

Paper submitted to Management Decision for the special issue on Poetry,  
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## **The Art of Entrepreneurial Foresight**

### **Abstract**

#### **Purpose**

This paper presents an analysis of entrepreneurial activities that emphasises anticipation and the art of future exploration; in so doing, it identifies important aspects of entrepreneurship as aesthetic or poetic activities.

#### **Approach**

After a short synthesis of the main entrepreneurial functions in terms of decision-making in the financial sphere, the managerial sphere, and the 'booster' sphere, the paper concentrates on the qualities required for a successful 'booster' function (motivation, ambition, innovation, cooperation, proactiveness). Because proactiveness and innovation both require futures thinking and creativity, the paper presents relevant material from the literature on long-term forecasting to establish the artistic aspects of these important components of entrepreneurial activities.

#### **Findings**

The paper's linking of entrepreneurial functions to the capacity for anticipation establishes the need for entrepreneurs to acquire competencies (in the area of forecasting) that are usually associated with artistic endeavours—endeavours that require aesthetics and, ultimately, a poetic sense.

#### **Implications**

There is an urgent need for university curricula to include material that is oriented towards the training of entrepreneurs. This should include specific courses on creativity and forecasting, including consideration of aesthetics and poetry.

**Originality/value**

The recognition that key entrepreneurial functions (proactiveness and innovation) are more art than science, and that they therefore require a set of artistic operational tools, is relatively novel in the current literature on entrepreneurial (and managerial) functions, and opens a research field in the aesthetics of business decision-making.

**Keywords**

booster function, proactiveness, innovation, foresight, forecasting, aesthetics

## 1. Introduction

Entrepreneurial behaviour is essentially characterised by *rationality*. The successful modern enterprise consists of rational decision-makers operating in a relatively predictable microeconomic market. In this context, rationality in pursuit of profit maximisation inspires all entrepreneurial actions—including the rational optimisation of technologies, the rational optimisation of financial structures, and the rational optimisation of wage policies. In short, rationality in pursuit of profit maximisation is the unifying principle of modern entrepreneurial microeconomic management.

Commenting on this increasing emphasis on rationality, Thaler (2000) ventured:

... my prediction is that this trend will be reversed in favour of an approach in which the degree of rationality bestowed to the agents depends on the context being studied,

Thaler's (2000) observation on the importance of 'context' is pertinent to this paper. The true entrepreneur does not live merely in the context of the present. The entrepreneur and the enterprise exist now, but always with a view to the context of the future. The implications of today's decisions are realised tomorrow.

Of course, if the entrepreneurial context is shifted from the present to the future, all decision-making becomes more complicated and potentially less rational. It requires consideration of uncertain market developments, undiscovered technologies, changing organisational patterns, and ever-shifting financial options. By definition, the enterprise of the future is not available in the here and now to be objectively analysed and rationally evaluated. The future is open only to the imagination. The future is not yet written.

Furthermore, a substantial part of the future will be a direct result of the purposeful decisions taken in the present. The achievements and events of the future are affected by the anticipations, interpretations, and visions of the present. In this scenario, Thaler's (2000) prediction (as quoted above) is especially apposite. If context sets bounds to rationality, as Thaler (2000) asserted, the future *context of anticipation* will place limits on the efficacy of entrepreneurial rationality. The context of anticipation requires more than competence in *rationality*; it also requires competence in *aesthetics*.

This paper first provides a review of current and past economic thinking on entrepreneurial activities. This review proposes a structure of entrepreneurial functions, and then attempts to identify the place of *anticipation* in that structure. The paper then reviews some key aspects of research in the fields of creativity and forecasting. It concludes with a discussion of the importance of aesthetics in entrepreneurial decision-making.

## 2. Entrepreneurial functions: a review

Economic thinking has preferred to work with the theoretical stereotype of the entrepreneur as a rational utilitarian agent, and most academic thinking has tended to presume that this is reality. Authors who have adopted a more objective empirical approach to the analysis of entrepreneurial functions—such as Cantillon, Say, Schumpeter, and Knight (see Redlich, 1949; Hoselitz, 1971; Hebert

