

Creativity, cognition, and the market

Bo T. Christensen, Ph.D., Assistant Professor, Dept. of Marketing, CBS

Introduction

What does marketing and markets have to do with creativity? Given the popular conception that marketers and advertisers are some of the most creative professionals out there, the link would intuitively seem to be quite strong. Marketers and advertisers tend to view themselves as highly creative professionals, competing for example in the generation of original, expressive, exciting and provocative advertising that they consider to be creativity par excellence.

But in most creativity research, marketing is not a creativity stronghold. In fact, when the creativity research literature is examined, marketing is rarely even mentioned as a creative domain. While advertisers and marketers may consider themselves to be highly creative, creativity researchers appear not to share that viewpoint given that the domains of choice when studying creativity are anything but marketing related domains. To illustrate this, a quick count from the citation database PsychInfo was conducted. Three of the major creativity journals (Creativity Research Journal; Journal of Creative Behavior; and Creativity and Innovation Management) were examined for articles related to creativity in various domains. The count showed that the prototypical domain is unquestionable the domain of art, with hundreds of references just in these three creativity journals. The sub-domains of painting, music, literature and poetry, and movies each has manifold more references than the whole of the marketing domain. Perhaps not surprisingly, the same is the case with product development or invention. A bit more surprising may be the fact that even science is far ahead of marketing, with over five-fold more references than marketing and advertising

combined. The domain of education and teaching too appears to be manifold more creative than marketing. And even politics supersede marketing as a creativity domain! In fact marketing and advertising is ranked close to the bottom in this simple count of creativity with only 18 references, placing them only just above journalism and sports. Of course, such citation counts are not proof of the quality or type of article contribution, but they do indicate that marketing is not considered remotely as central a creativity domain as art, science or invention. Conversely, marketing research does not seem too preoccupied with studying creative processes either.

As such we have a paradox; marketers and advertisers consider themselves to be involved in a creative domain par excellence. But in creativity research marketing appears to be unwanted, and marketing research seems to be neglecting creative processes too as a research area. Why is that? Why are hardly anyone studying the creativity-marketing link? In the present article we shall look at possible reasons for this paradox, and try to make arguments why marketing and creative studies could benefit from more interaction than they do today. We will start by looking towards two classical models of what the domains of creativity and marketing respectively are about, to find overlap in focus or skills involved. Then we will develop creativity theory by asking new research questions that may ensure that market creation skills are placed centrally in creative studies. And finally, a few new directions for market creation creativity are explored.

Two 4P models

Both creativity research and marketing research can be seen as having a number of dimensions to their respective field. This has been captured in two classical models of the content of these dimensions. Incidentally, in both fields, one of the most classical models for these respective dimensions was developed in the early 1960's, and in looking at these models it would appear that

both creativity and marketing has a lot to do with P's. Both models were called the '4P model'! The models are outlined below, to illustrate potential overlap between marketing and creativity research.

The 4P's of creativity

The domain of creativity research can be described as being composed of four parts or strands.

Rhodes (1961) and Mooney (1963) were the first to describe creativity as consisting of the creative Person, creative Process, creative Product, and creative Press/environmental factors. Each part or strand identifies one way of looking at creativity, with differing theoretical assumptions, models and conceptions and with varying means of measuring creativity. We will briefly outline each P here, and produce examples of the theoretical models involved in each P.

Theories looking at the creative **person** focus on the characteristics or attributes of people, notably individual differences in traits, types, motivation and styles of creativity. Much of the early work in creativity research dealt with individual differences in creativity, such as divergent and convergent thinking (Guilford 1950). And throughout the history of creativity research, a focus on what separates the Creative Genius from average Joe has received much research attention (see e.g., Simonton 1999). Studies of the creative person have examined both levels of creativity (e.g., Torrance 1974) and styles of creativity (e.g., Kirton 1989). Finally, studies of personality traits have found that creative people tend to be open to new experiences, less conventional and less conscientious, more self-confident, self-accepting, driven, ambitious, dominant, hostile, and impulsive (Feist 1999). The traits that distinguish creative children and adolescents tend to be the ones that distinguish creative adults, and the creative personality tends to be rather stable over time.

The theories of the creative **process** focus on mechanisms or stages of the creative thinking process. Based on anecdotal accounts of creative processes by inventors, scientists and artists, Wallas (1926) suggested the creative process has four stages: preparation, incubation, illumination and verification. This procedural description have had a large impact on creative studies, possibly because of it's face validity, where long periods of intellectual drought or impasses sometimes ends in insight and breakthroughs. Theorists in the tradition of Creative Problem Solving have tried to systematize the creative process into a number of stages, where divergent and convergent thinking takes place in each stage (e.g., Osborn 1963). Cognitive psychologists have been trying to explain some of the mechanisms involved in creative thinking, such as thinking by analogy, simulation, association and so on (e.g., Finke, Ward, & Smith 1992).

