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Editorial

On Management:

Is it Scientific Management? No!
Is it Management Science? No!
Is it Changing Management? YES!

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Our journal is growing, extensively (worldwide) and qualitatively (it is ranked B+ in Romanian research system, but the readers will better decide about their real interest in our work). ETC continues to promote interdisciplinarity, transdisciplinarity and new ideas. Many papers and books are questioning now if Economics or Management are still “sciences” if the result of their application failed to assure a steady economic growth or to offer solutions to get out of the recession. This could be the result of the “very scientific” approaches that stimulated clever people to innovate new and tricky financial instruments, new accountancy tricks to foul the auditors etc. A lot of new “sciences” guaranteed the absolute happiness and riches on the Earth with the only condition to strictly apply econometric formulas or simply rules to generate economic equilibrium...

In a recent declaration Acad. **Mugur Isarescu**, member of our Editorial staff and the Governor of the National Bank of Romania asked economic analysts to make serious debates on economic theoretical and practical matters just because some decision takers are not using a good and flexible economic thinking. I do agree with him, and suggest further improving the research in its transdisciplinary and holistic dimensions. Otherwise, we may stimulate anew very narrow specialists with no links to the general human needs, to the real changes in human existence and not sufficient creative and open to new.

So, my position is firstly to prepare people to be creative, to be curious to see the whole (gr. holon) and only after that to study the component parts of the whole system. In this respect End Means Methodology (EMMY) transgresses all human disciplines and put them together into a coherent theory on human thinking, feeling and acting, defining and describing a lot of disciplines, concepts, visions, theories or other mental constructs. Even it is over 30 I am still amazed that no institute of research, academy or university is interested to know it, to better understand it and to apply it. Of course all such general visions have their own limits, risks and fails, but a large discussion on it may improve it. In crisis times old theories are to be questioned and new theories are waited and welcome. “Do not put new wine in old vessels” is a very old and wise advice... So, new realities (wine) are to be introduced into new theories (vessels) to be studied and then better managed.

But is management still a “scientific” (taylorist) approach as it was in the modern times of the last century? Nor “management science” does not help us too much just because it tries to mathematize and to rigidize thinking and offer only strict local and present solutions to very concrete problems. Anyway, management as a theory on efficient human action is not a unique collection of models and rules to be followed in order to obtain the “greatest” efficiency.... Instead, management is an ever changing vision on human efficient action at different levels of social aggregation. That is why I propose to call it **Changing Management**. In this way management as theory and practice of efficient human action is a continuously changing and stimulates changing attitudes. **Changing Management** is about rapid changes in our complex world, but it is also about changes in its own content to better adapt to the ever newly realities. It is like a plane with variable geometry, changing

its form to better adapt to new speeds (of change). In this respect Changing Management simply took EMMY and uses it as a new fuel to obtain better solutions to ever growing speed of change all over the world. Of course, no one may be a prophet in his own country... and I hope that there could be some interest on it in different places of our Planet.

Interest on Ethics is also growing in a turbulent and not too moral world. But, EMMY is General Ethics, isn't it? Then, why there is no interest on EMMY? A lot of discussion is made on Corporate Social Responsibility. But CSR is part of EMMY. Then, why there is no interest on EMMY? A lot of parallels are made between Economics and Politics, and sometimes some ask themselves if these two disciplines have connections to Ethics. But, all three together and well intertwined are EMMY... A lot of people are trying to use transdisciplinary approaches, but EMMY is 100% transdisciplinarity as **Basarab Nicolescu** itself said. Maybe my marketing strategies for selling EMMY were not well prepared. But, EMMY is not for sale. It is only for taking and using it. Probably cheap (even free of charge) products are suspect to be bad enough for not having any price...

As about ETC, it is a means to attain higher intellectual and cultural ends: new ideas, interesting analyses, news about books and authors, better research methods and more holistic visions as transdisciplinarity is. Is it a strange thing to publish in ETC an article about literature signed by the reputed literary critic **Eugen Simion**? In a transdisciplinary vision a (literary) text is a mental construct that can be better or worse managed by its author. Any text has a con-text that can help understanding the ideas in the text. Building/ producing a text is doing an enterprise, with consume of specific means (resources), costs, in order to reach some ends as benefits/ pleasure for consumers. So, why not teaching EMMY in Letter Faculty?

A recent Job Fair in Romania concluded that diplomas are irrelevant in recruiting people. What is relevant for recruiters? Clever and industrious people are most wanted in labor market! Good marks do not reflect anytime these qualities. Shall HR managers recruit a guy who knows 25 definitions of management, X and Y theories a.s.o., but is unable to understand a metaphor, a sintagm or to concentrate a text in lesser and lesser words without losing its meaning? Is a graduate ready to learn all his/her life? Or is (s)he just too much bored with learning in a university... Working with computer is only using e-mail, or helps him or her to organize information, to make new connections and to use intuition in finding info? Many of these qualities are not sufficiently stimulated or created in universities; so, if the real end of studying at university is not to obtain a diploma, but to acquire new and useful knowledge, why do we offer to our graduates a diploma? Is the diploma an adequate means to certificate the graduate reached his or her end to obtain good knowledge? I think not. Students are learning for obtaining marks and diplomas not knowledge.... Once faculty is examining students and later the recruiters are examining graduates. Why this waste of time and human resources? The answer is quite simple: because education managers are following financial indicators, salaries for teachers etc. but not simply fulfilling the real ends the students are coming for at the university. Applying EMMY to analyzing the education structures we may discover that many means are not helping to reach presupposed ends. Many companies are already created their own universities in order to be able to command the set of skills required for that company and that could be a decisive competing advantage for a certain period of time. Is this not a sufficient strong signal for higher education structures that they are not fulfilling the promised ends? Or, isn't the signal from the market (not diplomas, only skills) sufficient to make a curricular and docimological radical reform to education system? Are there some other stronger political interests to maintain an obsolete education (and examination) system? A careful research could be helpful in this respect.

History teaches us that no one ever learned anything from history, but the recent history of world-wide financial and economic crisis generates a critical mass for new methods of research in the so called social "sciences". ETC is ready to publish any of them. Read carefully the **Instructions for authors** and the path to collaboration is created.

BUILDING NATIONS FUTURE IN GLOBAL DIS-EQUILIBRIUMS: ANTI-CRISIS PROGRAMS & PRIORITIES IN POST-CRISIS DEVELOPMENT IN TIMES OF RECESSION¹

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The views and reviews presented in the paper are views and opinions of the authors, based on our research and experience and do not depict institutional or countries views or of the institutions the authors are associated with. All errors and omissions are our own.

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Honourable President Islam Karimov, President of the Republic of Uzbekistan, Honourable Members of Parliaments, Mr. Rustam Azimov, First Deputy Prime Minister and Minister of Finance, Chairman of the Organizing Committee, Diplomats, Senior Government Officials, Professors, Corporate Heads, Journalists and Honorable members of the Organizing Committee at the Republic of Uzbekistan and the Cabinet of Ministers and other distinguished dignitaries on the dais, members of the this august audience and ladies and gentlemen, it is a matter of great privilege for me to have been invited to deliver the keynote address on " Building Nations Future in Global DisEquilibriums: Anti-Crisis Programs & priorities in Post-Crisis Development in times of Recession" at this prestigious policy international conference on "Outcomes of Anti-crisis Programs and Priorities of Post Crisis Developments", organized by the Cabinet of Ministers, Republic of Uzbekistan. At the outset I must congratulate the organizers for organizing this Meeting and selecting an extremely timely issues and having representation from around the globe. I would specially like to thank Dr. Rustam Azimov who has been kind to have extended the warm invitation to be present amongst you all and share my views on this pertinent topic.

¹ Invited to deliver Address at the Cabinet of Minister's International Conference on "Outcomes of Anti-Crisis Programs and Priorities of Post-Crisis Development" at Intercontinental Hotel, Tashkent, UZBEKISTAN (April 12th, 2010) on the invite of Honourable Mr. Rustam Azimov, First Deputy Prime Minister and Minister of Finance, UZBEKSITAN.

I wonder as to what extent I would be able to justify this great responsibility of delivering this address. It is a very difficult task and a great responsibility. However, it would be my endeavor to be up to the mark as far as possible or to the expectations of the organizers and galaxy of intelligentsia.

Keywords: *financial crisis, recession, anti-crisis programs, post-crisis*

I. Introduction

There are over US\$ 6 trillion worth of transactions that take place on a daily basis, which is equivalent to the total world trade every year. The persistent rise in the dispersion of current account balances of the world as a whole, wherein the sum of surpluses match the sum of deficits has grown substantially since the World War II. Since 1990, the un-regulated financial markets were set to induce growth for emerging and developed economies. However the economies have been hit one after the other with the fashion and need for market driven capitalist and liberalized economic systems. The emergence of the crisis in the last 20 years since 1982 beginning with USA (1982, 1989, 2007-08), India (1991), Russia (1992, 1998), Mexico (1994), East and South East Asian (1997), Brazil (1999), Argentina (2001) and the most recent financial turbulence observed in 2008 in US and Europe estimating an impact of over US\$ 6 trillion with over US\$ 3.5 trillion already proposed for bail out by the US Treasury clearly bringing forth the failure of Banking and Financial Institutions which serve as the back bone of an economy or life blood of an organization.

Nation's worldwide are en-tasked with responsibly to build sustainable future for all, while maintaining appropriate environmental discipline and stable socio-economic growth. The changing structure of world investment, trade, capital flow and the need for deeper integration, strengthening regulatory framework and signaling system is greater (Agarwal, Agarwal and Agarwal, 2006). Globalization has altered the economic frameworks of both developed and developing nations in ways that are difficult to comprehend. Innovation has seeded the need to finance development and growth in rural regions. Also the emergence of unregulated global markets appears to have moved towards a more stable and growth oriented economic globe. What is needed today is to develop sensitivity sensor systems to promote technology within the financial framework as an integrated approach to keep markets from busting and causing socio-economic panics.

Faced with these uncertainties, it is especially important that policymakers undertake the required policy adjustments for a sustained global expansion. As well, supervisory and regulatory authorities need to continue to strengthen energy financial market infrastructure to underpin the resilience of the ecosystem towards sustained development and clean tomorrow. In an attempt to build sustainable future of Nations in an inter-locked global economic environment it is critical to focus on the following issues –

- a. inducing Economic Growth and Financial Development
- b. reducing Financial Volatility
- c. fostering Employment Growth
- d. fostering Sustainable Environment
- e. restructuring Pension Systems and Societal Setups
- f. re-focus on Organic Agriculture
- g. setting in Fiscal Discipline & re-orienting role of IMF
- h. re-energizing multi-lateral trade agreements (WTO) along with bi-lateral FTAs

We have attempted to address some of the above mentioned issues in our paper.

II. The World Economy, Uzbekistan and Global Financial Turmoil

The current financial crisis and global economic slowdown has fostered the need for unprecedented international policy coordination globally with key role players as US, Europe, Russia, China and India. The regulators of developed and developing regions have to work closely with each other, actively participate in the international Financial Stability Forum and the standard-setting bodies operating under the aegis of the BIS, World Bank, IMF, UN and other international agencies. There needs to be a tight focus today between the monetary policy and the fiscal policy, especially in meeting of the liquidity and trade needs of our increasingly globalised financial markets.

Agarwal (2004) clearly forecasted and projected at the IFC Chile on 7th January 2004 that the World Economy is heading for serious financial turmoil with US slowdown and the projected Oil Shock. Agarwal also said that the financial architecture built in the 1950 is not robust and efficient to

meet the dynamism of today. The projections of early 2004 which came forth to be true in mid-2004 for Oil Price rise and 2007-08 for Global Financial Turmoil are quoted below

“The slow down of the US economy has a compound effect on the growth of the world economy by adversely affecting the demand for the products of partner countries as well. The effect of the impending slow down will be more severe on the growth rate of world trade which is likely to reduce to nearly a fifth of the rate achieved in 2000 to around 2.7 and 5.2 per cent in 2001 and 2002, respectively.”

“The volatility of oil prices is a highly destabilizing factor for the world economy. It is more devastating for oil importing developing countries than for other countries. Given the strong cartel in the form of OPEC operating in this market, it is not possible to rule out oil price shocks of the type faced in the early 1970s, early 1980s, early 1990s and 2000 or even in the future. It is imperative for international community to create a mechanism to regulate and stabilize oil prices at a certain reasonable and sustainable level. The intervention should bring the OPEC and other oil producers to observe some international discipline. Further, there should be some special fund to moderate the impact of volatility in oil prices for the poorer developing countries. The OPEC decision to cut output whenever oil prices tend to fall as witnessed in early 2001 indicates that oil prices will fluctuate around \$ 30-35 per. barrel. Therefore, oil importing countries will have to adjust their economies to the new level of oil prices in the coming years.”

“It is clear, however, that the challenges of globalization today and the resultant volatility in the international financial markets cannot be adequately handled by a system that was largely designed for the world 50 years ago. Changes in international economic governance have to keep pace with the growth of international interdependence.”

“The world community need to consider the issues involving International Development Cooperation, Restructuring IMF, International Borrowing and Lending, Private Capital Flows, Portfolio Equity Flows, Short-term capital movements, Capital Account Convertibility and Domestic Resource Management, Strengthening banking and financial systems, more seriously to match them with the needs and requirements of home countries, regions and the world economy. Of course the financial systems as enumerated above need to be regulated controlled and developed to reap the fruits of financial developments in the world economy to provide stability in the financial markets and to make the world a better place for living. Finance would be required not only for construction and development of economies but also for reconstruction and rebuilding economies.”

Fromlet (2005) rightly identified that China and India are the two biggest countries accounting for 40% of world population. Fromlet outlined the weakness and strengths of the two nations in sustaining the growth path adopted by them with one having deep rooted democracy and the other with substantial autocratic controls fostering faster growth. Given that these countries started their opening and reforming processes at different times and chose different strategic approaches which is bringing them sharply up the global ladder in trade and investment. The long-term outlook for these two giants hence is important given that they provide a sustainable base for markets and production capacities.

The EMU and Euros introduction has had a remarkable achievement in the European Integration process. The run-up to the Euros establishment and the experience of the past decade have been associated with an unprecedented degree of policy coordination among the sovereign states within the Euro area, including cooperation in the areas of fiscal and regulatory policies as well as monetary policy (Bernanke, 2008). The integration process has been a shield and growth contributor to the Euro zone for the last one decade. However the Global Financial Meltdown, US\$ depreciation against Euro and absence of Fiscal Control Mechanism creates pressures to de-stabilize the region and pose threats to the EMU system. Agarwal (1999) addressed on the challenges before integrating Europe suggesting the need for formulation of the European Constitution, which is finding place within Europe and European Institutions with the 1st draft of European Constitution submitted to the people in June 2004. The need for Europe to focus on global partnerships and interdependence to take care of challenges faced in last 4 years due to higher un-employment (i.e. blue & white collar workers), lower growth within the region, US recession, inflationary pressure within Europe leading to internal dissatisfaction with the integration process is extensively stressed in the work. Agarwal (2007) highlighted that these issues are a matter of concern, as they may cause de-stabilization of the Global Financial Stability & Development within Europe.

Recent travails brings forth the pertinent need for the financial regulatory framework requiring fundamental reform (Agarwal, 2004) even though the financial architecture is broader than the government's regulatory and supervisory response. The new financial architecture needs to properly understand and account for the dynamic relationship between private-market actions and public-sector structures. The economy's financial architecture is said to be a function of the relationship among financial institutions and market participants that transfer capital and risk between borrowers and savers. But the architecture has to evolve to be a mix of prescriptions and postures of the Political bodies, the Administration, the financial regulators (including central banks), NGOs and academic research centers in a more dynamic and robust form.

2.1 Uzbekistan: The Socio-Economic Development & Growth

Uzbekistan has shown an impressive development since its independence in 1991. The nation has progressed slowly but steadily with the rightful implementation of "*The Uzbek Model*". Uzbekistan, a landlocked country, has been able to attain a gross national income per capita of about US\$1,050 in 2009 (GNI, Atlas method) in short span of 19 years of independence. It is a resource rich nation having substantial reserves of gold, copper, natural gas, oil, uranium and extensive production of cotton. Uzbekistan also has well developed social and capital infrastructure, especially compared with countries with similar GDP/capita and/or neighboring countries. The country accounts for one third of the region's population, and an estimated 37% of Uzbekistan's population living in urban areas, with about three million inhabitants in Tashkent, the largest city and the capital. The country has a very young and rapidly growing well educated population with needs for growth and employment opportunities, especially in rural areas (2/3rd of population lives in Rural Uzbekistan).

The growth of the gross domestic product (GDP) in the year 2009, made up 8.1 percent. This was supported by industrial production at 9 percent, investments increase by 26 percent (including foreign investments increase by 68 percent), positive balance in the foreign trade turnover of more than US\$ 2.3 billion, growth of average salary up 40 percent, and the real incomes by 26.5 percent. Uzbekistan's progress has been observed with a focus on self-reliance in both energy and foodstuffs, and for pursuing a policy of "localization" (i.e. encouragement and protection of domestic production). For any nation, which is in its inception stages, it is vital to follow this policy to enable it strengthen its socio-economic framework to induce long run sustainable productive growth. This is clearly visible with this policy having been successful in increasing value addition in industry from 14% of GDP in 2001 to 22% in 2008, following a decline of the industrial sector from 33% of GDP in 1991. This would also inturn lay down the foundation for Uzbekistan to bring out sustainable economic viability through a free market access in the future.

The Uzbek Model has brought in major progress, which has helped maintain fiscal discipline, resulting in low public debt and budget surpluses every single year since 2003. Economic Surveys clearly bring forth the large increases in net foreign assets, which have been mirrored in the growth of monetary aggregates resulting in continued inflationary pressures faced with raising international food prices. The central bank keeping bank-led global financial crisis and the increase of inflationary pressures, has managed to tighten monetary policy in 2005-08 via increased deposits from commercial banks, the resumption of the issuance of central bank paper, and the accumulation of government deposits. This led to a decline in growth of reserve money from 88% in 2005 to 37% in 2006 (broad money growth - from 54% to 37%), although this tendency was reversed slightly in 2007 when reserve and broad money grew by 45% and 46% respectively, but in 2008, again, reserve money and broad money declined further to 28% and 35% respectively (WB, 2010). The contraction in money supply in the last 5 years did induce reduced Growth, however improved macroeconomic supervision/stability enabled the central bank to follow a Inflation target policy as one of its monetary policy measures.

It can be clearly seen from the World Bank's country report that the consolidated fiscal position has strengthened in 2008, supported by strong revenue from the commodity sector (in particular with an increase in gold prices and large increases in Gas export prices). It is commendable to note that appropriate implementation of the "Uzbek Model" proposed by the Honorable President Karimov has led to a budget surplus despite global financial recession (since 2007) and despite the government's deliberate policy of reduction of tax burden on the non-commodity sector. The augmented fiscal surplus (i.e. consolidated budget and Fund for Reconstruction and Development) in 2008 as indicated by the World Bank Country Report remains unchanged in 2006-07 at about 5% of GDP, increased to 10% of GDP in 2008. Also, the total budget expenditures has seen a continuous decline as a share of GDP

from 36% in 2000-2003 to 32% of GDP in 2008. This is clearly a joint outcome of the Uzbek Model and the Anti-crisis measures adopted by the country.

2.1.1 “The Uzbek Model”

The gradual approach to transition and state-led development aimed at import substituting industrialization and energy and food self sufficiency adopted by Uzbekistan has contributed to enable maintain growth in times of recession and have domestic orientation to wither away contagion effects of Global Financial Crisis. This approach resulted in a less painful economic and social transition than experienced in most countries of the CIS and, in recent years, strong macroeconomic performance. Under the Uzbek Model the government has a policy of high public spending in health, education and road sector to improve standard of living and equitability in the socio-economic societal framework.

The Economic growth of Uzbekistan has accelerated from around 4% in 1996-2003 to over 7% in 2004-06 and to over 9% in 2007-08, largely (but not exclusively) driven by external demand (WB, 2010). This growth performance has been accompanied by an annual per capita GDP growth, from 2% in the late 1990s to 6% in 2004-06, to over 7% in 2007-08, and to 8% in first half of 2009 as a result of boost of international confidence, exports (gold, gas and cotton) and decline in the population growth rate from 2% from 1996-99 to 1.3% between 2000-08. There has been a significant increase of remittances and other transfers to Uzbekistan at 8-10% of the GDP in 2005-08 from labor migrants in Russia, Kazakhstan and other countries have contributed to the support of living standards of the Uzbek population, particularly among low income and poor families. However, despite the reported high economic growth, employment generation and private consumption have lagged and there has not been a commensurate reduction in poverty in recent years. The national poverty level (defined as percentage of population consuming less than 2,100 calories per person per day) dropped by just 3.9 percentage points from 27.5% of the population in 2001 to 23.6% in 2007. This is the next challenge for the government to enable bring true fruits of the Uzbek Model to the nation and its people for equitable sustained growth.

The Model has been able to provide for the foreign exchange reserves to go more than triple, since 2004 level. The Reserves are more than US\$9 billion in 2008 (equivalent of 11 months of next year’s imports), which in turn provide for a financial cushion against financial crisis in 2009-10. A zero net external borrowing policy followed since 2001, and total outstanding external debt declined from 64% of GDP in 2001 to 14% in 2008, and projected to decline further to 13% in 2009, and total debt service payments in percent to exports also declined to less than 8% in 2008 are positive outfall of the economic development via the Uzbek Model. Despite some increase in recent years, actual foreign direct investment has remained one of the lowest among the transition economies relative to the size of the economy at 3% of GDP on average in 2006-08.

The “Uzbek model” in expected to formulate a transition from the old command and administrative distribution system to the market driven economic system of governance built on the five renowned principles and strategy of consistent and step-by-step reforms and evolutionary development of state and economy. Key observations marking the success of financial development in Uzbek economy (Karimov, 2010a) are

- volume of capital sufficiency of Uzbek banks exceeds 23 percent, i.e. it is almost as high as three times the international standards set by the Basel Committee.
- 14 commercial banks of the republic, whose assets in total make up more than 90 percent of the banking system, have received the high rating point “stable” from the leading international rating companies such as “Fitch Ratings”, “Moody’s” and “Standard and Poors”.
- total assets of banks are two fold of the amount of funds in the accounts of population and legal entities, while ensuring their full protection and guaranteeing the timeliness of payments.

The aggregate current liquidity of the banking system is ten times more the current obligations of banks on foreign payments. In other words, the solid “safety cushion” of the entire banking system is established.

- 240 bankrupt enterprises have been revealed in the country, including the large enterprises, of which at the moment 154 have already been realized to new owners. 86 bankrupt enterprises have been transferred to the balance of commercial banks.
- repay the credit debts to the budget and appears on wages worth total sum 1 trillion UZS, as well as establish on the basis of bankrupt enterprises over 100 new types of productions and additionally create more than 17,000 jobs.
- more than 840 projects were implemented in 2009 as part of the large-scale localization

program, which has permitted to increase the volume of manufacturing of products being localized as compared to the year 2008 to 2.3 times.

- production of over 120 new types of goods, from amongst which there are the oil and gas equipment, produce of chemical industry, component parts for the car making industry and many others. 2,000 new jobs have been created as a result of this initiative.
- effort to replenish their circulation funds of the exporter enterprises received soft loans worth in total 233 billion UZS in 2009 itself, which has paved way to prevent shrinking of production due to temporary difficulties in terms of exporting their products.
- benefits on the income tax and single tax payment for the enterprises of the light and food industries specialized in the output of consumer products. In 2009 the single tax payment for the small industrial enterprises was reduced from 8 to 7 percent; the amount of fixed tax for individual entrepreneurs was also reduced on the average for 1.3 times.
- 690 investment projects during 2009 in the framework of the Investment program and sector programs of technical modernization, of which 303 projects were successfully completed. In the whole, 22 large production facilities were commissioned in the country, of which 8 facilities – in the oil and gas, chemical and metallurgical industry, 9 – in the machine building and 5 – in the construction industry.
- implementation of the strategic investment projects on construction of the “Novoangren-Uzbekistan” Power Transmission Line-500 with substation, 165-km-long “Ahangaran-Pungan” trunk gas pipeline through the Kamchik mountain pass, as well as of the “Guzar-Surhan” high voltage power transmission line which has in fact completed creation of the single power and gas systems in the scope of entire country.
- commission of 217 kilometers and undertook a complete overhaul of 538 kilometers of automobile roads as well as 19 bridges. More than 280 billion UZS at the expense of the country’s Road Fund were channeled to accomplishment of such works. The projects attracted the soft loans of the ADB worth US\$56 million to procure the road construction techniques.
- on improvement of reclamation condition of lands 840 kilometers of collector and drainage networks have been commissioned in 2009 along with 250 drainage wells, 15 units of reclamation pumping stations and constructions. In total 130 billion UZS have been channeled for implementation of projects on improving the reclamation state of lands. As a result the reclamation condition of over 240,000 hectares of irrigated land has been improved, which allows to raise the level of crop yield and increase the incomes of farmers.
- over 940,000 new jobs were created in 2009, of them around 500,000 in rural areas. More than 390,000 new jobs were created in the sphere of small business, including 270,000 in the services sector.
- apart from the above 130,000 new jobs were created from home-based labor in cooperation with industrial enterprises and carrying out the work at home on contractor basis.

The above clearly outline the benefits of the Uzbek Economic Model and the Anti-Crisis Program. These have been well recognized by competent international financial and economic institutions such as the IMF, WB, ADB and several other leading financial institutions of the world through their reports and economic surveys (ADB, 2008; Karimov, 2010a; WB, 2010).

2.1.2 The Parliament “Oliy Majlis”

In any democratic economic system, the parliament plays a pivotal role in the socio-economic growth of its people and the economy. It is hearting to see that a special place has been reserved in the lawmaking activity of Oliy Majlis to the issues of normative and legal support of structural transformations in the economy taking place in the country, further to creation of a favorable investment climate, modernization, technical re-equipment of production, as well as development of the country’s banking and financial system. During this period of global economic sluggishness the entire package of legislative acts has been adopted, which envisage the consolidation of legal protection of private ownership, establishment of a powerful class of owners in the country, consolidation of farming, ensuring further liberalization of economy, creation of favorable conditions for development of small business and entrepreneurship, as well as establishment of a ramified market infrastructure (Karimov, 2010b).