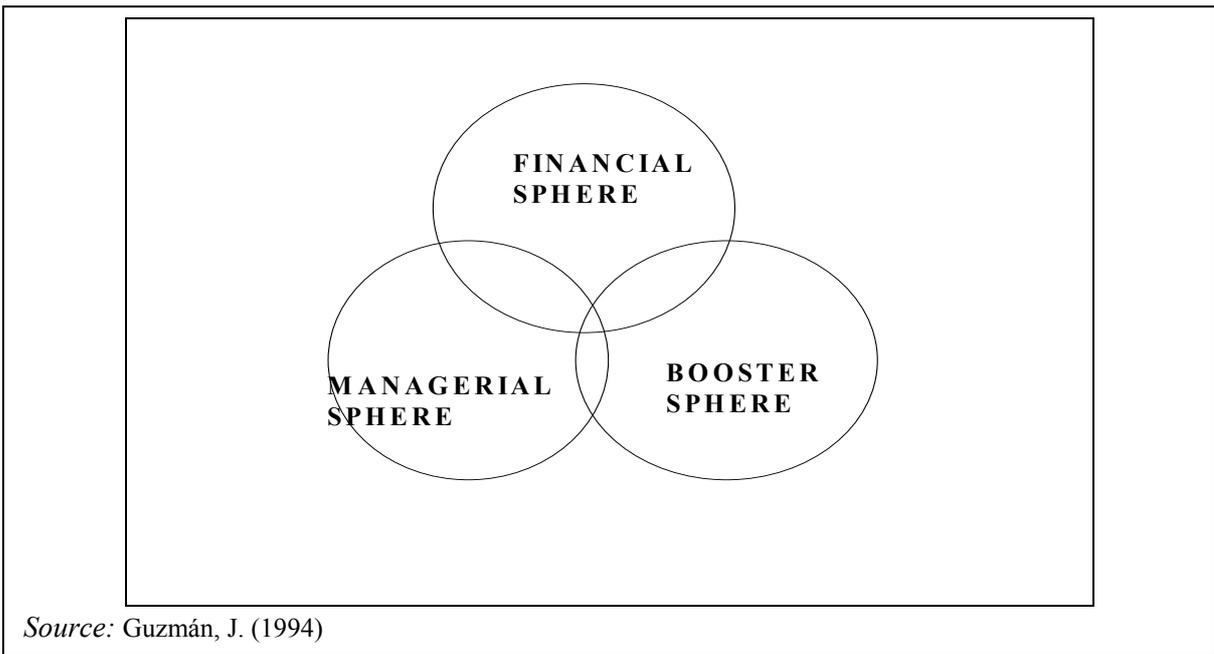
and Link, 1989)—have been the exceptions to this general attitude, rather than the norm. On occasions, these alternative views on the entrepreneur’s role have been augmented by the offerings of various social sciences—such as Weber’s (1914) sociological contribution, Sombart’s (1913) historical perspective, and McClelland’s (1961) psychological approach. Unfortunately, each of these approaches, though valuable in itself, has been developed without considering the others. As a result, a wide variety of extant notions coexist about the functions of the entrepreneur in promoting entrepreneurial success (Blaug, 1983; Hebert and Link, 1989; Wennekers and Thurik, 1999).

A quick survey of each of the main theories reveals some fundamental components of the entrepreneurial function that can be synthesised with a view to developing a taxonomy of the concept of entrepreneurship. In short, these fundamental components can be summarised as follows (Guzmán 1994).

- Several schools of thought consider the *capitalist* function as the only (or at least the most important) element in entrepreneurship. Such is the case with both the ‘classical’ doctrine and the Marxist doctrine of entrepreneurship.
- Other schools of thought focus on *managerial* activity when defining the role of the entrepreneur. The ‘neoclassic’, ‘marginalist’, and ‘institutionalist’ schools tend to adopt this view.
- Finally, various theories incorporate other *psychosocial* (‘human’ or ‘personal’) entrepreneurial elements with varying degrees of objectivity and formality. In this regard, the following are worthy of note: (i) the ‘innovation’ factor in the Schumpeterian entrepreneur (Schumpeter 1934); (ii) the ‘uncertainty’ factor in Knight’s (1948) entrepreneur; (iii) the ‘attraction to opportunities’ espoused in Kirzner’s (1997) entrepreneur ; and (iv) the various personal qualities and social conditionings that constitute a range of psychological and sociological approaches to the question.

On the basis of the above characterisation of the fundamental features of various historical approaches to the question of entrepreneurship, and without wishing to proffer yet another definition, the present authors would argue that the following ‘functional spheres’ comprise the activity of the quintessential entrepreneurial agent (see Figure 1).

### **Figure 1 The functional spheres of the entrepreneur**



- *1. Financial sphere:* This sphere of activity corresponds to: (i) the traditional ‘capitalist’ function of the entrepreneur; and (ii) activities concerned with the formal (financial) ownership of the entrepreneurial firm. The latter function includes interaction with shareholders (if any) or any other holder of equity financing (if relevant).
- *2. Managerial sphere:* This sphere is concerned with corporate direction and management. In its strictest sense, a managerial or directorial agent, even if situated in the highest echelons of the company, is effectively a salaried employee. The director can develop the daily labour, oversee all decisions, and organise the productive process in various parts of the company, but (in contrast to the other functional spheres discussed here), he or she does not assume any capital or personal risks.
- *3. ‘Booster’ sphere:* This sphere of activity encompasses the psychosocial elements of the ‘human’ (or ‘personal’) entrepreneur referred to above. That is, apart from the investment of capital (financial sphere) and corporate direction and management (managerial sphere), it is apparent that the ‘human’ (or ‘personal’) entrepreneur takes on other functions of a less tangible nature. These tend to be ‘basic initiatives’ of a psychosocial nature in the business—such as the initiation of an innovative project; the recognition of new profit-making opportunities in the market; and awareness of possible fluctuations in demand in society (Blaug, 1983).

