Advertising Creativity: Balancing Surprise and Regularity

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Creativity is considered the ultimate of human qualities, central to people from all walks of life, and even one of the measures of intelligence. Our ability to create is believed to be Godlike - "a gift from the gods," as the author of *Amadeus* says of Mozart.

Successful *creativity management* is the hallmark of a vital and prosperous advertising agency: "The most important function of an agency is designing creative ads" (Tellis, 1998: 93). It is the only organizational instance in which *Creativity* is the name of a department headed by a *Creative Director*. Creative thought is so valuable in advertising agencies that entire business structures are sometimes designed around the talents of one "creative genius" (Cummings, 1984).

Creativity in general and the creative department in particular represent important criteria in selecting advertising agencies. It is an important predictor of overall satisfaction with an agency (Halinen, 1997: 28; West, 1993), and is also central to agency-client relations in advertising (Michell, 1984).

Overall, few advertising and promotion executives would question the centrality of good creative strategy and execution (Martin, 1995). "Creativity is the heart and soul of advertising services" (Halinen, 1997: 28). "The word 'creative' is the currency with which ad agencies operate; without it there are no agencies (Arden, 2004: 105).

And yet:

Perhaps surprisingly, creativity has remained a rare topic in consumer research (Burroughs & Mick, 2004: 402), although the undisputed success of many products

may be attributed to consumer creativity (von Hippel, 1986). Likewise, creativity has remained almost unexplored in the area of advertising (Kover, 1995; Stewart, 1992). Zinkhan (1993) surveyed the previous 15 years of the *Journal of Advertising* and found only five published papers that dealt explicitly with *creativity*. Besides analyses of advertising content and tests of execution effectiveness, only a handful of empirical studies about advertising creativity have appeared in research literature (Reid, King & DeLorme, 1998). Moreover, most advertising textbooks say relatively little about it (O'Guinn, Allen & Semenik, 2000: 308). This constitutes a gap in the literature, highlighting the current lack of development of theories and practices of advertising creativity - resulting in a state of knowledge that is highly tentative and disconnected (Smith & Yang, 2004: 32).

We review the literature and bridge this gap by combining two steps. First, since insufficient systematic empirical knowledge is available in the field of advertising creativity, we assume that we may approach an adequate framework of the creativity process by borrowing from other fields. These approaches often suggest that creativity emerges from the basic elements of *surprise* and *regularity*. An appropriate balance between the two elements underlies creative ads, though whether ads that win awards are also necessarily *effective* in the marketplace, has also been debated in previous research. Second, in implementing these views, methods of creativity enhancement are subsequently reviewed. They can be divided into methods that advocate a *random* process, based on the assumption that there is a high degree of *chance* in coming up with a winning creative idea, and methods advocating *bounded regularity* that are analytical and focused rather than random or blind. Finally, *Surprise and regularity* have been found to sustain a constructive tension in the creativity process and therefore should guide the development of conceptual thinking and methods for designing creative ads.

Defining the Creativity Product

Creativity is an enigmatic phenomenon. Like intelligence, it represents a highly complex and diffuse construct (Sternberg, 1985). Although one may argue that there is no universally accepted definition of *creativity* (Ackoff & Vergara, 1981), a review

of literature soon reveals that the *creativity product* is conceived of as a conceptual space abounded with *dualities*.

Arguably, such dualities fall into two major types: those denoting two components of the internal workings of the "system" of advertising creativity (e.g. familiarity – surprise, Boden 1995; likeness – hidden, Bronowski 1956; familiarity – unrecognized, Goldenberg and Mazursky 2002), and those denoting one component of the internal workings of the "system" and one component of the external relations of the "system" with the surrounding environment (e.g. novelty (or originality) - and usefulness (or appropriateness, Amabile, 1983; Martindale, 1999)

Creativity is thus often defined as *useful novelty* - "not novelty for its own sake, but novelty that can be applied and add value" (Oldham & Cummings, 1996). Amabile proposes that a product will be judged *creative* to the extent that it is a novel and appropriate, useful, correct, or valuable response to the task at hand (Amabile, 1997). Leo Burnett defines *advertising creativity* in a similar manner: "The art of establishing new and meaningful relationships between previously unrelated things in a manner that is relevant, believable and in good taste" (cited in Blasko & Mokwa, 1986: 43).

In the following discussion, we shall focus on the first set of dual components, which we shall term - for reasons of convenience and applicability - *surprise* and *regularity*. This approach may balance the overemphasis found in the literature on concepts such as *novelty*, *uniqueness*, *divergence*, *difference* or *originality* (i.e. *surprise*). All the latter concepts are usually represented as one-dimensional constructs with little conceptual difference (Smith & Yang, 2004: 36). Following this survey, we shall briefly focus on the final measure of advertising – its effectiveness.

The Creativity Process

Creativity in advertising may consist of overcoming the *banal* (sheer *regularity*) on the one hand and the *bizarre* (sheer *surprise*) on the other; thus achieving a middle way between *normativity* and (to use de Bono's term) *crazitivity*, and enhancing *effectiveness*.

