

**ACTION - RESEARCH FOCUSED ON THE SHAPING OF THE FUTURE****George NICULESCU***"Constantin Brâncuși" University of Tîrgu-Jiu*

*Abstract: This paper is the result of action-research in which action itself is researched. In it are presented, defined, founded and specified: the concept of shaping the future and the concept of adequate architecture (within the model of minimal thematic processor) used for the organization of a strategic design group which is working for the shaping of the future. The action-research carried out provides some theoretical and practical arguments which plead for the adopting by the groups of strategic design of the concept of shaping the future and for organizing them towards the architecture of a minimal thematic processor. The research shows that the adoption of these concepts: 1) is possible and 2) through the subjectivity component based on phenomenological approach it allows the increase of the capacity for anticipation and for shaping / specifying the future reality.*

*Keywords: future shaping, paradigm, adequate architecture, market, action-research, model, foresight.*

**Introduction**

According to Thomas Kuhn an explicitly formulated paradigm has the shape of an answer to the following general questions:

What is kept under the observation? (An area to focus the knowledge effort together with observation „mission”)

And in this context:

- How to do the observations and by what means?
- For what kind of questions (issues) is supposed to search the answers?
- How these questions should be structured? (which is the optimal problematic structuring process?)
- How to prove the answers and what probation means are necessary?
- How should be interpreted the results of investigations?

If the area of focusing the knowledge mission is a problem (an issue) and not a part of the objective reality, then, we define a sub-species of paradigms which we call thematic paradigms.

One of the questions that may be put about a problem in the frame of a thematic paradigm is: how general and how particular is this problem. A problem that will pass the frontiers of many traditional knowledge domains will have a trans-disciplinary character, and a possible answer to this question becomes a principle that could become an universal valid / applicable principle. It is from this type of problem and from the system class where it could be applied we started this paper, trying to identify the way towards a better foundation of the entrepreneurial science.

The question from which we started is: *is there a specific implicit problem of any tangible or intangible achievement?*

Keeping the spirit of the action-research, before answering, we observe a few facts. If we are viewing the way of action and performing of different innovative entrepreneurs along a few centuries of capitalist development, we can say that in principle the entrepreneurs approach was a *suis generis* action-research one. As an recently example, from the book of Jessica Livingston *Founders at Work: Stories of Startups' Early Days*, Apress Publishing, 2007, we see that the innovative entrepreneurs with success stories practice an intuitive, non conscious, non formalized action-research. In the innovative start-ups nothing goes according to the plan, and so it is needed both perseverance and adaptability. So the trial and error process of intention – achievement, inherent to this phase can be seen as being one of action-research type.

This is the thematic frame of the paper. Putting it into action-research way, this frame translates into some practical questions:

How to easier go through from the spontaneous idea, just emerged (pop-up) in the mind, to the practical validated idea by logic and/or experiment, without killing it? How should be done so that the foresight teams to see more things and not longer in the future? With other words, how to introduce the phenomenological reflection in the research oriented to Future Studies?

#### **Foresight (*exploration of the future perspective*)**

Foresight is part of the research domain of future studies – research about the future regarding the evolution of ways to face the future, including in the study more and more aspects of reality, even the future study itself.

The foresight is a transdisciplinary research activity, inherently collaborative, which suppose the interaction between persons and organizations with a diverse professions, specialists, ages, resources, cultures, etc. Foresight is participative action-research to generate knowledges regarding the future, and to learn individual skills and group practices within an organized frame of networked organizations. Foresight put the problem of knowledge management both to an organized frame and to the thematic specialization area.

During the 1970 years this research domain domain was called forecasting and it was focused on the methods to predict the future especially with modeling econometric techniques, using mainly data from the past<sup>1</sup>. Between the methods we mention: trend extrapolations, S curbs, trend curbs and the analysis of patents and publications.

Foresight (*exploration of the future perspectives*) enlarged the research domain by incorporating methods that allow networking to collect the data, to assess and to interpret them, and also methods to support decision making<sup>2</sup>. Further on, the foresight includes research about the capacity of organizations to approach the future<sup>3</sup>. Both the forecast

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<sup>1</sup> Anderson, J. (1997) Technology foresight for competitive advantage, Long Range Planning, Vol. 30, No. 5, pp. 665-677.

<sup>2</sup> Cuhls, K. (2003) *From forecasting to foresight processes - New participative foresight activities in Germany*, Journal of Forecasting, Vol. 22, No. 2-3, pp. 93-111

<sup>3</sup> Tsoukas, H. and J. Shepherd (2004) *Coping with the future: developing organizational foresightfulness - Introduction*, Futures, Vol. 36, No. 2, pp. 137-144

techniques and foresight ones have been used at the level of companies, as well as at the regional, national and supranational levels, as the economic zones.