The last of these, the ‘booster’ function, has a markedly *dynamic character*, and is therefore difficult to formalise in objective terms. In contrast to the strictly ‘financial-sphere’ entrepreneur, whose function is limited to the investment of financial resources in a given project, the ‘booster’ entrepreneur takes on even greater risks and frequently mobilises the resources of other stakeholders

(such as those of a bank, for example). Moreover, the exercise of the booster function does not depend on the application of objective technical knowledge about business activities (such as detailed expertise in production, for example); this sort of technical activity corresponds to the managerial sphere in the schema being utilised here. Rather, the booster function depends on the *personal psychological and sociological qualities* of the individual entrepreneur.

Although the booster functional role resembles Mises' entrepreneur-promoter in many respects (Mises, 1949), the term 'promoter' has a clear connotation that links it to the *beginning* of entrepreneurial activity. Nevertheless, this same 'spirit of initiative', on which Mises (1949) tacitly based his approach, extends throughout the life of an entrepreneurial organisation. Indeed, such 'initiative' can be perceived in a succession of 'business projects' in the life of a single entrepreneurial organisation over a period of time. Similar observations can be made about the 'state of alert' before possible opportunities in the market (Kirzner 1997), risk-taking (Knight 1948), the response to internal corporate inefficiency (Leibenstein 1978), and the application of innovative combinations (Schumpeter 1934)..

Incorporating these notions of 'promotion' (at the beginning of a venture) and 'successive initiatives' (during the life of a venture), the 'booster' function as described above can be understood as consisting of two subfunctions (Guzmán 1994):

- *a promoter sub-function*: which includes the activities of an entrepreneur in creating a new business (including those of 'potential entrepreneurs' who have not yet created a venture, but have a propensity to do so); and
- *an energiser sub-function*: which includes the activities of an entrepreneur during the life of an enterprise, whereby the entrepreneur promotes the development of the business (or at least keeps it 'alive').

### **3. Main characteristics of the booster function**

Of the 'functional spheres' described above, the booster function best reflects the essence of entrepreneurship. As previously noted, it reflects the psychological and sociological qualities of the individual entrepreneur, and thus brings social, institutional, political, and personal factors into relationship with a firm's success and economic growth (Reynolds et al., 1999; Audretsch, 2002). In this context, the following personal entrepreneurial qualities are of particular significance (Guzmán and Santos-Cumplido, 2001):

- motivation;
- ambition;
- innovation;
- cooperation; and
- proactiveness.

Each of these is discussed below.

### **Motivation**

In recent years there has been a growing interest in the concept of motivation (Krueger and Casrud, 1993; Kuratko et al., 1997; Shane et al., 2003), and among the various taxonomies that have been advanced, the intrinsic/extrinsic model is of particular interest to the present discussion. An 'intrinsic' motivation for entrepreneurial activity is stimulated by the personal interest and pleasure that is derived from carrying out the activity. Intrinsic motivation is thus posited as being a vocational need for personal development—somewhat similar to McClelland's (1961) 'need for achievement'. The intrinsic/extrinsic motivation taxonomy thus takes into account the personal psychological needs and processes of the individual entrepreneur.

### **Ambition**

Ambition drives the entrepreneur to develop the business through competitive risk-taking (McClelland, 1961; Davidsson, 1991; Lumpkin and Dess 1996). This type of ambitious, thrusting behaviour is typical of entrepreneurial behaviour. As Davidsson (1991) observed:

Just as founding a firm is considered more entrepreneurial than not doing so, pursuing continued development of the firm is the more entrepreneurial choice when refraining from doing so is another feasible alternative.

### **Innovation**

Innovation reflects an entrepreneur's *creative* desire to engage with new ideas, seek novelty, and create innovative processes.

### **Cooperation**

Cooperative behaviour with other people and organisations can be utilised by the entrepreneur to reinforce the competitive position of the firm in the market and enhance corporate growth. Cooperative behaviour can be formal or informal, and personal social and business networks are important at every stage of the business—during the pre-start-up stage, in the initial stages of the new business, and as part of the ongoing development of the enterprise (Johannisson, 1995).

### **Proactiveness**

The term 'proactiveness' refers to the anticipation of future needs and the taking of dynamic initiatives to energise the business (Lumpkin and Dess, 1996). Proactiveness is obviously related to innovation and ambition, but the distinctive nature of proactiveness is its association with creative dynamic action to 'energise' the business—such as the active seeking of information and opportunities, the procurement of investment capital, a commitment to the training of employees, and the initiation of long-term planning.