The basic elements of *surprise* and *regularity* have intrigued many scholars, some putting their trust in the former and others in the latter. Not many, however, have entertained the notion that both *surprise* and *regularity* may coexist and nourish each other in creativity. The common understanding of this issue is: "At present, there is considerable disagreement about the psychological process involved in creative thought, with one camp claiming it represents a sudden, holistic view of relationships between previously unconnected elements… - and the other camp claiming that it is the result of considerable information gathering and extended problem solving" (Durgee, 1985: 30).

Surprise and regularity

Some people have explained creativity in terms of divine inspiration, and many others in terms of some romantic intuition, or insight. Boden (1991) suggests that "if we take seriously the dictionary-definition of creation, 'to bring into being or form out of nothing,' creativity seems to be not only beyond any scientific understanding, but even impossible to define". Popper claimed that creativity is a divine spark that may not be dismantled and examined through the use of scientific tools (Popper, 1959). Peters (1997) linked creativity to surprise, and equated surprise with grace, excitement, and "bending the rules and going the extra mile" (White & Smith, 2001: 27). It may therefore be concluded that the psychologist who insists that creativity can be studied scientifically must bear the burden of proof, in the face of centuries of testimony by mystics, artists and others who claim that at least in their moments of inspiration human beings are not subject to the laws of nature.

This sense of a leap is manifested by frequent descriptions of creativity as emerging from "thin air," or even from an apparently complete "void." Sinnott argues that it is common for a new idea to arise almost spontaneously in the mind, often seemingly out of nothing and at a time when a person may be thinking of something different (Sinnott, 1959). Poincaré (1952) describes his work on a mathematical problem in the same vein and in a casual manner: "One day, as I was crossing the street, the solution of the difficulty which had brought me to a standstill came to me all at once". Mozart likewise accounts: "When I am, as it were, completely myself, entirely alone, and of

good cheer - say, traveling in a carriage, or walking after a good meal, or during the night when I cannot sleep; it is on such occasions that my ideas flow best and most abundantly" (Mozart, 1954: 34).

Other thinkers and researchers conclude that the secret of creativity is concealed in the rather vague notion of *rule-transcending* rather than *rule-following*. *Rule-transcending* was formulated as *total freedom*, achieved by the elimination of directional guidance, constraints, criticism and thinking within bounded scopes (Csikszentmihalyi, 1996). Such elimination of constraints is expected to enhance the accessibility of ideas drawn and contemplated from a virtually infinite space of ideas (Grossman, Rodgers & Moore, 1988).

Tellis summarizes these views in the context of advertising, observing that creative ideas flourish in an environment of *freedom from rules*. The simple truth about *rules* is that they promote *conformity* and suppress *diversity* - one of the prerequisites of creativity (Tellis, 1998: 84-85). Aaker et al. (1992) note along the same line, albeit in a more tentative manner, that the best ads are *sometimes* those that break all the rules. However, this does not mean that we should avoid learning from the experience of the great practitioners of the art. "Great practitioners" - associated for instance with the "creative revolution" of the 1960s - are such mythological figures as Leo Burnett, David Ogilvy, and Bill Bernbach. What exactly should we learn from these larger-than-life authorities?

Many scholars hold that the creative process is qualitatively different from ordinary, day-to-day conventional thinking (e.g. Guilford, 1950; Wallas, 1926). Guilford has shown that most of the aptitude factors identifiable as belonging in the category of creativity may be classified as a group of *divergent-thinking* abilities. These abilities (evaluated by such tests as the "unusual uses"), in contrast to regular *convergent-thinking* abilities, emphasize searching activities with freedom to go in different directions, if not a necessity to do so in order to achieve excellent performance (Guilford, 1959: 161).

Some researchers stress that creativity involves special cognitive processes. Thus, they emphasize the importance of insight and productive thinking in creative

processes. Also, that in contrast to regular analytical problem-solving operations, the processes underlying insight in creative mechanisms of thought are not verbalizable (Smith, Ward & Finke, 1995: 328). In this context, one has only to mention Einstein's remark: "The words or the language, as they are written or spoken, do not seem to play any role in my mechanism of thought. The psychical entities which seem to serve as elements in thought are certain signs and more or less clear images which can be 'voluntarily' reproduced and combined" (Einstein, 1954: 32). Ogilvy echoes this, noting in regard to advertising creativity that most original thinking isn't even verbal and requires a groping experimentation with ideas, governed by intuitive hunches and inspired by the unconscious (Ogilvy, 1976).