The smooth process of election to the Legislative Chamber, Jokargy Kenes of Karakalpakstan and local Kengashes (Councils) that took place on December 27, 2009, as well as the runoff elections to those bodies on January 10, 2010 is a clear evidence of the confidence of the Uzbekees in the

governance and its growth models. The state of general activeness of voters, state of openness, transparency, observance of norms and requirements of domestic and international legislation, which have taken place in the elections, are noted in those assessments and commentaries, which became yet as another confirmation of the fact that how truly enormous steps our society has made for over the past years on the way of democratic transformations, ensuring freedom of choice for everyone and for establishing strong civil society (Karimov, 2010b). The elections demonstrated the high socio-political culture of the population, growing level of its political and civil self-consciousness, its broad support of our progressive advancement along the way of deepening reforming and modernizing the country. Most importantly, the elections have once again demonstrated that all radical changes and transformations taking place in our state – this is a process, which has acquired an irreversible nature.

The activity of the country's bicameral parliament elected for the first time in 2004 coincided in its time with the important period in our life notable for its deep transformations, dynamic processes of consistent reforming and liberalizing all spheres of political and socio-economic life, democratic renewal and modernization of the country. It is heartening to note that Uzbekistan has adopted more than 250 laws of a profound significance in deepening the socio-political and socio-economic reforms being carried out in the country. Also the implementation of the "Uzbek Model" and the "Anti-crisis program of measures for 2009-2012" directed to minimize the negative consequences of the global financial and economic crisis through the ages of the parliament, allowed Uzbekistan to show surplus instead of budget deficits and increase in the real incomes of the people.

The clear vision of President Karimov and the growth path being observed by Uzbekistan is expected to fulfill the dream of the leaders and founders of Uzbekistan to build the Nation "*From a strong state towards a strong civil society*", with just social-economic and socio-political reforms. The role to strengthen the role of citizens in governing the country is vital for a robust economic growth and social upliftment in a democratic society.

2.1.3 Anti-crisis program of measures for 2009-2012

The Anti Crisis Action Programme 2009-2012 is a stimulus package introduced in January 2009 to reduce the impact of the contagion impact of global recession on the Uzbek economy with the support to the banking system, export companies (through preferential credit and tax rebates) and employment.

The program focus has been to implement concrete measures to support the exporter-companies in ensuring their competitiveness at foreign markets given the rapid worsening of current conditions, creation of additional incentives for exports, in particular:

- allotting them the privileged credits to replenish the circulation funds with a term of until 12 months on the rate which does not exceed 70 percent of the refinancing rate of Central Bank;
- relieving the companies with foreign investments, which produce the finished goods, from levying all types of taxes and duties to the budget but for a value added tax (till 2012);
- restructuring the sum of overdue and current debts on the bank credits and writing off the penalty fees on the payments to budget, and rendering other no less important benefits and preferences." (MFA Uzbekistan, 2009)

In addition, support for food and consumer goods producers was envisaged through the programs of broad system of incentives for the local producer-companies for production of food and non-food consumer goods (until January 1, 2012) with the following tax and customs benefits are offered

- decreasing the single tax payment rate by 50 percent to micro-firms and small companies, which process meat and milk with a purposeful channeling of the released funds to undertaking a technical re-equipment and modernize production;
- relieving companies, which produce particular types of finished non-food goods, from paying an income and property tax, single tax payment for micro-firms and small companies.

The sources of financing for the Anti Crisis Program was proposed to be as follows

- own financial assets of companies and enterprises for a total amount of US\$ 8.2 billion
- credits of the Reconstruction and Development Fund¹ of the Republic of Uzbekistan worth US\$

¹ The Fund was established in 2008 with an authorized capital of about US\$ 3.2 billion. The Fund plays a very important role in implementing the strategically important projects along structural transformation and modernization of economy, as well as establishment, firstly, of the production infrastructure. In the nearest perspective we are going to take the Fund's assets up to US\$ 5 billion. For over the past two years the Fund

- 2.5 billion dollars and
- foreign investments and credits totaling US\$ 13.5 billion.

2.2 Oil Volatility Factor

The volatility in the oil prices is also a highly destabilizing factor for the world economy. It is more devastating for oil importing developing region of the world than for the others. Given the strong cartel in the form of OPEC operating in this market, it is not possible to rule out oil price shocks of the type faced in the early 1970s, the early 1980s, the early 1990s, 2000 and 2004-2008 or even in the future. It is imperative for international community to create a mechanism to regulate and stabilize oil prices at a certain reasonable and sustainable level. It is commendable to see the efforts made by the OECD and other international agencies to bring forth suggestions to streamline the global oil shocks (OECD Observer, November 2004 & other eds). Also, we at the Indian Institute of Finance (IIF) have been working extensively to provide possible solutions to economies and international agencies since 1987. Some of our suggestions and research forecasts have been very apt and have helped nations to build shields against oil shocks. A recent forecast by Prof. J. D. Agarwal, indicated that oil prices were expected to shoot up, hence economies and international agencies needed to initiate effective steps to offset the shocks. Suggestions to this effect were also considered in his paper, which appeared in Finance India, March 2004. This piece was written in December 2003, when no market indication of such a scenario was visible. Three suggestions which have been made by IIF at various forums are,

- firstly, to create an Oil Pool Account in 1990-91 by J. D. Agarwal, which was duly initiated by India and some other countries, has helped India live with the shock which the world has seen in the last two years and
- secondly, to development more active derivative markets (both financial and commodity) with products on oil (OECD Observe, July 2005) and their use by markets globally would help to bring discipline to the oil market and a reduction of pure dependence on OPEC or a select few nations.
- thirdly, to strengthen domestic currency specially in a case like India, where market pressures are there for the INR to appreciate countered by the RBI and the MoF, as most countries suffer on account of imports bills from Oil, which are purely in-elastic in nature. Incase of India itself, we only produce about 36% of Oil Consumption needs. The balance 64% is imported from different parts of the world in the Arabic Region, US, Russia, South East Asia and others.

It was high time that the global economies and the developed world understood the severity of high oil prices which had led the world economy to observe a steep rising inflationary trend. In such a scenario, the above suggested means or other mediums need to be adopted immediately to stabilize and bring down the oil prices to an appropriate sustainable level of around US\$ 40 – US\$ 50 per barrel (happen in by end of 2009) given that Jet light fuel (air-travel fuel) was hovering around US\$ 18-20 per barrel then. In 2010, it is expected to stabilized around US\$ 55 per barrel.

2.3 Money Laundering, Financial Markets & the Real Estate

Money Laundering is generally characterized by the intensity of fluctuations affecting the price in financial markets and generation of illegal money and a facilitator breeding terrorism in the long run. In a global financial environment of global imbalances, economic sluggishness/slowdown in Developed regions, Pension Problems, Un-employment on a rise the buoyancy in the Real Estate Market, The Capital Markets and the Bullion Market are a cause of concern and are required to be checked (Agarwal & Agarwal, 2008). Estimates arising from forecasts bases on regression lines and those of economic intelligence units indicate that globally Money Laundering amounts to more than US\$ 2 trillion to US\$ 2.5 trillion annually (i.e. about 5-6% of World GDP 2006 [44.444 trillion]) (Fabre, 2005; Agarwal and Agarwal, 2006), through formal channels. Our earlier estimates show that the money laundering magnitude with the banking sector along in 2004 was around US\$ 500 billion to One Trillion (Agarwal and Agarwal, 2004). Money-laundering not only economically destabilizes an economy but also exposes it to terrorist attacks, threatening the integrity and sovereignty of the nations concerned. It conceals the huge, illegal profits generated by unscrupulous organized criminal groups in various fields of crime. Money laundering generally involves a series of multiple transactions used to disguise

allocated credits worth more than US\$ 550 million to finance and co-finance tens of large industrial and infrastructure facilities.

the source of financial assets so that these assets may be used without compromising the criminals who are seeking to use the funds.

The Real Estate has been one of the most common and the simplest means to launder money for over a century now. The last two decade (1995 onwards) has seen leaps and jumps in the real estate markets globally (Banker, 2005; Baker and Rosnick, 2005; Schneider, 2005; FCEN Report, 2006; The Economist, 2007) to the tune of over 300% increase in the real estate prices in prominent urban cities and about 100% as an average of the global economy in general. Is this rise in tune with a fundamental basis for the Real Estate price increase is a question to be asked. Also it is interesting to note that this steep rise in the Real Estate markets till the early 2008 has been coupled with a high degree of correlation with the sharp rise in capital markets, the bullion markets and the international flows globally particularly in the last 3 years.

2.4 US & the Foreign Policy

A 200 year old nation has not only provided the waive for modern financial system (since early 1900s), but has also emerged to be a world leader in structures, strictures and policy frameworks adopted by the World Economy and its global institutions. In the last 15 years post emergence of a single polar world, it is visible that the US role play extensively enhanced in global issues with deep interest in different country policies and alliance they adopted. This came as a resultant of the US growth in the post World War scenario, which got factored in by the services sector having an average contribution to over 70% of US-GDP through the re-building of Europe and War torne nations. The US policy framework had greatly shifted from domestic growth focus to foreign policy led growth (post 1970s) as an outcome of their role play getting inception with the Bretton Woods System (July 1944)

The emergence of the Global Financial Crisis having clear routes in US and the US President-Elect Obama coming in place, will foster needs for US to bring extensive re-structuring of their domestic economy, labour markets and financial architecture (Agarwal, 2008c). This can be also observed if we look at the electoral mandates and the addresses made by Barack Obama after election as President Elect. This would enlighten a strong life support the US ailing economic framework and give breathing space for Nations under extensive stress and/or purview by US, to develop their independent policies to induce growth and meet with the current Financial Turmoil, not having US as a parenting figure around them.

III. Post Crisis Development

The fiscal burden due to recession has gone to double and some countries to triple the value as against what they were in the beginning of 2008. Fiscal concerns were already troubling large number of Emerging Markets and developed nations since the mid of 1995 with the emergence of crisis / recessionary scenarios in different parts of continents.

Fiscal order in an economy is vital for Monetary economics to bring fruits from a healthy economic environment. There is excessive fiscal spending taking place in the last 3 years given the elections being done in various Nations bearing impact on financial and trade orientations in the World Economy. If we look at election periods in US, France, Russia, India, and almost all nations worldwide, we would find that the fiscal budgets and spending go steeply up crossing all charts for previous trends. Special packages and schemes are introduced to energise the environment and show growth in nations, not to mention the excessive spending on security of the electorates and the election procedures. These are seen as vital to establish confidence within the society; however these act as a major cost to the growth and development of the Nation's socio-economic framework in establishing a sound financially equitable growth structure.

Some of the key measures suggested by us at various forums of the Italian Parliament, Finland Parliament, OECD Forums, Global Forum Sweden, ADB Forums and international agency to induce growth and reduce the impact of Global Financial Turmoil at conferences addressed since 2006 have been

1. Employment Growth and Economic Development Model (see Appendix A3.1)
2. Setting in Fiscal Discipline & re-orienting role of IMF (see Appendix A3.2)
3. World Energy Fund : Sustainable Environment and Development (see Appendix A3.3)
4. Restructuring Pension Systems and Societal Setups (see Appendix A3.4)
5. European Fiscal Policy Board : To avoid De-stablization within Europe due to inflationary pressures (see Appendix A3.5)
6. Restructuring of IMF (see Appendix A3.6)

7. Private Sector Initiative: Replicating India's Chit Fund Concept in Banking & FI Industry (see Appendix A3.7)
8. Re-energizing multi-lateral trade agreements (WTO) along with bi-lateral FTAs (see Appendix A3.8)
9. Re-focus on Organic Agriculture (see Appendix A3.9)

In the "Uzbek Model", Uzbekistan needs to inculcate some of the following institutional measures to further strengthen the socio-economic-financial framework and harness the growth potential it has for sustained economic growth of over 8% for the next decade

- Introduce Rolling 5 Year Plan for sustaining macroeconomic stability and for managing vulnerability to shocks.
- Boosting Agricultural Productivity (Agarwal, 2009; WB, 2010)
- Improving Business Climate. (WB, 2010)
- Responsive social service delivery systems that reach the poor as done through the Tunisia Solidarity Fund¹(Agarwal, 2007, 2009)
- Improving Accountability and Transparency. (WB, 2010)
- Improving Regional Cooperation within Asia (i.e Central Asian, South Asia and East Asia) (Agarwal, Agarwal & Agarwal, 2006)

Conclusion

We feel that regaining lost glory of mutual respect in jointly shouldering towards a peace loving harmonious growing global society is the demand of the hour. While addressing various Parliamentary, Governmental and International Agency forums we have stressed on better ties between India, Uzbekistan and the global village. We have also stressed on the need to address some of the key issues before synergising ties to improve confidence, maintaining positive outlook and realign political will for developing a progressive inter-regional focus for business, trade and societal interactions.

The efforts by central banks, regulatory bodies, governments and international agencies around the world to increase the availability of liquidity have contributed to tentative improvements in credit market functioning. However, the continuing volatility of markets and recent indicators of economic performance confirm that challenges remain. US needs to undertake major hard steps to rectify its financial turmoil, which has accumulated for over 2 decades and is having spill-over effects building costs for other nations (Agarwal & Agarwal, 2001; Agarwal, 2007). Hence policymakers need to monitor developments closely, and stand ready to take additional hard steps should conditions warrant. We feel that close working relationships between central banks, governments, international agencies and the academic world considering World Economy as a single entity and rising above country specific selfish interests can help build a Sustainable Financial World tomorrow.

Financial literacy has become a more frequently discussed topic, particularly in the United States (Fromlet, 2008). The in-appropriate use of Derivatives and the Global Financial Turmoil supports the view that Financial literacy amongst the households, corporate and policy makers has not been appropriate. Hence there is further need to have an increased focus on financial literacy which must be regarded as a logical development, since conditions for understanding financial markets have changed quite dramatically in the age of accelerating globalization (Fromlet, 2008 ; Agarwal, 2008b). Fromlet's survey findings also indicate that markedly better financial literacy has the capacity to improve macroeconomic growth on three grounds. The first is related to modern growth theory and the positive impact of investment in human capital on GDP. The second comes via an improved balance between savings and consumption. The third comes via avoiding bubbles and financial exuberance as a consequence of clearly increased financial literacy, a positive contribution to economic growth.

The World Economy is moving towards a new economic order. With the strong presence of US, Europe, Russia, China and India as key role players in the global economic framework, we may see a re-emergence of a multi-polar economic globe. The difference this time will be that each of these nations will have their edges different from the others. This is unlike the time when it was a bi-polar world with US and Russia being at the helm of affairs based on military might. What seems to be

Emerging as edges within these nations is US for its high-end technology & military structures, Europe for its financial strengths; Russia for natural resource extraction and military structures; China

¹ The fund created based on the concept to meet needs of employment, poverty reduction and increase in education (a) In 1997, Tunisian Solidarity Bank (for micro-credit finances for education and SMEs) ; (b) In 1999, National Employment Fund (21-21 Fund).

as a production hub and India as a Market. This would distribute the production centers, the market centers, the financial centers, the military structures to different regions within the World Economy. If we are really looking at building a stable and growth oriented future for Nation's in the global village, then we need to free ourselves of barriers and allow the market mechanism to freely flow and be part of this large society.

The Uzbek Model of Economic Development has been a reform process for the nation's economic stabilization. Several phases of this process brought about miraculous effect in Uzbekistan's economy. The main objective of the model has been to create conscious instrument for purposeful economic development of Uzbekistan. The GNP growth, wages and the potential resources and sources of economic growth like investment, fuel, financial, energy, crediting, material resource were the initial areas this model stressed on. Further the aspects related to price, currency, fiscal money and foreign economic policies were also added. The industrial and agricultural sectors are given equal importance for the developmental programmes. The government-led industrialization and import substitution programs have induced growth with a focus on utilization of (a) cash crops and natural resources (including energy and non-ferrous metals) and (b) public capital investment. This has contributed to the economies success in mitigating and reversing the output decline post independence since 1991 (Zettelmeyer, 1998).

We would like to lay stress again, that we first and foremost need to take care of the social security facilities/non-conforming systems existing in the economy towards the fulfillment and maintenance of the Senior Citizen's Dignity, Environment and a Social equilibrium in the society if we truly want to build Nations' future.

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Appendix A3.1 Employment Growth and Economic Development Model

Economic growth is extensively dependent on Employment growth. Many developed economics have shifted these resources to only one segment namely Services. The GDP contribution of services sector is between 60-80% for most developed economies in the last 3 decades. It is important that there is homogenous distribution of other sectors – agriculture and industry to contribute and have sustainable economic growth. This is despite the fact that corporations see economically benefiting externalities in economic havens, low cost economic zones and developing regions of the world. It is important that the government steps in to create avenues for domestic and foreign participants contribute in the growth of the three sectors to have homogenous contribution to the GDP with small year-on-year variations. Some of the Growth Key Model's are

- a. Chanakya / Kautilya (4th Century BC)
- b. Agarwal (1974, 1988) - Goal Program Model for decisions under Risk and Uncertainty
- c. Agarwal and Agarwal (2005) - Inflation, Savings and Financial Development
- d. Agarwal, Agarwal & Solojentsev (2008) - Human Resource Capacity Building Model in Venture Capital
- e. Ilyina and Samaniego (2009) – Multi-Industry Model for Growth with Financing Constraints

Venturing and adapting economic systems to fast changing market orientations in troubled times in different regions of the world have been observed to play critical role in inducing economic growth and boasting employment. Agarwal (1974, 1988) Goal Program Model for decisions under Risk and Uncertainty and Agarwal, Agarwal & Solojentsev (2008) Human Resource Capacity Building Model in Venture Capital funded ventures provide solution to enable organizations adapt to fast changing environments. The genesis of modern venture capital in existing literature is traced to the activity of Spanish Queen Isabella of Spain who sponsored the voyage of Christopher Columbus. DuPont (1919) is regarded as the first modern day venture. DuPont purchased thirty eight percent of equity interest in General Motors. IBM was established in 1924 by a group of wealthy individuals by merging a few smaller companies. Ralph Flanders, president of Federal Reserve Bank of Boston proposed creation of fiduciary funds which would enable institutional investors to invest five percent of their assets in equity of new ventures. Xerox Corporation is an excellent example of corporate venture finance whereby Haloid Corporation invested in the technology developed by Chester Carlson and Battelle Memorial Institute. The first venture capital firm in California – Draper, Gaither and Anderson was founded in 1958 and led to development of formal venture capital firm in Silicon Valley and San Francisco (Florida and Kenney, 1988).

In India, Chankaya (350-283 BCE) a Professor at Takshashila University on being thrown out by the Nanda King ventures in to make a boy wandering in the streets the first Maurayan Emperor Chandragupta. Chandragupta Maurya (340 BC - 298 BC) reign is remembered for defeating Alexander's Macedonian Satrapies, Nanda Empire and Seleucus and for unifying India. The period of Mauryan Empire (322 BC - 185 BC) is regarded as the Golden Age in Indian History with trading done in Silver Panas. Taksha, an ancient Indian king ventured into creating a centre of advanced learning called Takshashila (5th century BC) for teaching of Vedas and advanced knowledge in eighteen arts including archery, hunting, elephant lore, law, medicine and military science. The Nalanda University (1197BC-527 BC) was the first university to be setup in the world housed over 10,000 students and over 2,000 teachers on the campus. The Nalanda University attracted students and scholars from all across the globe in a period when global information flow and transportation was negligible. The idea of Pandit Madan Mohan Malaviya to set up a Hindu University which will spread oriental learning and theology contributed to the development of the prestigious Banaras Hindu University (1915), a centre of excellence even today. Kashi Naresh and Sri Rameshwar Singh Bahadur, Maharaja of Darbhanga funded this venture. In agriculture the share cropping institution (in which input costs and output revenues are shared by cultivator and land owner) of land tenancy lead to development of entrepreneurship in Indian farmers. Share cropping form of land tenancy promoted farming in a number of non conventional items including tobacco. Most of the MBA's offered do not focus on a number of financial issues which have attained vitality post 1985 with organization failures due to poor management and understanding of Finance. There exists an over-emphasis on other streams of management which were on the peaks of organizational success in the 1950 to 1980s leading them to create general MBAs with specialization in only one semester having two to four papers in specific management discipline. Indian Institute of Finance recognising this need pioneered business finance education in India in 1987.

Table 1 Genesis of Select few Key Venture Finance Projects

The current research traces the genesis of Venture Finance in India to fifty century BCE Classical Venture Finance, which can be traced to development of Nalanda University, Takshashila, Mauryan Empire and in recent times to Biocon and VLCC. Corporate Venture Finance can be traced to emergence of Alexandra Cotton Mill, Benaras Hindu University, Yarn and Jute Mill of Goenka, Lijjat Papad, Infosys and Kshema Technologies. Institutional Venture finance started in late 1980s with the development of TDICI in 1988.

| Year | Venture | Venture Finance Provider / Contributor | Country |
|------|---|--|---------|
| 527 | Nalanda University (527BC to 1197) | Kumaragupta | India |
| 518 | Takshashila | King Taksha | India |
| 350 | Chandragupta Mauryan Empire (350-283) | Chankaya (Kautilya) | India |
| 1492 | Christopher Columbus expedition (Colonization) | Isabella, Queen of Spain | Spain |
| 1869 | Alexandra Cotton Mill | Jamsetji TATA | India |
| 1906 | Xerox | Haloid Corporation | US |
| 1908 | General Motors | DuPont (VF in 1920) | US |
| 1915 | Banaras Hindu University (Oriental learning and Theology) | Kashi Naresh and Sri RS Bahadur, Maharaja of Darbhanga | India |
| 1919 | Yarn and Jute Mill | Ramnath Goenka | India |
| 1924 | IBM (Punched Card) | TMC (1896), CSC(1891) and ITRC (1900) merged | US |
| 1926 | Bajaj motors (Motor Vehicles) | Seth Bachhrai | India |
| 1938 | Eastern Airlines and Douglas Airlines | Laurance Rockefeller funded Venrock | US |
| 1946 | Amul | Gujarat Co-operative Milk Marketing Federation Ltd | India |
| 1950 | Share cropping farming institution (Tobacco) | Landlords and farmers | India |
| 1957 | Digital Equipment Corp. (now HP) | Georges Doriot, Ralph Flanders and Karl Compton/ ARDC | US |
| 1959 | Fairchild Semiconductor (Practical integrated circuit) | Laurance Rockefeller funded Venrock | US |
| 1959 | Lijjat Papad | Shri Mahila Griha Udyod | India |

| Year | Venture | Venture Finance Provider / Contributor | Country |
|------|--|---|---------|
| 1960 | Florida Foods Corporation (Nutritional one minute juice) | J.H. Whitney and Company | US |
| 1962 | Reliance Commercial Corp. | Dirubhai Ambani | India |
| 1968 | Intel (X86 Microprocessors) | Robert Noyce and Gordon Moore | US |
| 1977 | Oracle (Database software) | Larry Ellison, Bob Miner & Ed Oates | US |
| 1978 | Microsoft, DOS (Disk Operating System) | Bill Gates and Paul Allen | US |
| 1978 | Biocon | Biocon Biochemical Ltd. (Ireland) and Kiran Mazumdar Shaw | India |
| 1981 | Infosys | Sudha Murthy | India |
| 1984 | Cisco (Router) | Len Bosack and Sandy Lerner | US |
| 1987 | Business Finance Education in India | Indian Institute of Finance | India |
| 1987 | 3i Group | Bank of England | UK |
| 1989 | VLCC | Vandana Luthur and family | India |
| 1992 | MASTEK | ICICI and UTI promoted TDICI | India |
| 1994 | Amazon.com (Online Book store) | Jeffrey P. Bezos | US |
| 1994 | Yahoo (Search Engine) | Sequoia Capital | US |
| 1996 | Hotmail (Free Webmail service) | Draper Fisher Jurvetson | US |
| 1997 | Kshema Technologies (Customised IT Services) | Anant Koppar | India |

Source: Self Formulated from Historical Archives, Encyclopaedias & Wikipedia

3.1 Modelling Human Resource Capacity Building in Venture Capital funded ventures

3.1.1 Human Resource Capacity Building Model

The production function in any firm requires two critical inputs i.e. Capital and Labour. In a venture capital funded venture, human capability augmentation takes place at one end with capital provider and on the other hand with the capital receiver. Labour in a venture capital firm includes both office and administrative staff and floor level workers. As in the consumer theory the objective of a firm is to maximise output represented by

$$\text{Maximise } F(K, L) \quad (4.1)$$

Where K is capital and L is labour

$$\text{Subject to the cost constraint} \quad wL + rK = C_0 \quad (4.2)$$

For cost minimisation the necessary condition includes that the marginal products of all production inputs must be equal when these marginal products are adjusted by the unit cost of each input i.e.

$$MP_L/w = MP_K/r \quad (4.3)$$

So to minimise the cost and for achieving the results as represented by equation 4.3 both the capital provider and receiver must ensure that human capabilities are engaged in a manner that provides the maximum output to an economy

As per the linear programming format of the Stochastic Goal Programming Model (Agarwal, 1976) a firm will try to

$$\text{Minimise} \quad C = (P_i d_i^+ + P_i d_i^-) \quad (4.4)$$

$$\text{Subject to} \quad ax_i + u_i x_i + d_i^- - d_i^+ = b_i \quad (4.5)$$

$$x_i, d_i^-, d_i^+ > 0 \quad (4.6)$$

where P_i refers to priority coefficients, $d_i^{+/-}$ refer to positive and negative deviational variables, u_i is a random variable which is normally distributed with mean zero and variance-covariance matrix Σ , "a" is a matrix of fixed coefficient representing row vector, x_i are the column vector and b_i is a function of all the goals i.e. Given that a venture capital firm receiver and provider desire to achieve particular goals (x_1, x_2, \dots, x_n) then $b_i = f(x_1, x_2, \dots, x_n)$

Now by using equation 4.1 to 4.6 for Human resource capacity building a priority based model is proposed. The extent to which human personnel are employed depend on the priority the venture capital provider and receiver pay to each of the below mentioned variables. Therefore a priority based model for the pre investment phase is as follows.