Theories of the creative **product** look at the qualities and perceptions of creative outcomes. What characterizes the creative ideas, inventions, advertisements, theories, and pieces of arts produced? O'Quin & Besemer (1989) noted three characteristics: novelty (it's originality), resolution or usefulness (did the product meet the challenges it was meant to overcome), and synthesis (was it carried to a final completion).

And finally creative **press** (or environmental factors) assess the context or climate of creativity. Traditionally, the climate debate has primarily concerned organizational or team/group contexts. For example, Göran Ekvall (1996) identified 10 dimensions of the organizational climate that promote or hinder creativity, including such aspects as playfulness and humor, idea time, trust and openness, freedom and risk-taking. Recently, the discussion of the Creative Class (Florida 2004) has led to the argument that the 'place' is important for creativity. Florida argues that talent,

technology and tolerance all contribute to making a place (whether a city, a region or a country) creative.

Each of these four paradigmatic approaches focus on one aspect of creativity. And each will have different assumptions, different approaches to the theoretical models developed, and the empirical tests used. While each P focus on a particular aspect of creativity, what is perhaps more interesting in this regard is which P's are missing or not currently being studied. We will now turn to the 4P model in marketing to try to identify any potential overlap between the two models.

The 4P's of marketing

In marketing, early research pointed towards the business executive as an 'artist' mixing ingredients such as advertising, product planning, pricing, promotions, branding, channels of distribution, display, servicing, packaging, fact finding and analysis, physical handling, and personal selling (Borden 1964). Borden coined the phrase 'the marketing mix' to denote important elements that may comprise the marketing programme. The elements in the marketing mix was later regrouped into 4 elements (product, price, placement and promotion) thus leading to the memorable and enduring 4P model (McCarthy 1965). McCarthy defined the term as 'a combination of all the factors at a marketing manager's command to satisfy the target market'. The product represented a collection of features and benefits that could lead to customer satisfaction. The price was thought to be the revenue generating element in terms of added value (including customer perception). Promotion covered all types of communicating with markets (advertising, sales promotion, word of mouth etc.). And placement referred to the distribution channels, location and logistics. The marketing mix 4P model has frequently been challenged for neglecting or overemphasizing certain issues, leading to frequent suggestions of adding addition P's to the model (e.g., Booms & Bitnmer

1981; see also Groucutt 2005 for a long list of suggested P's in the marketing literature). One frequently voiced criticism of the 4P model is that the customer is not kept front and center in the mix. Another criticism that can be put towards the marketing mix is that it seems to relate primarily to existing markets: ways of segmenting, communicating and distributing to markets already out there. However, in strategic market creation, it is not enough to have tools for sampling, segmenting and dealing with existing markets. Markets are not static entities to be explored and optimized – they are created (Kim & Mauborgne 2005). The marketing mix in this case should thus try to expand the toolbox to include tools which aim at changing or evolving markets and innovations. The traditional marketing mix relate back to marketing as a way of optimizing the sales of new products on existing markets through segmenting, communicating etc. That may be fine for incremental type innovations, but in dealing with radical innovations that create or revolutionize markets, such skills will not suffice. In market creation, however, it is realized that markets and products are co-dependent and innovation necessarily involves not just creating products but importantly creating the right product-market match. As such, marketing and innovation becomes fused, and that fusion implies novel tools in the marketing kit.

In examining these two models of 4P's, it becomes evident that the focus of the models is not exactly the same. While the creativity 4P looks at the paradigmatic approaches to creative studies, the marketing mix described the content of the marketer's tool-box. However, the focus on marketing tool-box apparently comes at the expense of examining how those skills play out as processes. What do marketers actually do when diving into their tool-box? What processes and mechanisms are at stake and being used by marketers in their allegedly creative everyday tasks? Marketing research has been overwhelmingly focussed on the outcome product, at the expense of focussing on marketing processes. The creativity 4P model highlights that there are other

paradigmatic goggles to wear, besides the product view. In looking at marketing through a process lens, marketers will become able to examine not just what marketers are supposed to be doing (in terms of applying the 4P tool-box to marketing problems), but what they are actually doing when working creatively. Later in this chapter we will take a look at a few suggestions for what such a process view on creative marketing could look like, when market creation processes are explored by cognitive psychology methods.

Despite the differences between the 4P models, one thing seems evident: what creativity and marketing seems to share is a common focus on the product. The overlap between creativity and marketing can be found in looking towards the good or product – whereas the other aspects of marketing does not seem to be included in creative studies. Skills involving communication, distribution, and pricing are apparently thought to be unrelated to creativity in the 4P model of creativity at the moment.