Advertising industry interviews on the creative process have tended to describe the activity in such terms as "the ultimate leap of the imagination," or "a stroke of genius" (Sederberg, 1979) - semantic expressions of *originality* (Michell, 1984: 11). The path of *surprise* is illustrated in the literature on *advertising creativity* by a decisive stress on *novelty* and *diversity*. Tellis (2004: 22) states that "novelty is the key to effective advertising," and that creativity thrives on *difference* while precognitive commitment is bound to *sameness* (Tellis, 1998: 84). Others observe that creative ads involve *newness*, *risk*, *divergent thinking*, and *a sense of humor* (Jewler & Drewniany, 1998; Marra, 1990). Ang and Low (2000: 837) conclude their review of literature by pointing out that across the various definitions of *creativity*, one finds a stress on *divergence* from the norm along with a sense of *uniqueness* and *originality*. Higgins maintains that the most important aspect of advertising is "to be fresh, to be original" (Higgins, 1965: 14).

The creative department in advertising agencies is often seen as staffed by brilliant yet eccentric people (Wells, Burnett & Moriarty, 1992: 114). Ogilvy believed that in the advertising industry to be successful one must accumulate a group of creative people. This probably means a fairly high percentage of high strung, brilliant, eccentric nonconformists (Ogilvy, 1976). Such a notion is echoed by the blatant saying of George Lois: "If you're not a bad boy, if you're not a big pain in the ass, then you are in some mush in this business" (see Rothenberg, 1994: 135). Should all copywriters and art directors, then, be mad or at least somewhat disturbed?

Csikszentmihalyi concludes his study of creativity (1996: 1) by noting that "a genuinely creative accomplishment is almost never the result of a sudden insight, a lightbulb flashing on in the dark, but comes after years of hard work." Perkins (1981, 1988) and Weisberg (1986, 1992), among others, suggest that creativity is the outcome of regular thinking but only quantitatively different from it, and does not necessarily require a qualitative leap or a creative spark. Weisberg (1986) summarizes this issue by commenting that Creative thinking is not an extraordinary form of thinking. Rather, it becomes extraordinary because of what the thinker produces, not because of the *way* in which the thinker produces it. Attempts to define the regularities within the phenomenon of *creativity* have produced several schemes developed in various disciplines, such as linguistics (Chomsky, 1957; Eco, 1986), anthropology (Levi-Strauss, 1974), random graphics (Palmer, 1985), venture and transitional management (Kauffman, 1995), psychology (Simon, 1966) and artificial intelligence (Minsky, 1988).

A creative person is expected to deviate from accepted social norms, and even exhibit mental disturbance and mood disorders (e.g. Post, 1994). Jamison (1989) noted that extremes in mood, thought and behavior - including psychosis - have been linked with artistic creativity for as long as man has observed and written about those who write, paint, sculpt or compose. Thus, creative artists have often been described as suffering from disequilibrium in their personal lives and reflecting deviations in their work (Runco, 1994).

The study of creativity began to some extent with the study of genius (Becker, 1995; Isaksen & Murdock, 1993). However, the claim that creativity is restricted to high IQ "geniuses" was debunked long before, in studies conducted by Terman (1947; 1959). According to Simonton (1984) there just isn't any correlation between creativity and IQ. At best, only average intelligence is necessary as a resource of creative behavior (Barron & Harrington, 1981; Sternberg, 1985). It is thus concluded that creative ability is not necessarily related to intelligence (although a minimum level of intelligence is required) (Fletcher, 1990); rather, it may be related to such obscure factors as "style or modes of experiencing" (Barron, 1971). These findings stand in contrast to West's claim that personal intelligence is a personal characteristic, second

only to originality - valued by senior directors when hiring advertising creatives (West, 1994).

Meyer (1991) concludes that creative behavior is a learned pattern of habits and attitudes, not related to IQ, basic ability or aptitude; and that with training, an individual can reach creative achievement from almost any aptitude level. When creativity is considered surprising and irregular, the suggestion that it can be taught or trained seems indeed odd (Maltzman, 1960). It is difficult to train someone to think in an unexpected manner, as the outcome is not known in advance (Pickard, 1990).

In a more recent study, White (2006) notes that brain scans suggest ways in which the mental activity of creative people physically differs from that of the less creative, in the ways that connections are made as well as the parts of the brain in which activity is concentrated. However, he adds the reservation that it does not mean that not everyone can be creative; just that some people will be more reliably and regularly creative than others.

Whether or not creativity is associated with mental ability, it seems to entail a stable set of core *personal characteristics*. Creative individuals exhibit broad interests, attraction to complexity, intuition, aesthetic sensibility, toleration of ambiguity and self-confidence. They convey concentrated effort, persistence, high levels of energy in their work, and commitment to the creative endeavor. This all leads to an intensive absorption in their work, high aspirations, and an excessive willingness to grow, take risks, surmount obstacles and persevere (Amabile, 1983; Barron & Harrington, 1981; Cummings & Oldham, 1997; Golann, 1963; Helson, 1996; Helson, Roberts & Agronick, 1995; Martindale, 1989; Sternberg & Lubart, 1991; Tardif & Sternberg, 1988). One more identified form of regularity in the practice of advertising creativity - related, among other factors, to differences in tastes and personalities - is known as *creative styles*. It is based on the assumption that the creativity process is not entirely random: hence, advertising creatives have distinctive styles that permeate their work (Tellis, 1998: 87).