During the 1990's years the research domain has been enlarged to include the process of investigating the future at the level of organizations. The term of strategic exploration of the (*strategic foresight*) was developed by referring to the research focused at the level of a company<sup>4</sup>. Today, grosso modo, the future analysis substituted (as preferred term) the strategic foresight<sup>5</sup>.

Sector and space specialization of the foresight represent an important problem of economic optimization.

The performance of this activity in a domain and/or in an area depends on the performance of the foresight in other key collateral domains and in other geographical zone on the same level and on different levels. The shorter the geographic area and the bigger the needs for foresight of the diversified sector, the more scarce are the economic resources required to perform it. The connection is a powerful nonlinear (even discontinuous) one, as often happen in the case of complex systems.

Coming back to our thematic frame, *the success key should be somewhere in the phenomenological and not in the formal. Or in the phenomenological and in the formal? Even it is not too positivist from our part, we may say from the beginning that we tilt to believe that ...it deserve to try an answer by research, as fundamental research as possible*

we put once again the following questions:

How to easier go through from the spontaneous idea, just emerged (pop-up) in the mind, to the practical validated idea by logic and/or experiment, without killing it? How should be done so that the foresight teams to see more things and not longer in the future?

As we may see, foresight implies a lot of qualitative data and a large diversity in themes composition. The interest may be focused on a broad scale, from big regions to firms, and centered on economic, social, political or scientific themes. Here the networks are inevitable. But as Nonaka and many other researchers of the "knowledge based times", the tacit communication may be also altered.

### **Towards shaping the future**

As things always start from a personal idea, the initial demarche is a preponderantly phenomenological one. This type of situation is also indirectly remarked in an entire series of

<sup>4</sup> Slaughter, R.A. (1997) *Developing and Applying Strategic Foresight*, ABN Report, Vol. 5, No. 10, pp. 13-27.

Roll, M. (2004) *Strategische Frühaufklärung : Vorbereitung auf eine ungewisse Zukunft am Beispiel des Luftverkehrs*, Wiesbaden: Dt. Univ.-Verl.

Rauscher, L.-H. (2004) *Strategische Frühaufklärung : neuer Vorschlag zur finanziellen Bewertung*, Lohmar ; Köln: Eul.

<sup>5</sup> Dürr, H.-P., et al. (2004) *Werkstattbericht Nr. 64: Zukunftsforschung im Spannungsfeld von Visionen und Alltagshandeln*, Berlin: IZT.

Kreibich, R. (2006) *Arbeitsbericht 23: Zukunftsforschung*, in *Zukunftsforschung* Berlin: Institut für Zukunftsstudien und Technologiebewertung.

Burmeister, K., et al. (2002) *Zukunftsforschung und Unternehmen - Praxis, Methoden, Perspektiven*, Essen: Druck- und Verlagskooperative stattwerk e. G.

Porter, A.L., et al. (2004) *Technology futures analysis: Toward integration of the field and new methods*

works<sup>6</sup> by Gaurab Bhardwaj, who puts as base of his concept and his method of *anticipatory entrepreneurship* the idea that "markets can be anticipated by discovering (s.n.) and meeting latent needs rather than needs that are expressed and known. Anticipatory entrepreneurship deals with operating in the region that precedes the point of origin of the familiar industry life cycle curve. It is about creating the curve's origin and setting its growth trajectory".

Even the expressed needs are difficult to be formalized in a demarche, not to speak about the latent ones, which in order to structurally be researched should firstly be brought into light through open communication, therefore, appealing to an inevitable phenomenological component. The discovery in mind that „a certain (even vaguely defined) latent need might exist” is a purely phenomenological knowledge fact.

For the field of the orthodox economic sciences, on which the excess of formalization seems to have become a blocking factor if not a noxious one<sup>7</sup>, it is difficult to admit that market is an essentially phenomenological entity. In this way, the economic foresights are often overbalanced by events of phenomenological origin. Riots, fashion, attempts, panics etc., may unbalance any prognosis or previous allotment. As much as we would formalize, we will be able to describe at most the anticipatory behavior systems generated by needs that have already been structured and not by behaviors generated by needs which are still latent.

Besides, the definition of the concept of anticipatory system itself deals with formal difficulties. Robert Rosen, in the famous book „Anticipatory Systems”<sup>8</sup> tentatively defined the concept of an anticipatory system: "a system containing a predictive model of itself and/or of its environment, which allows it to state at an instant in accord with the model's predictions pertaining to a later instant."