Furthermore, the emphasis on the creative product extends to definitions of creativity. Although multiple definitions of creativity have been put forth over the years, the current mainstay definition is that ‘creativity occurs when someone creates an original and useful product’ (Mayer 1999).

While the naming of the product characteristics varies somewhat, it does appear that two product criteria are necessary in the definition: the product needs to be original (or novel, new or variable) and useful (or appropriate, adaptive or valuable). This definition has been repeated time and again in the psychological creativity literature, and seems to be the closest to a current definitorial consensus (Mayer 1999). The definition of creativity is sometimes separated from the definition of innovation by stating that whereas creativity ends in the creation of a novel and useful product, innovation also involves the implementation or launch of that product (Amabile 1988; Levitt 1963).

What is apparent from such a definition of creativity is that it creates a narrow focus on the generation of the creative product itself as the criterion for when creativity occurs. But what seems to be missing in the definition is a focus on the receiver or user or customer or evaluator of the creative product. While the user may be implicitly present in the definition in the inclusion of a 'usefulness' criterion (whereby the product apparently must be useful to somebody), there is no explicit mention of whom is to evaluate creativity.

Perhaps here we have a potential explanation for why marketing is not the domain of choice when studying creativity. Creative studies has identified itself closely with the generation of products, and while the focus on products is in part shared by the marketing mix, the other marketing mix skills are apparently distinct from and separate to creative skills. If creativity merely produces products with certain qualities (novelty and usefulness), then we need not bother to examine how those products are communicated, distributed or priced, seems to be the argument. Those skills are presently not considered creative. Implied in such a way of thinking is a strict separation of the market from the product. But, as mentioned, when it comes to market creation, that argument appears to break down, since markets and products are shaped and created together. Here the strict and narrow focus on the creative product will not suffice. Creative studies thus need to take seriously the 'audience' of creative products, and learn from marketing.

Who is to evaluate creativity?

Although a consensual definition of creativity exists, the creativity literature is not in agreement about the follow-up question: who is to evaluate creativity, and to whom is creativity supposed to be useful and novel? Such questions relate to discussions of which 'level' of creativity we are

dealing with. Both novelty and usefulness can occur at various levels. Novelty can be novel for a particular person, for a group of people, for a society, or for the entire population of the world (e.g., Johannessen, Olsen, & Lumpkin 2001). Similarly, the creative product can spread simply in the frequency of use of the product by the creator (within the future action of a single person), spread between individuals in a group of peers, or spread between individuals in entire societies or domains, thus highlighting differences in degrees of usefulness. So what are we to call creative? Is it the child's doodling on paper, or is it Einstein's theory of relativity we are talking about? Many creativity researchers have given thought to this subject, and taken sides, or tried to describe the levels of creativity.

On the one hand, there are theories such as Creative Cognition, that argue for creativity being ascribed to all levels, including so-called 'mundane' creativity (Ward, Smith, & Vaid 1997). Here we also find Boden (1990), who argues that psychology should concern itself only with mundane creativity that is novel to the individual (she calls it P-creativity, for 'psychological'), rather than creativity that is novel for the entire world (called H-creativity, for 'historical'). Anything H-creative will also always be P-creative, and, argues Boden, studying historical creativity is beyond the scope of a psychological theory. Further still, Weisberg (2006) is yet another theorist with a cognitive bent, that have argued for the exclusion of the 'usefulness' aspect of creativity, since including usefulness would in his opinion place the creative realm perhaps outside the scope of individual psychology, while moving into social and societal explanations. These three cognitive approaches appear to be arguing that real creativity is of the mundane kind (novel and useful to the individual). On the other hand, we have Simonton (e.g., 1999) arguing for creativity being ascribed to people making products that change societies or domains – the so-called 'creative genius' approach. Here, creativity is only creative, if the product in fact makes a large impact on domains

and traditions, as evaluated by either objective measures of impact, or external expert evaluators. Finally, some researchers have tried to classify the levels between the two extremes (see e.g., Cohen 1989).

But whom is to evaluate the novelty and usefulness of such creative products? The ideal implied by some of the above mentioned psychological approaches to creativity, appears to be an objective and neutral view-from-nowhere evaluation of creativity. And notably an objective evaluation that takes place a-priori, that is prior to the product ‘hitting the market’. The ‘neutral and objective view-from-nowhere evaluation’ ideal thus disregards the fact that creativity is always novel and useful to *somebody*, and implies *a somebody* making the evaluation. Indeed, especially the usefulness concept implies a somebody using the product for some purpose, and the outcome being considered by that person to be of value. As such, a ‘view-from-nowhere’ approach will find it notoriously difficult to evaluate usefulness in any domain.