Cognitively speaking, it is plausible that not all creative thinking follows the same pattern. Whereas some classic discoveries appear to have resulted from surprising

flashes of insight, others seem to have come about through more regular incremental applications of prior knowledge. The evidence that special processes such as insight, incubation, and activation of disparate elements may be discerned in noncreative tasks also helps to resolve the "surprise vs. regularity" dilemma. Whether or not a particular cognitive process is deemed special, it is clear that no such processes are encountered uniquely in creative thinking (Smith, Ward & Finke, 1995: 328-329).

When referring to creativity, most researchers of cognitive style note complementary contradictions corresponding to *regular* (*systematic*) and *random* (*intuitive*) thinking (e.g. reflective-impulsive, Kagan, 1966; analytical-intuitive, Allison & Hayes, 1996; rational-intuitive, Harren, 1979). The *regular* style refers to the tendency to analyze a situation logically and intentionally. In contrast, the *random* style refers to the tendency to capture a pattern (e.g. meaning, structure) without conscious thinking and without being able to account for the source of the knowledge or information.

An important part of being creative is to know the "rules of the game" and to become skilled at applying them (Perkins, 1981). Simonton (1984, 2003) states that the creative genius is an expert in a given domain, well acquainted with its rules and regularities. However, even in the exact sciences one cannot apply fixed rules mechanically. The creative genius Poincaré noted that mathematical work is not simply mechanical; that it cannot be carried out by a machine, however perfect. It is not merely a question of applying rules, of making the most possible combinations according to certain fixed laws - the combinations so obtained would be exceedingly numerous, useless, and cumbersome. The true work of the innovator consists in choosing among these combinations so as to eliminate the useless ones or rather to avoid the trouble of making them; and the rules that must guide this choice are extremely fine and delicate. It is almost impossible to state them precisely; they are [tacitly] felt rather than [explicitly] formulated (Poincaré, 1929).

Finke, Ward and Smith (1992) note the existence of two distinct processing phases of creative thinking: a *generative* phase, followed by an *exploratory* one. In Kelly's terms, there is a *creative cycle* of *loosening* and *tightening*. When being creative, we first *loosen* our constructions; then, finding a novel construction that seems to have some potential, we focus on it and *tighten* it, giving it substance or form (Kelly,

1955). An apparently similar rationale drives Barron (1968) to conclude that the essence of creativity is the ability to experience the extreme of psychological states - *crazy* and yet *sane* - and the use of both primitive and structured experiences and modes of thought. Thus we constantly oscillate between *surprise* and *regularity*.

Although these and other scholars are somewhat cognizant of the notion of *complementary contradictions* inherent in creativity, they neither fully acknowledge nor explicitly resolve the workings of this notion and its practical implications. At most, they tackle it in a general, descriptive sense. Some of this unexplored theoretical and practical potential will be briefly illustrated below, following the discussion of the resulting advertising *effectiveness*.

The Role of Effectiveness

Creativity is at the heart of every advertising campaign; but does it really sell? We are all familiar with so-called *original* creative ads that do not sell successfully. While these ads may win awards, they are not effective in the marketplace. A case in point is Nissan's "Mr. K" campaign. The creative community loved the campaign, but the Nissan dealers were sitting on an unmoving inventory (O'Guinn, Allen & Semenik, 2000: 306). Such cases are difficult to analyze because they do not offer any controlling condition (e.g., advertising vs. non advertising simultaneously to the *same* target audience), and therefore leave us with more questions than answers. In a rather simplistic manner, many advertising professionals believe that an ad is effective if it meets the sponsor's objectives (such as increasing sales or market share). The philosophy of one worldwide agency states: "It isn't creative unless it sells" (Wells, Burnett & Moriarty, 1992: 389).

The vast external, social and cultural *effect* of advertising occupies the mind of many social scientists. Cronin (2000) points out that in societies increasingly dominated by consumerism, advertising plays a key role in mediating identities, power and rights. A survey of 20 of the largest advertising clients in the United States found that failure to produce effective advertisements was the single unforgivable shortcoming an agency was considered to have (Kingman, 1981). Yet one may wonder what is concealed behind this opaque concept of *effective advertising*, how it can be evaluated, and how it is related to the complexity of the internal components of *surprise-regularity*.

Tellis (2004: 5) notes that despite its importance and wide implications, evaluation of the effectiveness of advertising is very difficult, as it depends intrinsically on response to communication. Lautman and Hsieh (1993: 18) claim more conclusively that "it is unlikely that a single executional formula for communicating messages simply will be discovered."