3.1.2 Pre Investment Human Resource Capacity building Model

Schumpeter (1942); Baumol (1968); Leibenstein (1968); Tyebjee and Bruno (1984); Drucker (1985); Kirzner (1985); MacMillan; Zemann and Narasimha (1987); Rumelt (1987); and Teece (1987) have elaborated on the functions of an entrepreneur and how his functionality is different from that of a manager. However, there exists very little empirical evidence on how does an entrepreneur lead to human resource augmentation in a new venture. With increasing large scale retrenchment in the light of global financial crisis of 2008 it is important how does an entrepreneur can involve such retrenched staff and help tackle increasing unemployment and contribute to growth in the real sector. Entrepreneur has been kept as the alpha coefficient in our model because of the ability to combine tangible and intangible resources in novel fashion (Kirzner, 1973) and can specialise in development of new business activities (MacMillan, Kulow and Khoylian, 1989). Akerlof (1970) discussed the Information asymmetry problem in the used car market. In venture finance information asymmetry also arises between the entrepreneur and the VC firm. The entrepreneur is reluctant to share the entire details of the project with the finance provider and the investor in a new venture tries to know more and more about the venture. This contributes further in hiring of more individuals to prevent adverse selection by the fund provider. During the pre investment phase human resource has to be employed by the venture capital provider for accepting, screening, negotiating, drafting and signing on the contract. The entrepreneur has to employ human personnel that can help in preparation of proposal

$$\text{Maximise HRCB}_1 = \alpha + P_1^{+/-} \text{DPS} + P_2^{+/-} \text{DAS} + P_3^{+/-} \text{DSS} + P_4^{+/-} \text{DNS} + P_5^{+/-} \text{DM} \quad (4.7)$$

- where, α = Entrepreneur and/ or innovator
 DPS^1 = Deal proposing staff
 DAS^2 = Deal accepting staff processing both solicited and unsolicited proposals
 DSS^3 = Deal screening staff undertaking technical and economic feasibility of the venture
 DNS^4 = Deal negotiating staff
 DM^5 = Deal makers who may or may not form the board of the new venture

3.1.3 Post Investment Human Resource Capacity building Model

$$\text{Maximise HRCB}_{1+} = P_6^{+/-} \text{PDS} + P_7^{+/-} \text{LS} + P_8^{+/-} \text{MS}_1 + P_9^{+/-} \text{MS}_2 + P_{10}^{+/-} \text{RS} + P_{11}^{+/-} \text{OS} + P_{12}^{+/-} \text{ES} + P_{13}^{+/-} \text{FS} + P_{14}^{+/-} \text{PIMS} + P_{15}^{+/-} \text{SDMS} + P_{16}^{+/-} \text{HHS} + P_{17}^{+/-} \text{LS} + P_{18}^{+/-} \text{CCS} + P_{19}^{+/-} \text{SLS} + P_{20}^{+/-} \text{EDS} \quad (4.8)$$

- where, PDS = Product/service development staff
 LS^6 = Labour for manufacturing the product or employees for providing service
 MS_1 = Managerial Staff supervising the line function
 MS_2 = Marketing staff commercialising the new product/service
 RS = Research staff reviewing the product/service (including receptiveness in the market) and suggesting changes for further development
 OS = Operational staff taking both order and sales
 ES = Evaluation staff (ensuring quality and cost control)
 FS^7 = Finance staff (managing the future liquidity requirements of the venture)
 PIMS^8 = Post investment monitoring staff of the venture capitalist
 SDMS^9 = Strategic decision making staff may serve on the board of the new ventures
 HHS^{10} = Head Hunting staff
 LS = Legal services staff taking care of patents
 CCS = Customer care staff
 SLS = Supplier liaison staff

¹ Tyebjee and Bruno (1984)

² Tyebjee and Bruno (1984)

³ Tyebjee and Bruno (1984)

⁴ Tyebjee and Bruno (1984)

⁵ Tyebjee and Bruno (1984) ; Gompers (1997)

⁶ Kortum and Lerner (2000) ; Ljungqvist and Lu (2004)

⁷ Bygrave, Hay, Ng and Reynolds (2003)

⁸ Maula (2005)

⁹ Gompers and Lerner (2001)

¹⁰ Gompers and Lerner (1999) ; Hochberg, Ljungqvist and Lu (2004)

EDS¹ = Exit determining staff of the venture capitalist

Equation 4.7 and 4.8 may be solved a linear regression equation or as a Linear Programming problem with equation 4.3 as the constraint. The aggregate effect of venture financing on employment growth may be seen by drawing an analogy with the Keynesian Multiplier. The total Human Resource capacity building will be much larger than what is purported by equation 4.7 and 4.8. This is because each factor outlined in equation 4.7 and equation 4.8 may hire other individuals for fulfilling their responsibilities effectively. Hence, to understand the aggregate effect on the economy the total Human resource capacity building is given by

$$AHRCB = 1/1 - b_H A p \quad (4.9)$$

Where, p represents the entire set of twenty factors mentioned in equation 4.7 and equation 4.8. b_H is representing marginal propensity to hire.

3.1.4 Employment Market Equilibrium Model

The pre and post Human Resource Capacity Building (HRCB) investment model can be extended to k factors using the Employment Market Equilibrium Model, which is represented as

$$\langle D = a + P_{i,1} p_1 + \dots + P_{i,k} p_k + G_i \quad (4.10)$$

Subject to

$$\sum_{i=1}^N P_{i,k} = 1$$

$$0 < P_{i,k} < 1 \quad i = 1, 2, \dots, N$$

where, <D is the equilibrium level of employment, p represents the factors mentioned in equation 4.7 and 4.8 and G_i is the random or unexplained employment augmentation with E(G_i) = 0.

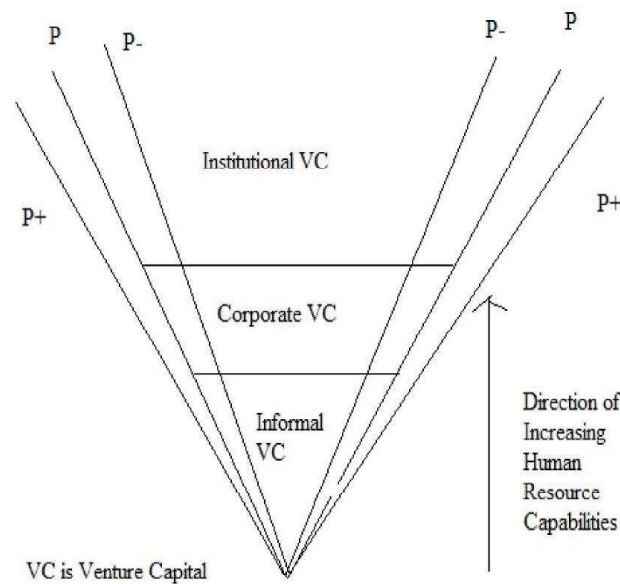
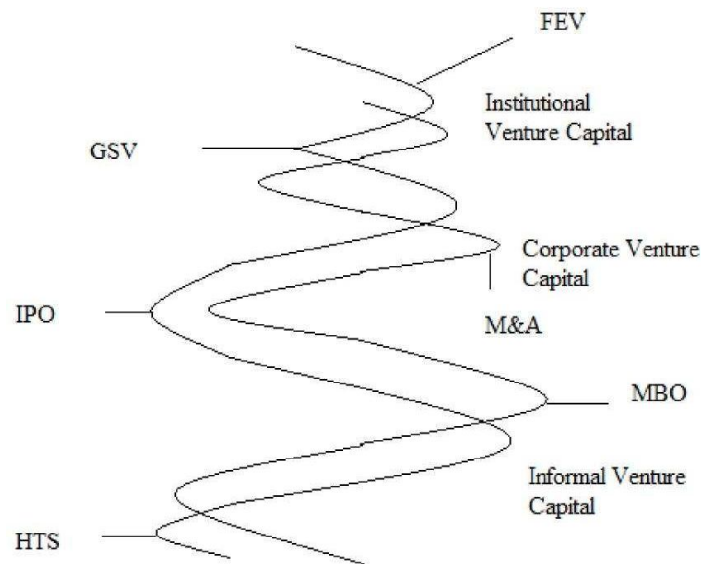


Figure 1 Micro-Economic Perspective of the Human Resource Augmentation at firm level

The Figure 1 below explains the total human resource augmentation for a new venture. An informal Venture Capital (VC) includes a wealthy individual or a business angel, corporate VC may use the services of a larger number of individuals forming part of the corporate structure and in case of an institutional VC a larger set of individuals forming part of the pension funds or insurance companies or other financial institution may employ a much larger set of individuals for searching and financing profitable ventures.

¹ Zahra, Yavuz and Ucbasaran (2006)



- Note:**
- HTS = Hostile Takeovers Staff
 - MBO = Management Buyout
 - P = Purchase of stake by Public by Initial Public Offer (IPO)
 - M&A = Mergers and Acquisitions
 - GSV = Government Supported ventures
 - FEV = financially engineered ventures

Figure 2 Macro-Economic Perspective of the Human Resource Augmentation Spiral at international level

The above Figure 2 depicts the evolution of Human Resource capacity building in a venture financed firms that has taken the shape of a spiral. Informal Venture Capital (VC) being the oldest has the largest number of individuals hired. The number of firms going for informal VC is the highest. Also, the processing activity in an informal VC is least cumbersome and time consuming. Informal VC further added to development of specially hired individuals who are constantly looking for opportunities of Hostile takeover. The conflict between the entrepreneur and the venture capitalist lead to management buyout (MBO). For undertaking MBO especially skilled managers were hired by the entrepreneur. With a need for a more formalised structure of venture capitalism, corporate venture capitalism developed. This form of venture capitalism augmented hiring of staff which could assist in undertaking Initial Public Offer (IPO) and Mergers and Acquisitions (M&A). With lesser number of firms financed by Corporate VC the human resource base for corporate VC is smaller than that of Informal VC. With government taking note of the contribution of venture capital funded firms helped developing Institutional VC firms. This further promoted the growth of a new profession of financial engineers who would develop new financial instruments, processes and help in solving problems in finance by either restructuring or undertaking risk management. The spread of the spiral shows the total contribution to Human resource capacity building.

3.1.5 Assumptions of the VC-HRCB Model

The model is an abstraction of the real world for employment capacity building and is based on some assumptions.

The assumptions have been included to make the model more tractable from mathematical point of view. The HRCB

Model assumptions are as follows

- Assumption 1: Firm will try to maximise marginal productivity of all employed factors.
- Assumption 2: Venture Capitalists and individuals employed in new ventures are rational.
- Assumption 3: Entrepreneur / Innovator are necessary for all new ventures.
- Assumption 4: Employment markets are competitive i.e. employment market is in equilibrium.

- Assumption 5: The model is applicable for one period time horizon. The results will be affected by a different assumption as regards time period.
- Assumption 6: There exists an employment exchange market for hiring of skilled individuals i.e. there is no constraints as regards the availability of employees with a particular skill set.
- Assumption 7: Firms hire and retrench employees during the lifetime of the firm.
- Assumption 8: The supply of entrepreneurs is limited in the economy.
- The assumption 5 can be relaxed by adopting a dynamic modelling approach.

3.1.6 Limitations of the VC-HRCB Model

The following limitations have been observed in the Model

1. Testing the model for short periods may not give suitable results.
2. The model assumes static relationship which may be dynamic.
3. The model believes that the employment capacity building is a simple structural form because it is mathematically tractable.
4. The model does not find the covariance among mentioned factors i.e. how does one factor affect employment augmentation in other factor.
5. Enormous data requirement limits the use of the model (as each regression for finding priority coefficient will require 21 inputs).
6. Unidentified factors contributing to HRCB may still remain.

3.1.7 Life Cycle Hypothesis for a Venture Capital provider and Innovator/Entrepreneur

Life Cycle Hypothesis states that a venture capital provider will invest in a venture and continue to stay with it till it is successful and then exit for profits. An entrepreneur in a VC funded enterprise continues to either stays with the successful venture or undertakes an exit for profits. After exiting the successful venture the entrepreneur either becomes an Angel Investor promoting innovation based ventures or starts a new innovative venture along with venture finance providers. (see Figure 3).

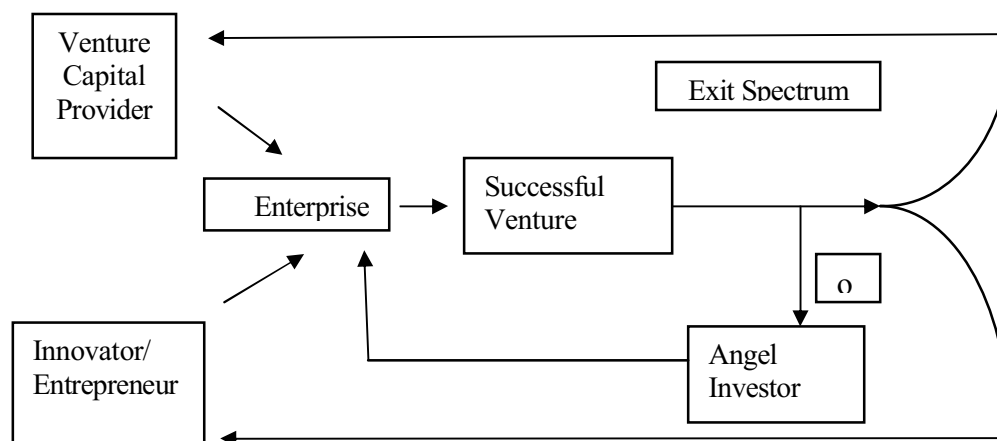


Figure 3 Life Cycle Hypothesis for a Venture Capitalists, Innovator and Entrepreneur

The hypothesis has been observed for a number of successful entrepreneurs including Jamsetji TATA (India), Ramnath Goenka (India), Anant Koppar (India), Gurbaksh Chahal (US), Sabeer Bhatia (US) and Sunil Bharti Mittal (India). They entered new ventures with support from business angels and later exited for profits. Their super ambitious genes prompted them to start new venture again and later exit for enormous profits. Such entrepreneurs either continue to remain in the cycle or exit it by becoming angel investors themselves. For example, in 1869 Jamsetji TATA converted a bankrupt oil mill in Chinchpokli into a profit earning cotton mill called Alexandra mill. He exited the business after two years to fulfil his dreams in the areas of iron and steel, education and power. Ramnath Goenka in 1919 ventured into trading of yarn and jute and later exited to establish Indian Express in 1936. In 1960 Ranjit Singh and Gurbux Singh who were employees in a Japanese pharmaceutical company ventured into forming Ranbaxy by borrowing a large amount of money from Bhai Mohan Singh. In fact, the

name Ranbaxy is formed by merging the names of the two entrepreneurs. This Pharmaceutical business was later acquired by the financier Bhai Mohan Singh when both Ranjit and Gurbux could not pay their dues. Recently, the present CEO Malvinder Mohan Singh exited this profitable venture by selling the promoter's stake of 34.82% to Japanese pharmaceutical company Daiichi Sankyo (www.livemint.com). Anant Koppa (1997) established Kshema Technologies as a software service industry for Industrial automation, healthcare, life sciences and mobile telephony. It was acquired by Mphaisis in a stock-cum-cash deal. Sunil Bharti Mittal started to make crankshafts for local bicycle with money borrowed from his father. Mr. Mittal later exited to create successful ventures like manufacture of push button telephones and now Airtel. Bharti group has also ventured with Rothschild family for fruit and vegetable processing and exports. Gurbaksh Chahal (US) made his way from rags to riches as he earned US\$ 3,00,000 a month from Internet advertising company he founded at his home. He exited in his first venture (Click Agent) in 2000 by selling it for US\$ 40 million. His second venture, Blue Lithium was bought by Yahoo for US\$ 300 million. Now the young entrepreneur is planning a new venture of developing a reality TV show in India. Sabeer Bhatia (US) venture provided free email service and tried to earn revenue by advertising on website. Later, Draper Fisher Ventures (DFV) invested US\$ 3,00,000 in this project in 1996. DFV later exited by selling it to Microsoft for US\$ 400 million. Mr. Bhatia is also regarded as an angel investor for NeoAccel.

Appendix A3.3 Sustainable Environment and Development

Changing Climate is raising alarms towards the usage of Energy and attainment of Sustainable Development globally. It is difficult to comprehend as to the certainty of how technological possibility will play out in the future to provide a balance for the need for survival vis-à-vis embracing the environmental concerns. Given the attention attained by the need for energy and the impact of climate change due to pollution, one can say with assurance that developments in energy markets will remain central in determining the longer-run health of national economy and societies. The experience of the later half of the last century affirms that market forces play a key role in conserving scarce energy resources and directing those resources to their most highly valued use. The productive capacity of the future can no longer be based on market forces alone. They would have to consider the cost to the society and the future, which would enforce the creation of Green Energy and their productive use for sustainable development. Hence energy and climate change issues present policymakers and citizens with difficult decisions and tradeoffs to be made outside the market process.

Effects of a changing climate are widely observable with the temperatures and sea levels on a steep rise with melting of ice and snow covers (Fralkenmark, 2007). The consequences could be catastrophic for the natural world and society. A large number of scientific studies indicate that due to the release of green house gases (such as carbon dioxide and methane) and wars, the impact on atmosphere by human activity post 1920 has been the primary cause of the drastic climatic change. One cannot do away with the effect of war situations and bombings done in the last 2 decades contributing to temperature variations, seismic disc movements and ozone depletion. Increase in Air-traffic and Airplanes travel at very high altitudes has also impacted on global warming. IATA predicts another 500 million passengers will take to the skies by 2010, with jet aircraft emitting 23 kg of CO₂ per 100 passenger per km, raising the risk to nature and mankind. Not only is the CO₂ emission a problem but also the Nitrogen dioxide from airline engines leads to formation of ozone leading to creation of cirrus clouds enhancing green-house effect contributing to global warming. In Europe it-self it is estimated that emissions from air travel increased by 73% between 1990 and 2003 (Philip, 2007). We need to secure a profound change in the way we generate and use energy, and in other activities that release these gases.

The unprecedented combination of climate change and associated disturbances like flooding, droughts, wildfires, insects and other drivers like land use change, pollution and over-exploitation of resources would lead to shift in agriculture productivity and economic growth globally. Even though agriculture is one of the smallest percentage contributors to the GDP pie, it holds the prime place in the Growth chart of nations. Moving to Green Technology for energy needs globally at the earliest possible is the only given solution to this complex problem. It is also important to note that Green Technology (based on renewable sources) is not only cheaper but also more labour intensive (both skilled and unskilled) in the long run than the non-renewable sources of energies in use. We believe that this would enhance the employment and reduce the tense atmosphere due to Un-Employment & Aging Population as well (especially in the Developed regions of the World). The Nobel Peace Prize 2007 to IPCC; the Al Gore's initiatives; The Global Forum 2007; The OECD Forum 2008 and the SIWI's Water Awards

every year for last three years have sent very powerful messages to the global community on the climate change and appropriate water management for developing an appropriate balance between a healthy ecosystem and sustainable growth.

4.1 Finland and Nordic Initiative

Finland, Sweden, and other parts of the Nordic Region are endowed with large terrains of Green belts (with forests land coverage being over over 85% in Finland, over 70% in Norway and over 50% in Sweden). The environment friendly parliamentary view and stagnant population in the region have enabled maintain the rich Green heritage. It is commendable to see the Nordic commitment towards environment, which is clearly visible from the decision to do away with the fossil fuels from the energy mix by 2020 through introduction of referendum since 1980 beginning with Sweden to move away from Nuclear Energy. This is despite the fact that Nordic's electricity consumption has been rising and it has one of the world's highest individual levels of energy consumption of about 18,000 kWh/head. Today, just under 50% of domestic energy production in Nordic region is based on nuclear, about 40% on hydro and 8% via fossil fuels. The Nordic Region introduced nuclear energy into its energy mix in 1965 to substitute fossil fuels. The moves towards Green Energy in the 1970s and towards Green Renewable Energy now by the Nordic countries are both because of ecological and economics reasons (i.e. due to Oil shocks of the 1970s and those posed 2004 onwards).

4.2 India Initiative

India is in need for huge energy requirements for sustaining the growth induced with increased trade, commerce and international presence in the country. Currently India's energy mix is a combination of hydro-power, bio-energy (wind, bio-gas, bio-diesel and others), solar, coal and nuclear energy. As far as economics of operations for energy creation and distribution are concerned, India have proved that it competes equally with the best, be it in the production of nuclear power, heavy water, bio-energy or nuclear fuel.

It is also interesting to note that 31% of India's primary energy comes from bio-energy that include agricultural and forest waste, wood chips, animal waste and bio-fuels. In India, Bio energy (non-commercial) is second only to coal, which accounts for just over a third of India's primary energy mix. Estimates show that about 70% of India's domestic energy need is met by bio energy. It is expected that 25 years from today taking the bio-fuels and renewable sources of energy, the share of non-conventional energy in our energy mix is expected to be 12-15% in the very least. Bio-energy's potential over the next 25 years, is about 2.5 times the combined potential of hydro, wind and nuclear. It is estimated that 60 million hectares for energy plantations, commercially grown bio-energy could yield 29-35% of India's primary energy requirements even 25 years from now. Inclusive of non-commercial bio energy, the share could be 39-45% (Sethi, 2007).

Apart from Bio-energy, India also enjoys being a Solar rich receipt. Scientific calculations show that about 7-8 million hectares under solar cells could give India energy independence even 25 years from now. From a forest conservations perspective, 2.25 million hectares under solar cells with 15% conversion efficiency could yield the same energy as 60 million hectares of wood plantations would yield.

To enable make the reach of Solar and Bio-Energy to the larges, the governments would have to promote and develop schemes to involve industries and government projects. One of the clear ways is to grant the request of the Industry for approving the R&D outlays as deduction from taxes due and that this fiscal incentive be made tradable. Also all the bio-fuels or bio-chemicals should be subjected to a very low tax or be exempt from taxes that are imposed on fossil fuels or fossil based chemicals to involve the SMEs and large industries to move towards Clean Renewable Energy sources.

4.3 World Energy Fund

The concerns and debates in the last five years on Energy and Climate change need to be addressed. It is vital that international agencies like the UN, IEA and World Bank take steps to give directions to nations and international society for developing means for appropriate actions to curb environment pollution providing for sustainable sources for development and growth globally.

Based on the concept of the UNs World Solidarity Fund, so created in December 2002 on the suggestion of Tunisian President Ben Ali (in December 2000 at UN Forum), we would like to propose the creation of a World Energy Fund to meet the needs and smooth transmission for change over to Clean Energy by industries globally.

The World Energy Fund may function by engaging in

- ◆ focus through
 - Purchase of Technology Patents for Clean/Green Energy to enable cheaper industrial usage by the industries globally (especially in developing regions of the World)
 - Promote Bio-Energy Sources (Bio-Diesel / Bio-Gas) and Solar Energy for Household energy consumption needs.
 - Governments to move forward than just Kyoto Protocol to sponsor or further projects which are based on Green Energy Sources for their Future Power needs.
 - Green Fuels to be Tax Free for a period of 5-10 years.
 - develop capital market financing energy products to finance Green Technology.
- ◆ finance the Fund through
 - Seeking donations (organization, international agencies & governments)
 - Introduce Pollution Tax (country/sector basis)
 - Fee from Use of Patents (purchased)
 - Environment Tourism (In Sweden over 3 million Sweds have visited Swedish Nuclear Plants (HT-Reuters, 2007))

The global world and economies are faced with challenges to counter climate change, energy and sustainable development. Though it is the responsibility of every citizen of the global world to fight against such environmental socially-ill, however the duty primarily rests on the shoulders of governance bodies and international agencies to play a proactive role in clearing the menace and providing directions to industry. With the changing structure of world investment, trade, capital flow and the need for deeper integration, strengthening regulatory framework and signaling system is greater. Globalization has altered the economic frameworks of both developed and developing nations in ways that are difficult to comprehend. Also the emergence of unregulated global markets appears to have moved towards a more stable and growth oriented economic globe. What is needed today is to develop sensitivity sensor systems to promote green technology within the financial framework as an integrated approach to keep markets from busting and causing socio-economic environmental panics. Faced with these uncertainties, it is especially important that policymakers undertake the required policy adjustments for a sustained global expansion. As well, supervisory and regulatory authorities need to continue to strengthen energy financial market infrastructure to underpin the resilience of the ecosystem towards sustained development and clean tomorrow.

Appendix A3.4 Restructuring Pension Systems and Societal Setups

Financing life has been the issue for ages. One desires and dreams of a comfortable flourishing life for their family and to have a better standard of living. This is normally the underlying for all financial planning of the future. We find that demographic, social, economic and political changes in recent times have stimulated the political and academic debate about how to provide and pay for the care of masses and the older generation in particular. This has been a rising concern for almost all developed nations and the emerging economies with an extreme shift in proportion of older generation within the demographic setup. India fortunately is blessed to be a young nation with over 60% population young and below 40 years of age. Increased public awareness of means-testing for care and consequent asset loss has also increased globally and in India. This has pushed the issue up the economic socio agendas. However, evidence about what people think requires an appropriate balance of responsibility between the individual and the state, for meeting future needs. It has been found that there has been increased use of personal financial resources to secure later part of one's life and in establishing how these vary with personal and socio-economic circumstances in the given nourishing environment. The state needs to see that there is an appropriate mix of personal and state resources in place to enable develop a self-financed market oriented financing product and service.

Time has seen systems emerge from self sustaining traditional cyclic to governmental social security systems and the private pension funds. The global village has addressed the ups and downs in these systems over their evolution in the last century. The self sustaining traditional cyclic system seems to have prevailed over the rest, given the test of time. You may be wondering what I mean when I say the "self sustaining traditional cyclic system". I am again coming back the personal financial resource management mechanism. It is a medium via which the parents invest in their children to enable them serve as social security for them in old age and further develop a secure future for their children. This is a never lasting cycle, which is a success by far. The western societies, both American and the

European, have been trying to explore the mystery of this age old *Bhartiye* culture and civilization (aging over 8000 years). These young societies though economically sound have not been able to evolve a self-sustained economically balanced social security. Hence, they have not only tried to understand but also adopt many of our traditional systems of life, as is evident from their shift of belief, values and the East look policies.