These five entrepreneurial qualities obviously influence, and are influenced by, various environmental factors. These environmental factors can be divided into two types:

- *factors in the entrepreneur's personal environment*: such as family, education, and professional experience, which provide the entrepreneur with abilities, values, and attitudes (Cooper and Dunkelberg, 1987; Krueger et al., 1993; Ray, 1993; Krueger, 2003); and
- *factors in the entrepreneur's global environment*: such as sociocultural and political-institutional factors, which provide the entrepreneur with information and opportunities, and also contribute to evolving attitudes and values (Van de Ven and Garud, 1989; Shane, 1994; Gnyawali and Fogel, 1994; Davidsson, 1995; Tiessen, 1997; Aldrich and Martinez, 2003).

The uncertainty of the evolving environment means that the entrepreneur, posited as a *rational* free decision-maker, faces a situation of 'bounded rationality'—because he or she is dealing with an environment (personal and global) that is changing in ways that are presently unknowable. In dealing with this dynamic situation of bounded rationality, the entrepreneur's decision-making is dependent on the 'booster' entrepreneurial qualities described above—motivation, ambition, innovation, cooperation, and proactiveness. Among these, 'proactiveness' and 'innovation' are posited here as being the most important—because individuals with these qualities are able to accept and utilise unstructured information and intuition with greater alacrity than those who lack these qualities.

Proactiveness and innovation (and the creativity required for both) are thus the focus of the present study of entrepreneurial qualities. Can these qualities be acquired by specific learning processes? Do tools exist that could be used to enhance these qualities? The answers to these questions are explored below.

## **4. Intuition, creativity, and forecasting**

### **4.1 Intuition and entrepreneurship**

'Intuition' can be defined as an intellectual perception of things that does not require inductive or deductive reasoning. Intuition about future developments has been the subject of research in psychology and 'parapsychology' (Schmeidler, 1964), and there is evidence that more 'dynamic' personalities (as identified with metaphor tests) score better in precognition tests using cards of familiar symbols. Along the same research lines, long-term studies (six years) at Newark College of Engineering (Dean et al., 1974) have shown that some people perform consistently better than expected, and others worse, when confronted with forecasting tests involving randomly generated numbers. Those showing a higher forecasting performance have been identified as having 'dynamic' personalities (in the terminology adopted for the study). In terms of entrepreneurial activity, Loye (1978, p. 58) has observed that "... many of the world's most successful entrepreneurs and economic empire builders have been, and are believers in and regular users of, precognition in reaching successful decisions".

The entrepreneurial 'booster' qualities of innovation and proactiveness (and the associated creativity that accompanies both), can be said to be associated with such 'dynamic' personalities with precognition capacities. In this sense, intuition is a source of entrepreneurship.

Intuition has been interpreted as a perception that is totally independent of the environment—perhaps even as a ‘prophetic revelation’ requiring an act of faith to be believed. In this sense, intuition becomes connected with ‘divination’, and even with ‘supernatural’ powers. The present study avoids this sort of speculation. Rather, intuition is interpreted here as an unstructured perception that has unidentified causes and leads to uncertain consequences. While acknowledging that, for lack of knowledge, intuition cannot be fully specified, it is nevertheless recognised as being part of a legitimate *chain of reasoning*.

It is of significance that intuition in both interpretations (as a ‘revealed independent perception’ or as a ‘component of a presently unknown chain of causal relations’) is intrinsic to artistic endeavour. Art evades the rationality of a causality chain; it ‘appears’ as a unique creation. Even if retrospective ‘explanations’ are provided by art critics regarding the supposed sources of ‘inspiration’ and the prevailing ‘trends’ in art, the work of art itself remains essentially a creation of ‘intuition’.

Aesthetics, as the fundamental ‘philosophy’ and ‘science’ of art, includes both the objective form of beauty and the subjective perceptive faculties (such as imagination) that lead to the creation of beauty. The classical view of aesthetics attempts to deal with the objective ontological and metaphysical aspects of beauty, whereas subjectivists tend to relate aesthetics to the intellectual and emotional intuition of individuals. In this latter sense, aesthetics can be said to be akin to an entrepreneur’s intuitions with respect to proactiveness and innovation.

In this context, it is of interest that Ackoff (1978) has referred to the “aesthetics of problem solving”. In exploring the aesthetics (or ‘art’) of problem-solving, Ackoff (1978) evoked the concept of a human ‘meta-ideal’—omnipotence in being able to satisfy all desires—and suggested four conditions for this meta-ideal:

- first, an increase in the efficiency of the means to pursue ends—which requires *information and knowledge*; this is the realm of the *natural and social sciences*;
- secondly, an increase in the availability of (and access to) the resources required to employ these efficient means—which requires *wealth and power*; this is the realm of *economics*;
- thirdly, a reduction in the conflict that arises when the satisfaction of one (or one’s) desire precludes the satisfaction of another (or another’s) desire—which requires *peace*; this is the realm of *morality and ethics*; and, finally (because the meta-ideal of omnipotence can never be fully realised ... )
- an ongoing ability to imagine *improved, desirable, and potentially satisfying states*; which is the realm of *art and aesthetics*.