Cognitive approaches to creativity has tried hard to disregard the ‘somebody’ in creative evaluations, by either arguing that the creator himself makes the evaluation of what is creative to him (p-creativity, Boden 1990), or by arguing that the subjective ‘usefulness evaluation’ is unnecessary, so that we may regard only the more easily objectified and neutral ‘originality’ evaluation in creativity (Weisberg 2006). Both approaches aim at throwing the third-party creativity evaluator out of the creative evaluation equation. However, the first attempt fails to account for the evaluative distinctions between so-called ‘mundane’ creativity and historical creativity – making this kind of evaluation practically irrelevant to creativity and innovation scholars looking at higher levels of creativity (although it may be suitable for ‘within-subject learning activities’). In art, science, and invention such low levels of creativity do not account for

evaluative variances at the higher and, arguably, more interesting levels. The second evaluation approach (Weisberg) fails to account for distinctions between what is original and valuable, and what is simply weird and different. The standard argument here is that the delusional or schizophrenic patient may produce a multitude of original ramblings or doodles – but unless they are also useful to a domain, we would not call them creative. Both cognitive approaches tried to argue for an approach to creative evaluation that disregard societal or market concerns, thus limiting creative evaluation to a strictly psychological level. Or put in other words: in the mainstay psychological explanation of creativity, the market is simply not part of the theoretical model. However, attempts to disregard markets and societal categories in creative evaluations have, in my opinion, so-far failed for the above reasons. Below we will thus take the ‘who is to evaluate’ discussion seriously, and look at two alternative approaches to how creativity may be evaluated by third-parties: either through gatekeepers or markets.

Two approaches to the evaluation of creativity

In all but the most mundane of creative products, it is necessary to include external evaluators in the creativity model. In these historical creativity cases, creativity is not measured from a view-from-nowhere, nor by the creator himself. Rather, in these historical cases, external evaluators make the judgments necessary. These external evaluators are part of the creativity judgment, in that they set the criteria for originality and usefulness at given points in time. Such criteria and external evaluators may be changing over time, but they cannot be written out the creativity-evaluation equation. It is possible to point to at least two different kinds of external evaluators in creativity judgments. The first concerns the gatekeeper concept, while the second views the market as the evaluator. We will look at both approaches to evaluation below.

Gatekeepers

The gatekeeper is a person, institution or other social system that decides what shall pass through each gate section. One of the first to use the term ‘gatekeeping’ was Kurt Lewin during WWII (Lewin 1947) to denote a mother or wife as the decider of which foods end up on the family dinner table. This was an important research task during WWII since much domestic meat was being shipped overseas to feed soldiers and allies, resulting in the fear that a lengthy war would have the United States starved unless a protein substitute could be found (Wansink 2002). The challenge became to introduce organ meats (hearts, kidneys, intestines etc.) to the US dinner tables. But how? Lewin used the gatekeeping concept to describe how certain people controls food through different channels (the garden channel, the store channel) and play a central role in deciding which foods ends up on the dinner table and are eventually eaten – sometimes even despite the preferences of the remaining family. As such, changing US eating habits became a matter of targeting the gatekeeper – the cook who selects, prepares and serves the food – not the husband or children of the family. By studying the cognition, motivation and conflicts of gatekeepers, it was possible to incur change in the ecology that led housewives to adopt different habits. Lewin also considered the gatekeeper process in communication, with news items passing through gates – a concept later made famous by White (1961) in journalism.

The idea of applying the gatekeeper concept to creativity evaluation is not new. Morris Stein, working in the marketing domain, used the concept to e.g., patrons who provide emotional and financial support; transmission agents who disseminate the work to the general public, such as gallery owners, salesmen, advertising agencies, publishers, bookstores and opinion leaders (Sawyer 2006). Stein stressed the importance of communication to others as an inherent aspect of creativity.

In creativity, communication with the self was insufficient, but rather consensual validation was needed in creativity evaluations (Amabile 1983;Stein 1953).

Some theories, taking the external evaluator seriously in creativity evaluations, have come up with sociological models of creativity (e.g., Becker 1982;Csikszentmihalyi 1988; 1990; 1999). In an elaborate model, Csikszentmihalyi (1990) argued that creativity is not an attribute of individuals but of social systems making judgments about individuals. In a theory of cultural evolution he hypothesized two salient environmental aspects related to evaluation: the field and the domain. The field is a group of gatekeepers (such as the critics, teachers, museum curators etc.) with the authority or ability to sanction new ideas for which ones are entitled to be included in the domain. The field thus makes up the social organization of a domain. A culture is made up of domains with existing representations and rules (such as mathematics, music, synchronized swimming etc.), and it is within such domains that new innovations are constructed and evaluated. Domains are necessary in the creativity evaluations because without reference to 'old' or existing patterns it is impossible to make original contributions. Without rules there cannot be exceptions. Creativity thus occurs when a person makes a change in a domain, a change that will be transmitted through time, making the process similar to the mechanisms of natural evolution, with each part in the creativity model being primarily responsible for one element: variation (by the person), selection (by the field), retention (by the domain).

