THE INTERNATIONAL CONFERENCE IN ECONOMICS AND ADMINISTRATION
ABSTRACT

It is paradoxical to know that production of science in different disciplines has been significant in Iran, but it has played a very limited role in the production of administration science in the world. This fact refers to the gap between Iran and other countries in terms of administration science. This problem has no solution but transferring of knowledge and borrowing the scientific findings of more advanced countries; and the problem of localization of knowledge still remains unsolved.

The present study, through a hermeneutic approach, embarks on the offering a phenomenological interpretation to provide a proper understanding of the application of Era-Based Cellular Planning (ECP) for development of knowledge in light of collage metaphor.

To this aim, and to relate the propositions abstracted in research process affected by rationalistic epistemology, analytic-logical method has been employed.

Using the metaphor of collage for understanding scientific theories, skillful managers and theoreticians are trained. Hence, the knowledge of administration is produced throughout the world and is accumulated in large global knowledge management repositories. Iranian managers and theoreticians should be trained so that they can create collages of new theories by synthesizing the findings in practice and take collection of synthetic theories. In this way, a large number of country’s administration problems is redefined and developed in the process of solution.

Keywords: Era-Based Cellular Planning (ECP), Collage metaphor, Administration science, Knowledge production

1. INTRODUCTION

Developing countries perceive wide gaps between theory and practice as if theories belong to a world different from the world of action and practice. Perhaps, the reason is that the scientists follow the scientific schools of advanced countries, while practice deals with the realities of any given society.
Scientific issues are not confined in the borders of scientific communities, but take place in the wider area of actual societies. Hence, the need for formulation of problems in interdisciplinary, multidisciplinary, and trans-disciplinary fields is very necessary (Scott & Davis, 2007, 17).

The relationship between science and practice is very accurate in advanced countries. In these countries, the science of administration has emerged and gradually developed in response to administration problems. This is while in developing countries, a sort of knowledge transfer has happened. Therefore, in a phenomenological analysis, the science of administration in developed countries is the result of the interaction between scientists and agencies; while in developing countries, it is the outcome of the interaction between scientists of these countries with the scientists of developed ones.

The trend of knowledge transfer was valuable in initial stages. It is a precious opportunity through which developing countries, without having to pay for the experiments and experiences, benefit from the achievements of scientific endeavors of developed countries. However, this procedure has three main drawbacks:

- Incongruity of the past findings of developed countries with present issues of developing countries, and the problems arising from the improper application of knowledge.
- Intellectual laziness of the researchers and scholars of administration in developing countries and the habit of borrowing knowledge from the West.
- Forgetting the necessity of exploration for identifying, detecting, and understanding problems as the starting point of scientific activities.

Therefore, it appears that the responsibility of knowledge policy-making institutions in developing countries is greater than that of developed countries. In Iran, the High Council of Science, Research and Technology is one of knowledge policy-making institutions. This council tries to make the most out of research budgets by wisely allocating the limited resources.

In this respect, the present study intends to propose a method which makes it possible to gradually develop knowledge in this area. The situation of administration science in Iran is very paradoxical; while in recent years Iran has had significant achievements in various scientific areas, its contribution to the administration science in the world was very low. This refers to the wide gap between Iran and other countries of the worlds in terms of administration science. In such a condition, the only solution is knowledge transfer and borrowing of the scientific findings of more advanced countries which keep the problem of localization unanswered.

The present study suggests using the metaphor of collage for understanding scientific theories and training managers and artistic theoreticians. In this way, the science of administration is produced throughout the world and is accumulated in large global knowledge management repositories. Iranian managers and theoreticians should be trained so that they can create collages of new theories by synthesizing the findings in practice and take collection of synthetic theories. In this way, a large number of country’s administration problems is redefined and developed in the process of solution.

2. RESEARCH METHODOLOGY

The main goal of this study is to investigate conceptual and philosophical propositions. The exploratory nature of research led researchers look into phenomena from a different perspective. This study has been conducted through a hermeneutic approach in which the research is directed toward construction of a phenomenological interpretation to reach a proper understanding of the phenomenon under study. Then, to relate the propositions
extracted through research and under the influence of rationalistic epistemology, analytic – logical method is employed. In analytic – logical method, the evident major premise is combined with the resulting minor premise, and the logical result is achieved (Glaser, 1978; Glaser & Strauss, 1967).

The data used in this study were the articles, books, and scientific and organizational reports considered as objective realities. According to Glaser and Strauss, in theoretical sampling, it is not necessarily sufficed to one kind of data about an issue, or a specific method for collecting data; rather, different data and different perspectives and views are used to reach an understanding of the issue (Danaee fard, et al., 1383). In this method, sampling is continued up to the point where no new information is obtained (Glaser, 1978).