In his exploration of what he called the “aesthetics of problem-solving”, and especially this last point in his human ‘meta-ideal’ (that is, the imagination and pursuit of improved, desirable, and potentially satisfying states), Ackoff (1978, p. 16) asserted that:

... beauty is that property of the work and workings of man and Nature that stimulates new aspirations and commitments to their pursuit.

This definition of 'beauty' has obvious resonance with the qualities of creative entrepreneurship being advanced in the present paper. It is apparent that there is a strong artistic component in entrepreneurship—especially with respect to the entrepreneurial 'booster' functions that require a combination of *intuition* (in creating proactive visions of the future) and *rationality* (in making appropriate decisions in the present).

As noted above, the present study rejects the notion of intuition as some form of 'divination' associated with a deterministic view of the world in which events happen without recourse to any known physical law or human purpose. Rather, intuition is understood here as a perception that is part of a chain of causes and consequences that is *presently* unknown, but which is accessible to human exploration in a context of free agency and purposeful activity. Intuition is thus posited as a means by which entrepreneurs can anticipate otherwise 'unthinkable' chains of future events, while continuing to conceive of the enterprise as a purposeful system that maintains influence over its own future.

Once intuition is understood in these terms as an essentially *aesthetic* entrepreneurial activity, the question becomes whether it is possible to stimulate and enhance the role of this quality in decision-making. In this regard, two main lines of research are of relevance: research into 'creativity' and research into 'forecasting'. These are briefly considered below.

#### **4.2 Research into creativity**

Creativity is a legitimate (indeed, an essential) activity of entrepreneurs. As de Bono (1971, pp. 2 and 22) has observed:

Creativity is not a separate part of thinking. It is not a luxury to be used by artists ... Creativity is as much the business of executive management as of R&D departments.

Creativity can be understood as a process and as an ability. In both senses, creativity is essentially concerned with the *future*. The creator can never be sure of the result, and the creative ability and process thus become known only after the event (Gotz, 1981). This uncertainty includes the questions of how often this creativity will appear and how long it will last.

Although the creator never knows the actual result until it is realised, the creator repeatedly makes decisions during the course of the action—decisions that are intended to produce the desired end. These 'creative decisions' during the process are derived from experience, intuition, and expectation.

Sparshott (1981) alluded to a similar theme when he stated that a poet is never a poet until the poem is finished. According to Sparshott (1981), a poet lives with the tension between inspiration and form, and finds motivation to cope with this tension through the ongoing desire to explore new ways of realising inspiration. In this ongoing creative process, the poet draws upon accumulated personal experience and knowledge. This continuous exploration in the poet's creative ability and process is

analogous to entrepreneur's innovation and proactiveness in fulfilling the booster function of entrepreneurship.

As noted above, entrepreneurial qualities influence, and are influenced by, various environmental factors. A similar reciprocal relationship exists between artistic creativity and the environment. Kavolis (1964) found that creativity usually flourishes when a society enjoys economic prosperity, as in ancient Greece and during the Italian Renaissance. According to Kavolis (1964, p. 334), it is not prosperity *per se* that provides the impulse for creativity; rather it is "... the proportion of social resources which is allocated to non-instrumental pursuits". A larger proportion of resources not only enhances the financial security and creative freedom of the artist, but also reflects the expectations and 'open mind' of the wider society. These psychological and sociological conditions are especially important for artistic pursuits that have no apparent economic benefit. Poetry, for example, is a creative activity that is essentially without economic motivation—unlike some other artistic activities. In this sense, poetry is at the core of any study of 'pure' creativity. It is not readily apparent why someone would spend a great deal of time working on something that is unlikely to provide a living; however, as Sparshott (1981) observed, it is impossible to find a society in which poetry has not been practised.

As a process, creativity relies mainly on 'lateral thinking'—that is, thinking that relies on the possibility that *an unknown causal chain* (such as that leading to intuition, as discussed above) can be inferred by reference to *a known causal chain* acting in another (somewhat related) field. Research into managerial creativity has identified several tools that have acquired a well-deserved status among management scholars as being useful in developing business competencies. It is clear that most of these 'lateral-thinking' tools are derived, formally or informally, from the creative artistic process.

Research on creativity presupposes that creativity can be learned—much as an artist learns about the characteristics and *modus operandi* of his or her artistic tools (such as the use of colours and shapes, the synthesis of musical notes and rhythms, and the manipulation of poetic words and rhymes). De Bono (1971, p. 219) was categorical on this point:

We tend to regard creativity as something brought about by chance, or as the by-product of an ego-seeking temperament, or as a mysterious magic gift which some people have and others do not. Creativity is all these things, but only because we have made no attempt to introduce discontinuity into our thinking in any other way.