Market impact

Another approach to creativity evaluation concerns market impact estimates. Here market impact is basically measured by looking at how much the creative product has spread or diffused onto the market. Depending on the nature of the creative product, such spread measures may concern the

number of copies sold, the number of peer-reviewed journal article quotes, the number of times a web-page is displayed, the number of search-results in Google, the number of tickets sold at the box-office, and so on. All these measures are attempts at estimating domain impact through quantitative estimates of product diffusion. In comparison with the gatekeeper approach, the quantitative market estimate is a democratic estimate of spread – basically every vote counts.

The theory of diffusion of innovation (Rogers 1995) will be well-known to marketers in this regard. Diffusion is defined as a “process in which an innovation is communicated through certain channels over time among the members of a social system. It is a special kind of communication, in that the messages are concerned with new ideas.” (Rogers, 1995, p5). Through an understanding of the four basic elements in the definition (the innovation itself, communication channels, time and the social system) diffusion theory examines the factors that determine whether a product will diffuse or spread widely into society. Interestingly, diffusion theory has hardly made any impact on creativity research, even though diffusion theory has discovered several factors concerning both product and audience fostering or hindering product diffusion. Again perhaps, one could speculate that this may be due to the heavy emphasis on products in creativity research, and underscores the sharp divide that has existed between creativity research and marketing research.

Other approaches to measure creative market impact includes Richard Dawkins’ notion of memes (Dawkins 1976). “Examples of memes are tunes, ideas, catch-phrases, clothes fashions, ways of making pots or of building arches. Just as genes leap from body to body via sperm or eggs, so memes propagate themselves in the meme pool by leaping from brain to brain via a process which, in a broad sense, can be called imitation. [...]. If the idea catches on, it can be said to propagate itself, spreading from brain to brain.” (Dawkins 1976, p. 192). Memes operate by the same basic

principles as genes. The same three qualities that ensure gene survival (fecundity, longevity and copying-fidelity) could ensure meme survival. For example, while one idea may become extinct, other ideas will survive, spread and mutate through modification. Finally, Simonton (2004) has made numerous studies using creative impact measures on various domains, such as peer-review quotation counts, to pose his argument that creativity involves a great deal of chance.

Creativity estimates or evaluations of the non-mundane kind of creative products are typically carried out by either gatekeepers or markets. As such, the evaluation is not face-less, or done from an objective view-from-nowhere. Actual people are making these estimates. In most domains, both types of creativity evaluators are in operation. For example, the creativity of technical gadgets may be estimated through market impact (in terms of sold copies), but also through the expert reviews carried out by independent organizations (such as magazine reviews, or consumer-protection agencies). The same can be said of creativity in films, where both success at the box-office and the Oscars count towards movie creativity. And in science, the Nobel prize and citation counts operate as two different attempts to evaluate creativity of authors and articles.

This may seem straight-forward. Creativity evaluation is basically a social or societal process, with people (either on markets or in the form of gatekeepers) making judgments through word or action. What is less straight-forward, is perhaps the argument that if this is the case – if creativity judgments are done by people taking a view-from-somewhere - then including these individuals in models of creativity seems warranted. It is not possible to exclude the external creative evaluator from the evaluation, and nor would you want to. Including an audience in the creativity model is warranted, thereby making the model more sociological than it has been hitherto.

If it is accepted that creativity judgments in this manner includes and incorporates external judges, then psychological models of creativity needs to address how that affects the skills involved in creative work. And this is where marketing enters the scene. Because arguing for the necessity of including external evaluators in creativity models opens up for new types of creativity skills not readily acknowledged by traditional psychological product focused models of creativity. And many of these new creativity skills can be broadly characterized as being either based on the marketing mix, or the new market creation paradigm. In sociological creativity models, the creativity skill toolbox will suddenly find itself full of marketing tools.

Communication is one example: communicating with the audience (whether gatekeepers or markets) involves a host of skills that usually fall under the marketing heading, but which becomes part of an extended creativity model with an audience. Depending on the type of audience (gatekeepers vs. markets) different types of communication skills may be central, but in all cases and domains, communication will play a role for creativity estimates. In an extended creativity model, it becomes central to direct information in appropriate ways, through appropriate channels, to the targeted market, in order to ensure that the audience learns about the new product, and is persuaded to adopt it. Such marketing basics have not previously been thought to concern creativity in psychological models focusing on products. The same can be argued for distribution and price; again, having an audience leads to considerations about the proper price and distribution channels for creative products. And these considerations can be considered part of (not separate to) creative skills when external evaluators (gatekeepers and markets) are made part of the creativity model.