In this study, references in the field of application of Era-Based Cellular Planning (ECP) (Pourezzat, 2010; Pourezzat et al., 2011b) and collage metaphor (Hatch, 1997, 54-5) were reviewed to get the theoretical richness of the final model.

The validity of the final model in offering an appropriate answer to research question was estimated and minor modifications were made in some aspects.

3. THE PROBLEMS OF DEVELOPING ADMINISTRATION KNOWLEDGE IN IRAN

Before commencing the discussion, some points are raised about the realities of administration knowledge in Iran:

- Usually, the administration issues in Iran are formed under the influence of the mentalities and specific views of policy-makers in a given period of time.
- Sometimes, the intellectual frameworks of policy-makers affect the identification and definition of administration issues to the extent that they can never understand the reality of administration issues.
- Sometimes, the sense of belonging to an idea, belief, or attitude prevents policy-makers from perceiving the signs inconsistent with it in reality; therefore, they define and interpret administration issues differently.
- Sometimes, the modern tools of administration affect the entry of real information on administration issue to the extent that make policy-makers receive wrong information and accordingly, define the problems wrongly.
- The fact is that despite the long history of administration science in Iran (since Achaemenians), the production of this science is very weak at present.
- Administration issues are very diverse and numerous; thus, prioritized collections of issues are formed which are continuously added up to.
- The theories invented by other countries are useful, but not comprehensive and applicable prescriptions for solving the problems in Iran.
- The combination of the achievements of world knowledge on administration, and selective and artful application of it in light of collage metaphor can be very fruitful.
- Using theoretical collages and solving problems in the short run must not prevent scientists from focusing on the necessity of paying attention to the relation between science and practice in administration. That is to say, Iranian administration scientists must develop their scientific achievements rapidly and consider local problem solving as their target of knowledge production.

As such, the science and practice of administration in developing countries must converge so that in future, the science of administration would serve its practice and sustainable development of the country. It can be argued that there is a wise relationship
between the advancement of countries in the science of administration and their sustainable development; a very trustable relationship.

4. SWOTN MATRIX FOR DEVELOPMENT OF ADMINISTRATION KNOWLEDGE

Considering the diversity of administration issues in Iran, as well as issues imposed upon administration of every society by the realities of the world and social incidences, the science of administration deals with an increasing set of issues.

As such, a sort of prioritization system is required to give order to such diverse problems of administration. Before addressing the use of Era-based Cellular Planning System (ECPS), it would be fruitful to present a discussion of SWOTN matrix. The policy-makers of administration in Iran face the following strengths:

- Presence of universities and research centers of humanities relevant to administration, and significant number of graduates of higher education in this field
- Incompetency of some managers and their alienation with the science and practice of administration;
- Political behaviors and spaces permeated to the various levels of Iranian public organizations;

The main existing opportunities are:

- Change of administration language affected by development of electronic administration;
- The possibility of coordinating master’s and Ph.D theses and dissertations for solving administration problems, under supervision of the high council.

The major threats are:

- Fundamental changes in administration issues which, sometimes, changes priorities according to the necessities of time and place;
- Decline of the spirit of useful research and study due to interest of some researchers and university professor in easy and repeated while productive work;
- Brain-drain in unexplainable trends;
- If any given problem is not solved, it might change into an increasing threat.

Also, the main needs are:

A problem must have one or more alternative solutions which provide the possibility of solving it in different situations.

The problem-solving capacity must be growing and flexible to provide priorities and policy packages in flexible frameworks, as necessary.

The appropriate strategic planning system must be capable of considering all these 10 points.

5. THE APPROPRIATE STRATEGIC PLANNING SYSTEM

Various approaches of theoreticians in the area of strategy to the way strategy is developed in organizations have led to various and numerous models in this area. Although this plays a very significant role in the richness of strategic management literature and contributes to the expansion of choices of practitioners in the area of strategy (e.g. researchers and senior managers of organization), in some cases, confuses the practitioners faced with the models and difficulty of choosing from among them. This has made some researchers of strategy offer a typology for classification of different kinds of strategies. Nutt and Backoff