Some advertising researchers and practitioners feel that effective advertising can indeed have a tremendous impact on public taste, making a positive aesthetic contribution as well as ringing up sales on the cash register (Wells, Burnett & Moriarty, 1992: 389). Watkins concludes in his *The 100 Greatest Advertisements* (1959: V) that as an instrument of sales, advertising has fulfilled its first glowing promise fabulously. West (1999: 39) claims that "a 'winning creative idea,' one that stands out from the crowd and is memorable, can have enormous impact on sales." Researchers have estimated that a winning creative idea can generate a sales increase of up to five times, controlling for the same budget, product, distribution, and other marketing efforts (Buzzell, 1964; Blair, 1988; Rossiter & Percy, 1997).

However, advertisers today are aware that sales and effectiveness are subject to many variables, of which advertising is only one. "The sales of a product are determined by the mix of marketing variables: the product, the price, the package, the public relations, the merchandising, the sales force and the distribution. No element of the mix taken in isolation can be a unique determinant of sales… all the elements must pull together in combination" (Evans, 1988: 6). Ogilvy and Raphaelson (1982: 15) concluded that for nearly half a century, Gallup, Starch, and other research firms have measured the noting and relationship of tens of thousands of advertisements; Nobody has been able to correlate these measurements with sales.

It appears that the defining audience for creatives is other advertising professionals, and creatives in particular (Kover, James & Sonnet, 1997). This is one of the reasons why the judgment of creative award shows appears to be held in much higher esteem by most advertising creatives than by researches demonstrating the effectiveness of the advertisements they create (Young, 2000: 19). Advertising managers, on the other

hand, claim that creative advertising may win awards but may have little to do with effectiveness. The resolution of this struggle must by now be obvious: compounding *surprise* and *regularity* by way of an "effective Wow!," both creatives and advertising managers may achieve their desired goals and approach the hall of fame.

Devising Creativity-Enhancement Methods

Creativity-enhancement methods are numerous and diversified. Smith (1998) provides an analysis of 172 idea-generation techniques used by organizations and creative consultants. However, when the notion of *surprise* or *novelty* is polarized, there might be less methods or techniques. El-Murad and West (2004) conclude, for instance, that despite attempts to apply the most *systematic* and scientific methods toward developing creative ideas, the evidence suggests that it is a *random* process, because there is a high degree of *chance* in coming up with a winning creative idea. *Random* creativity is, accordingly, important (Gross, 1972).

It is however clear that while experimentation without any pattern of inference may supply many new facts for contemplation, it is not a *method* (Blachowicz, 1998: 11). Trusting sheer *randomness* or pure *chance*, with complete sacrifice of rationality and better judgment, is obviously not a preferred path toward stable and continuous advertising creativity. Some methodological frameworks should be devised and implemented. The essential question remains: what method should be adopted?

Parallel to the mode in which the *creativity process* is deciphered, scholars, researchers, and practitioners have devised different *creativity-enhancement methods* hopefully leading to the much-aspired Holy Grail of a *creativity product*.

In general terms, we suggest classifying the prevalent creativity methods into two ideal types: *unbounded randomness*, emphasizing the element of *surprise,* proceeding *from divergence to convergence*; and *bounded regularity*, proceeding *from convergence to divergence*. Let us review each of them.

Methods Advocating Unbounded Randomness

Working most often in teams, copywriters and art directors try to come up with creative ideas that set their advertising apart. Such idea-generation is an extremely

challenging task, and various methods have been developed to facilitate the process (Aaker et al., 1992: 403).

The *creation stage* of advertising encompasses the *idea-generation* process, the generation of written copy (*copywriting*), artwork of various kinds (*illustrating*), and a preliminary or comprehensive version of the advertisement (*layout*). Aaker et al. (1992: 372) view the initial phase of *idea-generation* as the "heart" or "key" of the creativity process.

Most methods for the enhancement of *idea-generation* devised over the last decades have been based on the belief that in order to "ignite the creative spark," all we have to do is break away from existing (sound) mind-frames and search for the *surprising* and the *irregular*, reaching the aspired goal of "generating a large quantity of ideas" (Aaker et al., 1992: 372). The implicit assumption behind such methods is that the greater the number of ideas, the greater the probability of achieving a set of quality ideas after filtering. Nobel Prize winner Jonas Pulling said: "The best way to get a good idea is to get a lot of ideas."

Ideation is therefore measured often in *quantitative* rather than *qualitative* terms, and is directed in a *random* manner. Alex Osborn, founder of Batten, Barton, Durstine & Osborn (BBDO) - one of the largest advertising agencies in the United States - tells of a successful copywriter at his agency who starts a job by clearing his mind, sitting at a typewriter and simply writing down everything that comes to him. He even includes silly and worthless phrases, with the thought that they will block others if they are not written down (Osborn, 1948: 135).

Aaker et al. (1992) note that it is somewhat ironic that in refining decision theory very sophisticated methods have been developed to choose among alternatives, although we still have only the crudest notion of how to generate these alternatives. They find no available means to solve this predicament, except to fall back upon the age-old technique of *brainstorming* - probably the most widely recognized and used method for creativity-enhancement.