Creativity, in art and entrepreneurship alike, is assisted by making the effort to learn how ideas are generated.

### **4.3 The role of forecasting**

Forecasting deals with precognition of future trends and events. Formal methods of forecasting were initially developed at the Rand Corporation (Santa Monica, USA) soon after the end of the Second World War. Jantsch (1967) classified these methods into 'exploratory' methods (from the present to

the future by alternative possible paths) and ‘normative’ methods (from desirable futures to ways of achieving them, beginning from the present).

During the past fifty years, research into forecasting has developed under different terminological labels, but in rather similar contexts: ‘prospective analysis’ originated in France; ‘futures research’ has come mainly from the USA, and, more recently, the concept of ‘foresight’ has spread from the UK and the wider EU. All these approaches make certain presumptions: (i) the conditionality of forecasts (that is, the future will remain unknown in the present); (ii) the existence of alternative paths (that is, various scenarios are possible); and (iii) the free agency of decision-makers.

Using Jantsch’s (1967) categorisation, pure ‘normative’ approaches in forecasting are more the exception than the rule. The starting-point of such normative theories would necessarily be founded in value judgments about the objective of the decision-making agent in seeking a certain ‘desirable’ future; in fact, most objectives are usually established at the end of an initial exploratory process whereby alternatives are outlined, a preference is expressed, and objectives are then defined. Nevertheless, in theory, pure normative forecasting could be undertaken from the starting-point of an ideal future state of the world in terms of predetermined values (as is the case with a Utopian model). In this model, the visionary approaches divination, and there are strong mystical components to his or her creative intuition (whether this be in the arts or in a business enterprise). The design of ‘pure’ normative forecasting brings rational logic to the quest for a dream.

In contrast, ‘exploratory forecasting’ remains, in large part, an art. Despite the use of rigorous methods in exploratory forecasting, Godet (2001, p. 258) was apposite in asserting that futures thinking and futures scenarios represent “... an art which requires many talents, e.g. non-conformism, intuition and common sense”.

Most exploratory futures research can be classified into three methodological areas :

- *expert consultation*: including the well-known ‘Delphi’ and ‘cross-impact’ methods (well described by Godet, 1987, 2001); these methods presume that there is some form of unstructured knowledge in the minds of experts that can be reasonably used to anticipate future events or their probabilities of occurrence;
- *trend analysis and extrapolation*: including modelling (Heiss, Knorr and Morgenstern, 1973); these methods attempt to identify past regularities and (if possible) basic causalities, and thus develop assumptions about their continuation into the future; and
- *thinking tools*: which are mainly for individual use—such as interpretive structural modelling (Warfield, 1982) and morphological analysis (Zwicky, 1969); these methods try to infer indirect rational implications from simple relations (usually binary relations in sets of problems, variables, or events), thus improving an individual’s personal understanding of complex issues.

These various exploratory methods undoubtedly have the potential to improve perceptions of the future. They can therefore act as stimuli for precognitive intuitions and, ultimately, to improved decision-making. As Fontela (2000) has observed, this is clearly the role of the so-called ‘scenario methods’ of forecasting—in which all three forecasting methods (‘expert consultation’, ‘trend analysis’, and ‘thinking tools’) are integrated into *creative* long-term thinking (Fontela, 2000).

## **5. Final consideration: On the role of poetry**

Intuition, creativity, and forecasting are essential components of all artistic endeavours. These are also the essential elements in entrepreneurial decision-making—at least in the specific context of decisions pertaining to the future of the enterprise (which, in many ways, are the most important decisions to be made in any enterprise). The *rational* entrepreneur of the profit-maximisation model, who is essential for success in the market economy, has to move into the field of *aesthetics* when faced with a consideration of the things to come. Both in terms of the environment and in terms of the internalised world of his or her own initiative, the entrepreneur’s thinking must become more like that of an intuitive artist. In other words, when considering the existential questions of survival and growth, the entrepreneur necessarily becomes less ‘rational’ and more ‘emotional’.

By using the available tools of creativity and forecasting (as outlined in this paper), it is still possible to remain ‘quasi-rational’. But the final creative act—the decision that finally displaces the unknown future to a step further ahead in time—will always be essentially aesthetic.

This conclusion establishes a strong link between entrepreneurship and art, and ultimately between entrepreneurship and art’s pure expression in poetry—an art that gives sense to words. In the process of making decisions that open and close possible futures, the entrepreneur, like the poet, gives ‘sense’ to the enterprise, provides its design and its shape, and transforms its language beyond that of mere economics. The future-oriented entrepreneur and the poet share many attributes—including creativity, innovation, motivation, and courage. At their best, they both demonstrate dash, elegance, and charm.