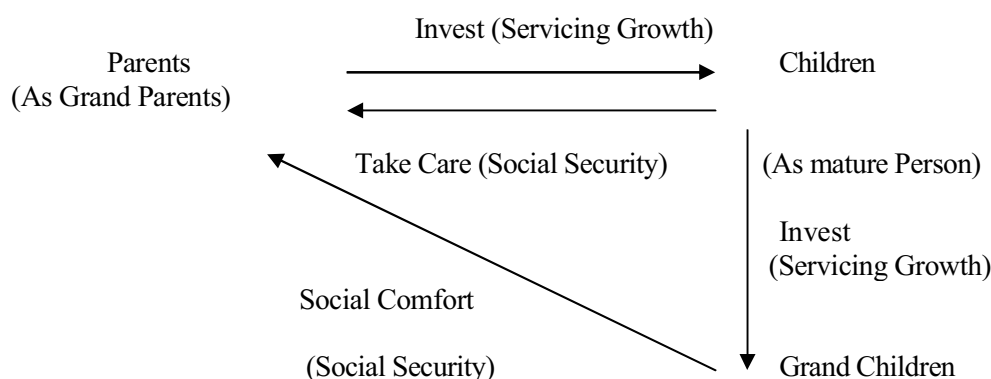


Figure 1: Self Sustaining Traditional Cyclic System

We feel the Social Security for India cannot be in align with the developed nations and the Western philosophy as we have more than 400 million¹ (35% of India’s population) in the un-organized sector. Not only this, but also it is well evident from Federal Reserve documents and research studies that the total burden of the formal social security system and the payments their off are posing tremendous problems for a rich nation like US. This problem is not their with the US only, UK, Japan, Germany, France and many other developed nations are facing the same tune due to mis-management of social security funds and non-servicing population (young). In our understanding from literature in Europe similar systems did exist till as recently as the last 1960s, but had dissolved given the capitalistic market driven systems taking hold in the society.

A well articulated book by Noriyuki Takayama on “Taste of Pie: Searching for Better Pension Provisions in Developed Countries” has tried to also explore, explain, evaluate and suggest on the prevalent social security systems and their role in financing old age towards comfortable living. The need to earn more with a belief of larger sum assuring late periods of one’s life has emerged out of the materialistic lifestyle of the west. Within Asia these systems have turned to be investment avenues for financing of future family needs than to provide for social security. As within an Asian’s mind the true social security is with their future generation (grandchildren and children) secured, rightly so.

Given this one must not push aside the need for financial funds to secure a healthier late life. The complexities of stress, economic competition, efficiency and Darwin’s concept of survival of the fittest have generated the need to think in a more economic than social way for a better life ahead. The thorny question of retirement which lies before us is as to how are we going to finance it. Before we move on to this, we would like all of us to think, as to what have we done to ensure a secure future. Some of the responses which come to our minds are that we have initiated savings; have made investments in bonds, securities (in treasury bills/government bonds) and real estate; setting up of a business (i.e. by entrepreneur). These are certainly some of the well known means of financing finances for the future, but not the means to secure or finance life.

What we most need to do is to provide for a secure flourishing and growth oriented future for the family. We must not forget that “A rising sun is always looked upon”. What is important at this stage is that the Senior Citizen of any country deserves to live with dignity, which they have rightly earned over their life span. The Governments need to see that the “Senior Citizen’s Dignity” is not brought to shame with any of its policy prescriptions, which at times tend to get influenced by the market driven economic systems. The cultural and civilization beliefs are important and must be tightly held for a robust socio-economic system. We all need to respect and honour the same, given that the formal social security systems (both public and private) have failed to provide the masses their dues in market driven economic systems.

¹ Vineeta Rai, Chairperson, Provident Fund Regulatory and Development Authority (PFRDA) interview in Asia Insurance Post, June 2004

Amongst the commonly known financing strategies for Retirement these are

- Annuity Products¹
- Investment in Gold / Silver
- Real Estate
- Deposits (Bank FDs, Equity, Pension, RBI Bonds, Mutual Funds)
- Social Security / Pension Fund Account
- Debt Financing (financing current needs via Debt and hedging it against future incomes)
- Creating future value (by setting up smaller business options)
- Government Bonds (tax-free and taxable)
- Fixed Deposits in the Banks and Financial Institutions
- Post Office Schemes (Monthly Income Schemes & Term Deposits)
- LIC Schemes
- GOI Special Senior Citizen Pension Schemes
- Mutual Fund Schemes

governments may want to consider implementing a few other options from those mentioned below for the benefit of the masses at large. They may want to explore the possibility to directly or with private participation setup

- Re-Employment Pension Fund
- Social Security Account as Monthly Deposit Scheme
- Stable Policy of Pension Fund Rates

Whenever the rates on Pension scheme need to be changed, they need to be done on deposits from the current year onwards and not from retrospective effect, as the expectations, confidence in the system and planning of the masses gets hay way. One must understand that confidence once shaken is difficult to build up, which results in economic sluggishness and failure for future products/schemes.

- Post Office Retirement Scheme

Appendix A3.5

European Fiscal Policy Board :

To avoid De-stabilization within Europe due to inflationary pressures

Agarwal (2007) had re-emphasised the need to set-up a Fiscal Policy Board (as proposed in his work of 1999) to bring in equilibrium in the European Fiscal affairs leading to inflationary pressures in Europe. The Fiscal Policy Board would comprise of Ministers of Finance of EU member states as their board members and Secretary Ministry of Finance to be the Deputies. The role of the Fiscal Policy Board would be to stream line and develop a plan for smoothing the Fiscal Policy within Europe to avoid inflationary pressures and de-stabilization of Europe and the integration process (as observed in India & USA). The suggestion was seconded by Dr. Jean-Paul Fitoussi, President OFCE-Parigi, France and other speakers at the ER forum at the Italian Parliament.

While addressing on the challenges before Europe at the Italian Parliament (on 19 September 2007), the Global Forum 2007 (on 5th November 2007) and Swedish Regional Council Group of Ministers/Ambassadors in (16th November 2008), we were happy to see that the suggestion of Agarwal (1999) to formulate the European Constitution is finding place within Europe and European Institutions with the 1st draft of European Constitution submitted to the people in June 2004. He stressed the need for Europe to focus on global partnerships and interdependence to take care of challenges faced in last 4 years due to higher un-employment (i.e. blue & white collar workers), lower growth within the region, US recession and inflationary pressure within Europe leading to internal dissatisfaction with the integration process. Prof. Agarwal highlighted that these issues are a matter of concern, as they may cause de-stabilization of the Global Financial Stability & Development.

Appendix A3.6

Restructuring of IMF

Agarwal (2004) proposed that there is an urgent need for restructuring the IMF to handle the financial crisis faced by various nations in a more meaningful way. First, there is a need for considering in a systematic fashion, not only the role of world institutions, but also of regional arrangements. Accordingly, regional monetary funds to monitor, regulate and suggest measures to countries of the

¹ A life annuity is an insurance product that pays out a periodic amount for as long as the annuitant is alive, in exchange for a premium

region may be set up. Regional Monetary funds should be set up to assist developing countries in different regions for meeting their temporary liquidity problems and to help them avert default which may perpetuate the crisis by shaking the confidence in these economies. An attempt was made in this regard in 1997. The Japanese government had proposed to set up an Asian Monetary Fund (AMF) first in 1997 to monitor the region's economies and provide early warning to the respective governments on the impending crisis. It could also provide speedy assistance to deal with the crises in their early stages so as to prevent them from spreading. AMF could also be a significant step towards decentralization of international monetary and financial decision making that is presently concentrated in the Washington, DC. Regional Monetary Fund could understand region specific issues better than IMF. However, despite strong support within the region, the proposal for an AMF did not get far. It was opposed by the United States and IMF, as it posed a threat to the monopoly of IMF. However, in 1998, Japan proposed the Miyazawa Plan at the Annual IMF-World Bank meeting, which is a more modest proposal. It seeks to provide a US\$ 30 billion package for the region for short-term trade financing as well as recovery through long-term projects. It was suggested that the Japan Export-Import Bank, the World Bank and the Asian Development Bank could jointly take part in the initiative. Agarwal in his keynote address in Chile on "Volatility of International Financial Markets: Regulation and Financial Supervision" proposed that "India can take initiative to form a regional IMF- SAARC Monetary Fund to assess and help the member countries of this region". Later during the same year the proposal was seriously considered by the government and the honourable PM Shri Atal Bihari Vajpai proposed the idea for the formulation of the Monetary fund at the SAARC meeting in Pakistan (November 22-23, 2004).

Secondly, there is an urgent need to review the working of IMF as IMF package of reviving economies is often counter productive for most of the countries approaching IMF. Often IMF prescribes the same set of conditionalities to every economy which have quite diverse requirements and needs. For instance, the IMF package uniformly insists on belt tightening, devaluation and demand compression measures that affect growth adversely and hence make recovery even more difficult and aggravates volatility in financial markets. Furthermore, despite a widespread recognition of the role played by the capital account liberalization in accentuating the crisis, the IMF has been pushing the affected countries towards accelerated capital market liberalization in the wake of the crisis. IMF often adopts a short sighted and rather inflexible approach to crisis management. Malaysia decided to withdraw from the IMF Program soon after it was initiated to the program after the crisis. Instead, Malaysia adopted an unorthodox approach to dealing with the crisis that included imposition of capital controls although temporarily and the adoption of a fixed exchange rate regime. More importantly, Malaysia's approach also included lower interest rates and fiscal expansion or pump priming by the government as against belt tightening measures and balancing of budget included in the IMF package. As a result, Malaysia did not suffer the kind of social consequences that other affected countries did and the recovery was rather quick with a 5.8 per cent growth of GDP in 1999 and 8.5 per cent in 2000, compared to much lower rates of growth achieved by Thailand, Indonesia and the Philippines under the IMF program.

Thirdly, there is also need for revival of SDRs Allocation. Special Drawing Rights (SDRs) were established by the IMF at the end of the 1960s to supplement international liquidity. SDRs were supposed to become the principal reserve asset. However, the allocation of SDRs has been abruptly halted since 1981, thus adversely affecting the ability of developing countries to supplement their reserves and making them vulnerable to the liquidity crisis. They have been forced to borrow on onerous terms to augment their international reserves. The institution of SDRs continues to be relevant, especially for developing countries and it should be restored as soon as possible by the IMF. There is, therefore, need for a thorough reform of the IMF's working and bringing flexibility into the package that keeps in mind the specific needs of the affected countries.

IMF is currently viewed as a single global institution with no alternatives. It should rather become an apex institution with a network of regional or sub-regional monetary funds observing monetary and economic stability of the regions and equitable growth in world investments.

Appendix 3.7

Private Sector Initiative: Replicating India's Chit Fund Concept in Banking & FI Industry

With the failure of FDIC to provide for funds and the US Government not approving the US\$ 700 billion fund in August 2008, it was observed with 10 major Banks of US and Europe coming forth to setup a joint fund of US\$ 70 billion with each bank contributing. The group of global commercial and investment banks, included Bank of America, Barclays, Citibank, Credit Suisse, Deutsche Bank, Goldman Sachs, JP Morgan, Merrill Lynch, Morgan Stanley, and UBS. This step was initiated to help

enhance liquidity and mitigate the unprecedented volatility and other challenges affecting global equity and debt markets (ET, 2008). These banks would work together

1. First, to assist in maximizing market liquidity through their mutual commitment to their ongoing trading relationships, dealer credit terms and capital committed to markets.
2. Second, to establish a collateralized borrowing facility, which ten banks (Bank of America, Barclays, Citibank, Credit Suisse, Deutsche Bank, Goldman Sachs, JP Morgan, Merrill Lynch, Morgan Stanley, and UBS) have committed to fund for US\$7 billion each (\$70 billion in total). The facility will be available to these participating institutions for liquidity up to a maximum of one third of the facility for any one bank. It is anticipated that the size of the facility may increase as other banks are permitted to join the facility.
3. Third, to help facilitate an orderly resolution of OTC derivatives exposures between Lehman Brothers and its counterparties. This effort included opening the OTC derivatives market for trading this Sunday afternoon

The fund so setup could be sought by any bank or financial institution in difficulty of credit needs for short term to enable avoid failures of banks and financial institutions taking place one after the other in the last 6 months, at a rate decided by the member banks. This is a very traditional form of financing operations followed all over Indian by Indian indigenous Business Men, where they are incapacitated to seek loans from banks/FIs due to non-formal structure of business and weak balance sheets. Hence few of them come together to pour a fixed amount of fund referred to as the Chit Fund, which can be utilized for a short duration by any of the members contributing to the Chit Fund at rate higher than the bank lending rates. This mechanism is illegal and not approved by the RBI and the Government, however has been function and still does all over the country. The step undertaken by the Banks is a replication of the same concept within the Banking and Financial Industry.

Appendix A3.8

Re-energizing multi-lateral trade agreements (WTO) along with bi-lateral FTAs

The WTO seems to have phased out with its role getting biased in the Globalisation process. However Globalisation has helped the per-capital social enrichment at all level in both developed and developing worlds at a much faster pace in a short span of 2 decades as against the earlier socio-economic smoothening which normally took centuries. Given the establishment of bi-lateral trades post 2000 and the Doha round, the importance of trade and inter-dependence of nations has come forth. Hence it is vital that the WTO framework get back into functionality if the World Economy would like to see fruits of the globalisation process initiated and laid foundation 2 decades back. Given the growth in the levels of FTAs signed post 2000, the WTO may want to consider re-orienting its structure to given appropriate place to FTAs within the WTO Framework. This would enable both sets of Trade relationships exists mutually benefiting the consumers, enhance trade and society at large.

Appendix A3.9

Re-focus on Organic Agriculture

Nations around the globe are seriously concerned to develop both the agriculture and the rural areas. As these are suppose to be the central point of the economy with majority of people living in rural areas and dependent on agriculture. Development of agriculture is the precondition of industrialization. It is the agriculture and rural areas feeding the industry with raw materials and these sectors are also the major consumers as these are spread widely and have larger section of population living there.

Agriculture and rural development has not attracted the desired investment and the financing pattern is largely traditional. Also the return on investment is very low, which makes it dis-lucrative for masses to stay in agriculture and related industries. Hence, it is either left to the individuals living in rural areas, engaged in agriculture or the state and the local bodies. The corporates and major banks and financial institutions have played marginal role i.e. to the extent the state facilitated or asked them to involve themselves assisting these two sectors. The state and the governments have their own budgetary constraints. Lately the World Bank, and other international financial institutions are focusing on financing and investment in the agriculture and rural development. The strategies suggested and the policies adopted in the developed economies and developing economies with special reference to Hungary and India would be traced and highlighted. A new strategy in the changed paradigm is also suggested

While there are massive technological innovations in the technology (technological change) in agriculture with respect to methods of cultivation, seeds, development, difference use of land, soil

testing, fertilizer, use of equipments etc almost all over the world yet larger part of agriculture despite impressive innovations is bound by tradition and traditional technology for various reasons. The funding available to agriculturists, their resource position, education, dependence on nature and natural resources, poor returns on investment and such other factors has not attracted desired investment and other resources in this most natural occupation of the world. Most of what is practiced is learnt from ancestors, villagers and the fellow agriculturists particularly in the developing economies of the world. What feeds the world and the nation unfortunately is not fed the same way in a reciprocal way by society.

Agriculture and rural areas and the people engaged and living there do not enjoy the status which is enjoyed by their counterparts in cities and metropolis. Poor infrastructure, weak social facilities such as high quality education, health, clubs and other social activities are missing in rural areas almost in the whole world economy. As a result their quality of life is generally low as compared to their counterparts. Given the current Global Financial Meltdown, China has introduced special schemes to motivate its people to engage themselves in Agriculture and Agro-based industries. Given the importance of Green and Clean food due to biological problems (weak immune system) and diseases emerging in large part of Western Developed Region, the organic agriculture has gained substantial importance and become the need of the hour.

Some of the emerging needs for enhancing innovations and development for both rural and agricultural regions are

- ◆ innovations to meet climate change
- ◆ innovations to meet energy needs through renewable sources
- ◆ creative means to counter un-employment
- ◆ needs to be globally inter-connected simultaneously taking care of global financial disturbances (spillover effects)
- ◆ inducing non-inflationary growth
- ◆ innovations to counter terrorism and money laundering.

CONCEPTUALIZATION AND APPLICATION OF METHODOLOGICAL ALTERNATIVES IN THE ENVIRONMENT AND SOCIETY

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Abstract: *That article considers the approach of Methodological Alternatives in the Environment and Society, created by Neffa&Ritto, and presents its application in the process of Environmental Education developed with education professionals and small rural producers living in locations within the Project "Knowledge Forms and social-environmental practices: integrated action in the hydrographic basin of the Rio Preto/ Region of Medium Paraíba do Sul", Brazil. The adoption of such a methodology seeks to relate social actors and citizenship and with the elaboration of public policies, with a view to contributing to the improvement of informal teaching of the sciences and the creation of strategies towards community participation for the increment of sustainable productive activities. The research interventions accomplished are based on the renewal of the research-action methodology, whose centrality intends to dialogue with local development where it nears the science of a praxis built by the very actors / researchers, and where this same methodology bears interrogations about the purposes of the research-action itself. An environmental education linked to Social Technology initiatives, which come as a possibility to reformulate the representation of nature as built in modernity and the logical assumptions that assure prioritarily economic development (production and consumption models) in detriment of the (re)production of life on Earth and of the human evolution, comes as a social praxis from which emerges the idea that the transformation of the relationship human being x nature depends on the established changes in the local social dynamics – mainly in those where social actors are involved in generating productive activities of labor and income. The application of the methodology ALMAS happened based on participative management of projects (research-action) and in a transdisciplinary perspective, with a view to the socialization of scientific knowledge, traditional techniques and sustainable productive practices, necessary to the human development and environmental sustainability.*

Keywords: *Transdisciplinarity, Participative Methodology, Research-action, Environmental Education, Social Technology, Local Development*

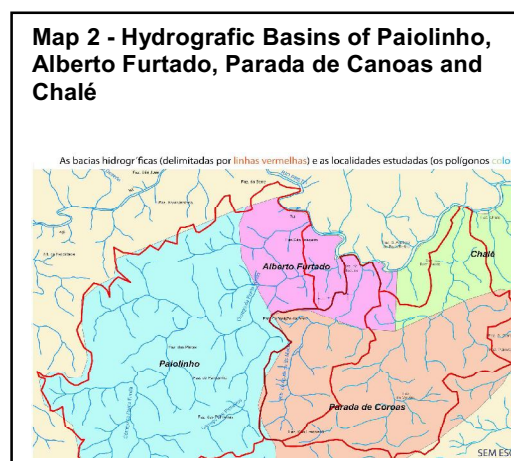
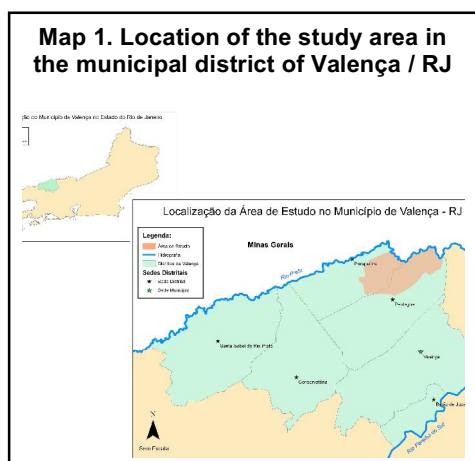
1. INTRODUCTION

This Paper presents ALMAS, i.e., Methodological Alternatives on the Environment and Society, created by Neffa&Ritto, and presents its application in the process of Environmental Education developed with education professionals and small rural producers of Parada de Canoas, Paiolinho, Chale, Alberto Furtado and urban area of Parapeúna, a municipal district of Valença, in Rio de Janeiro, Brazil, all of which lying within the reach of the Project "Social/environmental knowledge and practices: integrated action in the hydrographic basin of Rio Preto, in the region of Medium Paraíba do Sul"¹.

In this Project environmental education is understood as a political praxis as it articulates itself with the productive dynamics of social relationships, since social actors are involved in activities that generate labor and income. The involvement of the actors in this educational process attempts to relate organizations with citizenship and with the elaboration of public policies, in order to contribute to the improvement of informal teaching of sciences and to give rise to strategies of community

¹ Research project coordinated by Professor Doctor. Elza Neffa, in the period of May 2007 to September 2008, with support of the Foundation for Research Aid of the State of Rio de Janeiro - FAPERJ.

participation towards the increment of sustainable productive activities. The perception of environmental education as an instrument of social transformation indicates a permanent learning process capable to contribute to the understanding of a multidimensional reality, starting from the multi-referentiality of subjects active in social and environmental complex systems (Nicolescu, 1999). The research field that involves environmental issues not only incorporates and inflects the concepts and methods of different scientific fields (ecology, anthropology, history of the religions, education, political science, among others), but it also admits, in the analysis of the phenomena, biophysical causes as much as social ones, widening the borders among social sciences, natural sciences, philosophy, the arts, religion and traditional knowledge, starting from the representation of the environment as a space of articulation of natural and social processes consisting of different materiality orders and rationality spheres, with a view to valuing sustainability conditions of life.



The solutions to the current problems demand paradigms different from those that generated them. New sensibilities and new civilizing meanings, critical, solidary and autonomous stands that subsidize social participation, the exercise of citizenship and the transformation of economic and technological processes are some postures that enable us to face capitalist forms of dominance and alienation, which makes room to overcome the hierarchy between scientific knowledge and traditional knowledge and for the implementation of productive practices that result in social inclusion and human emancipation [Santos (2000); Castoriadis (1987) and Mészáros (2002)]. Aware of those needs, Neffa&Ritto, based on Social Technology movement, enlarged the theoretical presuppositions of the Research-Action approach, formulated by André Morin and Michel Thiollent, who incorporated new methodological alternatives in the environment and society (ALMAS) into educational activities which, when addressing labor qualification and the potentialization of sustainable productive knowledge and practices, require a science of praxis built by the very social actors.

The perception of human beings as embedded into relations that when transforming nature through labor and technique, transform themselves and the concrete conditions of their lives (Lukács, 2007) is fundamental so that pedagogic actions that result in emancipation and citizenship are implemented seeking and ethical-responsible involvement of each human being in the process of human development and of environmental sustainability. When articulating social practices and labor issues seeking alternatives towards survival needs and the integral development of human beings, Environmental Education initiatives in hydrographic basin of Rio Preto come as instruments of enlargement of ecological awareness and the socialization of knowledge that allow to create solutions for the problems that affect small producers, public managers, education professionals, and communities. The adoption of new mentalities and productive dynamics that integrate the human being into nature contributes to the reeducation process of those actors vis-a-vis the predatory exploitation of natural resources, the forms of participation of society as a whole and also unsustainable economic models. To establish a new pedagogic mentality presupposes the assumption of ethical and political commitments that, being based on a complex form of thinking (Morin) may point towards emancipatory alternatives and roads to a participation and cooperation culture giving rise to a solidary network and a humanization process.

The presuppositions of the methodology are capable of stimulating formative processes of networks of actors able to trigger changes in behavior related to the use of the natural resources and to

social and environmental practices linked to labor and income generation, health, education and sustainability, which has been contributing to the sustainable development of this hydrographic basin. Geo-reference techniques, meetings, seminars, workshops and interviews favored the construction of the scenery, and contributed to the enlargement of the social actors' perception in relation to the possibility of their transmuting historical social domains starting from the appropriation of methodologies and techniques to articulate traditional knowledge and scientific knowledge. At the time this research started, the social actors of that hydrographic basin anticipated the concrete possibility of transforming agricultural commodities into preserves and compotes, with a better durability that may allow for its commercialization no matter the condition of highways, the viability of enlarging the cultivation of medicinal and aromatic plants available in home-made kitchen gardens for the production of teas, sachets and dyes, as well as the production of ornamental crafts, among other activities favoring labor and income generation.

The application of that methodology in the research proved that a common emancipation sense might come into play (Santos, 2000) starting from the construction of production alternatives that may develop people's talents and methodological localities potentialities, because social actors build their political identity when they transform the social structures that are on the basis of the material conditions of their own existences and also when they promote local development and quality human relationships based on the respect for those values shared by the people involved in the dynamic connection process of diverse scientific knowledge to the knowledge involved in the action (based on experience and spirituality).

To create alternatives in environment and society is the challenge to be faced by all those who are seeking to overcome that natural resources are infinite, to reformulate the representation of nature built in modernity and the development patterns linked to the logics that assure prioritarily economic development (production and consumption models) in detriment of the (re)production of life on Earth and of human evolution. The hydrographic basin as a whole, which encompasses the physical and social realms, the political and economic system and the available technology, was the object of study of researchers active in several areas of knowledge with the University of the State of Rio de Janeiro, namely UERJ, being the concept reinforced as a transdisciplinary subject as it presents multiple dimensions (levels of reality) that are seen from the several perceptions held by these researchers- educators, geographers, biologists, social scientists, IT experts who, together with the local population, attempted to face the challenges of the emerging reality of a globalized world.

To understand the hydrographic basin, the landscape was dimensioned as a complex concept with multiple meaning levels, a cultural text of several dimensions that is directly linked to the perception of the world, serving human beings as a guide to their actions towards changing the environment. In an attempt to discover and to explain the order within the multiplicity of relationships that happen in the landscape, more than understanding it conceptually, we intended to identify landscape indicators that may be found in the different techniques and materials used in the production process of small rural producers lying in the hydrographic basin of Rio Preto, which ultimately reveal the cultural attributes in their social and environmental practices that reflect understanding that they have of nature.

For Milton Santos (1994: 68-69), the landscape is a type of a mark of the history of labor and techniques, but it is not reduced to it, and should be thought along with the political, economic and cultural conditions once techniques have an important role, but it does not have an historical existence outside social relationships.