Furthermore, in creativity, audiences are not just being targeted. They are also to some extent created. The old-fashioned view of creativity involved filling the needs of not-yet or unsatisfied

customers. However, audiences (gatekeepers and markets) are not static. In part they are made, and they evolve over time. In constructing blue-oceans (Kim & Mauborgne 2005), innovators not merely locate unmet needs. They may in fact discover new needs, or create them. Creativity can be market driven – but more often than not radical creativity is market changing. Society did not *need* TV or the iPod, or Guernica, Marxism, or MySpace or many of the other revolutionary products from the last century. Rather the products changed their respective domains and markets. The creator of creative products is thus not only writing the play (to stay in the theater metaphor), the play is written for an audience. And selecting the right audience will in part decide the creativity of the product. Sometimes the audience will not take front and center in the generative processes – the author may not always make explicit decisions about who the book is targeting – but the point is here that implicit decisions about the target audience is always made. And finding the right product/audience match is an inherent creativity skill. As such, while evaluators are external to the product they are evaluating, they are not necessarily independent of the decisions of the creator. The decision to create and launch a product in certain ways to certain markets will have implications for the impact of the product on the market. As such, it should be clear, that separating the technical/functional aspects of creativity from marketing issues such as communication, the target audience, pricing etc. is unsound in both marketing and the study of creativity. The creation of products implies creating an audience whom will evaluate. Creativity skills are partly about finding the right match between a generated audience and a generated product. And the notion of the audiences (whether found or made) has been a neglected research topic in creativity research.

When it is realized that it is unsound to separate the creative product from it's audience, then perhaps it can also be argued that it is unsound to separate them into different organizational functions: an R&D unit and a marketing department respectively. That is not necessarily the

argument presented here. But what can be argued, is that if they are separated, then the marketing skills involved in creativity should not merely be an ‘add-on’ to product development, where product developers hand over a finalized product to marketing. Rather, the product should evolve in co-creation of market and product, with close cooperation between product development skills and marketing skills. The corporation may be ensured both through cross functional teams or through integrated knowledge and understanding of both audience and product in each individual in the organization. As an example of the latter approach, some companies attempt to bring customers into product development both to generate and evaluate novelty. Usability studies (Rubin 1994), user involvement in product development (Kujala 2003), and user driven innovation (von Hippel 2005) are all examples of this. As such, there may be many ways to ensure that markets and products co-evolve. But whatever approach is taking, the way forward is not an ‘over-the-wall’ approach where products and audiences are considered separately in the process. Rather, marketing skills contribute actively to all stages of product development by shaping products and users alike. The overall conclusion to be drawn from this is that that regardless of whether creative individuals consider themselves to be doing ‘marketing’, creativity in any domain in essence involves carrying out tasks from the marketing mix. It is time that the social marketing skills in creativity receive research attention, rather than being excluded from creative research due to some mistaken argument that marketing is something completely different from creativity and product development.

Should creativity researchers be saddened by the fact that it now seems inappropriate or impossible to maintain that creativity can be studied merely as a psychological concept? In my opinion psychologists should not be saddened by this. Even though psychologists may lose their property rights for the creativity concept, what they will gain in stead is an extended creativity concept for them to explore. As such, as already argued, the extended sociological model will open up for new

kinds of creativity skills currently overlooked in the literature. And these skills can also be studied using psychological theory and methods. Marketing skills from the marketing mix and market creation concepts will make up part of such newly added focus areas for psychological creativity research. As such, psychologists will have lots to say and study about the extended model.

But the pendulum swings both ways, and marketing research should find such a focus area equally exciting, by allowing for new psychological approaches to studying creative marketing processes. By focusing on creative marketing processes through psychological or cognitive methods, marketers may find out what it is creative marketers actually do, and locate cognitive mechanisms and processes involved in market creation. This is currently not something that can be looked up in the typical marketing textbook – here the ‘psychology’ section typically deals strictly with the psychology of the end-user, customer or decision maker, ironically without any emphasis on the psychology of the marketers themselves. Below I will take a look at just a few concepts that the extended creativity model allows psychologist and marketers to study. I have chosen to exemplify this with how and what a *cognitive* approach to creative marketing may begin to focus on.

