking styles, motivation and cultural influences. Feist sees positive personality traits of creative individuals as including high levels of energy, attraction towards complex and novel phenomena, openness to ambiguity, willingness to be open-minded and being persistent in adverse conditions. These traits can be found across a range of industry sectors, and across time, from the non-profit arts organisation to the entrepreneurial owner/manager of the small or medium enterprise.

Within psychology, creativity is mainly examined by looking at people’s cognitive style, social psychology, personality and environmental perspectives. In order to understand how creativity develops at the individual level, research has focused on understanding personality factors.

**Creativity and personality**

Studying the relationship between creativity and personality takes one of three routes: explaining creativity by utilising personality theories; examining the personality and biographical characteristics of well known creative individuals and their activities in different fields; and focusing on a small number of particular personality dimensions. Personality theory is adopted since it would be expected that this should account for creative behaviour along with other behaviour types. Psychoanalytical theorists view creativity as emerging from the unconscious or preconscious (as discussed by Freud) while humanistic theorists relate creativity to self-actualisation. These positions are further indicators of the need to evaluate creatively from a qualitative perspective, as well as noting creativity’s quantitative dimensions. By examining biographical information and identifying and comparing personality characteristics within the same field and across other disciplines, future creative behaviour can be predicted. Barron and Harrington identified the following personality factors following a 15-year-long research programme:

[A] fairly stable set of core characteristics (e.g. high valuation of aesthetic qualities in experience, broad interests, attraction to complexity, high energy, independence of judgement, autonomy, intuition, self-confidence, ability to resolve or accommodate apparently opposite or conflicting traits in one’s self concept, and finally, a firm sense of self as ‘creative’) continued to emerge as correlates of creative achievement and activity in many domains.
Creativity and cognitive style

There has been a shift in emphasis in the psychology literature towards examining creativity from a cognitive style approach. This relates to how we think, learn, form ideas, generate knowledge and ultimately manage our lives and our businesses. The focus is on understanding the mental processes that determine this learning. Relevant factors include creative thinking and problem-solving styles, divergent thinking, linking remote associations in order to derive creative solutions, ideational fluency (the ability to generate many different ideas) and imagery and verbal fluency.

Creativity, motivation and actualisation

Some believe that creativity is part of everyone’s innate makeup but that only a small proportion of the population actualise this. This suggests that everyone is born with the ability and potential to be creative but it is the degree to which certain individuals are much more able to actualise this than others which is of interest here. Although talent plays a part in determining creativity development, intrinsic motivation and hard work also play a part. Understanding how motivation and actualisation interact results in a clearer grasp of their linkage with creativity. Ultimately, marketers must also understand this if they want to attain competitive advantage in the marketplace. Amabile differentiates between essential and non-essential creative motivators:

People will be most creative when they are primarily intrinsically motivated, by the interest, enjoyment, satisfaction, and challenge of the work itself; this intrinsic motivation can be undermined by extrinsic motivators that lead people to feel externally controlled in their work...

Entrepreneurial marketers are able to reach a heightened state of intrinsic motivation since, as owner/managers, they are in control of their work environment. Intrinsic motivation channels passion and interest in creative personnel who carry out a task because they enjoy the challenge of it. Individuals are extrinsically motivated when an additional goal is reached which is separate from the act of doing the work, or when a constraint imposed by an extrinsic source is overcome. One such example is when a small firm is able to overcome conventional barriers to internationalisation through successful exploitation of their creative competencies such as opportunity recog-
nition, networking and word of mouth marketing. Motivation is affected by factors such as evaluation expectation, actual performance feedback, expected reward, autonomy and the nature of the work itself.

Amabile’s Intrinsic Motivation Principle of Creativity posits that intrinsic motivation is conducive to creativity, but extrinsic motivation is detrimental. However, some external motivators such as reward and recognition for creative ideas can have a positive impact on creativity. According to Amabile, those individuals who are more inclined to be intrinsically motivated exhibit behaviour that is more deeply engaged in an activity because they are free of ‘extraneous and irrelevant concerns about goals extrinsic to the activity itself.’ This allows for playfulness with ideas and materials and the freedom to ‘take risks, to explore new cognitive pathways, to engage in behaviours that might not be directly relevant to attaining a “solution”’. They are less likely to be hindered by concern for the extrinsic goal. These orientations also relate to marketing theory and research where entrepreneurial researchers will be mainly intrinsically motivated and Marketing Academy researchers will be mainly extrinsically motivated in their perpetuation of well-worn cognitive pathways.