Investigating the typologies proposed by these researchers reveals a kind of contradiction among them. This led Galbraith and Schendel to provide a useful classification of different kinds of typologies in the work entitled “An Empirical Analysis of Strategy Types”. In their view, some typologies involved business level strategies, and some others cover corporate level strategies. Meanwhile, in the marketing literature, too, some typologies of marketing behavior strategies are seen. For example, Kotler proposes 9 marketing strategies some of which resemble the strategies stated in strategic management literature (Kotler, 1965: 104-109). Besides, Galbraith and Schendel identified other kinds of typologies which try to classify the patterns of organizational behavior (Galbraith and Schendel, 1983; 154) such as the typology of Miles and Snow (1978) who divide strategies into defensive, reactive, analytic, and exploratory strategies. These typologies study the relationship among strategy, structure, and process rather than focusing on the patterns of strategy (Miles & Snow, 1978: 30). Some of the main typologies of organizational behavior are the ones proposed by Mintzberg (1973), Miles et al. (1978), Acar et al. (1987), Nutt and Backoff (1995), Chaffee (1985), Laurial (1997), Mintzberg (1978), and Whittington (2001).

Whittington (2001) is one of the researchers who classified strategies on the basis of the pattern of organizational behavior. In discussions of the nature of strategy and its importance, he introduces four classical, evolutionary, process, and systemic approaches.

- In classical approach, the organization can predict market changes through planning and adapt itself to them. Thus, strategy can be developed through logical and rationalistic analyses. Hence, one must avoid the agitated space of business and develop strategies in the thinking room of the organization.
- In evolutionary approach, the environment is complex and unpredictable. Therefore, spending energy for developing strategic plans is disastrous. In fact, considering the continuous changes of actors in the environment and market, strategy-makers of the organization should not limit their choices; rather, they should continuously increase their quantity and quality.
- In process approach, it is not possible to separate planning from implementation (as suggested by classical approach) and an effective strategy is the one which is developed directly through participation and close involvement in all stages of activity in the environment. It is the outcome of action in environment and interaction with it.
- In systemic approach, strategy must be developed in relation to environmental condition; it must be effective and efficient; and is developed and implemented in line with its specific social context. Therefore, a good strategy is the one which is designed and implemented in accordance with various considerations of the environment (Sodagar, 2009).

Developing strategy is not easy task considering the various scenes of social life, especially at national level and social macro systems it deals with numerous issues and variables the number and diversity of which are continuously increased.

In general, classical and planned approached, despite their rather strong claims, cannot be useful in complex and changing environments, and their claimed rationality cannot be achieved by the existing technology and planning procedures. The evolutionary approach ignores many peculiarities of the system affected by demands of the environment; while the organizations are justified by their special, unique and distinguishing features. In this analysis, “presence” or “absence” of indistinguishable organizations are considered equal, i.e. if an organization dependent upon the environment is eliminated, no one would notice it. Therefore, analyzing the growing behavior in environment-dependent organizations is useless, because these systems play no role in the evolution of the environment.
However, adaptive, systemic, and process approaches deserve consideration. Adaptive approach refers to the necessity of gradual modification of the strategy in practice. Systemic approach contributes to the relation of micro-systems, systems, and macro-systems, logic of self-analysis of the system and its power in environment, and developing more logical and effective strategies. In addition, this changeable, problem-oriented, and flexible process approach adds to effectiveness and efficiency of developed strategies. This approach, drawing on the metaphor of artist potter, believes that the manager, like the potter, must always be at the core of practice and deal with real problems.

Hence, it seems that one must enter the future with an approach with though strategies learning from the changes of the environment that can get the emergency factor from the feedback processes and exert influence in the process of continuous modification of strategies. The implication of two valuable researches on the process of strategy development in public organizations of Iran was that the strategy development must be deliberated as much as possible, but the system must have enough capacity for facing emergencies so that it can adapt its strategies with the requirements of the organization and environment according to rules of process approach (Sodagar, 2009; Naji, 2009).

This reveals the necessity of combining the findings of these two approaches in an attempt to synthesize the advantages of “acting upon previous thought” and “flexibility for facing the emergencies of the era”. This necessity is the main claim of this work about the effectiveness and efficiency of the application of ECP.

Hence, the present study, focusing on the unavoidable necessity of “rational stability” and “compulsive flexibility” for effective and efficient confrontation with the realities of contemporary world, emphasizes designing era-based cellular planning system. The main distinguishing features of this system are flexibility in the changes of era and high capacity for replacing pre-planned cells or scenarios with the framework of strategic plans. These two features provide ECPS with specifications which contribute to the capacity of the system (organization or government) for rational action facing with the rapidly-changing world.

Strategy is the result of human thought. So, it is a convention in the language and can be repelled in it, too, and there is not unique and rigid way to develop it. The important point is to devise a way to achieve social goals with highest degree of effectiveness and efficiency (Pourezzat, 1389: 29-51).