2.1. CHARACTERIZATION OF THE HIDROGRÁFIC BASIN OF THE RIO PRETO

The Rio Preto is an indirect tributary of the Paraíba do Sul river, being of great importance in the Medium Paraíba region. With an extension of 198 km, this river starts in the Mountain ridge of Itatiaia and, along its course, it separates the states of Rio de Janeiro and Minas Gerais, running into the Paraíba river.

No industrial residues are polluting agents in the hydrographic basin of the Rio Preto, which is representative of a rich history and traditions. The environmental degradation of this hydrographic basin may be identified by water pollution due to the absence of effluent treatment and improper discharge of solid urban and rural residues, affecting water quality, and erosion and sediment production, a consequence of the systematic cutting of vegetation covering large areas used for growing, as well as soil handling with archaic techniques, such as the burning of vegetation, among

others, that affect water volume, provoking an increase in the frequency of floods and the impairment of living conditions due to the increasingly higher hydric risk of the Rio Preto.

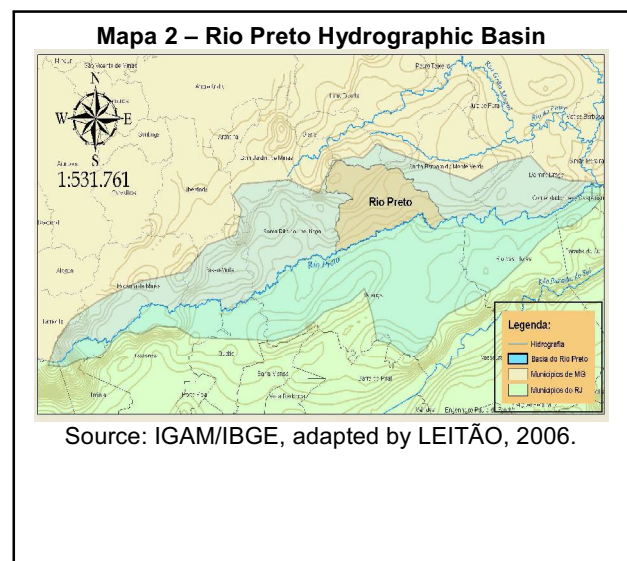
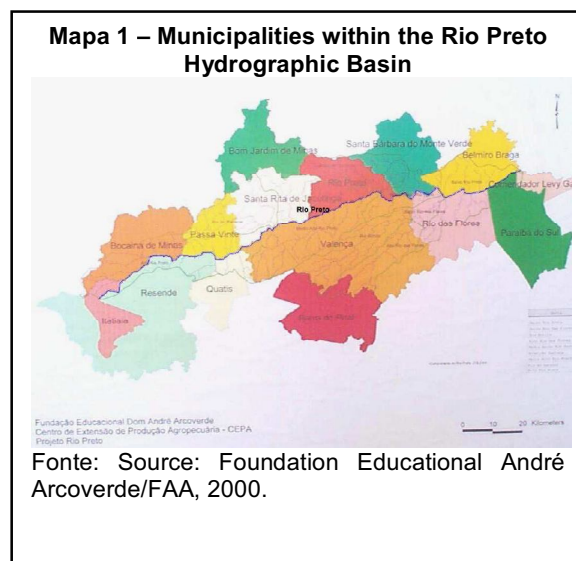
With the hot and humid weather, the devastation of the forests for coffee plantations in the XIXth century favored the erosive process in that basin hydrographic once, without the protection of the forest, the lands were much more exposed to weather conditions.

The persistence of that deforestation during XXth and XXIst centuries for the increase of cattle raising activities, which does not demand such fertile soils, threatens the health of important streams, rivers and fountainheads that irrigate the area of this study, since the region does not have Conservation Units that may help halt environmental degradation.

The regional morphology is framed by cattle raising activities as grazing provokes gutterways in the soil, helping rain drainage, forming small ponds along cattle routes, and giving rise to gullies.

The substitution of the coffee plantations for agribusiness and cattle raising modified the mechanisms accelerating erosive processes.

The lack manpower accentuated soil burning to open room for grazing, exposing the soil



directly to rain and erosion. Soil burning done by during dry weather leaves the soil unprotected when the first summer rains come..

Another severe environmental problem affecting the hydrographic basin of the Rio Preto is the obstruction of rivers by sand and other sediments, which is called silting. River silting may provoke large flooding, as has been the case in the region for many years now, mainly in the cities of Parapeúna / Valença-RJ and Rio Preto / MG, both in the Rio Preto basin.

2.2. HISTORICAL AND ECONOMIC FUNDAMENTS

In the XIXth century, in the Medium Paraíba river and its sub-tributary - the Rio Preto - coffee plantations abounded for export, conforming the region and providing the Province of Rio de Janeiro with the condition of an important economic center in Brazil.

In the XXth century, coffee plantations gave way to a two-fold industry with the industrialization of the Medium Paraíba and the implementation of agribusiness and cattle raising activities in the hydrographic basin of the Rio Preto. This basin is characterized by the development of agriculture and cattle raising in the municipal districts in Rio de Janeiro - Valença, Rio das Flores, Quatis, rural areas of Resende and Itatiaia, as much as in the municipal districts of Minas Gerais State - Bocaina of Minas, Passa Vinte, Santa Rita de Jacutinga, Rio Preto, Santa Bárbara do Monte Verde, Bom Jardim de Minas and Belmonte Braga. No matter how much the region partly lies in the State of Rio de Janeiro and partly in the State of Minas Gerais, there is little difference in culture between both, where traditionalism and conservativeness prevail in social relationships and in handling natural resources.

An economic comparison of those intra-regional areas within the Medium Paraíba river shows a high percentage of industrial activities for the regional income - 83.56%, in opposition to the spaces where it grows the farming, that only incorporate 1,59% to the total of the income of the area. The

those data the tertiary section is added, responsible for 14,85%, and the fact of that reality to be hidden by a development image that homogenizes the area as a completely.

2.3. PROFILE OF LAND OWNERSHIP

The Rio Preto hydrographic basin land ownership profile shows a high number of small properties (smaller of 10ha) and of intermediate properties (between 10 and 100ha). The analysis of the demographic (People/km²) density of the municipal districts of the Medium Paraíba indicates the diversity and complexity of the region.

The municipal districts whose activities are markedly industrial and/or that participate in the economic dynamics of the region's industrialization process present a high demographic density, in other words, 168.61 People/km². The municipal districts whose economy primarily relies on farming activities present an extensive area, with 2,917.5 km² and a low demographic density, 31.63 people/km² as it is the case of Rio das Flores and Valença. With around 15.9 people/km², distributed in a 479.5-km², area Rio das Flores has the smallest demographic density rate in the region. The municipal district of Valença, in its turn, although holding the largest regional territorial extension (1305.8 km²) has almost half of the demographic density of the municipal district of Resende, in whose 1100.2 km² area holds an expressive industrial park.

If on the one hand the region implemented a domestically expressive industrial park in the Paraíba do Sul river basin, on the other hand the modernization of farming activities, widely implemented in the Brazilian territory from the 1950's to the 1970's was not enough to guarantee economic improvement of small productive units, largely family businesses lying in the hydrographic basin of the Rio Preto. Besides funding obstacles, small properties present an uneven topography referred to as "sea of hills", hindering the use of machinery and stimulating traditional techniques.

2.4. RIO PRETO Hydrographic Basin Business Trends

Migration emptied whole populational areas within the Rio Preto hydrographic basin and reduced any likelihood of productivity increase, although hundreds of small owners' families produce income through the development of farming activities, producing:

- Milk (marketed in natura, cheeses and sweets);
- Sugarcane (transformed in handcrafted white rum in home-made stills);
- Fruit growing (guava, passion fruit, jaboticaba, banana, mulberry, star fruit, cajá-mango, among other fruits are processed into compotes and liqueurs);
- Fish farming (tilápia and carp);
- Beekeeping (bee honey);
- Legume growing (vegetables for in natura marketing and pickles);
- Forestry (native essences and medicinal and aromatic herbs);
- Craftwork with banana trees fiber, corn straw fiber, seeds, among other natural materials;
- Rural-historical-ecological tourism.

However those activities characterize the autonomy of those small producers, they do not constitute their emancipation, as their rudimentary production only allows for a small income generation, given the lack of processes to make possible the generation of surpluses to be marketed in domestic and foreign markets.

2.5. SMALL RURAL PRODUCERS AND LOCAL SOCIAL AND ENVIRONMENTAL PROBLEMS

It is mandatory to justify our concern concerning Small Rural Production. This niche in Brazil is responsible for 70% of the economically active population in rural areas and for 20% of the national workforce. The data of the Agricultural Census of IBGE (1985) informs that farming areas with less than a hundred hectares total 21% of all farming areas and respond for an expressive agricultural production in the country.

Small producers are dispersed within the whole hydrographic basin of the Rio Preto. They develop production relationships based on their own workforce to produce subsistence crops, presenting a precarious life condition and need to build pathways for productive to improve their lives.

Real situations show small producers differ greatly, showing complexity and multiplicity, being a heterogeneous mass composed of permanent workers, part-time workers, small owners, leaseholders, tenant land partners who have insufficient conditions – be that in the form of land or

work tools – for their family farm business, which means they have to resort to part-time jobs to meet their family needs.

To overcome production and payroll hardships, small producers rely on the workforce of their families. In general, family members cooperate in the productive process, being men the prevailing workforce in preparing fields for planting, weeding, sowing, cattle raising, harvesting and product marketing.

As production is diversified, and men usually move to pre-sales and sales activities, women end up being responsible for running the business, household chores, and farmwork, not always accomplishing the lightest tasks, although men remain being considered the breadwinners. Women's presence is more significant in manual tasks, in the care of animals, in kitchen gardening and in manual processing such as corn grinding, and foodstuffs like candies and cheeses, among others, although they usually participate in milking activities. Practically without the help of men, women are solely responsible for raising the children who gradually become part of the workforce as the heirs of the family network, should they decide to remain living on the farm.

An important expression of the personalized character that conforms social relationships is mutual help and collective work. Relationships based on family ties, friendship and camaraderie they are characteristics of relationship networks among landowners. They usually believe in solidarity, which although not excluding conflicts, individualism or intolerance, allows for mutual help, in case of need.

Concerning land, it does not only imply net worth, but also a production means, and small producers are linked to it with their very own traditional culture, which demands behaving beyond the established rules governing the exchange of merchandise, i.e., much symbolic significance is present. The great challenge for small producers consists of developing family strategies in order to assure their own reproduction and that business keeps going on. In the hydrographic basin of the Rio Preto, the precariousness of the establishments and the impoverishment of small producers, owners of land smaller than 10 hectares, became markedly worse due to the fact that cattleraising relies most on cattle for milk as the main economic activity. In general cattle raising is highly valued, cattle for milk and livestock-raising alike, but these small producers may not be characterized as small cattle raisers. Commercial exploration and conservation of nature is predominantly traditional in farming and cattleraising activities, and environmental preservation, where techniques applied are rudimentary.

Small producers live on their farming activities lacking basic infrastructure in different sectors. According to the problems identified by small rural producers of the municipal district of Valença, in Rio de Janeiro, to become part of the Participative Urban Master Plan of this municipal district (Complementary Law 62/2006) face serious difficulties, such as:

- in sanitation, with water supply deficiencies (water analysis and treatment), sewage deficiency demanding septic tanks or alternative systems (such as dry sanitation system) and garbage disposal (poor guidance towards handling and final destination of poisonous products packing, supply of proper trash can depots for solid residue on the part of the municipal administration);
- in transportation, with the lack of highway maintenance (cleaning gutters, sewage pipelines, patrolling, road maintenance, of drainpipes, prepare and maintained streets, scum placement and of signaling) and of new lines and schedules of bus;
- in education, discontinuation of rural schools, inadequacy of curriculum and calendar for the rural area, inexistence of courses appropriate to the local reality and the needs of students who concluded the basic cycle the lack of middle school courses, Rural Environmental Education and professional training - craftwork, cooking (sweets, cold cuts, cheeses, seasonings, bread-making), rural administration, fish farming, beekeeping, medicinal plants, ornamental and aromatic plants, essential oils, hostelry and rural services, among others;
- in health, medical services, dental care and social assistance, and the difficulties to implement preventive medicine programs, Family doctor support, rehab care for alcoholism, smoking and drugs, dietary habits and vaccination campaigns, preventive campaigns on AIDS, hepatitis, influenza, conjunctivitis, filariasis, pregnancy in adolescence, contraceptive methods etc.), the inclusion senior citizens in aid programs, and fast-track courses on accident prevention, markedly Industrial Protection Equipment concerning toxic substances, medicines, vaccines, machinery, equipment, vehicles and implements in general;
- in agriculture, difficulty to purchase implements (seeds, vaccines and fertilizers at compatible costs with the low value of the sale of the product on the market) and of appropriate agricultural equipment to the production (trucks, patrol, retro-digger, bulldozer, Bauer, vehicles in general);

- in technical support for adequate land handling and irrigation practices, correction and fertilization, as well as for the diversification of the crops and new activities as fish farming, beekeeping, sowing, vegetable farming, poultry raising , sheep raising, plant sowing for craftwork and landscaping, reforestation etc.;
- in communication due to the unavailability of fixed telephony, radio, cellular, TV antennas, mail and telegraphs etc.;
- in safety, lack of integration of the Military police, Civil, Forest and Fire brigade, patrolling, communication means between the rural residents and police stations, sheriff's office etc.);
- in farming policies, lack of projects, planning and funding policies; lack of articulation with Farming and Environmental agencies and authorities Unions, Universities and other Teaching Institutions, Associations, Dairy products processors, Cooperatives, among others; inefficiency in pest control, and the lack of health issues campaigns; little participation of rural organizations in Municipal Council addressing farming policies; lack of social, economic, environmental diagnosis in rural areas; deficiency of guidance in environmental issues, land ownership, social assistance, labor and tax, associativism and farming issues as a whole.;
- in marketing products, given the precariousness of unpaved roads and intermediation costs;
- in environmental issues, the need of effluents treatment through the construction of leachate tanks and/or biogas plants in cowshed, barns for swines and birds (b) recovery and preservation of forests and bank river vegetation and reforestation with native species, of protection springs and waterheads; (c) diffusion of ecologically-friendly farming, and sustainable development with application in vegetable gardens and organic farming, organic livestock, organic milk in dairy processing. Use farming surplus as animal feed.;
- implementation of initiatives of environmental reconstruction and ecological reorientation of properties and conservation, protection and valorization of water with the construction of dams, water rain depots, ditches to wall water rain in highways, besides special programs for the reconstruction of the water fountains and protection of springs, with reading material back-up, such as "Producing Water";
- in tourism, difficulty for tourists to access historical and cultural sites and scenic views and the lack of information through TV, radio and press campaigns, and specialized guides; lack of preservation of the historical farms, monuments, bridges, tunnels, belvederes, trails and roads; with the little legal protection of historical sites and their use for cultural, artistic and touristic activities.

Along with all these problems, small producers face challenges to increase their such as the low use of pastures in the winter for cattle feeding; incorrect pasture handling; lack of fertilizers in pastures; low use of animal feed prior to pregnancy; improper animal feed supply; lack of soil analyses to correct acidity; insufficient brucellosis shots; insufficient workforce supply to answer for increased production demand. To add to the problem, the lack of local planning for farming activities, tax rebate incentives to foster production and the difficult access to bank loans, granted through projects financed by government agencies. As for settlers, the unwillingness of landowners to lease land and allow for small farming (beans, corn, sweet potato, cassava, among other basic livelihood products) has been driving workers towards public policy programs such as the Federal Government's "Family Support", to complement income and very often supply all family needs, when this is a family's only income.

Although quite degraded by farming activities, the hydrographic basin is of great importance in the context of the Medium valley of Paraíba do Sul since rural workers tend to have a sense of contribution to improve environmental conditions, enabling therefore: a better ecological awareness through the appropriate handlings of the renewable natural resources; (b) the improvement and maintenance of the productive potential of the soil, through practices as organic handling, proper use of pesticides, plateau farming etc; (c) the improvement of water quality for human use and irrigation, through practices towards improving underground water supply; (d) increase of sustainable farming and activities that seek social and economic growth in rural areas; fostering labor supply, stimulating initiatives to dodge migration from the country to cities; (f) enhance initiatives towards rural development with the participation of communities and local governments. Protection of water sources and river bank vegetation is also the concern of the small producers, which they regard as social, and environmental sustainability (Calazans, Neffa and Novicki, 1998: 247-259).

3. THE METHOD AS STRATEGY OF EMANCIPATORY ACTION-TAKING

As opposed to the epistemological positivist interpretation of knowledge, which gave rise to the current civilization crisis, social and environmental problems emerge due to the critical models of partnership prevailing in modernity, provoking the need of building another social rationality where the human being is the center of the development praxis. This change in values and the formulation of a new paradigm to reinvent solidarity through a knowledge capable to enable the several subjects to exercise social practices that lead to actions of individual and collective citizenship and the incorporation of a new knowledge bearer of emancipation.

The development of projects, undertakings and social initiatives, in general, is more successful when the whole process is made public, mainly in decision levels, when actors share the same value inception, knowing and influencing the perception of problems and those inherent means to handle reality.

According to Santos (2000), when social regulations started, those concerning farming activities have been the most neglected ones in the last two centuries and exactly because of that y for that were the ones that were least obstructed by legal determinations being, which provides room to establish a dialectics with emancipation onsets: participation (political dimension) and solidarity (ethical dimension). Along with that, the importance of networking to create communication (internally and externally), realms where experiences may be exchanged, allowing for the accomplishment of events, the establishment of alliances and projects and the formulation of strategies to exercise larger influence within public policies.

Behavioral changes demand the adoption of educational strategies that, as seen here, are recognized as an understanding process, political practice and democratic commitment that the civil society should assume as the onset of citizenship (Freire, 1997).

Under the perspective of promoting social transformations and to reach communities, seeking sustainable initiatives that might point towards solutions for the problems concerning social and environmental responsibility, the methodology here presented approaches presuppositions of contemporary science (Einstein, Planck, Heisenberg, Bohr, Pauli, Prigogine, among other physicists of the century XX) as addressed in the theory of complexity (Edgar Morin), in social ecology (Félix Guattari), in organic intellectual development (Antonio Gramsci), in transdisciplinarity (Basarab Nicolescu), in emancipation knowledge (Boaventura de Souza Santos) and in research-action (André Morin).

The reconstruction of human relationships and the organization of micro-political and micro-social practices based on a new solidarity that respect personal and local cultures depends on the construction of new conceptual and methodological references postulating cooperation, connection and dialogue between several disciplines and the applied integration among scientific and non scientific knowledge. It also depends on the perception of the world as dynamic and dialectic realm - a totality in constant flow of energy, of events and of processes in transformation - and as a net of relationships in which all parts of the universe are founded in an interdependence of physical and anthropological and social phenomena.

The reconstruction of those conceptual and methodological references that foment emancipation practices capable to overcome dominance relationships of social exclusion imposes an organic intellectual development which, with a critical and reflexive capacity and with the instrumentalization of the research-action approach contributes to the construction of an emancipation common sense and a conscious praxis towards local sustainability.

In that sense, the project was ruled by the socialization of scientific and technological knowledge and of sustainable productive practices, towards labor qualification the potentialization of knowledge and everyday experiences within the Social Technology perspective. Techniques, transforming methodologies and/or applied interaction with the population and the appropriate solutions posted by this very same population for social inclusion and improvement of life conditions. In this regard, Social Technology incorporates the existing technologies and creates new committed technologies within the singular interests of the several local social segments, with a focus on their demands, characteristics and potentials (Ritto, 2008). That approach integrates: (1) academic and traditional forms of knowledge with the actors' participation involved in the research process and in teaching approaches with a views to promoting human, social, environmental, cultural and economic development, when nearing social demands of knowledge production; (2) it inverts subject's traditional role as a passive agent of public policies to make them become central actors of the construction process towards developing conditions for a sustainable human development; (3) it

assumes the unification of reality and the consequent specification and construction of solutions that affect communities respecting and valuing their history, culture and local knowledge inspired by their own principles, under the transdisciplinary view, and (4) it intends that initiatives and the proposed processes enable the development of other projects to contribute to the promotion of an effective social and environmental environmental.

Therefore, the activities of Environmental Education developed in the region within the project intended to enlarge critical awareness in social actors to qualify them to problematize reality and assume their social responsibility that, as seen by Gramsci (1985), represents the organic intellectuals construction - individuals prepared to assume their role as the mediators of diverse interests of social groups, acting on and managing public policies. We understand that to exercise such a role, it is necessary that those individuals be endowed with diagnosis capacity, of initiative to face decision-making processes to solve problems, teamwork, organization capacity to face uncertain situations to help establish better shared decision-making. Such competences make possible that the actions of the communities' mobilization, of the spread of information and of enlargement of ecological awareness may contribute to a general increase in awareness and participation, making the whole process coherent, structured and emancipating. Boaventura de Souza Santos (2000:329-342), in his turn,, notices that the qualitative improvement of the common sense concerning scientific knowledge characterizes the epistemological rupture of modern science, which will be more important in post-modern science if scientific knowledge feeds common sense. He understands that common sense:

- in spite of being conservative, has a utopian dimension and freedom that may be enlarged through the dialogue with scientific knowledge;
- for being practical and pragmatic, reproduces agglutinated life experiences of a dying social group;
- for being transparent and evident, distrusts the opacity of technological objectives;
- for being superficial when concerning structures that are form awareness, it is foremost in capturing the horizontal depth of conscious relationships between people and things;
- for being to demoralizing and non-methodic, it reproduces itself spontaneously in everyday life;
- for accepting what exists just as it exists, it privileges action that does not produce significant ruptures in Reality.

Based on those definitions, Boaventura proposes a new emancipation common sense that comes from an emancipation knowledge, a form of knowledge that departs from an ignorance standpoint designated by colonialism (the other as an object) towards a point where knowledge is designated as solidarity (the other as a subject) (2000: 29). Emancipation knowledge is solemnity-reflexive as it "knows that is not through theory that theory itself becomes common sense. The theory (2000, 37) is the cartographic awareness of a pathway on which political, social and cultural fights pass on, influencing and being influenced by them".

The educational practice of an inspired Environmental Education proposes the construction of the ecological subject (Carvalho, 2004: 156-7). In that construction movement the subject responsible for committed action-taking with sustainable and social fairness is a dynamic that integrates the dialectic method in its logic to interpret and act in the world to transform it (Marx and Engels, 1984: 111). As that historical methodology, the ideas and the thoughts reflect the material conditions of the human existence, being therefore indispensable to understand the concrete conditions of human life, as seen in time and history so that they can teach and implement pedagogical initiatives that result in emancipation and citizenship.

3.1. METHODOLOGY: CONCEPTUALIZATION AND APPLICATION

As a result of our examination of the researches accomplished in the area of the Medium Paraíba do Sul, especially in the hydrographic basin of the Rio Preto, and before the multidimensionality of factors faced in the local reality, we understood the method as a pathway that is not devoid of safe ideas and absolute and unalterable knowledge, but it creates and is recreated without pre-defined goals beforehand, assuming the conquests of the a suspicion philosophy, present in the Socratic Method, in Montaigne's doubt, in Pascas proposall and in science with conscience by Morin, in other words, in a learning and re-learning process.

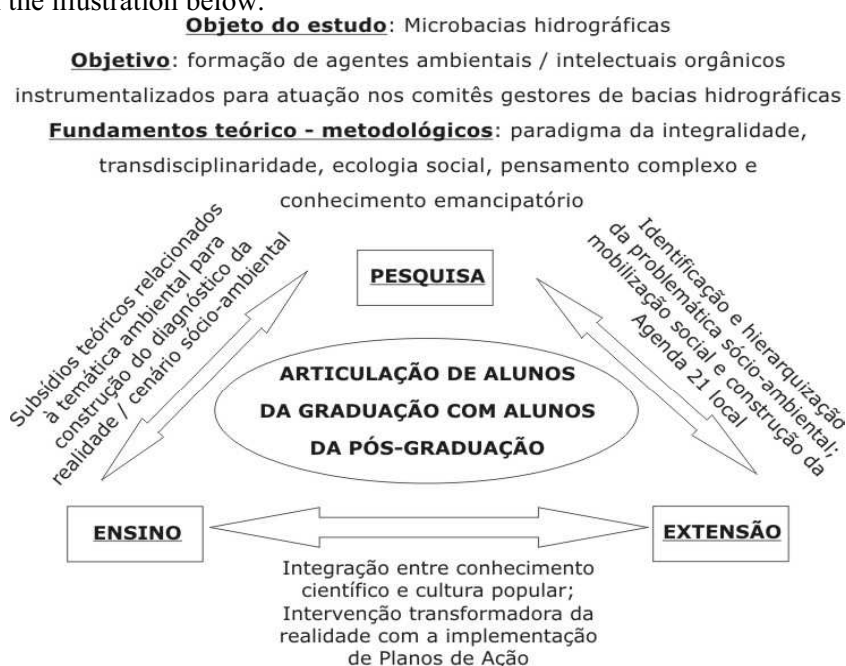
We also see the method as a strategy that contains of a group of beginnings that configure a guide for to think compound on two levels that pronounce and if retro-feeding - one that facilitates the development of strategies for the knowledge and another that facilitates the development of strategies for the action (Morin et al., 2007: 20-39).

In relation to the knowledge production, a challenge to be faced by the researcher consists of cleaning his/her glance, impregnated of values, ideologies and prejudices that influence his/her perception of the reality, and to turn it open for the aspects of the landscape that they are not summarized to the physical middle, but they articulate the natural way and the cultural, assuming the human being's presence that, through researches productive practice, it transforms, at the same time, the environment and to their selves.

That select glance is characterized by incorporating the complex focus, that respects the echo-organization and it identifies the outline of the natural / cultural reality, to the researcher's perception and his/her task of overcoming the glance to discipline. With him, a change of glances can be established with the individuals that live and they work in the researched scenery, therefore to the objective data of reality the local social representation is incorporated, stained of elements of the imaginary and of the symbols of the experience of the community's life.

