

EPISTEMOLOGY OF MANAGERIAL SCIENCE, or why do managers behave the way they do?

David Průdek

a. Summary

Understanding the present managerial science requires to understand its history. Traditional relationships developed over the time need to be examined a new understanding of structures and relationships implemented. Managing organisations mean managing change and overcoming barriers to change more than ever before. This again requires adaptation of culture and paradigms developed over decades. Managers are confronted with changes in their environment that enforce changes in their behaviour.

b. Introduction

As introduction to this work, prior any concept or idea are brought up, I feel a need to rise the question how long a line of thoughts would have to be, to describe life in organisations in its entire complexity. Such task, for certain, would take more than the scope of this work and probably more than a human life.

Therefore I would like to turn the reader's attention to the fact that thinking, talking or writing about people and their relationships in organisations requires vast simplification. This simplification leads to the design of concepts, models or approaches that represent a significant decrease of complexity. Decreasing complexity leads to models that omit uncountable numbers of relations that may possibly be neglected for the purpose the model was designed for but would have to be examined at any time a model is used at a different occasion.

c. Epistemology of managerial sciences

Talking about concepts, approaches and models needs understanding purposes they were designed for. Talking about management requires investigating where this activity comes from.

In the development of managerial sciences stand out two events that happened many thousands years ago. The first is the moment human predecessors began to live in packs increasing hereby their prospects of surveillance. The second occurred when the first humanoid realised living in a social environment and wittingly notified another one about his belief. Since this event a long history of thinking about how humans should live and design their relationships may be described. Crainer (1998) appoints the first noticeable work of management science "The Art of War" by Sun Tzu published 500 b.c. and the second Nicolo Maciavelli's "The Prince" published 1513. Vodáček and Dvořák (1990) place the beginning of the history of managerial science into the second half of the 19-th Century and works of Taylor, Gantt, Gilbert and Emerson. The milestones of

managerial science of the 20-th century proof that the development of this scientific area was faster than ever and many concepts have fallen soon after they arose.

To understand how management science contributed to the evolution of the western world during the 20-th century and hereby again changed it self we may use a concept published by Redfield (1993) [31]: "...in order to understand history you have to comprehend how our today's view of the world developed, how it was developed by the people who lived before us...".

Further we have to incorporate some ideas from the second order cybernetics as described by Heylighen and Joslyn (2001) [1, 2]: "Second-order cybernetics in particular studies the role of the (human) observer in the construction of models of systems and other observers... A second-order cyberneticist working with an organism or social system, ..., recognizes that system as an agent in its own right, interacting with another agent, the observer."

We now introduce two categories for modelling the environment of an organisation and the meaning of the organisation (the reason why people group in a specific organisation). A management scientist, publishing his ideas about how organisations work, can be understood as an observer of the organisation and becomes a part of its environment. A very simplified model than could be:

Publishing a managerial concept becomes a change in the environment of the organisation. The organisation changes by implementing the idea or refusing it. This again changes the environment of other organisations. Reacting organisations change themselves giving the observer new input to adjust the theory.

In addition the organisation itself has a meaning (multiple meanings) that lead to steady change without external input. The meaning why people have formed organisations or became parts of organisations could be explained using motivation theories based on work of Maslow (1954), Herzberg (1959) and Mc Gregor (1960).

First organisations were formed in order to secure food for its members. In these organisations already some specialisation occurred. Later the same organisations amended their meanings and were used beside food procurement for defence activities. New approaches started to be implemented when might – ability to use the products of work of others - was invented. The first time the meaning of the organisation was imposed by a limited number of members. The organisation became hereby at least two meanings: The reason why the leader of the organisation wanted it to exist and the reason why other members wanted to be a part of it.

The environment of these early organisations was characterised by lack of resources. Therefore competition was invented and organisations had to implement another meaning: Successfully compete with other organisations. Since the environment of the organisation lacked of

resources the joint of the meanings of the different stakeholders was easy. A total disaster for the prehistoric managers was the invention of wealth. It became difficult to motivate people. New tools had to be applied. First structures were developed. We may describe these prehistoric structures as set of multiple relations of who may legally kill whom and who must not be killed. Such a set of rules enabled delegation of power and, as organisations grew, developed a new side product, politics.

Another set of management tools was developed later based on a different principle the human need to believe in something and to share this belief with other people. This managerial concept was well applied by the Christian Church.

These three principles of HRM (power structures, politics and shared belief) still form the base of existing managerial approaches. Managers still understand more or less the meaning of organisations as war for resources. They just changed the instruments from power of deciding about some ones life to the power to decide about some ones money.

A significant break in the art of managing people came with technology and resulting mass production. These changes in the environment needed to amend the thinking about organisations. A revolutionary approach was introduced by Taylor (1911) in his "The Principles of Scientific Management". This approach enabled managers to break down every step of the working process into single actions and to set up the optimal time for the performance of it. This approach gained broad application in the industry and was one of the basements of the success of Henry Ford – Collier, Horowitz (1987), Ford (1923). Notwithstanding the enormous contribution to productivity this approach generated a fundamental future problem for motivation. The employee was made incompetent.

Fayol (1916) placed the management in the centre and designed the functional model of the organisation: production, sales, finance, accounting, management. Fayol applied general management principles such as: specialisation, competence and responsibility, discipline, unification of orders and management, centralisation, order, hierarchy, initiative, motivation and others. His concept was largely dateless and forms still the managerial thinking in the world. Application of Fayol's approach contributed to the enormous success of GM, Sloan (1963). It took almost a century before his principles started to be put in question. Specialisation and hierarchic organised structures developed over generations will probably not meet the challenges of the 21-st century.