Entrepreneurial decision-making, when working beyond the controlled and known environment in which rationality can operate, can be enhanced by a recognition of two complementary realities—a recognition of the profoundly artistic nature of entrepreneurial thinking and a recognition that art itself is not merely a matter of mystical intuition, but rather an intuition based on instrumental experiences.

A knowledge of the tools for improving perception of the economic future is an important subject for teaching and learning in business schools, and ongoing research into creativity and forecasting methods is certainly required. However, the notion of the strictly ‘rational’ entrepreneur has to be extended. In the business schools of the future, there will certainly be a place for art and poetry alongside ‘rational’ forecasting.

## **References**

Ackoff, R. (1978), *The Art of Problem Solving*, Wiley-Interscience, New York.

- Aldrich, H.E. & Martinez, M. (2003), Entrepreneurship as Social Construction: A Multilevel Evolutionary Approach. In Z.A. Acs & D. Audretsch (Eds.) *Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction*: 359–99. London: Kluwer.
- Audretsch, D.B. (2002), *Entrepreneurship: A Survey of the Literature*. Brussels: European Commission Working Paper, Enterprise Directorate General.
- Baumol, W.J. (1990), Entrepreneurship: Productive, Unproductive and Destructive. *Journal of Political Economy*, 98: 893–921.
- Baumol, W.J. (2004), Entrepreneurial enterprises, large established firms and other components of the free-market growth machine. *Small Business Economics*, 23: 9–21.
- Blaug, M. (1983), Marx, Schumpeter y la teoría del empresario. *Revista de Occidente*, 21–2: 117–30.
- Carree, M.A. & Thurik, A.R. (2003), The Impact of Entrepreneurship on Economic Growth. In Z.A. Acs & D.D. Audretsch (Eds.). *Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction*: 437–72. London: Kluwer.
- Collins, O.F. & Moore, D.G. (1964), *The Enterprising Man*. East Lansing: MI: Michigan State University Press.
- Cooper, A.C. & Dunkelberg, W.C. (1987), Entrepreneurial Research: Old Question, New Answers and Methodological Issues. *American Journal of Small Business*, 11(3): 11–23.
- Davidsson, P. (1991), Continued Entrepreneurship: Ability, Need and Opportunity as Determinants of Small Firm Growth. *Journal of Business Venturing*, 6: 405–29
- Davidsson, P. (1995), Culture, Structure and Regional Levels of Entrepreneurship. *Entrepreneurship and Regional Development*, 7 (1): 41–62.
- de Bono, E. (1971) *Lateral thinking for Management: A Handbook*. London: McGraw-Hill,
- Dean, D., Mihalasky, J., Ostrander, S., Schroeder, L. (1974) *Executive ESP*, Englewood Cliffs N.J.: Prentice Hall.
- Fontela, E. (2000), Bridging the Gap Between Scenarios and Models, *Foresight*, 2, 1, p. 10–14.
- Gnyawali, D.R. & Fogel, D.S. (1994), Environments for Entrepreneurship Development: Key Dimensions and Research Implications. *Entrepreneurship Theory and Practice*, 18 (4): 43–61.
- Godet, M. (2001), *Creating Futurus*, Economica, London
- Godet, M. (1987), *Scenarios and Strategic Management*, London: Butterworth.
- Gotz, I. (1981). On Defining Creativity. *The Journal of Aesthetics and Art Criticism*. Vol. 39, No. 3, 297–301.
- Guzmán, J. (1994), Towards a Taxonomy of Entrepreneurial Theories. *International Small Business Journal*, 12 (4): 77–88.
- Guzmán, J. & Santos-Cumplido, F.J. (2001), The Booster Function and the Entrepreneurial Quality: An Application to the Province of Seville. *Entrepreneurship and Regional Development*, 13: 211–28.
- Hagen, E.E. (1962), *On the Theory of Social Change: How Economic Growth begins*. Cambridge, MA: Massachusetts Institute of Technology & The Dorsey Press Inc.
- Heiss, K.P., Knorr K. & Morgenstern O. (1973), *Long Term Projections of Power*, Cambridge (MA): Ballinger.
- Hebert, R. F. & Link, A.N. (1989), In search of the Meaning of Entrepreneurship. *Small Business Economics*, 1: 39–49.
- Hoselitz, Bert. F. (1971), El Nacimiento de la Teoría Empresarial, in Sengler J. (coor) *El Pensamiento Económico de Aristóteles a Marshall*:. 250–72. Madrid: Ed Tecnos.
- Jantsch E (1967), *Technological Forecasting in Perspective*, Paris: OECD.
- Johannisson, B. (1995), Paradigms and Entrepreneurial Networks: Some Methodological Challenges. *Entrepreneurship and Regional Development*, 7: 215–31.
- Kavolis, V. (1964). Economic correlates of Artistic Creativity. *The American Journal of Sociology*. Vol. 70, No. 3, 332–341.
- Kirzner, I. (1997), Entrepreneurial discovery and the competitive market process: an Austrian approach. *Journal of Economic Literature*, 35: 60–85