Developed by Osborn (1948, 1958) and used regularly at most advertising agencies, *brainstorming* features a group of six to ten people who focus on a problem. The cardinal rule is that judgment is deferred and criticism prohibited. "No line of inquiry should be ruled out." The wilder the ideas that survive the better, for they may stimulate a new association that will trigger more useful ideas. The participants are encouraged to build upon ideas as they appear, combine and improve them. The atmosphere is positive. The objective is quantity, with the assumption that it leads to quality.

Following a first stage of *divergence* (*conceptual brainstorming*) - or what was termed by De Bono "messing around with ideas" - the method proceeds with an attempt at *convergence* (*screening*). During the second stage, the ideas (tens or sometimes hundreds) are filtered to produce a smaller set, which is subsequently examined and tested for economic feasibility and value (*usefulness* along with *novelty*).

Another method, developed by Gordon, is known as *synectics* (from the Greek, the joining together of different and apparently irrelevant elements). *Synectics* applies to the integration of diverse individuals into a purposeful group. This is an operational theory for the conscious use of the preconscious mechanisms present in human creative activity, and aims at increasing the probability of success in problem-stating, problem-solving situations (Gordon, 1961).

Additional methods include *lateral thinking* (DeBono, 1971), which proceeds in discontinuities, jumping about from idea to idea without structure; *divergent thinking* (Guilford, 1973), in which thoughts flow in all directions from one starting point, even if the path seems illogical; *associative thinking* (Young, 1975), in which one puts together unrelated ideas; *soft thinking* (Von Oech, 1983), which includes metaphorical, paradoxical, ambiguous and fantasy thinking (giving the following direction, among others: "be foolish and silly"); as well as other methods, such as *mind mapping* that calls for free association and flow of thoughts, and *random stimulation* that posits that a remote analogy may sometimes stimulate a chain-reaction of new thoughts and loosen a fixation (for further details, see Goldenberg & Mazursky, 2002).

All these methods are based on the requirement that judgment be suspended and divergent ideas emerge by associative thinking in an unconstrained space (e.g. Grossman, Rodgers & Moore, 1988). Therefore, the resultant *idea-generation* process is mostly *random*, or at least *blind* and *haphazard* (Campbell & Paller, 1989; Simonton, 1994).

Methods based on *unbounded randomness* are still often used in general management (e.g. Kiely, 1993; Rickards, 1998) as well as in advertising (e.g. O'Guinn, Allen & Semenik, 2000). It is our contention that such methods have, by and large, directed advertising creativity into non-fruitful and inhibiting avenues. Notwithstanding the popularity of these methods, they have been questioned in numerous studies (Bouchard, 1969; Diehl & Stoebe, 1987, 1991; Paulus et al., 1993; Weisberg, 1992). Proponents of methods advocating *randomness* have provided no research evidence based on systematic assessment of their efficiency. In particular, they have not offered a way of controlling and discarding failed trials, thus dooming all trials and responses to qualitative commensurateness (see Blachowicz, 1998). A study testing the performance of a group of problem-solvers instructed to randomly "break the rules, get out of the square and shift paradigms," showed no significant differences between the ideas generated by this group and those generated by problem-solvers given no instructions. Moreover, the study showed that while such methods may increase the apparent *novelty* of ideation, they decrease the *appropriateness*, *usefulness* or *effectiveness* of the ideas produced.

It was further observed that people frequently asked to come up with new ideas sometimes try to find their own regulated means of becoming more productive at ideation tasks. They may, for instance, identify patterns common across different contexts and apply them on an *ad hoc* basis within a certain category. Such patterns will be less transient than the random extrication of thought (e.g. Boden, 1991; Dasgupta, 1994; Weisberg, 1992).

As to the *synergetic effect* - commonly identified with such unbounded randomness methods and presupposing that a group of people thinking together is superior to a "nominal group" in which individuals think alone - at least one study asserted that this

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plays only a minor role in creativity ideation. In a controlled experiment, ideas suggested by individuals working alone were even evaluated as superior to those raised in brainstorming sessions (Weisberg, 1992). It was repeatedly and conclusively shown by investigators that the most prevalent method of *brainstorming* does not generate more ideas or greater creativity than do nominal groups (Diehl & Stoebe, 1987; 1991). All in all, groups were shown to be suppressive of individual productivity, and the quality and originality of ideas generated by them to be inferior (Sutton & Hargadon, 1996). Grimes (2005) concludes that without a specific problem to solve, the *brainstorming* session and the ideas will be aimless. Without a good balance of people, the session will be one-sided. The more people in the room with preconceptions about a subject, the harder it will be to break free.

Often, the reason we don't see the source of our problems is that the means by which we try to solve them are the source (Bohm, 1992). The main conclusion of such studies is that an excess of ideas obscures the *ideation process*, and *randomness* and *irregularity* impede creativity. It has finally been realized that *total freedom* in idea-generation is inadequate (Paulus et al., 1993; Stroebe, Diehl & Abakoumkin, 1992).