Innovative cognition and market creation

Like the rest of creative studies, the creative cognition approach has been pre-occupied with examining how creative products are generated (Finke, Ward, & Smith 1992), at the expense of looking into audiences and product-markets matches. Typical areas of study have been descriptions of how categorization works in producing novel exemplars (Ward 1994), whether randomness of elements enhances creativity in invention (Finke 1990), or how fixating elements may keep you from reaching creative solutions (Smith 1995). While creative cognition has a lot to say about product development and the realization of novel products, the marketing researchers would be at a

loss in finding studies looking into central marketing related creative skills and thinking processes, such as how marketers think about customers and segments and their relation to innovations, how marketers reason creatively about price and availability issues, and so on. Such creative thinking skills have simply not been examined. The same may be said of marketing research: hardly anyone seems to have focussed on such marketing related creativity skills at the process level. In order to differentiate the approach taken here with the past creative cognition product oriented approach, I will call the present approach 'innovative cognition' to highlight that here we are dealing with cognition with a broader focus. Innovative cognition deals with thinking processes involved in market creation, such as thinking and reasoning about audiences and product-market matches, about communicating or distributing to markets, etc. Examples of generative processes could involve analogizing between markets and differentiation from competition. Exploratory processes could involve simulating market segments and user preferences, contextual shifting of product use, functional inference for different segments and the like. Further, communication, persuasion and distribution considerations would be an inherent part of innovative cognition. We will now take a look at a few of these examples in a bit more detail.

Randomness and paradox

In creative cognition, randomness and paradox have been linked to increased levels of creativity. For example, Finke (1990) showed how asking people to generate new creative products using random elements or random categories led to increased numbers of creative and highly creative products (although a slight decrease in terms of product usefulness was also detected). In market creation it may be possible to utilize some of the same elements to enhance innovative thinking of markets. For example, by creatively analyzing or brainstorming how you might diffuse an innovation to current non-customers may lead to insight. Kim & Mauborgne (2005) divided non

customers into three tiers: the 1st tier on the edge of the market, the 2nd tier who have refused the current offerings from your industry, and the 3rd tier who have never thought about your market's offerings as an option. The 3rd tier is the farthest from your market. By brainstorming 'how might we sell product X to third-tier non-customer Y' it may be possible to pinpoint unexpected and lucrative product-market matches using randomness and paradox. The randomness and paradox may be introduced by randomly selecting the non-customer segment to brainstorm, and the paradox may be introduced by selecting segments where it intuitively seem inappropriate or impossible to sell your companies offerings. For example, brainstorming 'how might we sell Barbie dolls to young adult males' could lead to surprising results. (Incidentally, a Barbie Doll look-a-like is now being sold in UK stores to young adult males. The concept is a gadget involving a sexy doll, a strippers pole, and PC connectedness. Basically the gadget allows you to upload your favourite song to the gadget, after which the doll will dance to your tune). Possibly similar brainstorms led the banking industry to adopt new approaches to banking in order to satisfy the Muslim community's religious beliefs that paying interests on loans or deposits are against the Koran. Islam also forbids certain kinds of risk-taking, including gambling. Islamic finance banks have circumvented this paradox by for example seeking to avoid charging interests by sharing profits and risk with the customer, making the bank more of an equity partner. The resulting ways of banking have been hugely successful in capturing previous non-customers. As such, brainstorming paradoxical product-market matches may lead to surprising results, and innovative cognition could study whether, like in creative cognition, paradox and randomness do indeed lead to more creative outcomes.

Mental models of individuals and markets.

A mental model is a representation of some domain or situation that supports understanding, reasoning, and prediction based on long-term domain knowledge or theories (Gentner 2002). In the mental models tradition the focus has been on mechanical reasoning and reasoning about physical systems (Hegarty 1992; Schwartz & Black 1996). Causal mental models rely on qualitative relationships, such as signs and ordinal relationships, and relative positions, speed or mass (e.g., Forbus & Gentner 1997). When running mental models, people do not estimate exact values or quantities or carry out mathematical calculations in predicting system behaviour. Still, despite their lack of detailed quantifications, these qualitative reasoning strategies can be quite powerful, and has the tremendous advantage of allowing reasoning with partial knowledge. Some of the disadvantages of mental models include their inaccuracy and imprecision (Gentner 2002). Mental model runs allow quick and cheap ways of testing possible alternatives.

Although previous mental models have primarily concerned physical systems ('products'), it is possible in innovative cognition to study mental models involving individuals or markets.

For example, like Csikszentmihalyi (1990) argued, creative individuals will attempt to internalize the evaluative criteria of the field, and use that (mental model) internalisation as a basis for judging their own creative ideas. Mental models of the evaluative criteria of the field thus constitute and attempt to forecast whether the field will eventually judge the new idea to be creative. He argued that practically all creative individuals say that one advantage they have is that they are confident that they can tell which of their own ideas are bad, thus forecasting the potential verdict of the field, and eliminate those bad ideas without investing time and energy in them. Nobel Prize winner Linus Pauling is a case in point. When asked how he was able to come up with so many groundbreaking ideas, he replied that it was easy – you think of a lot of ideas, and throw away the bad ones. This, however, requires mental models of the evaluative criteria of the field, and the ability to

successfully simulate which ideas will pass such evaluations, to later become accepted as grand novelty.