- Knight, F. (1948), *Risk, Uncertainty and Profit*. London: The London School of Economic and Political Science & Aldrich. (first published in 1921, Cambridge: Houghton Mifflin Company).
- Krueger, N & Casrud, A.L. (1993), Entrepreneurial intentions: Applying the theory of planned behavior. *Entrepreneurship and Regional Development*, 5: 315–30.
- Krueger, N., (2003), The Cognitive Psychology of Entrepreneurship. In Z.A. Acs. & D.D. Audretsch (Eds.) *Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction*: 105–40. Londres: Kluwer
- Kuratko, D.F., Hornsby, J.S. & Naffziger, D.W. (1997), An examination of Owner's Goals in Sustaining Entrepreneurship. *Journal of Small Business Management*, 35: 25–30.
- Leibenstein, H. (1978) *General X-Efficiency Theory and Economic Development*. Oxford University Press, London.
- Loye, D. (1978), *The Knowable Future*. New York: Wiley-Interscience.
- Lumpkin, G. T. & Dess, G. G. (1996), Clarifying the Entrepreneurial Orientation to Construct and Linking it to Performance. *Academy of Management Review*, 21(1): 135–72.
- Lumpkin, G. T., Hills G. E. & Shrader, R. C. (2001), *Opportunity Recognition*. A CEAE White Paper, Chicago: Institute for Entrepreneurial Studies and University of Illinois.
- McClelland, D. C. (1961), *The Achieving Society*. London: The Free Press.
- Mises, L von (1949), *Human Action: A Treatise on Economics*. New Haven: Yale University Press.
- Ray, D.M. (1993), Understanding the Entrepreneur: Attributes, Experiences and Skills. *Entrepreneurship and Regional Development*, 5: 345–57.
- Redlich, F. (1949), On the Origin of the Concepts of “Entrepreneur” and “Creative Entrepreneur”. *Explorations in Entrepreneurial History*, 1(2): 1–7.
- Reynolds, P.D., Hay, W.M. & Camp, S.M. (1999), *Global Entrepreneurship Monitor 1999, Executive Report*. London: London Business School and Babson College
- Santos, F.J. (2004), “Convergencia, desarrollo y empresarialidad en el proceso de globalización económica”, *Revista de Economía Mundial*, 10-11, 171-202
- Schumpeter, J.A. (1934), *The Theory of Economic Development*, Harvard University Press, Cambridge (Ma), (first published in German in 1911).
- Shane, S. (1994), Cultural Values and the Championing Process. *Entrepreneurship Theory and Practice*, 18 (4): 25–41.
- Shane, S. (2000), Prior Knowledge and the Discovery of Entrepreneurial Opportunities. *Organizations Science*, 11 (4): 448-69.
- Shane, S., Locke, E.A. & Collins, C.J. (2003), Entrepreneurial Motivation. *Human Resource Management Review*, 12: 257–79.
- Schmeidler, G. (1964), Precognition Scores related to Subject's Ways of Viewing time, *The Journal of Parapsychology*, 28
- Sombart, W. (1913), *Der Bourgeois. Zur Geistesgeschichte des modernen Wirtschaftsmenschen*. München/Leipzig, Neudruck 1920
- Sparshott, F.E. (1981). Every Horse has a Mouth: A Personal Poetics. D. Dutton and M. Krausz, eds. *The Concept of Creativity in Science and Art*. London: Martinus Nijhoff Publishers.
- Thaler, R.H. (2000), *From Homo Economicus to Homo Sapiens*, Journal of Economic Perspectives, 14, 1, p. 133–41.
- Tiessen, J.H., (1997), Individualism, Collectivism and Entrepreneurship: A Framework for International Comparative Research. *Journal of Business Venturing*, 12: 367–84.
- Timmons, J. (2004), Opportunity Recognition. In Bygrave, W. and Zacharakis, A. (ed) *The portable MBA in entrepreneurship*, 29–70, New Jersey: John Wiley.
- Van de Ven, A & Garud, R. (1989), A Framework for Understanding the Emergence of New Industries. In R. Rosenbloom & R. Burgelman (Eds.). *Research on Technical Innovation. Management and Policy*, vol 4: 195–225. Greenwich, CT: JAI Press.
- Warfield, J.N. (1982). Interpretive structural modeling. In S.A. Olsen (Ed.), *Group planning and problem-solving methods in engineering* (pp. 155–201). New York: Wiley.

- Weber, M. (1904), *Protestantische Ethik und der Geist des Kapitalismus*. Tübingen: JCB Mohr.
- Wennekers, S & Thurik, R. (1999), Linking Entrepreneurship and Economic Growth. *Small Business Economics*, 13: 27–55.
- Zwicky, F. (1969), *Discovery, Invention, Research—Through the Morphological Approach*, Toronto: Macmillan.