In addition, techniques for idea-generation such as *lateral thinking*; *divergent thinking*; *associative thinking*, *soft thinking*, *mind mapping* and *random stimulation* are phrased in vague generalities or prescriptions rather than in terms of measurable cognitive operations. Thus, for instance, even if we are convinced that *lateral thinking* can promote creativity, we would wish to identify the specific kinds of cognitive processes that give rise to or constitute this kind of thinking, and then provide an explicit account of the way in which they may be extended to different situations or contexts (Finke, Ward & Smith, 1992: 6).

Compared to methods advocating *unbounded randomness*, methods advocating *bounded regularity* - briefly reviewed below - manage cognitive processes rather than ideation sessions; are analytical and focused rather than random or blind, and are specific rather than general in applicability.

We may conclude that while the notion of *randomness* stresses the *quantity* of ideas, the notion of *regularity* stresses their *originality*. However, in order to achieve *creativity*, both these notions must be combined: both *quantity* and *originality* are needed in order to ignite the "spark."

Methods advocating bounded regularity

Assuming we would like to set rules and regularity in creative ideation what form should we look for? In an empirical study conducted by Johar, Holbrook and Stern (2001) five real-world creative teams from an advertising agency were given a strategic brief for a new beverage product and asked to design the layout for a print ad. Think-aloud concurrent protocols obtained from each team's copywriter, art director, and the two working together were analyzed to examine the creative process and its relationship to the created advertisement. Interpretive analyses of the protocols revealed four of the five teams chose to pursue a single mythic structure to the apparent detriment of their final product. Only one team engaged in fully diversified idea generation involving a wide range of alternative scenarios. However, this more flexible team produced the ad judged most successful by advertising professionals. Could it be that this team has found the optimal path?

An ambitious attempt at creating an "exact science of creativity" was made during the 1940s by a chemical engineer named Genrich Altschuller. He postulated that there must be discernable, measurable and learnable patterns or formulas underlying successful creative ideas. By backward analysis of more than 200,000 patents and technological inventions, he succeeded in defining more than 40 patterns of invention which he labeled "standards." Those non-intuitive patterns could be described, predicted and controlled independently of external influences. They consisted of system dynamics determined solely by the intrinsic features of the products - a revolutionary idea in the field of creativity analysis (Altschuller, 1985, 1986).

More recent creativity research has shown certain fundamental patterns or formulas underlying creative designs (e.g. Blasko & Mokwa, 1986; Goldenberg, Mazursky & Solomon, 1999a; Scott, 1994). It has further indicated that some identifiable patterns may serve to enhance creativeness (Goldenberg, Mazursky & Solomon, 1999a,

1999b; Moreau, Markman & Lehmann, 2001). In a recent paper McQuarrie and Phillips' (2005) study focused on certain regularities (e.g., pictorial metaphors), and it was found that when consumers are presented with an indirect metaphorical claim, they become more receptive to multiple positive inferences about the advertised brand. When the indirect metaphorical claim takes the form of a picture, consumers are more likely to spontaneously generate positive inferences at the time of ad exposure. If correct, why not aim the ideation to such design structures whose effectiveness is already measured and known? Would it be possible to impose certain regularities and bound the processes effectively?

The concept of *bounded regularity* is embedded in a number of current ideation methods; for example in marketing consider *morphological analysis*. This cluster of methods, among them one known as HIT (Heuristic Ideation Technique), breaks down a system, outcome or process into essential sub-concepts, each representing one dimension in a multi-dimensional matrix. Ideas are created by searching the matrix for new, previously non-existent combinations of attributes (Tauber, 1972). The major shortcoming of this cluster of methods is its lack of definition of specific guidelines for combining the attributes, and its lack of a prescribed reduction mechanism facilitating the process of selecting the best ideas.

Design Structures in creativity:

The study of design structures in creativity has systematically developed in two main directions. The first focuses on *rhetorical figures*, defined as stylistic variations that appear to enhance effectiveness. McQuarrie and Mick (1996) relate to *rhetorical figure* as an artful deviation from audience expectation in the form taken by a statement. As an aspect of advertising style, such figures include rhyme, antithesis, pun, and metaphor, among others (McQuarrie & Mick, 2003: 579). Such figures are independent of the specifics of the site of its occurrence, or of the occasion on which it occurs. The promise of rhetoric is that there is a system for identifying the most effective form of expression in any given case.

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An alternative research direction was developed by Goldenberg, Mazursky and Solomon (e.g., 1999a). In their studies, *templates* are identified as simple structures that can be uniquely formulated schematically. The use of *creativity-templates* assures the generation of unique creative ideas (Hayes, 1978). Experiments show that individuals trained in the *creativity-template* technique are able to generate new ideas superior to those generated by untrained individuals or people using rival techniques - as judged by experts who were blind to the existence of *templates*. Moreover, most of those template-fostered ideas are not replicable by any other ideation technique (Goldenberg & Mazursky, 2002: xi-xii). Finally, *creativity-templates* enable the repetition of messages, greatly contributing to awareness and recall without risking the loss of the customers' attention or the ill effects of boredom.