Another type of mental model concerns simulations of markets. Non-static markets and radical novelty makes for a tough combination when creators wish to simulate or forecast markets. None the less creators do simulate and attempt to forecast, by for example extrapolating knowledge of individual decision makers to estimate market impact. Innovative cognition should study how mental models of markets are constructed and used on non-static markets, in order to understand the factors involved. It may for example be possible to pinpoint under what circumstances it is appropriate to extrapolate individual decision making in the model, and when other representations may be more appropriate.

Research questions linking mental models to market creation could involve asking how market creators mentally represent information about the end-user, the field and the market. What level of representation is involved (individual/group/market), and how does that influence the simulation outcomes. And how can mental models of individuals and markets be enhanced and utilized optimally in market creation.

Analogy reasoning of markets

Analogy involves accessing and transferring elements from familiar categories to use it in constructing a novel idea, e.g., in an attempt to solve a problem or explain a concept (Gentner 1998). Analogical reasoning is assumed to be a general human capacity (Holyoak & Thagard 1995) involved in most domains, although perhaps notably creative problem solving domains such as science, innovation and art. Anecdotes of famous scientists or inventors solving creative problems

using analogy abound in the creativity literature. One of the most famous is George de Mestral developing Velcro after examining the seeds of the burdock root that had attached themselves to his dog. He discovered that the burdock root has tiny hooks that attached themselves to the loops in hair or fabric, and he used that discovery to develop Velcro. Like most other creative studies concepts, analogical reasoning has primarily been used to illustrate how creative products are generated.

However, analogical reasoning may also be applied to accessing and transferring elements between markets. Like products, markets have relational structure, and in trying to find the right product-market match, it may be possible to use analogy of previous product-market matches to come up with new matches. The study of market analogizing may take several forms. For one thing, mapping and transferring innovations to novel hypothesized markets may lead to discovering new unrealized market potential. By utilizing knowledge of the nature of markets or segments with which the market creator has past knowledge, market creators can make analogies to future market-product matches, by transferring elements. Further, by utilizing knowledge of how past markets were changed or evolved, it may be possible to transfer such knowledge of how markets may change to create future markets for innovations. As such, analogies in market creation will not only serve the purpose of producing novel and useful products– but also explore and create novel and useful product-market matches. Research question could involve whether market creators actually use market or product-market match analogies. Further, the types and functions of analogies in this regard would be interesting to pursue.

Conclusion

While creative studies has had 4 paradigmatic approaches to the study of creativity, marketers seem to have neglected process studies of what it actually is that they do, at the expense of focussing on

the marketing mix. Further, the skills involved in the 4P marketing mix model are aimed mainly at exploring and optimizing existing markets, and are not capturing skills involving the creation of more radical novelty in blue ocean strategies. As such, marketing research could benefit from applying psychological process methods from creativity research in order to examine what it is marketers do in market creation, in order to learn how such processes can be taught and improved.

On the other hand, the study of creativity has so far been preoccupied with the study of the generation of novel and useful products. Research questions focussing narrowly on the product have tended to ignore the question of who is to evaluate creativity. Rather, an objective-view-from-nowhere evaluation of creativity has been the norm, in attempts to make the creativity concept one that may be examined and explained purely in psychological terms. However, although that may work for lower 'learning-type' kinds of creativity, in non-mundane types of creativity, it is necessary to take the 'who is to evaluate' question seriously. In non-mundane creativity, evaluators are external, and take the form of gatekeepers and markets. As such, it is impossible to ignore that creativity evaluation needs a model involving sociological concepts and explanations. It is time that creative studies receive an 'audience', and takes that audience seriously as evaluators of creativity. Taking the audience seriously carries implications for what may be studied under the creativity headline. For one thing, marketing related skills of communication, distribution, pricing and concepts related to market creation, becomes part of the creativity tool-box. This does not mean, however, that creativity is forever lost for psychology. Rather, psychologists should find that loosening the strains of the narrow product focus will lead to new research topic involving for example product-market matches. Hopefully such an expanded creativity model can help ensure that creative studies will recognize the creativity involved in many marketing and market creation activities, and ensure that they receive research attention.

Thus, creative research and marketing research could benefit from fusing their efforts by focussing on the common thread of market creation. An added interaction between marketing and creative studies will thus be beneficial for both research streams. Creative research will gain an expanded creativity model involving added marketing skills, while marketing research on the other hand will gain from methods and focus on the processes involved in doing market creation. Three suggestions were put forth here for this new field of study: the use of randomization and paradox I market-product matches; the use of mental models in thinking creatively about individuals and markets; and analogizing between markets. But many more research suggestions can be developed, that utilizes and develops both fields. Hopefully such added interactions will help create new markets for both creativity and marketing research.

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