In relation to the development of the strategies for the action, when the change of glances with the community presupposes the institutionalization of a permanent community project that it opens possibilities for the individuals' emancipation and of the institutions in their interactions in the civil society, a work of community mobilization sends to the development of four methodological axes of diagnosis, performance and evaluation - the political-social organization, the maintainable production, the educational processes and the demand for integrated actions - that, pass through the fifth axis, the cultural, they guarantee the operation of the community life in an ascending spiral movement non-linear. Such axes, proposed in the Methodology for the collective mobilization and individual Met-MOCI (Falcão / Andrade) were incorporate, in that project, to the stages of the methodology Research-action that are constituted by an exploratory phase and of elaboration of the pre-project - formulation of the problem, construction of the scenery and of the diagnosis social/environmental (stage I); for the elaboration of the project (stage II); for a social mobilization and analysis of the problems and of the necessary actions to solve them (stage III) and for the elaboration of the Plan of Action, whose authorship is shared by the social subjects involved in the research-action (stage IV) process. The Plan of Action is characterized by being pedagogic instrument that it involves the subjects in community meetings making possible the debate about the local problem, the planning and the construction of the Plan, and for promoting an articulation among the production of the scientific knowledge, the research of the scenery social/environmental and the intervention in the reality, starting from the social demands and of the community mobilization.

The research-action, methodological strategy adopted for conception, elaboration and implementation of Plans of Action, it emphasizes the diffusion of information and of guidelines for formation of leaderships, with views to the incentive of new pedagogic actions and the support to the integrated actions developed by the several communities around the enterprises and of the activities partner-economical-political-environmental. The knowledge and practices join in the interventions as schematized in the illustration below.



The projects, for their time, are developed committed with academic excellence beside the commitment with the effective presentation of results through the intervention in real problems. In that perspective, it incorporates: (a) the attributes of the “glocalization” that the researches and the interventions consider the characteristics of the place. culture, opportunities and embarrassments. beside the global dynamics and of their influences, positive and negative, in the direction of recommendations and of proposed of knowledge formalization and of action gone back to the maintainable human development; (b) the perspective Multi-actor in that the knowledge, the experiences and the needs emerge of the social partners' group that if define their selves in the real spaces of performance and they propitiate, to every moment, the configuration of the real and (c) the movement of Social Technology, already mentioned previously, whose systematic efforts already feel in the sense of enlarging the borders of the application of the knowledge available for the improvement of the quality of life of social segments excluded by the actions of the market, respecting them know no-scientific of each community.

It is important to emphasize the implication of the methodologies Met-MOCI and research-action happened without there was, however, a lineal relationship among the phases presented by each one of them. That articulation was made in an attempt to give bill of inventorying the problem inherent social/environmental to the places object of that study, of acting starting from the priorities listed for the social actors and of evaluating the implemented activities, tends in view the need to establish a more agile methodological flow than it articulated mobilization actions to the education formative actions of the which result innovative productive practices.

For constituting as a line of the social research that supplies the efficient ways so that participants' groups and of researchers they formulate guidelines transformers, the Research-action (Morin, 2004) allows the articulation with a methodology that enlarges the bases of the community mobilization seeking to promote a planned action of character social, education or technician. The recognition of the possibility of that articulation links to the perception that the three important phases that precede the stage of elaboration of the Plan of Action are combined with the axes of the methodology Met-MOCI, although that methodology extends their tentacles when presenting an axis related to the maintainable production and to configure the cultural axis as traverse articulator of the other ones four.

The articulation of the Research-action with the methodology Met-MOCI was made in the attempt to render the goals proposed in the project, given the short time and the difficulties faced to touch and to contain the people, mainly the small producers, whose great distances among the properties, the precariousness of the highways and the difficulties faced in the daily work, per times, it put barrier the wills and they conform the conformism. In that perspective, the adaptation of the stages of the Research-action to the axes of Met-MOCI allowed that, after the exploratory phase and the visualization of the landscape, in the scenery built starting from the diagnosis accomplished with more than ninety families in different moments of meetings, parties, masses, visit-techniques, interviews, informal conversations, discussions and analyses, the problems social/environmental and their contradictions were revealed, and sketched some proposed to face them. With base in that diagnosis, activities were planned for spread of information, accomplished workshops, complemented by Seminars about Environmental Education. The approached themes and the actions of production of preserves of fruits and of vegetables (compotes and pickles) and the identification of the medicinal herbs cultivated by people in their home-made vegetable gardens. they woke up the interest for the educational process that it appears for an articulation of the traditional knowledge to the scientific knowledge, with views to produce in a maintainable way, joining value to the agricultural (fruits and vegetables) products, and to motivate the cultivation of medicinal and aromatic herbs that, properly processed for use in teas, sachets and dyes, they will do not depend on immediate commercialization to generate income.

Changing those axes for the concrete actions accomplished in the basin hydrographic of the Rio Preto, in the extent of this project, and in the perspective of thinking elements to build new Methodological Alternatives in Atmosphere and Society, the reflection / action based in the two methodologies and the analysis of the concrete conditions of the reality fomented the registration of a new strategy of community mobilization that it appears of a collective action of common interest, which is, of the implementation of productive practices that they join value to the existent products in the places. Such action works as appeal to the participation and the solidarity commitment. The answer obtained with the mobilization around the proposal of socialization of information and of

techniques for development of maintainable productive practices, that correspond to the people's immediate interest of joining value and of generating income starting from the transformation of the products that they present difficulties for commercialization in nature, it demonstrated the concrete possibility of the social actors' of that basin hydrographic participation in collective projects and in interactive nets and it appeared for the overcoming of the conformism. In the same way, the process of construction of the inventory of the medicinal herbs cultivated in the producing small women's home-made vegetable gardens, elaborated starting from the interviews done in loco, it woke up them for the possibility of they be turned active economically and of they have access to the public politics. Like this being, to the actions undertaken in this project with base in the Research-action and in Met-MOCI they were incorporate some proposed thought by Neffa&Ritto that enlarge the theoretical-practical field when suggesting:

1. Construction of inventory of the problem social/environmental and of the local potentialities that allow the visualization of the landscape built with base in the diagnosis participative. Meetings of articulations, of reflection and of discussions they reveal the problem social/environmental, they allow the hierarchy of the problems and they point the themes of the communities' interest that, for they be specific, they generate demands for differentiated educational processes, and they lead off the informal educational process;
2. Articulations, reflections and discussions in meetings that point the problem social/environmental, allow the hierarchy of the problems and identify the themes of the communities' interest that, for they be specific, they generate demands for differentiated educational processes, leading off the informal educational process and the socialization of new knowledge about the education, the health, the work and the environment;
3. Seduction for community mobilization and for insert in the formative processes, starting from generating (Paulo Freire) themes of the local social actors' political-economical-environmental interest, through moments productive people who can be courses, lectures, workshops, reforestation collective efforts, applications of kits for analyses of the waters of the rivers, among others;
4. Organic (Gramsci) intellectuals' formation - individuals prepared to assume the paper of mediators among the interests of the social groups where they act and the one of the managers of public politics - for us to contribute in the planning participative, with views to look for solutions for the community's demands saw projects, programs and actions transformers to promote social inclusion, respecting the environment and the local cultures;
5. Exchange of you know and practices social/environmental as subsidy to the appearance of the sense common emancipation (Santos) and the incorporation of maintainable productive practices;
6. Deeping of the interactive dimensions, through nets and of associations that articulate the social actors, with views to exchange know traditional and experiences, to identify potentialities, to deepen technician-scientific knowledge and to consolidate the practices that qualify for the work, with views to enlarge the fan of the integrated actions of human promotion.

People fit to highlight that, for analysis of the cultural subjects, she opted for the (Bogdan & Biklen, 1994:60) ethnography because that methodology comes as an approach that "refers to the study in the way as the individuals build and they understand their daily lives". In that perspective, the study of the social representation used some traditionally instruments linked to the ethnography, as the participant observation and the interview not structured. It is important to accentuate that, in this study, also pictures were used, in way to support the understanding of the contexts in that the subject of the investigation locate.

Among the actions developed in the perspective of forming the ecological subject stand out the visit-techniques, the countless meetings and the seminars accomplished at the schools of the public net where lectures were promoted on administration of basins hydrographic and analyzed the concepts of maintainable local development, agro ecology, associations and cooperatives, solid residues and maintainable consumption, as well as, exhibited videos on the problem social/environmental and implemented jewelry workshops using woven and paper and of bottles pets for production of toys, brooms and other objects.

The improvement workshops and home-made industrialization of foods, supplied by a former-technique of EMATER / RJ in the places of Chalet, Alberto Furtado, Stop of Crowns, Parapeúna and Paiolino for seventy three people, most women and some few men's young accompanied girls and boys, they allowed the socialization of techniques of sterilization of glasses, of conservation of vegetables without chemistry use for pickles production and for making of composites

of orange candies, papaya, banana and pumpkin in pieces, beet jellies, mulberry, banana with orange and papaya with pineapple. They allowed, also, the learning of the making of yam coconut sweet. The craft workshops prioritized the social orientation of the feminine work for use of available resources in the area where you/they live (seeds, grains) and of scraps of fabrics came from of the local textile companies, aiming at the production of panels, quilts and decorations of Christmas, among other objects susceptible to commercialization, that so much can promote generation of income as elevation of the women's self-esteem involved in the project.

As for the medicinal and aromatic herbs, the identification of its cultivation in the small domestic vegetable gardens made possible that a listing that identify was accomplished the corresponding scientific names, the uses that the residents of the basin hydrographic of the Rio Preto do of them appearing, with base in the common sense, and the therapeutic properties of those plants. The identification of the readiness of the small producers appeared for the viability of the enlargement of that production with base in feminine labor as one in the ways of doing the articulation among you know them traditional and the scientific ones, of incorporating new techniques and of transforming the scientific knowledge in a new sense common emancipate.

By Boaventura de Souza Santos, "the knowledge emancipation, to the turn-being common sense, doesn't despise the knowledge that produces technology, but he/she understands that just as the knowledge it should be translated in solemnity-knowledge, the technological development should be translated in life" wisdom (2000: 109).

CONCLUSION

The socioeconomic transformations of the last 20 years affected the behavior of companies deeply until then just gone back to maximization of the profit. As consequence of the largest pressure for transparency in the businesses, the companies started to adopt a more responsible posture in their actions. In that context, they emerge the solidary practices that conspire in the sense of to get better and to turn more productive the established relationships among the agents involved in the enterprises. The Methodology grows leaning in an administration participative of the Projects (research-action), from the discussions of the proposals to the effective interventions, with views to the socialization of scientific and technological knowledge and of maintainable productive practices considering all of the involved agents. In that sense, it intends to encourage the development of a net of subjects, people and organizations, committed with the development political, economical and social, above all with the reduction of the inequality. The adopted methodologies will be sustained always in the articulation of scientific knowledge with you know places, through practices social/environmental related to the work generation and income, to the health, to the education and the sustainability.

In certain measure, the objective of the transdisciplinarity in the knowledge co-creation is to encourage a community of thinkers and to facilitate the generation of committed projects with the promotion of a culture that allows the articulation of the you know in function of the creation of an ethics of the solidarity sustained in the understanding of the diversity of the subjects that you/they look for the expressed unit in the collective action on behalf of the very common. Centered in the subject, the transdisciplinarity conspires in the direction of a more enlarged perception of the reality, with views to the creation and the use of knowledge in subjects and local circumstances; then the proposed methodology. A transdisciplinarity area wants to be an open space for fertile dialogue and fertilization crossed among researchers, teachers, artists, managers and social actors who want to open their approach of the reality second this semantic plurality. The projects transdisciplinarity, developed by a net of actors holders of specific knowledge that you/they are to discuss complex situations and in crossed fertilization of you know, teaching and learning continually with the group, they contribute to the enlargement of the perception of the reality and of the identification in more appropriate ways and roads promoters of progress in the context of the environmental sustainability.

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CREATING ETHICS. THE MULTIMODAL STRUCTURE OF MORAL REASONS

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Abstract: *I will illustrate that “abduction” – or reasoning to hypotheses – is central to understanding some features of the problem of “inferring reasons” in ethics. I contend that ethical deliberation, as a form of practical reasoning, shares many aspects with hypothetical explanatory reasoning (selection and creation of hypothesis, inference to the best explanation, model-based reasoning, manipulatory cognition) as it is described by abductive reasoning in science. Of course in the moral case we have reasons that support conclusions instead of explanations that account for data, like in epistemological settings. To support this perspective, I propose a new analysis of the “logical structure of reasons”, which supports the thesis that we can look to scientific thinking and problem solving for models of practical reasoning. The distinction between “internal” and “external” reasons is fundamental: internal reasons are based on a desire or on an intention, whereas external reasons are, for instance, based on external obligations and duties we can possibly recognize as such. Some of these external reasons can be grounded in what I call “moral mediators” of various types. I will also illustrate how this activity of practical reasoning takes advantage of hybrid representations bringing up the question of how multimodal aspects involving a full range of sensory modalities are important in it. Finally, it will be important to illustrate why it is difficult to “deductively” grasp practical reasoning, at least when we are aided only by classical logic; complications arise from the intrinsic multiplicity of possible reasons and from the fact that in practical reasoning we can often hold two or more inconsistent reasons at the same time.*

Keywords: *moral reasons, abduction, ethics, practical reasoning*

1. INTRODUCTION

While I deeply believe that creating and acquiring new knowledge is critically important, even I must admit that all the information in the world is meaningless unless we can use it effectively: the principles and ways of reasoning that allow us to put new ethical knowledge to work are just as important as the knowledge itself.

In my recent book *Morality in a Technological World*¹ I have considered how new technology and changing economic circumstances have generated the need for new moral knowledge, and I have examined the social and cultural contexts in which moral reasoning takes place. In this article I will provide an analysis of moral reasoning’s cognitive features and constraints.

I believe we can find models for practical reasoning in scientific thinking and problem solving – an appropriate source given the fact that science and technology underlie many of the cultural changes that have triggered the need for a new approach to ethics. It is worth remembering here that ethical knowledge, like scientific or other kinds of knowledge, is created and used by human beings and is, therefore, fundamentally related to several cognitive and epistemological concern. First of all I have to stress that ethical knowledge and reasoning are expressed not only with words at a verbal/propositional level but also through model-based and manipulative/“through doing” processes. Consider for example, the important role in ethics played by imagination, which, like analogy, visualization, simulation, and thought experiment, is a form of model-based reasoning.

Another important theme is creativity, which is an important factor in effecting conceptual change and forging new perspectives. By exploiting the concept of “thinking through doing” and of manipulative abduction, I have also illustrated in the quoted book some of the most interesting cognitive aspects of what I call “moral mediators.” Morality is often performed in a tacit way, so to

¹ Magnani, 2007.

speak, “through doing,” and part of this “doing” can be seen as a manipulation of the external world with the express purpose of building these moral mediators. They can be purposefully built to achieve ethical effects, but they may also exist independently of human beings’ intentionality in a variety of entities and may carry ethical or unethical consequences. Furthermore, while describing morality “through doing” I have supplied a list of “moral templates” – forms of invariant behaviors – that illustrates manipulative ethical reasoning.

My analysis of moral knowledge and inferences in the cognitive terms of abduction and model-based reasoning yields a very useful integrated framework that reveals connections between aspects of ethical deliberation that are typically considered dissimilar if not wholly contrasting, from the role of emotions, visualizations, and narratives to the function of schemas in moral thinking and deliberation. Finally, concept of abduction has also allowed a cognitive comparison with diagnostic reasoning brings to light the intrinsic “incompleteness” of knowledge in ethical inferences.

2. GOOD REASONS AND ARGUMENTS

The Minimum Conception of Morality is very concisely described by James Rachels: “Morality is, at the very last, the effort to guide one’s conduct by reason – that is, to do what there are the best reasons for doing – while giving equal weight to the interests of each individual who will be affected by one’s conduct: there are no privileged people.”¹

I would add that to achieve even this minimal level of morality, we need guidelines and reasoning skills that allow us to employ our knowledge effectively: 1) we need sound principles for choosing actions, principles that allow us to consider opposing views and 2) appropriate ways of reasoning – inferences – that permit us to apply these principles. The first statement relates to the concept of “knowledge as a duty”: it is our duty to establish principles – that is, to produce and apply rich ethical knowledge appropriate for modern moral problems, just as it is our responsibility to seek and use other kinds of knowledge – “scientific,” for example.

The second statement, on the other hand, stresses the importance of being methodologically aware of moral reasoning’s cognitive processes. Dealing dexterously with modern moral challenges requires new knowledge, of course, as well as greater skill in acquiring and understanding pertinent facts and information. I maintain that both appropriate ethical knowledge and proper moral reasoning are necessary for human beings to assume responsibility and enjoy freedom, both of which are primary features of a moral life.

How we ought to live is the central problem of morality, and the way we reason dictates how we live. Our intellectual and religious traditions have elaborated many ethical theories, each of which seeks to answer this question. Ethical theories are formed by various moral rules and principles that aim at providing good reasons to guide us when making inferences and moral judgments. Many kinds of reasoning are employed in ethics, both in the construction of theories and knowledge and in practical deliberation. Consequently, *creating ethics* refers not only to expanding *moral knowledge* but also to developing and using *moral inferences* systematically when dealing with problems, real or abstract, in practical deliberation.

Generally speaking, living morally involves matching a concrete situation or problem with something abstract – rules, principles, and prototypes, for example, as well as models and emotions, etc. Principles in ethics are easy to identify; prototypes, (like schemas and frames) are standard, previously solved ethical cases or common situations involving ethical issues.

Living morally is not always simple, especially in the face of daunting new challenges that require new creative ideas: for example, certain technological innovations have generated problems in the realms of human reproduction, the environment, and cyberspace that were unimaginable just 20 years ago. If we are to succeed in managing these and other unprecedented difficulties, we must use novel ways of thinking and feeling to recast and reinterpret the situations that caused them. Without adequate reasoning, even well-intentioned moral actions may fail – or, worse still, cause harm – and the best way to facilitate adequate reasoning is to confront problems with flexible and well-fed minds. As we will see later in this article, the level of ethical creativity, for both collectivities and individuals, is directly related to the richness of moral knowledge and the quality of emotional training combined with strength of will to do right things.

From a theoretical point of view, living morally is the capacity to use valuable moral knowledge along with well developed *templates* of reasoning that can explain situations or conflicts

¹ Rachels, 1999, p. 19.

and provide suitable modes of deliberation. Long-term pondering can thwart the process: sometimes immediate action is critical – one must quickly manipulate objects and situations in the human and natural environment, and in such instances, morality is achieved “through doing” rather than “through feeling” or “through reasoning.”

3. CREATION AND SELECTION OF REASONS

A very famous case can clearly show how different theories (principles, rules, and prototypes) and inferences lead to different conclusions in ethical deliberations. The case, reported by Rachels,¹ involves an infant called Baby Jane Doe who was born in New York in 1983. The baby suffered from multiple birth defects, including spina bifida (a condition in which an embryo’s spinal column fails to close completely during the first month of development), hydrocephaly (excess fluid on the brain), and microcephaly. Baby Jane Doe needed surgery to close the gap in her spinal column, but her pediatric neurologists disagreed on the potential outcome of the procedure: one physician, Dr. Newman, believed the surgery would not be worth undertaking because the baby’s defects were so great that even with the operation, she could never attain a reasonable quality of life, while the other physician, Dr. Keuskamp, advised immediate surgery because he thought the baby’s condition was less dire. The parents, faced with this medical *and* moral problem, followed Dr. Newman’s advice and refused surgical treatment. Shortly after that, Lawrence Washburn, a conservative “right-to-life” lawyer, petitioned the courts to set aside the parents’ decisions and order the surgery. The New York State Supreme Court granted that request, but a higher court, calling Washburn’s suit “offensive,” quickly overturned the order after hearing the description of the baby in Dr. Newman’s testimony:

[...] on the basis of the combination of malformations that are present in this child, she is not likely to ever achieve any meaningful interaction with her environment, nor ever achieve any interpersonal relationships, the very qualities which we consider human.²

At this point the federal government got into the act by asking whether a “handicapped person” – the infant – was being discriminated against. Still, based on Dr. Newman’s prediction, the suit to order surgery was dismissed, and consequently, the procedure was not performed.

It is clear that Newman’s testimony is based on a kind of *predictive reasoning*. This kind of reasoning, if combined with the ethical principle of *benefit*, states that if we can benefit someone without harming anyone else, we ought to do so, and it was this thinking that led to the conclusion that surgery would not be worth the risk and expense: “With surgery, she would have a 50-50 chance of surviving into her 20s, but she would be severely mentally retarded, paralyzed, epileptic, unable to leave her bed, without control of her bladder or bowels, and unusually vulnerable to such further diseases as meningitis. The mental retardation would be so severe that she would never even be able to recognize her parents.”³ Surgery, then, would benefit neither Baby Jane Doe nor anyone else, and even if she survived the operation, her parents would face years of heavy labor caring for a child who had derived little benefit from it.

If, however, instead of the degree-of-benefit principle, we prefer to use the *sanctity-of-human-life* guideline followed by right-to-life activists, we would view the surgery very differently. In the construct of this second principle, which states that every human life is invaluable and sacred, the pessimistic prospects determined through predictive reasoning are irrelevant, and we must chose surgery, regardless of the possible outcome. Of course, we would arrive at a similar conclusion if we apply the principle of the *wrongness of discriminating against the handicapped*. The failure to perform surgery on the baby, would, in this case, be considered unacceptable discrimination against and a denial of the rights of a handicapped person.

When considering Baby Jane Doe’s problem, we have here at our disposal three ethical principles to guide us – degree of benefit, sanctity of human life, and wrongness of discriminating against the handicapped, all of which are options we can choose from a pre-established list of principles (“reasons”) that guide us as we evaluate problems and arrive at decisions. I contend that ethical deliberation as a form of practical reasoning⁴ is a variety of *abductive reasoning*, similar to the reasoning conducted in scientific and diagnostic settings.⁵ Of course, in a moral case we have reasons

¹ Rachels, 1999, pp. 6-12.

² Cit., p. 7.

³ Cit., pp. 7-8.

⁴ Cf. Millgram, 2001 and 2001a.

⁵ Magnani, 2009.

that support conclusions instead of explanations that account for data;¹ still, moral reasons can play an important explanatory role. It must be mentioned here that recent research on models of abduction has acknowledged, beyond Peirce, the existence of a “non-explanationist” abduction describing a kind of practical reasoning that covers the case of ethical thinking.²

We have said moral deliberations involve both selecting or creating “reasons” and then applying them to concrete cases. We can both *select* (or *create*, if we do not have any) moral reasons and apply them to concrete cases, sometimes while also looking for the “best” reason according to some ethical meta-criteria. When we create new ethics, we produce new knowledge and form new rules about problems and situations that have not yet been fully interrogated from the moral point of view: in short, we construct new “reasons.” We must not only use currently available ethical concerns/reasons to solve ethical problems but also build a richer body of moral knowledge to handle puzzling situations. In addition, new reasons (for example in terms of new principles) tailored to the modern era will allow us to probe the moral intelligibility of problems in a fresh, unprecedented way. An example of such invention might be the relatively new ethical principle of civil disobedience, which provides “reasons” for some particularly extreme behaviors and therefore renders them morally intelligible.

Nevertheless, in ethical deliberation we typically do not create new moral guidelines; rather, we select ones from our “encyclopedia” of pre-existing principles, as we did above when we explored the Baby Jane Doe case from three established ethical viewpoints. From the sanctity-of-human-life perspective, all surgical operations that protect human life of any kind are good; surgery would also be the “right” choice if we assume that it is wrong to discriminate against a handicapped person by denying him or her treatment that someone without disabilities would ordinarily receive. On the other hand, if we, like the baby’s parents, select the utilitarian principle of *benefit* from our encyclopedia (“If we can benefit someone, without harming anyone else, we ought to do so”), we would opt to forego the operation: based on the information available about Baby Jane Doe – that her chances of survival after surgery were poor and, even if she did survive, the prospects for her general health were grim – the surgery would offer little benefit to the infant and would not serve anyone else’s interests.

Even without the surgery, however, Baby Jane Doe did not die, and five years later she was doing much better than expected: she was able to talk, use a wheelchair, and attend a special school. Even though her parents had used a good utilitarian moral principle and the best information at hand when making their decision, their choice turned out to be “wrong” in spite of the fact that it was the product of careful moral consideration. This does not mean that the decision was immoral – it was just wrong. Other parents in other cases would be right to make the same decision.

3.1 Moral Agents and Moral Patients Intertwined

Because technological artifacts are designed, produced, and used in the human world, they are deeply interwoven into social interaction and, as a result, they have profound effects on what people do and how they do it. We can say, for example, that computers possess moral agency because they have 1) a kind of intentionality and 2) can have moral effects on other entities (referred to below as “moral patients”) – that is, they can benefit or harm beings that are capable of having their interests impeded or furthered. As Deborah Johnson puts it:

Artifacts are intentional insofar as they are poised to behave in a certain way when given input of a particular kind. The artifact designer has a complex role here for while the designer’s intentions are in the artifacts, the functionality of the artifact often goes well beyond what the designer anticipated or envisaged. Both inputs from users and outputs of the artifacts can be unanticipated, unforeseen, and harmful.³

One way to interrogate a moral problem is to think of the involved entities as subjects and objects of actions or, as some ethicists put it, as “moral agents” and “moral patients.” Moral *agents* perform good or evil actions and are, therefore, sources of moral action, while moral *patients* are the objects of such actions. Floridi and Sanders posit that there can be several kinds of possible relationships between these agents and:

¹ Cf. the section “The Logical Structure of Reasons”.

² Gabbay and Woods, 2005, p 50.