Such definition of an operational value does not give us any chance to explain „how come that the anticipatory systems have appeared” in a determinist manner. It only makes us admit their existence, although we have always known it by the fact that we know that we are anticipatory itself, because we anticipate and we know that we know it. Where do we know it from? From our own experience which, as Mihai Draganescu affirms as well in his work (e.g. *Ortophysics*) is profoundly a phenomenological one. Admitting that in reality also final causes take part in the action and that it cannot be explained without considering them as being fundamental is actually difficult only for the ultra-positivist academic world. As Dubois<sup>9</sup> also remarks, "Robert Rosen considers that anticipatory systems are related to the final causation of Aristotle. A future cause could produce an effect at the present time. Then the causality principle seems reversed. Robert Rosen relates some anticipatory systems to feed-forward loops".

Entrepreneurs however do not have these kinds of ultra-positivist prejudices, they also base on intuition in a great deal. They know that the others make use of feed-forward loops so

<sup>6</sup> Bhardwaj, Gaurab, John C. Camillus, and David A. Hounshell (2005). "The Search Process and Dimensions of Long-Term Growth". Ch. in *Innovating Strategy Process*, eds., Steve W. Floyd, Johan Roos, Claus Jacobs, and Franz W. Kellermanns, pp.213-226. Blackwell Publishing, Oxford, UK

<sup>7</sup> ...as many times has even vehemently observed Georgescu Roegen, proposing the exceeding of the arithmomorphic obsession by accepting the dialectical penumbra, natural situation in the economic sciences

<sup>8</sup> Rosen R., 1985: *Anticipatory Systems*. Pergamon Press, New York

<sup>9</sup> Dubois M., 1999: *Computing Anticipatory Systems*, CASYS, Vol. III, No.1, pp 67-102

they act in an intentional, anticipative, proactive manner, exactly for building the future – they make (or at least try to, even with risks) an exercise of programming the future, harboring anticipatory behaviors (based on feed-forward) of the others. Entrepreneurs make the economy, the economists only try to MAP out how to make it less risky, choosing the financeable companies and who is trustworthy enough to make them by the decisions of investments and by the right of monetary emission of the banks.

To put it in a nutshell, the problem is not the fact that we need an extra-player in order to assure us that the entrepreneurial process does not introduce unacceptable risks in the social-eco-ecological environment through its pioneering, but the one that the player is too likely to only see the monetary risks, reducing everything to them.

As a matter of fact, we should talk about at least three players in the reality of the possibilities of accomplishment, to decide as motivated as possible whether the offer of an implant of a niche of a new market is acceptable, having in view the complex connection: risk/chances/promises. Those three players would be: *the initiators, the consumers and the investors, each of them with their knowledge of allocating the resources and with their specific methods of pursuing the way from intuitive/phenomenological to deterministic/structural*, so that only the final vote should contain an as reduced as possible phenomenological shadow – the decision should be made in the most responsible way and with the essential contribution of conscience.

If on a market is implanted a new industry which is preexistent on international level, the implant will cause co-adaptation perturbations. In emergent regions, where massive extra-regional investments take place and where important shares of the industries from the developed countries migrate, these kinds of perturbations may be major. For example, the labor market may suffer important structural modifications. Technically, a new sector appears and, as a result, the economic structure as a whole is changed.

At the same time (having in view the fact that an architecture means structure and form), the entire architecture of the market will change and this will induce variations of the constraints, previously established, practiced by the market on the social system. All the other subsystems will locally be adapted. The entire process will evolve, during the transition, at local levels. The former objective of performance of the entire system will significantly be discarded by the new architecture, transitional, in evolution one.

### **Shaping the future**

#### ***a. The issue of shaping the future - an issue of architectonic creation***

In the conceptual language developed in the theoretic research phase, any strategies propose a change of life situation at social level, using a way to solve ...of a latent benefit. In detail, a strategy propose the acceptance of a passage from the actual life situation to future life situation, as a solution to be adopted at the level of social behavior, claimed as being necessary to the creation of a latent benefit (satisfaction of a need / desire non satisfied) by indicating a way to be solved at the behavior level – an action plan.

#### ***b. The process of shaping the future***

How do we make the change of the vision?

From what is presented above, we deduce that one of the critical element to do - in order to attain the desideratum for sieving the stakeholders, and, why not, to ally them - is the

promotion and acceptance of change at the societal level. This is a performance requirement for the “reception of a strategy”, that most of the specialists claim it. But how is possible to succeed? The strategic leaders can control the process of promotion, but not the process of acceptance.

In order to maximize the chance of acceptance, it is needed the passage from the vision of desirable future to the vision of acceptable future, and from the vision of possible future to the one of feasible future.

### **Conclusions**

To have a well shaped description of the future means to talk about a shaped world, as though this world is concrete, and not about the future characterized by the terms of strategic calculus.

This presume an effort of narrative scenario making, which is to be done to go from technical terms, cold and dry, to “live” histories – stories – drama of that world. It must be reminded that always the germs of the future are in the present.

