

## Cognitive Evolution and Revolution

~ Ph. D. Student **Cătălin Grădinaru** (University of Bucharest, Faculty of Business and Administration, Romania)

E-mail: [gradinarubusiness@gmail.com](mailto:gradinarubusiness@gmail.com)

**Abstract:** The generator of the accelerated progress and durable development depends on the human daily ability and capability to project, construct and reconstruct the own condition.

Cognition is the essence of the human condition. Knowledge is not only assimilation and accommodation, but it is also a huge resource permanently generating intellectual potential. Such kind of potential is connecting the physical space with the virtual one, is maintaining the cognitive value, is providing innovation, creation, storage and transfer. Knowledge is always the avant-garde and watch. Practically, it is generating the ultimate dimension of the human being. But, by reaching a summum of consumer's society, top technology and IT, in the cognitive space a real revolution began and it certainly will change the world.

**Key words:** knowledge, cognition, cognitive product, cognitive effect, cognitive revolution

## Introduction

More and more and profoundly people live in an environment where at the ground of all things there is no more the individual human being neither his production by hard working in the fields or in the plant, but his main quality which practically makes him an inexhaustible potential and an unattainable resource: the knowledge

Even if the knowledge itself is a product of the human activity it becomes today a cause of creative potential generation and an unattainable resource of the efficient human action. The information, cognition and idea are situated today in the core of reasons for any progress as the society as quickly as an energetic transfer is going through the distance from the human being – the slave of the work to the human being – the uncontracted creator of its tools and processes. That's why the today but especially the tomorrow society is not any more a society of production, neither a consumer's one, but simply a knowledge society. It is a society situated over the former ones dominating, correcting and transforming them all. Everything existing from now on in the world will carry the gene regenerated by such type of society. The economy will be an *economy based on knowledge or epistemic economy*<sup>1</sup>, the information will be the monad of cognition, and the culture itself, with its huge systems of values, will little by little pass to a culture concerned on treasuring the effects of knowledge, generating in its turn, a sound support for the new cognitive civilization.

<sup>1</sup> Adrian Curaj, Capital intelectual, București, 2011-2012, p. 2

## Employee, manager and firm

Yesterday, a graduate from a higher education institution according to a vocation, an ideal or a need was hired by a firm (enterprise, company, etc.) where, on the basis of his knowledges accumulated during the forming educational process, started the work. The most of employees remained almost at this stage. They did conscientiously their jobs, consolidated certain habits, formed certain skills and abilities and tired out after work they arriving home they were not able to do anything else. They needed to rest for the next day to start again. At that stage (which still exists today in many firms), the employee was simply a man-servant of the tools or of the predefined algorithms the only thing he could do was to comply with them. His part of creativity within this kind of production was the ability, the capability to keep the tools at the maximum of efficiency or possibly from the Classic School to partly improve the algorithms. Almost all performant management studies and theories (Taylor, Fayol, Weber) to the School of human relations (Mayo, Maslow, Herzberg, Mac Gregory) and to Toyotism, from the X and Y theories to Z theory (interiorizing the firm objectives by culture) – do nothing else but to centre the management effort on one component or another, having in view only the efficiency i.e. to grow the labour productivity. The styles of managing – from the weak administration to the autocratic style, from the free time style to the middle style or the integrating (most performant) one – also emphasize in a newer or older formula one or another of the components or, in the case of the integrating style to put them under holistic strategies the whole meaning more than the sum of its parts.

All these things are important by all means – some of them are useful even today –, but they are not coresponding any more to the features of the new society as well as almost none of the former concepts are not coherent with the new constructive trends bringing not only a new dimension but also a new paradigm both of them based almost exclusively on knowledge.

Without realizing the knowledge continuing to be a *modus cognoscendi*, specific for people and their communities became, *nolens, volens*, a real *modus vivendi* too. People learn how to know and know even more profoundly how to learn in order to get those cognitive performances providing them not only the conditioned existence but also the effective conditioning of their existence. Somewhere, in a very large area the ontology meets gnoseology and together bring the man closer to his own essence which depends on cognition. The human being really is knowledge. Knowledge, as I stated, more and more becomes from an effect a cause and from a cause an essential environment of growing, living, protecting the nature and making the planet more human. Only by knowledge the human being becomes really to be the measure of all things as the sophists<sup>2</sup> asserted.

These are only several of premises we start from in understanding the new type of society. They show that the times dramatically changed that the new type of society exceeds the yesterday patterns and at least in this constructive stage little by little reduces the entropic level of the human world and outlines the first expectations (not at all

optimistic) in the process of globalization. But till then there is a plenty of time. For the moment people try to understand why instead of harmony they have conflicts and instead of ideals –frustration, fears, interdependencies without precise determinations and a lot of insecurity.

Indeed, in their greatest part the firms and enterprises became more supple, smaller and more flexible and their organization culture- as an effect of the knowledge, experience and more or less long activity- passes from traditional systems of values provided by a long history to a cognitive type of culture much more supple and dynamic. It counts very much the image, the recognized quality of production, management, information and communication. The brand itself during this transitional stage is more supple, especially depends on image, cognition and certainly on the quality of products not only upon the long existence or the former legends.