³ Johnson, 2004

- 1) They are disjoint (it is unrealistic to say that there not at least one entity that qualify both as an agent and as a patient);
- 2) The second class can be a proper subset of the first;
- 3) The two classes intersect each other. Characterizations 2 and 3 are not very useful because they both require at least one moral agent that in principle could not qualify as a moral patient. (Only supernatural agents can fulfill this requirement: a God that affects the world but is not affected by the world, for example)
- 4) All entities that qualify as agents also qualify as patients and vice versa (standard position), or, finally,
- 5) All entities that qualify as patients also qualify as agents.¹

This last statement may need a bit of revising, however: for example animals are moral patients that cannot serve as moral agents. Generally speaking, non-living “things” are considered to be similarly passive; like animals, both they and some artificial entities can be considered patients with intrinsic value – take the Mona Lisa, for instance. I contend, however, that unlike animals, some non-living “things” – the Internet, for example – are more than passive objects. Such things can be said to possess a sort of moral agency even though they lack the characteristics we usually associate with human agency: free will, full intentionality, responsibility, and or emotion

While this distinction between moral patients and agents may be correct and useful, it fails to recognize the dynamic aspects of moral delegation and externalization. Indeed moral delegation to external objects and artifacts does not take place simply because a given thing is supposed to intrinsically possess a given set of properties. For example, it is the way in which a thing dynamically interacts with humans and how they respond to it that renders an artifact like Mona Lisa a moral patient. In this sense, my conception differs from the one that distinguishes moral patient from moral agent, which I consider to be too static.

This view fails to account for the process by which we continuously delegate and give (moral) value to the things around us. For example, the patient-agent distinction fails to explain why the first gift a teenager receives from a girlfriend or boyfriend might acquire great (intrinsic) value and become a simple moral patient, even if it is just a ragged old T-shirt. In such cases, value derives from neither the condition nor the cost of the present, but from the worth it has triggered in the gift’s recipient.

Moreover, there is an additional reason to prefer my conception about moral delegation described above. Consider, for example, the idea that animals should have rights on their own, a notion based on the claim that, like us, animals are capable of suffering. They are moral patients, and as patients they have to be respected. According to my view, we can further see this value attribution as a result of moral mediation. My view also shows that as we delegate new moral worth to animals, they can reveal to us previously unseen new moral features – of suffering, in this case, which then acquires a new value and a new extension. Animals play the role of moral mediators because they mediate new aspects of human beings’ moral lives.

The agent-patient distinction, then, has some shortcomings: it is obvious that the moral agency of computers is not the same as that of human beings, and in this respect it is not different in kind from that of other technologies. Tom Powers has argued that while computers have a kind of external intentionality – one that, in the case of human beings, is expressed outside the human body through speech, written sentences, maps, and other designed artifacts – they cannot have *internal* intentionality in the way that people can. Instead, the agency of technological artifacts is closer to that wielded by human “surrogates” like tax accountants or estate executors.² This comparison elucidates the moral character of computer systems by showing that they have a kind of intentionality and have effects on moral patients, and hence they are appropriate objects of moral appraisal. In these cases we are faced with a kind of “mind-less morality.”³ The fact that some artifacts possess moral agency is

¹ Floridi and Sanders, 2004b. Carsten Stahl (2004) has recently investigated whether or not computers can be considered autonomous moral agents. Since computers cannot understand the information they store and manage, he says they lack the basic capacity “to reflect morality in anything.” He argues on this point using an interesting and curious test called “the moral Turing test.”

² Powers, 2004.

³ Floridi and Sanders, 2004a.

yet another reason to seek new knowledge: we must construct suitable policies that allow us to “punish” problematic artifacts – that is, to modify, re-engineer, or remove them.

3.2 Moral Mediators in Our Technological World

We have already established that the monumental moral challenges created by technology are making it necessary for us to think about the world in different ways, and I do not believe concepts like the moral agent-moral patient paradigm are sufficient to give us the tools we need to achieve this goal. I contend that framing new moral problems with the idea of *moral mediators* is a much more fruitful way to proceed.

Much of the behavior we conduct through learned habits – the tacit templates of action described above – is devoted to building vast new sources of information and knowledge: external *moral mediators*. Let us return to our previous example of those human beings who create, in a tacit and embodied way, foster homes, which play a moral role: they facilitate a foster child’s recovery as they allow him or her to rebuild moral perceptions that were damaged by previous abuse. Here, the artifact (the foster home) is an example of a moral mediator in the sense that it mediates – objectively, over there, in an external structure – positive moral effects. Other moral mediators, however, are built by human collectives in a conscious way, as is the case with some objectified rules or principles created with a particular goal in mind or with already established ways of producing moral effects (religious rites, for examples). Many complicated external moral mediators can also *redistribute* moral effort: they allow us to manipulate objects and information in a way that helps us overcome the paucity of internal moral options – principles and prototypes, etc. – currently available to us. I also think that moral mediators can help explain the “macroscopic and growing phenomenon of global moral actions and collective responsibilities resulting from the ‘invisible hand’ of systemic interactions among several agents at local level.”¹

Using moral mediators is more than just a way to move the world toward desirable goals: it is an action that can play a moral role and therefore warrants moral consideration. We have said that when people do not have adequate information or lack the capacity to act morally upon the world, they can restructure their worlds in order to simplify and solve moral tasks. Moral mediators are also used to reveal latent constraints in the human-environment system, and these discoveries grant us precious new ethical information. Imagine, for instance, a wife whose work requires long hours away from her husband, and her frequent absences cause conflict in their relationship. To improve their marriage, she restructures her life so that she can spend more quality time with her spouse, an action that can cause variables affected by “unexpected” and “positive” events in the relationship to covary with informative, sentimental, sexual, emotional, and, generally speaking, bodily variables. Before the couple adopted a reconfigured “social” order – that is, increased time together – there was no discernible link between these hidden and overt variables; a new arrangement has the power to reveal important new “information,” which, in our example, might come from a revitalized sex life, surprisingly similar emotional concerns, or a previously unrecognized intellectual like-mindedness. A realigned social relationship is just one example of an external moral mediator; natural phenomena can also serve this purpose. In my book *Morality in a Technological World*² I considered the problem of “respecting people as things” as we discussed external “natural” objects’ potential to create new ethical knowledge; we have seen that endangered species serve as moral mediators, for example, when people define themselves as “endangered,” for such comparisons provide us with new insights into other humans beings’ self perceptions. In fact, many external things that have traditionally been considered morally inert can be transformed into moral mediators. For example, we can use animals, the earth, or cultural entities to identify previously unrecognized moral features of human being, or we can employ external “tools” like writing, narrative, ritual, and, as we saw with the earlier examples of foster homes and group homes, institutions to reconfigure unsatisfactory social orders. Hence, not all moral tools are inside the head – many are shared and distributed in external objects and structures that function as objectified ethical devices.

While almost any sort of entity can help to mediate our moral outlook, certain technological artifacts can be considered *über* moral mediators – those equipped with artificial intelligence and the ability to be directly engaged in ethical reasoning and behavior. We must not only recognize the ethical ramifications of using such machines, but also of allowing them ethical autonomy toward

¹ Floridi and Sanders, 2004a.

² Magnani, 2007.

human users as well as other devices; in the process, we must assuage human fear about machine intelligence. Developing ways to deal with artificial intelligence is a new field of research – called machine ethics – that involves many interesting topics: improving interaction between artificial and natural intelligence systems by adding an ethical dimension to technological devices; using ethical strategies to enhance machine-to-machine communication and cooperation; developing systems that provide expert ethical guidance; establishing decision-making procedures for ethical theories with multiple prima facie duties that present conflicting perspectives; and assessing the impact of machine ethics on society.

External moral mediators of all kinds can function as components of a memory system that crosses the boundary between person and environment. For example, they transform the tasks involved in simple manipulations that promote further moral inferences at the level of model-based abduction. In the above case of the wife seeking moral protection of her marriage, she transforms it by manipulating her behavior so as to increase the quality time spent with her husband, and thus finds new information that allows her to abduce new internal model-based ideas and/or feelings – new motivating images, for example, or constructive emotions - about her husband and/or marriage. When the everyday life of a previously abused child is manipulated by placing her with a foster family, for instance, the new setting is a moral mediator that can help her abduce new model-based internal experience, images, emotions, or analogies through which she may be able to recalibrate her conceptions of adults, her past, and of abuse in general.

Actions executed through tacit templates can even enhance one's level of physical sensitivity: I can alter my bodily experience of pain by following the previously mentioned *control of sense data* template – that is, through unconsciously modifying the experience of my body and changing its relationships with humans or non-humans in distress, I may, for instance, create new, empathic moral ways to help other beings. Mother Theresa's personal moral rich feeling and consideration of pain had been certainly shaped by her proximity to starving and miserable people and by her manipulation of both her and their bodies. In many people, moral training is often related to these kinds of spontaneous (and, sometimes, "lucky") manipulations of their own bodies and sense data so that they build morality immediately and non-reflectively "through doing."

Throughout history, women have traditionally been thought to place more value on personal relationships than men do, and they are often regarded as more adept in situations requiring intimacy and caring. It would seem that women's basic moral orientation emphasizes taking care of both people and external things through personal, particular acts rather than relating to others through an abstract, general concern about humanity. The ethics of care does not consider the abstract "obligation" to be as essential; moreover, it does not require that we impartially promote the interests of everyone alike. Rather, it focuses on small-scale relationships with people and external objects, so that, for example, it is not important to "think" of helping disadvantaged children all over the world (as men tend to aim at doing) but to "do" so when called to do so, everywhere.¹

My philosophical and cognitive approach to moral model-based thinking and to morality "through doing" does not mean that this so-called female attitude, being more closely related to emotion, should be considered less deontological or less rational and therefore a lower form of moral expression. I contend that many of us can become more intuitive, loving parents and, in certain situations, learn to privilege the "taking care" of our children by educating our feelings – maybe by heeding "Kantian" rules.² The route from reason to feeling (and, of course, from feeling to reason) is continuous in ethics. Many people are suspicious of moral emotional evaluations because emotions are vulnerable to personal and contextual attributes. Nevertheless, there are moral circumstances that require at least partially emotional evaluations, which become particularly useful when combined with intellectual (Kantian) aspects of morality.

Consequently, "taking care" is an important way to look at people and objects, and, as a form of morality accomplished "through doing," it achieves status as a fundamental kind of moral inference and knowledge. Respecting people as things is a natural extension of the ethics of care; a person who

¹ Moreover, both feminist skepticism in ethics and the so-called "expressive-collaborative model" of morality look at moral life as "a continuing negotiation *among* people, a socially situated practice of *mutually* allotting, assuming, or deflecting responsibilities of important kinds, and understanding the implications of doing so" (Urban Walker, 1996, p. 276). Of course, this idea is contrasted with the so-called "theoretical-juridical conception of morality."

² The role of ethics of care in bioethics is illustrated in Carse, 1999.

treats “non-human” household objects with solicitude, for example, is more likely to be seen as someone who will treat human beings in a similarly conscientious fashion. Consequently, using this cognitive concept, even a lowly kitchen vase can be considered a moral mediator.

When I clean the dust from my computer, I am caring for the machine because of its economical and worth and its value as a tool for other humans. When, on the other hand, I use my computer as an epistemic or cognitive mediator for my research or didactic activities, I am considering its intellectual prosthetic worth. To make a case for respecting people as we respect computers, we can call attention to the values human beings have in common with these machines: 1) humans beings are “tools,” albeit biological ones, with economic and instrumental value, and as such, can be “used” to teach and inform others much the way we use hardware and software, so human beings are instrumentally precious sources information about skills of various kinds; and 2) like computers, people are skillful problem solvers imbued with the moral and intrinsic worth of cognition.

4. THE LOGICAL STRUCTURE OF REASONS

I consider “abduction,” – that is, the reasoning to hypotheses – central to the problem of “inferring reasons” in ethical reasoning and deliberation. In abduction we usually base our guessing of hypotheses on incomplete information, and so we are in front of nonmonotonic inferences: we draw defeasible conclusions from incomplete information, and these conclusions are always withdrawable. It is in this sense that abductive reasoning constitutes a possible useful model of practical reasoning: ethical deliberations are always adopted on the basis of incomplete information and on the basis of the selection of particular abducted hypotheses which play the role of “reasons”. Hence, ethical deliberation shares some aspects with hypothetical explanatory reasoning as it is typically illustrated by abductive reasoning in scientific settings. To support this perspective on the “logical structure of reasons” I will provide an analysis based on the distinction between “internal” and “external” reasons and on the difficulties in “deductively” grasping practical reasoning, at least with the only help of classical logic.

I will illustrate that “abduction” – or reasoning to hypotheses – is central to understanding some features of the problem of “inferring reasons” in ethics. I contend that ethical deliberation, as a form of practical reasoning, shares many aspects with hypothetical explanatory reasoning (selection and creation of hypothesis, inference to the best explanation, model-based reasoning, manipulatory cognition) as it is described by abductive reasoning in science. Of course in the moral case we have reasons that support conclusions instead of explanations that account for data, like in epistemological settings. To support this perspective, I propose a new analysis of the “logical structure of reasons”, which supports the thesis that we can look to scientific thinking and problem solving for models of practical reasoning. The distinction between “internal” and “external” reasons is fundamental: internal reasons are based on a desire or on an intention, whereas external reasons are, for instance, based on external obligations and duties we can possibly recognize as such. Some of these external reasons can be grounded in what I call “moral mediators” of various types. I will also illustrate how this activity of practical reasoning takes advantage of hybrid representations bringing up the question of how multimodal aspects involving a full range of sensory modalities are important in it. Finally, it will be important to illustrate why it is difficult to “deductively” grasp practical reasoning, at least when we are aided only by classical logic; complications arise from the intrinsic multiplicity of possible reasons and from the fact that in practical reasoning we can often hold two or more inconsistent reasons at the same time. When I introduced the methodological problems of ethical deliberation in the previous sections, I contended, following Rachels, that morality is the effort to guide one’s conduct by reasons, that is, to do what there are the best reasons for doing while giving equal weight to the interests of each individual who will be affected by one’s conduct. I added that 1) we need good and sound reasons/principles to apply to the various moral problems, which will call our attention to and encourage evaluation of (good) arguments for opposing moral views, and 2) we need appropriate ways of reasoning – inferences – which allow optimal application of the available reasons.

I also said that in *abductive reasoning*, which is used to form explanatory hypotheses, we usually base our hypotheses on incomplete information, and that we are faced with *nonmonotonic* inferences: we draw defeasible conclusions from incomplete information. From this perspective, abductive reasoning also constitutes a model of practical reasoning: we adopt ethical deliberations based on incomplete information and on particular abducted hypotheses – guesses – that serve as “reasons.” Hence, I contended that as a form of practical reasoning, ethical deliberation shares some

characteristics with hypothetical explanatory reasoning (the selection and creation of a hypothesis, the inference to the best explanation) as occurs during abductive reasoning in scientific and diagnostic settings.¹ Of course, in moral cases, we have reasons that support conclusions instead of explanations that account for data, like in epistemological settings².

“The logical structure of reasons” is the title of chapter 4 in John Searle’s book *Rationality in Action*.³ I plan to use Searle’s conceptual framework to better understand what exactly are “reasons” in ethics. Whereas Searle deals with rational decision making, many of his conclusions appear to be appropriate for ethical cases, too.

By criticizing the classical model of rational decision making (which always requires the presence of a desire as the condition for triggering a decision), Searle establishes the fundamental distinction between *internal* and *external* reasons for action: those that are internal might be based on a desire or on an intention, for instance, while external reasons might be grounded in external obligations and duties. When I pay my bill at the restaurant, I am not doing so to satisfy an internal desire, so this action does not arise from internal motivations; instead, it is the result of my recognition of an external obligation to pay the restaurant for the meal it has provided. Analogously, if an agent cites a reason for a past action, it must have been the reason that the agent “acted on.” Finally, reasons can be for future action, and this is particularly true in ethics where they do not always trigger an action – in this case, however, they must still be able to motivate an action: they are reasons an agent can “act on.”

Searle’s anti-classical “external reasons” will probably not seem strange: I stress the fact that human beings delegate cognitive roles (and moral worth) to external objects that consequently acquire the status of deontic moral structures. This also occurs when we articulate ideas in verbal statements – promises, commitments, duties, and obligations, for example – that then exist “over there,” in the external world. Imagine the deontic role that concrete buildings (like for instance the ones whose shapes restrict routes people can follow) or abstract institutions (for example, constitutions usually compel us to consider equality of citizens as important) can play in depicting duties and commitments we can (or have to) respect. Human beings are bound to behave in certain ways as spouses, tax payers, teachers, workers, drivers, and so on. All these external factors can become – Searle says – reasons/motivators for prior intentions and intentions-in-action of human beings.

Many things around us are human made, artificial – not only concrete objects like a hammer or a PC, but also human organizations, institutions, and societies. Economic life, laws, corporations, states, and school structures, for example, can also fall into that category. We have also projected many intrinsic values on things like flags, justice rituals, or ecological systems, and as a result, these external objects have acquired a kind of autonomous automatism “over there” that conditions us and distributes roles, duties, moral engagements – that is, it supplies potential “external reasons.” Non-human things (as well as so-to-say “non-things” like future human beings and animals, etc.) become moral clients as well as human beings, so that current ethics must pay attention not only to relationships between human beings, but also to those between human and non-human entities.

Moreover, in the section on “moral mediators” section we saw how external things we usually consider to be morally inert can be transformed into those moral mediators that express the idea of a distributed morality. For example, we can use animals to highlight new, previously unseen moral features of other living objects, as we can do with the earth or with (non natural) cultural objects; we can also use external “tools” like writing, narratives, others persons’ information, rituals, and various kinds of institutions to morally reconfigure social orders. Hence, not all moral tools are inside the head along with the emotions we experience or the abstract principles we refer to; many are over there, even if they have not yet been identified and represented internally, distributed in external objects and structures which function as ethical devices available for acknowledgment by every human agent. These delegations to external structures – which are thus transformed into moral mediators - encourage or direct ethical commitments, and, they favor the predictability in human behavior that is the foundation for conscious will, free will, freedom, and of the ownership of our own destinies. If we cannot anticipate other human beings’ intentions and values, we cannot ascertain which actions will lead us to our goals, and authoring our own lives becomes impossible.

¹ Cf. Magnani, 2009.

² As I have already noted, recent logic research admits – beyond Peirce – that abductive reasoning is also occurring in non-explanationist reasoning environments.

³ Searle, 2001.

Let us return to the role played by reasons in ethical reasoning. Intentional states with a propositional content have typical *conditions of satisfaction* and *directions of fit*.

1. First, mental and linguistic entities have directions of fit: for example, a belief has a *mind-to-world* direction of fit. For example, if I believe it is raining, my belief is satisfied if and only if it is raining “because it is the responsibility of the belief to match an independently existing reality, and it will succeed or fail depending on whether or not the content of the belief in the mind actually does fit the reality of the world.”¹ On the other hand, a desire (or an order, promise, or intention) has a *world-to-mind* direction of fit: “if my belief is false, I can fix it up by changing the belief, but I do not in that way make things right if my desire is not satisfied by changing the desire. To fix things up, the world has to change to match the content of the desire.”²
2. Second, other objects (not mental and not linguistic) also have a direction of fit similar to the ones of beliefs. A map, for example, which may be accurate or not, has a *map-to-world* direction of fit, whereas the blueprints for a house have a *world-to-blueprint* direction of fit because they can be followed or not followed.³ Needs, obligations, requirements, and duties are not in a strict sense linguistic entities, but they have propositional contents and directions of fit similar to the ones of desires, intentions, orders, commitments, and promises that have a *world-to-mind*, *world-to-language* direction of fit. Indeed, an obligation is satisfied if and only if the world changes to match the content of the obligation: if I owe money to a friend, the obligation will be discharged only when the world changes in the sense that I have repaid the money.

When we applied the moral principle of the *wrongness of discriminating against the handicapped* to the case of Baby Jane Doe, we resorted to a kind of “external” reason that we had to “internalize” – that is, recognize as a reason worth considering as we sought to orient our moral action concerning the girl’s life. If we had instead used strong personal feelings like pity and compassion to guide our reasoning, we would have decided for or against the operation based on a completely “internal” reason. We have to note, of course, that external reasons are always observer-relative. It is only human intentionality that furnishes meaning to a particular configuration of things in the external moral or non-moral world. The objective fact that, say, I have an increased white blood cell level acquires a direction of fit that is a direction for action only if related to a human being’s interpretation (for example only “in the light” of a diagnosed disease, that same fact can trigger the decision for a therapy).

Searle also discusses the so-called collective intentionality that enables people to create common institutions such as those involving money, property, marriage, government, and language itself, an intentionality that gives rise to new sets of “conditions of satisfaction,” duties, and commitments. In my perspective I say these external structures have acquired a kind of delegated intentionality because they have become *moral mediators*, they have acquired a kind of moral “direction”. I have already illustrated that in those cases, when we have to deal with a moral problem through moral mediators, evaluating reasons of any kind immediately involves manipulating non-human externalities in natural or artificial environments by applying old and new behavior *templates* that exhibit some uniformities. This moral process is still hypothetical (abductive): these templates are embodied hypotheses of moral behavior (either pre-stored or newly created in the mind-body system) that, when appropriately employed, make possible what I have called a moral “doing.”

We must remember that I contend external moral mediators are a powerful source of information and knowledge; they redistribute moral effort by managing objects and information in new ways, and as a result, they transcend limits caused by the poverty of moral options immediately represented or found internally – those options located, for example, by merely applying internal/mental moral principles, utilitarian envisaging, and model-based moral reasoning like emotions.

It follows from the previous discussion that many entities can play the role of deontic moral structures. This fact can lead to a re-examination of the concept of duty. In this perspective duties can be also grounded in trained emotional habits, visual imagery, embodied ways of manipulating the world, exploitation of moral mediators – as we have just seen, endowed with a sufficient ethical worth in a collective.

¹ Cit., p. 37.

² Cit., p. 38.

³ Cit., p. 39.

4.1 The Multimodal Structure of Moral Reasons

What are these “reasons” that, following Searle, are the basis of rational actions and, in the Baby Jane Doe case, the basis of moral action? A reason answers the question “Why?” with a “Because”; it can be a statement, like a moral principle, as in the answer to “Why should we perform surgery on Baby Jane Doe?”: “Because of the wrongness of discriminating against the handicapped.” In reality, reasons are “expressed” by the statements – *explanations* – insofar as they are *facts* in the world (the fact that it is raining is the reason I am carrying an umbrella). They are also represented by *propositional intentional states* such as desires (my desire to stay dry is the reason I am carrying the umbrella), and, finally, by *propositionally structured entities* such as obligations, commitments, needs, and requirements, like in the case of our moral “principle” of “the wrongness of discriminating against the handicapped.” All good reasons explain and all explanations give reasons. Searle also distinguishes between reasons that justify my action and thus explain why it was the right action to perform, and the reasons that explain why in fact I did it.

1. First of all, in rational decision making, when we must provide a reason for an intentional state, we have to make an intelligent selection from a range of reasons that exist either internally or externally - in the latter case, we must take the external reason, recognize it as good, and internalize it. With respect to my ideal of an ethical deliberation sustained by “reasons,” I can affirm that it is not unusual for the “deliberator” to have limited knowledge and inferential expertise at his or her disposal. For instance, she may simply not have important pieces of information about the moral problem she has to manage, or she may possess only a rudimentary ability to compare reasons and ascertain data. Ethical reasoning is defeasible: because it is impossible to obtain all information about any given ethical situation, every instance of moral reasoning occurs without benefit of full knowledge, so we must remember that any reason can be rendered irrelevant or inappropriate by new information. Generally speaking, as illustrated above, these reasons can take three different forms: external *facts* in the world, such as empirical data; internal *intentional states* such as beliefs, desires, or emotions; and *entities* in the external world like duties, obligations, and commitments with the direction of fit upward (world-to-mind). External facts must be internalized and “believed,” while external entities must be internalized and adopted (“recognized”) as good and worth of consideration. The same happens in the case of rational moral deliberation.

2. Second, we must remember that maintaining a flexible, open mind is particularly important when we lack the ethical knowledge necessary to confront new or extreme concrete situations.

It is this second idea that returns us to the idea of “knowledge as a duty” I have previously introduced. In our technological world, it is our duty to produce and apply updated ethical knowledge just as it is to gather and implement other kinds of knowledge – “scientific,” for example. In the ethical case we stress the importance of selecting good reasons in terms of available principles, facts, and information, by improving the methodological awareness of the main cognitive processes involved. I maintain that both appropriate ethical knowledge and proper moral reasoning are the basic conditions for maintaining freedom and for adopting responsibility in our action, which I indicate as being the main traits of moral life.

When evaluating an ethical case, we have at hand all the elements of rational moral decision making: the problem we face, the “reasons,” and the agents involved. Every reason, Searle says, contributes to a “total reason” that is ultimately a composite of every good reason that has been considered – beliefs, desires, obligations, or facts, for example. As already observed, first, rationality requires the agent to recognize the facts at hand (I have to believe that it is raining) and the obligations undertaken (I have to adopt the principle of the sanctity of human life) without denying them (which would be obviously irrational).¹ Second, reasons can be more than one, indeed I need at least one motivator, but in some cases there are many, and these reasons often conflict with one another; it then becomes necessary to appraise their relative weights in order to arrive at the prior intention and the intention-in-action.

In abductive reasoning, this kind of appraisal is linked to evaluating various inferred explanatory hypotheses/reasons, and, of course, it varies depending on the concrete cognitive and/or epistemological situation. I contend that epistemologically using abduction as an inference to the best explanation simply requires evaluating competing hypotheses (that express competing “reasons”

¹ Searle, 2001, p. 115.

in the ethical case). The best total reason would be the one that creates prior intention and intention-in-action.

What criteria can we adopt to choose the reason(s) that will become the motivator(s)? The concept of “coherence” as illustrated by Paul Thagard,¹ in which ethical deliberation is seen as involving conflicting reasons (deductive, explanatory, deliberative, analogical) that can be appraised by testing their relative “coherence.” This “coherence view” is terrifically interesting because it reveals multidimensional character of ethical deliberations. The criteria for choosing the most coherent “reason/motivator” represent a possible abstract cognitive reconstruction of an ideal of “rationality” in moral decision making, but they can also describe the behavior of real human beings. As I have already stressed, human beings usually take into account just a fraction of the possible knowledge when performing ethical judgments. For example, when making judgments, it is common for utilitarians to employ only what Thagard calls “deliberative” coherence or for Kantians to privilege principles over consequences. Psychological resources are limited for any agent, so it is difficult to mentally process all levels of ethical knowledge simultaneously in an attempt to calculate and maximize the overall coherence of the competing moral options. The “coherence” model accounts for these “real” cases of human moral reasoning by showing they fit only “local areas” of the coherence framework: in general, real human beings come to immediate conclusions through one moral aspect (for instance, the “consequentialist” one) and disregard the possible change in coherence weight that could result from considering other levels (for instance, the “Kantian” one).