We distinguish the following situations for shaping the future world from the actual world:

- case of emergent shaping – is profiled on the current trends which escape the strategic will, “as like these trends have their own will”;
- case of shaping the future by the “others strategies”;
- case of shaping the future by “own strategies”.

As well, let us see that the shaped world is not unique. A well shaped description should compare worlds that “shape themselves”, so that to be choose “that desired world”. Only with such a description the change leaders could launch the strategic proposal to the public (in this moment this is “their own strategy” which is to be transformed in a common one, in order to increase the chances of strategic success by countering the trends of the system to “break” into a number of subsystems with divergent and/or contradictory objectives against the strategic objective.

On the basis of this well shaped description of the desired world it is possible to pass to the shaped description of the expected changes during the process, in the same way of narrative scenario making which is to be done to pass from technical terms, cold and dry to “live” histories – stories – drama.

The last step is to shape the bet by shifting from the desirable vision to advantageous vision:

- description of the strategic offer in terms of advantages;
- individualized in terms of strategic advantages of the offer, for the changes of the actual situation accordingly to each different category of public;
- understanding the specific bets of each participant regarding the change;
- of their transaction formula, so that;
- the advantage of their summing to be possible to constitute, after democratic consultation and negotiation, into a common bet.

What distinguishes the process of shaping the future from a classic process of strategic elaboration is the sub-process of scenario making involved in the requirement of the Shaped

Future, i.e. the process of transposition of the strategic action plan into a narrative product about the story of “adventure” to live, going through the route from the actual world (non advantageous) to the new world, advantageous for all.

These imply the inclusion of creators of narrations into the group of strategic design and, of course, it is desirable that they have the artistic abilities needed to give a better result.

The main conclusion of this research, seen through the prism of:

- including the subgroup „Scenario” in the frame of the group for strategic design,
- adoption of the concept of shaping the future, and
- organizing the activity of this group according to an architecture of minimal thematic

processor,

*is the following:*

Adopting the concept of shaping the future and of the architecture of minimal thematic processor by the groups of strategic design:

- 1) is possible,
- 2) is useful and fertile – through the component of action-research based on a phenomenological approach - and so permitting the increase of the capacity for anticipation and for shaping / specifying future realities.

### References

1. Anderson, J., Technology foresight for competitive advantage, Long Range Planning, Vol. 30, No. 5, 1997
2. Bhardwaj, Gaurab, John C. Camillus, and David A. Hounshell (2005). “The Search Process and Dimensions of Long-Term Growth”. Ch. in *Innovating Strategy Process*, eds., Steve W. Floyd, Johan Roos, Claus Jacobs, and Franz W. Kellermanns, Blackwell Publishing, Oxford, UK
3. Cuhls, K., From forecasting to foresight processes - New participative foresight activities in Germany, Journal of Forecasting, Vol. 22, No. 2-3, 2003
4. Drăgănescu, M, Introduction to the Structural-phenomenological Philosophy. The Orthophysical Paradigm, Ardealul Publishing, Targu Mures, Philosophy Library, 2001, \* e-book, MSReader format, ISBN 973-8300-00-2.
5. Dubois M., 1999: Computing Anticipatory Systems, CASYS, Vol. III, No.1
6. Dürr, H.-P., et al. (2004) *Werkstattbericht Nr. 64: Zukunftsforschung im Spannungsfeld von Visionen und Alltagshandeln*, Berlin: IZT.
7. Gaurab, B., Chowdhry, V., “The Method of Anticipatory Entrepreneurship”, *Frontiers of Entrepreneurship Research*, 2005
8. Gaurab, B., Camillus, J. C., Hounshell, D. A., “The Search Process and Dimensions of Long-Term Growth”. Ch. in *Innovating Strategy Process*, eds., Steve W. Floyd, Johan Roos, Claus Jacobs, and Franz W. Kellermanns, Blackwell Publishing, Oxford, UK, 2005
9. Kreibich, R. (2006) *Arbeitsbericht 23: Zukunftsforschung*, in *Zukunftsforschung* Berlin: Institut für Zukunftsstudien und Technologiebewertung.
10. Porter, A.L., et al., Technology futures analysis: Toward integration of the field and new methods, 2004

11. Rauscher, L.-H. , Strategische Frühaufklärung : neuer Vorschlag zur finanziellen Bewertung, Lohmar ; Köln: Eul., 2004
12. Rosen R., 1985: Anticipatory Systems. Pergamon Press, New York
13. Slaughter, R.A., Developing and Applying Strategic Foresight, ABN Report, Vol. 5, No. 10, 1997
14. Tsoukas, H. and J. Shepherd, Coping with the future: developing organizational foresightfulness - Introduction, Futures, Vol. 36, No. 2, 2004.