Creativity as a trait

Creativity as a trait focuses on issues such as locus of control, self-esteem, dogmatism and narcissism. Riquelme notes that specific cognitive styles and personality traits that directly impact upon creativity include being sensitive, open-minded, intellectually curious, having determination and perseverance and using the right side of the brain to process information. The individual composition of creative characteristics will vary and so each creative individual will possess different sets of traits.

There are links between viewing creativity as a trait and the literature on entrepreneurial trait theory which relates to factors such as motives, temperament, style and ability, need for achievement and being in control rather than being controlled. People latch onto and identify with certain traits and characteristics as descriptors of particular individuals and groups. However, this only tells part of the creativity story and a much fuller understanding is needed rather than this surface level description. Guilford examines creativity from the perspective of psychological trait theory:
I have often defined an individual’s personality as his unique pattern of traits. A trait is any relatively enduring way in which persons differ from one another … Behaviour traits come under the broad categories of aptitudes, interests, attitudes, and temperamental qualities…Creative personality is then a matter of those patterns of traits that are characteristics of creative persons...

Examining creativity from a trait perspective can have limited impact, given the impact of social surroundings (place) on creative behaviour. Identifying patterns is useful but a more in-depth appreciation is needed in terms of their consequences. The authors model creativity in a much more holistic way by integrating traits, characteristics, personalities, cognitive decision making, the life of the creative individual, group or organisation and any longitudinal social effects.

**Creative genius**

Historically, creativity has been linked to genius. One of the earliest works on hereditary genius by Francis Galton, *Hereditary Genius: An Inquiry into its Laws and Consequences*, attempted to measure mental capacity across different cultures and classes. The central tenet of his thesis was that genius was an inherited trait. Genius is a combination of imagination and understanding, but its origins are difficult to identify:

> [W]here an author owes a product to his genius he does not know how the ideas for it have entered into his head, nor has he it in his power to invent the like at pleasure or methodically.

Puccio identifies the work of William Duff (1767) as one of the earliest explorations of the relationship between genius and imagination. Judgement is used to assess the interplay between the diverse responses of divergent thinking and the consideration of the feasible possibilities of convergent thinking.

Recent work suggests that, rather than creativity being a rare characteristic found only in those attaining a genius status, it is much more common, occurring to varying degrees in everyone. There is a lack of an agreed definition of genius, but two categories of genius have been identified:

‘Creators’ – who make lasting contributions to human culture, whether as scientists, philosophers, writers, composers or artists – and ‘leaders’, who transform the world by their deeds rather than by their ideas or emotional expressions…
Genius has also been used synonymously with terms such as ‘high ability’ and ‘giftedness’. Biographical research provides wide-ranging evidence of the relationship between creativity and genius. Approaches used include the allotted space in biographical dictionaries for each individual, achievement and intelligence testing, the degree of socially recognised status and the statistical analysis of individual differences between groups. However, by focusing solely on biographical examination of individuals who had reached a heightened state of socially recognised eminence, data on future genius is overlooked.

**Property**

Creativity is seen by some as residing in a particular property, such as an organisation itself. Property is linked to the organisational culture that helps or hinders creative problem solving. Creative problem solving and innovation, as we have established, are central factors in establishing competitive advantage and flexibility in the marketplace. Creative problem solving can be visualised on a continuum of paradigms: paradigm preserving, paradigm stretching and paradigm breaking. The first is deemed the most comfortable but the least innovative and the last can result in true innovation:

Paradigm preserving techniques do not tend to change a participant’s perspective ... no new elements or relationships are introduced into the problem space ... Examples of these techniques include Brainwriting and Brainstorming ... Paradigm stretching techniques encourage users to stretch the boundaries of the problem space. This is achieved by either introducing new elements or new relationships so that group members can consider something new ... Examples of these techniques include Object Stimulation and Metaphors ... Paradigm breaking techniques encourage participants to completely break down the boundaries of the problem space and to look at something entirely new. This occurs when both new elements and new relationships are introduced ... Examples of these techniques include wishful thinking and rich pictures...