The next impact on managerial theory brought the deep crisis of the thirties. This crisis announced that organising production and its efficiency may not be the core business of management for the future. Carnegie (1937) published his visionary book "How to win friends and influence people" that became a bible for any salesman since publication.

The following years of the Second World War and the hungry years after the war generated large growth in demand and concepts that empowered

employees were not considered mainstream of managerial theory. The meaning of any production facility was to produce as much products as possible. Management was understood as capability to administer the company's organisation. Weber (1947) introduced a model of monocratic bureaucracy supported by written rules, specified competencies, hierarchic organisational structure, specifications and standards and delimitation of managers and owners. Weber's model based on Fayol's understanding of organisations together with Taylor's work form the fundamentals of business administration prevailing into present time. Their principles are still used in the majority of organisations. A side effect of these "mechanistic" approaches is the dehumanisation of work and a HR model efficient in static environments characterised by demand exceeding the supply side. The optimal employee was comparable to an easy replaceable machine built (educated) for one specific operation. The economically motivated employee (salary and fear to lose the job) had to be disciplined and his brain was replaced at the factory gate by a set of instructions.

In the beginning of the 60-es the world started to change, the capacities on the supply side exceeded the demand. Competition began to be more than a word. Management scientist started to seek for new management approaches in areas of marketing (Kotler) and strategy (Chandler, Ansoff, Porter). An outstanding position in the management theory of the second half of the 20 st century shall be awarded to Peter F. Drucker who taught managers understanding their companies as open organisations. Coming from "The practise of Management" (1954), over "The Age of Discontinuity" (1969), "Post Capitalistic Society" (1993), to "Management Challenges for the 21 st Century" (1999) Drucker gave managers a broad scientific view how the world may change.

In the seventies the growth of the Japanese economy was the starter of the Quality Assurance (QA) movement led by, Deming (1982), Crosby (1984) or Juran (1989). This movement opened the box of bureaucratic management and imposed the question: "How may we motivate people to do thinks, that may possible not be instructed?"

The Japanese team-work became a must in many organisations. Team building in the western world is still more a matter of fashion than a matter of culture. Asian societies are based on different social concepts more announcing long term (life long) relationships. European and US managers used instructions and structures to design teams and motivated them by power, policies. The main paradox of the QA movement was that it ended up in a certifiable set of rules and instructions until recently transferred to (ISO 9000/2001) a more process oriented approach.

In the 90-ies many authors started to attack the basic paradigms organisations were built on (Handy, Kotter, Covey, Senge, Bennis). The world has changed. The COMECON block disappeared, Asian economies grew. Mergers and Acquisitions became global. Managing across borders was necessity. Cost and quality was of no value anymore. Invention and technology were key words of the day. It became publicly known that

companies have to change.

To change an organisation requires commitment of independent, active and nonconform individuals. This generates a paradox situation. Organisations have used power to motivate people thousands of years and people were used to be instructed. They were brought up from their very early days to accept power and instructions. We have to understand that the managers of today were educated within principles of the sixties. The change, that is requested, will possibly attack basic paradigms of the existing western world.

d. Conclusion

Managers are confronted with new conditions in their environment that probably require new approaches. Equipped with a continuously developed knowledge and instruments managers are forced to decide whether:

They use and apply approved methods, to support the old with a new vocabulary and consolidate their existing power or pull down proven truths and paradigms, experiment with the unknown and endanger entrusted funds and their own careers.

BIBLIOGRAPHY

Bennis (1996) *Organizing Genius: The secrets of creative collaboration*, Addison-Wesley, USA

Carnegie (1937) *How to win friends and influence people*, Simon & Schuster, New York

Crainer, Stuart (1998) *Kompedidium managementu*, Computer Press, Prague

Crosby, P. (1984) *Quality without tears*, McGraw-Hill Book Company, Hamburg

De Shazer (1974) *Brief Family Therapy Center*, Millwaukee, Wisconsin, USA

Drucker (1954), *The practise of Management*, Harper & Row, New York

Drucker (1969) *The Age of Discontinuity*, Heinemann, London

Drucker (1993) *Post Capitalistic Society*, Management Press, Prague

Drucker (1999) *Management Challenges for the 21 st Century*, Butterworth-Heinemann, Oxford

Fayol, H. (1916) *General and Industrial Management*, Potkan, London 1946

Gibson, Rowan (editor) (1997) *Rethinking The Future* (collection of texts

by Handy, Covey, Porter, Prahalad, Hamel, Hammer, Goldrat, Senge, Bennis, Kotter, Ries & Trout, Kotler, Naisbitt, Thurow, Kelly)., Nicholas Brealey Publishing, Ltd., London

Heylighen & Joslyn (2001) Cybernetics and Second-Order Cybernetics, in: R.A. Meyers (ed.), Encyclopedia of Physical Science & Technology (3rd ed.), Academic Press, New York,

Handy (1995) Beyond Certainty: The changing worlds of organisations
Harvard Business School Press

Handy (1995) The Age of Unreason Harvard Business School Press

Juran (1989), Handbuch der Qualitätsplanung, The Free Press, New York

Kotter, John (1996) Leading Change, Harvard Business School Press

Maturana & Varela (1998) The Tree of Knowledge (revised edition).
Shambhala Press, Boston.

Redfield, J. (1993) The Celestine Prophecy, Warner Books, Inc., New York

Senge (1994) The Fifth Discipline Fieldbook: Strategies for building a learning organisation Doubleday, USA

Taylor (1911) The principles of Scientific Management, Harper & Row, New York

Vodáček & Dvořák (1990) Management v USA, Institut řízení, Praha

Weber, M. (1947) The Theory of Social and Economic Organisation, Free Press, New York