The employee is not any more what he use to be. If he knows and knows what to do he is accepted. If he is not bringing something new in the fortress „to know” nor in the fortress „to know how to do”, after several cycles of production he has to look for another place of work. The firm needs people able to innovate even within the standardized areas to bring a plus of that cognition stored within the goal of the firm by giving a substance to be on one hand personalized and on the other ennobled. The market economy means tough competition but the real winners are those who bring a plus of intelligence and innovation not only in the object to be sold but also in the processes of its production and in the management generating and co-ordinating the process of production.

The manager must equate three essential variable: knowledge generating knowledge,

<sup>2</sup> David Boucher, Paul Kelly, Mari gânditori politici, de la Socrate până astăzi, Editura ALL, 2008, p. 26

the only resource which is not degradable, financial and material resources and the market. But the only one bringing cognitive surplus value is obviously the human resource. The old schools of economic thought use to have in view this priority but within a closed register, in a limited to the firm area. This priority ment in the greatest part to take care of people, better salaries, incentives, better inter-human relations, to optimize the team composition, to notice and stimulate compatibilities, to motivate, etc. All of them ways of stimulating or accelerating the existing stored potential. This was equal to irrational exploitation some time up to the exhaustion of the human resources. The economy on the basis of knowledge as an economic engine of the knowledge society is not any more based upon such management. Even if it was some-time performant, in the new circumstances such a management leads to a rapid exhaustion of the human resource, to the need to frequently replace it with new forces. It seems to be suitable. All over the world an excess of labour exists and that's why the firms (especially those in the developed countries) have a plenty of labour and of brains. On the contrary for ones of them appears a competition. The powerful firms especially those in the countries with long traditions in performant economy and not only take care of providing irresistible attractions for brains all over the world by a very favourable salarial, social, cultural, etc offer. Especially in the American companies, research units, work many specialists arrived here from all meridians.

These brains bring a plus of knowledge and innovation that makes the existing huge difference among firms, companies, etc in the world. But such practices will lead again to a huge economic and technological polarization, poor countries become even more poor and the rich countries even more rich.

### **The new knowledge amplifier and its effects**

The big break took place when the network appeared. In few years a big part of the humankind but especially the zones loaded with IT and high technology benefited from the access to information in a real time which has changed the world. Suddenly the zones with resources, markets, the main energetic resources, transportation, the big geo-economic platforms, etc have been positioned under the magnifying glass of the big powers consumers of energy and creators of technology. In few years practically there is no unsupervised place on the planet day by day, hour by hour from the satellite, from all kind of sensors carriers and other technical and human catchers of data and information. Seemingly this revolution did not produce victims but on the contrary it offered to the humankind the chance to see the world show, to communicate, to get video information in real time and to be ..supervised also in real time. The enormous high tide of information and data amplified by the enormous power of the network suffocated for a while the cognitive systems and algorithms but immediately the advantage became huge. The data bases, the communication by Internet and by all kind of other nets appeared so that nobody could make the so necessary distinction between net managers, the big beneficiary of the net (according their capabilities to administrate) and the rest of the world. The rest of the world came immediately out at sight of the world with enough complicated effects. The interested parts, by all possible means, from the financial to military from the image to the cognitive ones hit the vulnerable points and realized equally quickly the devices of a possible world cognitive system. The

order based on states couldn't prevent from this cognitive offensive nor from preemptive or post factum preventive actions and reactions. Suddenly the planet became visible in all its spectrum, controllable, easy to manipulate and obviously vulnerable. The big powers went on with armament in the top ten of the military powers counts the former ones (USA, Russia, China, India, England, Turkey, France, South Korea, Japan and Germany), as a sign that the effects of the World War Two passed, the emergent economies sprang, and the surprised economic units tried to get out from self-isolation and opened up to the market.

As I asserted above the management of the firms understood that without going out from his ideal of integrality it is absolutely needed to re-centre its efforts on recrudescence of cognition by re-connecting with the big universities and putting in work together new policies and strategies of cognition, innovation and technology transfer through the labour market or a direct relation. The process is still developing and improving itself but the problems are extremely difficult and pressing as long as the firm in order to survive and possibly to thrive within

the knowledge society and within the economy based on knowledge needs an intense co-operation with an university head, an academician and the university in order to be useful and to renew its brand needs the experience, practices and dynamics of the firm. University brings to the firm that cognitive support making possible the common generation for the firm benefit the plus of innovative and creative intelligence ment to bring managerial and productive performance on the market and in production.

### Conclusion

Without outsourcing the cognitive processes generating performance the firm in order to survive within the cognitive revolution must join its forces with the University and the University if intends to become performant in the education must connect its forces, means and knowledge with the firm, the net supports and the networks themselves generating a new type of management that we shall name complex network management, usefull connection management or the relational University-firm management.

---

### REFERENCES:

1. **Adrian Curaj**, *Capital intelectual*, București, 2011-2012, <http://www.slideshare.net/andreeacalin77/capital-intelectual-15384059>
2. **David Boucher, Paul Kelly**, *Mari gânditori politici, de la Socrate până astăzi*, Editura ALL, 2008
3. **Gheorghe Crețoiu, Viorel Cornescu, Ion Bucur**, *Economie*, Ed. III, Editura C.H. Beck, 2011
4. **Viorel Cornescu, Elena Druică**, *Întreprindere, Management, Profit*, Editura All, Beck
5. **Daniel Andriessen**, *Making Sense of Intellectual Capital: Designing a Method for the Valuation of Intangibles*, Routledge, New York, 2011
6. **Michel Barot**, *Les fondement de la connaissance économique*, 2010