### 6. ERA-BASED CELLULAR PLANNING SYSTEM (ECPS) AND ITS CAPACITIES

ECPS is based on a strategic approach to planning in a highly-competed and challenged situation. Particularly, the vaster, more analytic, riskier, and more strategic a plan, the more there is the need to use ECPS.

Here, the stages of applying ECPS for identifying, classifying, and prioritizing general problems, as well as organizing and managing academic and administration researches for solving those problems are briefly discussed (Pourezzat, 1389, 119-146).

### 7. ERA-BASED CELLULAR PLANNING (ECP)

ECPS becomes very flexible to overcome the difficulties of planning and development, and using its cellular structure, makes it possible to review the stages of implementation of present and future plans of administration science and even manage the
undesirable effects of previous plans according to the situation of knowledge and technology development.

The cellular structure of these plans creates a situation where the future plans are less affected by previous plans. In other words, the future is less dependent upon the past actions. For instance, if the long term plan refers to a 20-year outlook, it can be divided into some 5-year plans, several 1-year plans, and a large number of some-month, 1-month, even smaller plans, so that each of these micro-plans constitute one cell of the ECPS (Fig. 1).

It goes without saying that if the set of plans are designed as integrated packages, the planning and implementation system would be very vulnerable, as the planners, in the face of any change of the environment, will have to revise their plans, stop many parts being implemented, and remove many implemented parts.

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Fig 1. One Page of ECPS Involving an Infinite Number of Planning Cells (pourezzat, 2010)

As it is shown in Fig. 2, every letter refers to one era, and each index refers to one plan from a family of plans. For example, cell A59 refers to plan 9 from the family of plans 5 in era A. Also, cell E76 refers to plan 6 from plans 7 in era E.

Fig. 2: Network of ECP System from A Era to Z Era (Pourezzat, 2010)

Each cell refers to one scenario or plan of an era of one age. These cells must be designed as a collection of micro-systems based on the hard and soft relation.

ECP is designed with the aim of providing the opportunity for continuous optimization of decisions and policies so that the continuous nature of the outcomes of any decision is
considered and understood by planners and administrators. This continuity is specially affected by the nature of systemic links among cells (Pourezzat, 1389, 95-99).

8. THE USE OF ECP

To make a coherent connection in ECP, use of cellular structures to be consecutively placed in consecutive ages is recommended. These structures deeply complement each other in a network of strategies and can be called conceptual strategies (Fig. 3).

![Fig. 3: Spread Dashboard of Planning in National Scale (Pourezzat, 2010)](image)

Conceptual strategies should not be limited by a strategy or a group of strategies; rather a set of numerous and diverse scenarios must be designed and the possibility of using them in successive ages must be planned. Also, a large number of accompanying strategies can be devised in successive ages. This needs skill and creativity for developing matrix and completing its surface and depth (Pourezzat, et al. 2011a, 20-21).

9. CONCLUSION

It is quite possible in the development process of developing countries that turning back has some advantages; such as the possibility of using tested technologies instead of reinventing it, and even moving toward previous technological standards of developed countries, but the necessity of using the experiences of pioneering societies in this area and localizing their successful experiences is felt.

The situation of administration science in Iran is very paradoxical; while in recent years Iran has had significant achievements in various scientific areas, its contribution to the administration science in the world was very low. This refers to the wide gap between Iran and other countries of the world in terms of administration science. In such a condition, the only solution is knowledge transfer and borrowing of the scientific findings of more advanced countries which keep the problem of localization unanswered. As such, scientists focus on issues belonging to the advanced world while living the world which reflects the realities of the backwarded world.

Hence, the relationship of theory and practice breaks down in developing world. For example, it developed countries, the presence of administration science in the face of social
phenomena is more serious that developing countries, as in those countries, the administration science has grown together with administration problems, and its function is problem solving. The present study, in light of a hermeneutic approach and using the metaphor of collage, embarks on providing a phenomenological interpretation to create a proper understanding of the application of ECP for development of knowledge.

ECP has a remarkable capacity for knowledge policy-makers. Using this system, one can prioritize different problems and provide the possibility of solving them as vertical and horizontal packages in the dashboard of the action age and subsequent ages according to the nature of hard and soft relations among them. The final goal of this system must be defined in a way to direct any academic research to one or more problems, so that one problem is solved, mitigated, or at least identified and prioritized in every research.

Hence, using the metaphor of collage for understanding scientific theories and training managers and artistic theoreticians is justified. In this way, the science of administration is produced throughout the world and is accumulated in large global knowledge management repositories. Iranian managers and theoreticians should be trained so that they can create collages of new theories by synthesizing the findings in practice and take collection of synthetic theories. In this way, a large number of country’s administration problems is redefined and developed in the process of solution.

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REFERENCES