As to the focal region of mind of advertising creativity the *creativity-templates paradigm* assures superior creativity management because it facilitates the focused cognitive effort involved in generating new ideas and the capacity to access relevant information, as well as recognition (Goldenberg & Mazursky, 2002: 148, 165). This taxonomy eventually promotes the generation of superior ad ideas in creativity judgments, brand attitudes and recall (Goldenberg, Mazursky & Solomon, 1999a, 1999b). The last point is essential, as "some 85 percent of magazine readers do not remember seeing the average advertisement, and 75 percent of viewers cannot recall the average television commercial the day after they have seen it" (Ogilvy & Raphaelson, 1982: 14).

The *creativity-templates paradigm* extends the view of common patterns by deriving universal *templates* characterizing the evolution of successful ideas. They were initially defined through backward analysis of product innovations. The history of a product was traced through its former versions. By portraying the configuration of each product version and subsequently examining the stepwise changes between versions, common patterns of change were observed, which were later classified into *creativity-templates*. Only five templates were found to cover the majority of successful new product innovations (Goldenberg & Mazursky, 2002: 179ff). The use of templates can lead to even more effective ads than reliance on simple norms or rules such as "be remarkable!" or even the use of divergent, lateral, associative, soft

thinking and the like. Indeed, Tellis noted that "Research indicates that being *different* is neither the only nor a sufficient key to effective ads. On the contrary, effective ads can emerge from *templates*" (Tellis, 2004: 24).

The two research directions of structures in advertising creativity indicate the type of cognitive processes and strategies that lead to creativity, demystifying it while avoiding circularity. Creative performance is no longer explained simply in terms of "creative thinking," but with reference to the particular, deeply-embedded types of cognitive structures that one employs (Finke, Ward & Smith, 1992: 7); and especially in terms of the characteristics (components and attributes), links, configurations and operators defining these structures (Goldenberg & Mazursky, 2002: 168ff). Under these disciplined conditions one may enjoy the benefits of a constrained, yet more fruitful and effective search for ideation. As observed by Boden (1991), "constraints - far from being opposed to creativity - make creativity possible. To throw away all constraints would be to destroy the capacity for creative thinking. Random processes alone, if they happen to produce anything interesting at all, can result only in first-time curiosities, not radical surprises."

In this context of "constrained creativity," design structures *can* play the role of *attractors*: paths that the self-organized mind tends to follow, assisting the individual to process and organize information by using favorable processing routes proven in the past to lead to productive ideas (see Kelso, 1997). The small number of paved routes (i.e. basic mental operations or mechanisms) avoids spending "a lot of time going down blind alleys" typical to brainstorming (Otnes, Oviatt & Treise, 1995), and offers the much demanded "escape from freedom" which reduces anxiety (Fromm, 1971), thus maintaining - in Einstein's words - the "joy in creative expression and knowledge," and sustaining the "courage to create" (May, 1975).

Conclusions

As we cluster together the metaphor-like juxtapositions of *coherence* and *relevance*, we achieve a new sense of what is *similar* (*regular*) and what is *different* (*surprising*)

in the human *process of creativity* in general and in its very "heart" of *idea-generation* or *ideation* in particular. Thus we could suggest a new *ecology of mind* that points toward a new resolution of such intriguing questions as how ideas interact; is there some sort of natural selection that determines the survival of some ideas and the extinction of others; what sort of economics limits the multiplicity of ideas in the region of mind of *creativity*; what conditions are necessary for stability or survival of this region, and the like.

In a broad generalization, we may now propose that *creative ads* are those that by maintaining *coherent* relationships between the internal components of *surprise-regularity* - while sustaining their *constructive tension* (see Jung, 1943, par. 34) - are more *effective* at achieving their external goal than others, and are therefore more *relevant* to the *consumers* (the people who buy or use the *creativity product*). It thus seems that while the *creativity-templates paradigm* gives the process of ideation its much needed *operational regularities* and sustains its *surprising novelty*, it also enhances its *effectiveness* to the consumer.

This approach overcomes some of the inherent shortcomings of available *creativity-enhancement methods*, many of which rely on sheer *randomness* rather than on the complementary contradictions between *randomness* (*surprise*) and *regularity*. Such methods are based on a false assumption, insisting that "despite even the most systematic and scientific approaches toward developing winning creative ideas, the evidence suggests it is a random process" (West, 1999: 40); that "[an inherent difficulty is] the lack of procedural guidelines to validate the creative process given its prelogical and preconscious nature" (Martineau, 1957); or that "the literature tends to support the… view that creativity cannot be programmed or regularized" (Michell, 1984: 21). On the contrary, in promoting a specified and restricted *theoretical coherence* instead of an *unbounded divergence*, we may gain the benefits of discernable, measurable and learnable *regularities* assuring *effective surprises*.

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