Searle interprets rationality in decisions naturalistically: “Rationality is a biological phenomenon. Rationality in action is that feature which enables organisms, with brains big and complex enough to have conscious selves, to coordinate their intentional contents, so as to produce better actions than would be produced by random behavior, instinct, tropism, or acting on impulse.”² I agree, but I would add that rationality is a product of a hybrid organism. This notion obviously derives from the fact that even the external tools and models we use in decision making – an externalized obligation, a computational aid, and even Thagard’s “coherence” model described above – are products of biological human beings, but at the same time these tools constitutively affect human beings, who are, as we already know, highly “hybridized.”³

4.2 Abduction and Practical Reasoning

Searle considers “bizarre,” and I strongly agree with him - that feature of our intellectual tradition, according to which true statements that describe how things are in the world can never imply a statement about how they ought to be: in reality, to make a simple example, to say something is true is already to say you ought to believe it, that is other things being equal, you ought not to deny it. Also, logical consequence can be easily mapped to the commitments of belief. Given the fact that logical inferences preserve truth, “The notion of a valid inference is such that, if p can be validly inferred from q , then anyone who asserts p ought not deny q , that anyone who is committed to p ought to recognize its commitment to q .”⁴ This means that normativity is more widespread than expected.

Certainly, theoretical reasoning can be seen as a kind of practical reasoning where deciding what beliefs to accept or reject is a special case of deciding what to do. The reason it is difficult to “deductively” grasp practical reasoning is related to the intrinsic multiplicity of possible reasons and to the fact that we can hold two or more inconsistent reasons at the same time.⁵ The following example illustrates how practical contexts are refractory to logical modeling. Given the fact that I consider it a duty to do p and that I also feel committed not to do p , we cannot infer that I am committed to do (p and not p). I am a physician committed to not killing a patient in a coma, but at the same time my compassion for the patient commits me to the opposite duty. This does not mean that I

¹ Thagard, 2000.

² Searle, 2001, p. 142.

³ Cf. Searle (2001) calls the means and ways of performing an action (for instance to fulfill an obligation) “effectors” and “constitutors.” An obligation to another person is an example. I know I own you some money: “I can drive to your house” and “give you the money” – effector and constitutor.

⁴ Cit., p. 148.

⁵ Searle “reluctantly” declares that it is impossible to construct a formal logic of practical reasoning “adequate to the facts of the philosophical psychology” (2001, p. 250). I think that many types of non-standard logic (deontic, nonmonotonic, dynamic, ampliative, adaptive, etc.) reveal interesting aspects of practical reasoning by addressing the problem of defeasibility of reasons and of their selection and evaluation.

want to preserve the life of the patient and, at the same time, I want to kill him – that would lead to an inconsistent moral duty. All this represents an unwelcome consequence of the fact that commitment to a duty is not closed under conjunction.¹

In practical reasoning, we are always faced with desires, obligations, duties, commitments, needs, and requirements, etc., that are at odds with one another. Moreover, even if I consider it a duty to do p and I believe that (if p then q), I am not committed to do q as a duty: I can be committed to killing a patient in a coma and at the same time believe this act will cause pain for his friends, but I am not committed to causing this pain. *Modus ponens* does not work for duty/belief mixture.²

The examples above illustrate the difficulties that arise when classical logic meets practical reasoning. They further stress the importance I attribute to abductive explanatory inferences in practical settings, where creating, selecting, and appraising hypotheses are central functions.

5. CONCLUSION

Finally, I would like to stress again the centrality of the content of the section “The Logical Structure of Reasons” where the reference to the distinction between “internal” and “external” reasons in ethical deliberation can be correctly understood in the light of my cognitive considerations on moral mediators and morality through doing. The “external reasons” resort to the role of externalities of various type I have always stressed in my books, starting from the primary considerations on “respecting people as things” until the role of “moral mediators”. It is in this section that I explicitly work out the main theoretical aspects related to my thesis about the importance of cognitive and epistemological tradition to renovate research on ethical

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¹ Cit., p. 250.

² Cit., pp. 254-255.

THE EPISTEMIC VALUE OF RATIONALITY¹

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Abstract: *Models of rational choice use different definitions of rationality. However, there is no clear description of the latter. We recognize rationality as a conceptual conglomerate where reason, judgment, deliberation, relativity, behavior, experience, and pragmatism interact. Using our definition, the game theoretic idealized principle of rationality becomes absolute. Our model gives a more precise account of the players, of their true behavior. We show that the Rational Method (RM) is the only process that can be used to achieve a specific goal. We also provide schematics of how information, beliefs, knowledge, actions, and purposes interact with and influence each other in order to achieve a specific goal. Furthermore, ratiom, the ability to think in the RM framework, is a singularity in time and space. Having a unilateral definition of rationality, different models and theories have now a common ground on which we can judge their soundness.*

Keywords: *conceptual conglomerate, traditional rationality, rational method, ratiom*

1. Introduction

In order to have a proper analysis of different ‘problems’, one must have the appropriate tools. *Rationality* is one such tool exploited in rational choice theories, game theory, decision theory and others, that has been over-used and miss-used. Moreover, contemporary models of management utilize the hidden assumption that the actors involved are rational. However, there is no one true and clear definition of what rationality is.

Our ideas and beliefs about the concept of rationality are not clear. Different models of rational choice use different definitions. Being an abstract concept, it is hard to pinpoint this term. This is the reason why this notion has been misinterpreted. Rationality is a super-system concept. It is a conceptual conglomerate (ConC)², where reason, judgment, deliberation, relativity, behavior, experience, and pragmatism interact. Nevertheless, there is no one unified way for all the elements of this ConC to interact. The current models look only at partial interactions and they have limited descriptions.

Our paper will show what rationality really is, provide its functional definition, as well as its mathematical characterization. The first part of the paper focuses on previous work done on this topic. In this section, we describe the major aspects and we illustrate certain limitations of these models. We characterize Traditional Rationality (TR) as the basic idea of what is believed to be rational in major theories dealing with this concept, more precisely Game Theory and Rational Choice Theory. We show the constraints of the concepts of utility and equilibrium contained in TR. We also describe the standards of preferences and what expectations of future events are.

In the second part of the paper, the Rational Method (RM) is described. We show what a goal is, and prove that the RM is the only way to achieve the former. We describe the foundation that builds to the Rational Method, and so, to the realization of any goal. The term ‘ratiom’ is introduced. We also show that ratiom is a singularity in space and time.

We end the paper with different general remarks regarding true rationality. Moreover, we will answer throughout the paper to different questions that some of our colleagues pertinently ask.

¹ This research was presented at the 12th International Conference on Foundations and Applications of Utility, Risk and Decision Theory, Rome, Italy; and Spain, Italy, Netherlands Meeting on Game Theory, Foggia, Italy

² Conceptual Conglomerate is a reference to any specific or elusive system (may the latter be formed by elements, concepts or states).

1.1. Traditional rationality

Figure 3 of the Appendix illustrates the general ideas encompassed in rationality, what is known of 'traditional rationality'. This map is a collection of previous works on the topic. Some characteristics of rational/TR are: way of thinking of individuals; framework; pattern of thinking; context dependent; choice dependent.

Contemporary models use a reasonable approximation of what is rational when referring to TR. Moreover, the same models assume hyper-rationality, meaning that nothing can violate the actors' preferences. There are few problems with hyper-rationality: actors' preferences may be contradictory; preferences are dependent on nature, on the situation; constraints imposed on the actors change the initial preferences; framing. These are only a few of the difficulties that are introduced indirectly.

For Rational Choice Theory (RCT), TR is the deliberation and finding the best course of action (using rationality in any form to distinguish from alternative actions). We see that this definition is extremely general. Another definition for TR is that RCT tries to predict what actual action will be taken. Nevertheless, the *action* aspect is only one part of rationality. *Action* is a consequence of the actor's rationality. In other words, RCT evaluates the actions of actors as symptoms of their rationality, and not actually looking at the root of the canonical basis of rationality.

We will show that even if the assumptions of TR have useful properties and characteristics, they are not accurate and create loopholes in models. For this reason, the latter do not represent accurately reality, the world.

There are three general characteristics (definitions) that are attributed to TR and the actors that use TR (Straffin 1993, pp. 53-54):

- (1) **Traditional Rational Player:** A player is rational if it chooses the alternative that has the highest utility.
- (2) **Reverse Causality of TR:** The reason why a player chooses a certain strategy is that the specific strategy has the highest utility.
- (3) **Comparison of Utility:** If Player 1 (P_1) values an outcome higher than Player 2 (P_2), then P_1 values more the outcome than P_2 .

There is an important question that needs to be answered (Feinberg, 2005a): is TR a property of the decision or of the decision maker? We remark that TR is not a property. It is a characteristic. The first definition of RCT puts an emphasis on the decision maker. Yet, the second definition puts it on the decision. Here, we see one aspect of TR relativity between models, and even internal to the same models.

Moreover, Game Theory (GT) uses two major assumptions regarding the player (the rational player, an ideal person) (Damme 1983, pp. 1-2):

- (4) **Assumption 1.** The player can analyze the game, i.e. he is sufficiently intelligent.
- (5) **Assumption 2.** Von Neumann/Morgenstern's utility function can express the player's preferences.

1.2. Other characteristics of Traditional Rationality

Characterizing someone of rational or irrational is actually characterizing the latter's conformity to the standards of rationality (Nathanson 1985, pp. 35). Nevertheless, these standards are unclear. Even though one may argue that (1), (4), and (5) form these principles, we do not believe so. We will see later that rationality does not have standards. It is a method. This is the reason why one cannot assign rationality, in the traditional sense of rationality, to anybody.

Some consider rationality as the means (practical and efficient) to achieve an end. For these, there is no specified method of achieving the 'desired' end. "Achieving the end no matter the means" is pragmatism. It is true that in pragmatism there may be rationality (and vice-versa), but rationality is not limited only to pragmatism.

For a player to be rational, he or she needs experience. Ayer (Blanshard 1962, pp. 25) argued that "'being rational' entails being guided in a particular way by past experience." However, experience is not only P_1 having some action in some environment. Experience depicts a ConC that is more complicated. It is: 1. interaction with the environment; 2. it is acquiring information; 3. it is transforming this information into knowledge; 4. it is having the ability to reason and deliberate regarding the knowledge obtained. We will see in section 2.3 the different types of information and how the latter is transformed in beliefs and knowledge. For now, we point out that experience by itself

is meaningless, unless there is a lesson to be learned from it. By learning, we understand the acquisition and ‘adaptation’ of concepts and patterns. We note that without learning, there is no rationalization.

Moreover, the rationalists “have held that a belief or action is rational if it is based on skillfully carried out deliberations and that a person is rational to the degree that he tends to base his beliefs and actions on rational deliberation” (Nathanson 1985, pp. 37). This definition of rational belief/action is evasive. Actions are rational to the extent that a person employs the rational methodology. As for rational beliefs, they are ‘rational’ if they are also reached through the rational methodology and have as foundation correct information and knowledge.

1.3. Utility and equilibrium

Having (1) through (5), we conclude that the player’s goal is to maximize the utility function and choose the strategy that guarantees this function. There is no other objective for the player. Davis (1970, pp. 52) stipulated that “an utility function is simply a ‘quantification’ of a person’s preferences with respect to certain objects.” However, we have to note that ‘quantification’ is a construct. It is a scale for an object that holds a value over some range. The range can be set by the individual, by the opponent, by nature, or by the modeler.

Moreover, utilities are personal. Therefore, how can one know what utilities and what utility function P_1 has? In certain games (the prisoner’s dilemma, chicken, ultimatum game, matching pennies, stag hunt, etc.), it is the modeler that determines the utilities, and the utility function is always the same: achieve the highest utility. Rabin (1993) and Dufwenberg and Kirchsteiger (2001) have made advancements regarding different models that take in consideration the opponents perceptions and their influence on the utilities of the game. Moreover, Levine (1998) and Fehr and Schmidt (1999) have models that are more *fair* taking into account the opponents’ preferences in the utilities. In nature, the reasons for which individuals assign value to things can be demonstrated to be irrational (yet, irrationality is the antonym of rational; not knowing what rational is, we cannot determine what is irrational).

In GT, the players do not determine the utility values. Values to different outcomes are assigned in the model, and the modeler assumes their independent utilities regarding the players. Again, we see that it is the modeler that determines the range of quantification. Yet, the utility values attributed in a game are personal and should not take in consideration the modeler. They should be independent from the modeler.

Homo Economicus (HE) is self-interested and classifies rationality though his own utility-maximization decisions in a vacuum of norms and values. His norms and values are the only ones that exist. In other words, HE is rational in the sense that its welfare is defined by the optimization of the utility function of the perceived opportunities. Simply, HE is selfish.

We know that many predictions of behavior that are based on HE do not work. When the assumption of HE was introduced in certain games, and these games yielded different results than those expected, researchers were surprised. The games that model HE behavior employ tautological assumptions to a certain degree. This is the first step in understanding why current theoretical models give different results than what would happen in reality. This is also the case for GT.

Using (4) and the belief that actors believe that their opponents behave in the same manner as them (Feinberg, 2005, pp.97), we actually have two assumptions:

(6) **Assumption 3.** P_1 : I am rational;

(7) **Assumption 4.** From P_1 ’s perspective, P_2 is rational.

Furthermore, Nash equilibrium (NE) has a universal ‘condition’ that it is the best response, assuming that the players are rational. Yet, the concept of NE is also determined by the modeler, because it is the latter that determines the utilities of the players. There is some literature that stipulates that the Nash rational is not a necessary consequence of rationality, or a reasonable empirical proposition (Bernheim, 1984). Moreover, Pearce (1984) holds the view that for strategies to be rational, the NE is not necessary or sufficient.

In a game where there is equilibrium, an NE, if one player deviates from the path of achieving the equilibrium, he is considered irrational, in the traditional sense of rationality. We note that TR is bivalent, and there are two explanations for this deviation. 1) P_1 (being the deviator) does not have the ability to reason about the achievement of equilibrium. He fails Assumption 1. In this case,

equilibrium is the goal. 2) P_1 does not want to achieve equilibrium. Here, equilibrium is not a priority. Maybe P_1 achieved his goal and for him, he is rational¹. The player may be satisficing. From the modeler's point of view, the player is not rational because he did not achieve equilibrium, and, in the same time, obstructed P_2 to achieve it also.

Von Neumann and Morgenstern succeeded in demonstrating two things about ... utilities. First, it is always possible in principle to convert a player's consistent preferences among outcomes of a game into utilities. Secondly, if a player applies the principle of maximization ... to the expected utilities rather than to the expected monetary values of the available strategies, then this player is in fact choosing according to his or her tastes. This is called the principle of maximizing *expected utility*. (Colman 1982, pp. 19–20)

We notice that even von Newman and Morgenstern acknowledge the fact that utilities are theoretical. Propositions of utility of choice also fluctuate in time and environments. This is caused by the indirect influence of hyper-rationality. Moreover, when an actor frames an outcome, the former influences the utility of that outcome.

1.4. Preferences and expectations

We also have to note that preferences play a central roll in any theory that has the concept of TR as an element. In economics, preferences are said to be rational if and only if they are complete and transitive (actors can compare all alternatives and the comparisons are consistent). Using TR means that the actors will choose the most preferred option. However, if uncertainty is present, the independence axiom is added to the model.

Independence axiom: If $X > Y$, then $pX + (1 - p)Z > pY + (1 - p)Z$ for all Z and $p \in (0,1)$, where X, Y, Z are lotteries.²

Rational expectations bridge the realm of expectations and the RCT framework. It is not the actions that are the main focus, but expectations of future events undergone by actors. These future events are actually best guesses of the future taken in consideration all available information. Expectations are considered to be, under uncertainty, what is likely to happen. They can be realistic or not. Yet, these models say nothing about human behavior besides the fact that the actors behave 'rationally'.

The rational expectations model assumes that people do not make systematic errors when predicting the future. Any expectation that differs from the actual outcome is only random deviation. However, any expectation cannot be fully rational because the future cannot be predicted. Potential future events can only be partially predicted.

Thus, using the methods described before, can we quantify rationality using (1) through (5)? If we are able to do so, how do we 'quantify' rationality, or the degree of rationality? TR, per se, cannot be quantified. TR is bivalent: an actor is either rational or it is not. There are no degrees of TR. One cannot be 'more rational' than another. Being defined as it is, TR is bounded by the choice of the highest utility and the Principle of TR (Stahl 1999, pp. 122).

Principle of TR: Every player wishes to come out as well off as possible.

The Principle of TR does not tell us anything about the method of achieving the highest welfare. For this reason, we state that the principle of TR is more like an aspiration than an actual principle. A player can incorporate this objective in its values. However, by doing so, the player would become HE.

Newell (Newell 1982) uses a different principle of rationality with which we are partially in agreement:

Newell principle of rationality (NPR): If an agent has knowledge that one of its actions will lead to one of its goals, then the agent will select that action.

¹ Traditional Rationality is relative.

² The independence axiom is attributed to Dr. P.A. Samuelson. *Econometrica* 1952 vol.20, 661-679, has short but interesting contributions by H. Wold, G. L. S. Shackle, A. S. Manne, A. Charnes, E. Malinvaud, and P. A. Samuelson regarding 'strong independence axiom'.

2. Rational Method

2.1. The goal

We use the following definitions:

Definition 1. A goal is a personal ‘target’ that an individual wants to accomplish given some standards.

Definition 2. Rationality is a method of deliberation of achieving a specific goal.

A goal is an abstract concept. It is an outcome that an individual attempts to transform in a fact. We note that an *action* per-se is not a goal, unless the goal is the specific action.

For the rational method (RM), the *Goal* is to achieve a specific goal. It has no connection with maximizing the utility function, unless the latter is the goal.

We remark that any strategy is a method. However, strategic approach for GT has no connection with cleverness. For us, as well as for the RM, cleverness means having the most efficient method of achieving a specific goal. We will discuss cleverness and intelligence in section 2.3.

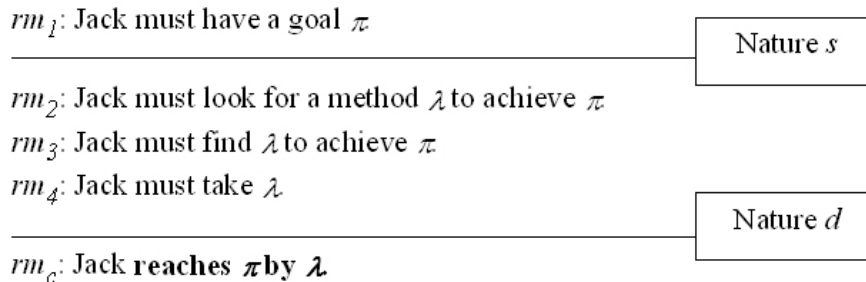
We also notice that common knowledge of rationality (CKR) is the assumption that the same definition of rationality is at work. Yet for TR, there is no information about what the other player wants and what standards of rationality (models) are employed, except assumptions 3 and 4. Aumann’s definition of common knowledge (Aumann, 1976) cannot be employed in this case. Having RM, we may be tempted to use CKR as an assumption. In fact, Aumann’s CKR is knowledge in the RM framework.

The choices that actors have are set to be *modal*-rational by nature; modal-rational due to the fact that ‘rationality’ is a goal driven method. One may have the goal (π), but not the method of achieving it. In this case, π is not a goal. It is a stationary potential future event¹.

A great deal of experimentation has confirmed that decision makers do not always behave according to laws of rationality². GT incorporates these *laws* into its models in the manner we have seen. Therefore, GT’s architecture does not model real situations. GT yields conclusions that are not fully suitable in the real world. For this reason, we see the need to have a unified definition and methodology when analyzing rationality in any theory and model. And most importantly, we must have a definition that illustrates accurately real life situations and actors.

2.2. Rational method

Rationality is a method, and it is sequential. Figure 1 illustrates the four steps that characterize the rational method.



where Nature *s* is Supportive Nature and Nature *d* is Deviant Nature; and Jack is our generic player.

Figure 1

An individual sets himself a specific goal, π . He must look for a method, λ , in order to achieve this goal. The individual may find multiple methods of achieving the goal. Once he finds the appropriate method, the individual must take the desired method. This methodology will ensure, but not guarantee, the achievement of the specific goal. Once the method is chosen, and it is enacted, Nature can put constraints in the achievement of the goal.

¹ We have to note that a stationary potential future event is not necessarily an expectation.

² The laws of rationality for GT, and even for RCT, are more assumptions than laws. A law is empirically tested (and retested), and the former represents accurately reality.

We note that only after the completion of one of the steps, an individual moves to the subsequent step.

This entire process is called true rationality or RM. We remark that it can be presumed that more efficient the path (the method) to achieve the goal, the higher the rationality. For the RM, as well as for the TR, there are no higher or lower degrees of rationality. For us, an individual uses RM or not. This assumption of higher degree of rationality is actually a measurement of the ability to reason, and it is not an assumption. We will see in section 2.3 how this ability to reason is characterized.

As we stated before, we are partially in agreement with NPR. The reason is that the latter looks only at rm_4 . However, there are three other steps that need to be completed before arriving to the most efficient path to achieve a specific goal. Moreover, the first definition of TR in RTC also focuses only on rm_4 .

Corollary 1: If rm_1 to rm_4 , then we have the conclusion of the four steps, rm_c .

Without rm_1 , there is no RM because RM is a goal driven method. rm_1 is considered the foundational element of the RM. Some may not even consider rm_1 a step in the RM. However, rm_1 is existential to RM, therefore, incorporated in RM. rm_2 is the internal thinking process of finding the set Λ of all available means of achieving a specific goal. Section 2.3 deals with this aspect. In rm_3 , Jack chooses λ out of set Λ . λ is linked to π because λ is a mapping function to π . The logical argument is:

$$\begin{array}{l} \pi \\ \lambda \rightarrow \pi \\ \lambda \\ \therefore \pi, \text{ by Modus Ponens.} \end{array}$$

The effect of a method that leads to π , is π .

We note that Nature is not present in Corollary 1.

Corollary 2: If rm_1 to rm_4 , and Nature d is present and diverges Jack from his path, then we have a partial rm_c .

For us, a partial rm_c refers to a lower lever of π that Jack reached. We point out that goals have different degrees due to satisficing.

Let $\Lambda = \{\lambda_1, \lambda_2, \lambda_3, \dots\}$, and $f(\lambda)$ be a mapping function of λ to π . Nature being present, we have $fk(\lambda)$, with κ power of deviation of Nature over $f(\lambda)$. $fk(\lambda) = \kappa\pi$. As κ is the power of influence, we set $0 \leq \kappa \leq 1$. If $\kappa = 0$, π is not reached. If $\kappa = 1$, π is reached because Nature d is not present. If $0 < \kappa < 1$, π is partially reached. We note that the deviation coefficient κ is inverse proportional to the influence of Nature d .

In any system, as scientists, we have to take in consideration the environment. In our case, the environment is set as Nature. Any environment has its own limitations and liberties. Jack may have the appropriate method to achieve his goal. Because of last-moment influence of Nature, Jack is obstructed to fully reach his goal. In this case, Jack could have done nothing. One cannot blame him for not contemplating all aspects of the environment. An individual does not necessarily know how and to what degree the environment influences his method λ .

Corollary 3: If rm_1 without rm_2 to rm_4 , and Nature s is supportive of Jack, then we have a partial rm_c .

This is the case when Jack sets himself a goal, but does not have time to engage in rm_2 to rm_4 . There is a p probability of potential possibilities that this may happen in real life situations. Even if in most cases p is 0, we have to acknowledge this possibility.

The proof of Corollary 3 is a combination of the proof of Corollary 1 and Corollary 2, having $g(s)$ as the mapping function to π , and μ the support power of Nature. We note that μ is directly proportional to the influence of Nature s .

The probability of Corollary 3 is minimal. For this reason, this corollary can be neglected. However, we felt the necessity of stating it in order to have a complete understanding of the world.

Theorem 1. *The RM and Corollary 3 are the only ways to achieve a goal.*

Proof 1. Corollary 1 and 3 can be combined to provide the proof of this theorem. The same rational of Modus Ponens applies in this case also.

Proof 2. A different proof is to use the reduction to absurdity argument. What ways are there to achieve π ? Using the goal's definition, it is the individual that attempts to transform an outcome in a fact. Therefore, Jack must actively be engaged in this process.

Let us call π a specific goal, and π^* a goal in general. π^* can be achieved by mistake, or by influence of Nature. However, there is no method involved, no RM. Also, Corollary 3 does not apply in this case because Jack did not intend to be actively involved in reaching the specific goal. π^* is not a specific goal. It is a *wish*. We have to notice that π^* may happen or not, depending on Nature. This type of nature is not Nature *s*, because π^* is not a specific goal, and RM does not apply in this case.

An individual has to reach the threshold of willingness to achieve the goal. This is how wishes are transformed in goals. Reaching this threshold, which enables the drive to achieve the goal, is manifested by the work done through steps rm_1 to rm_4 .

The difference between π and a wish is that a goal entails willingness to put effort in accomplishing it. A wish has no willingness of work involved.

If the goal is achieved by other means, π is not a goal per se.

Lemma of theorem 1. *The RM does not guarantee reaching the goal.*

Proof. Using the RM ensures the path of achieving π , but does not guarantee the actual achievement of π . Reaching the goal is a future event. As stated before, future events cannot be fully predicted. Moreover, Nature is always present. This Lemma is a specific case of Corollary 2 where $\kappa = 0$.

2.3. Schematics of RM to achieve π

Having a rationality method is not enough. We also have to understand how Jack arrives to and uses the RM. We provide the subsequent schematic that is composed of the following ConCs: I – information; B – belief; K – knowledge; O – purpose; Ξ – actions; π – goal (end result). All these ConCs are specific and relative to the individual.

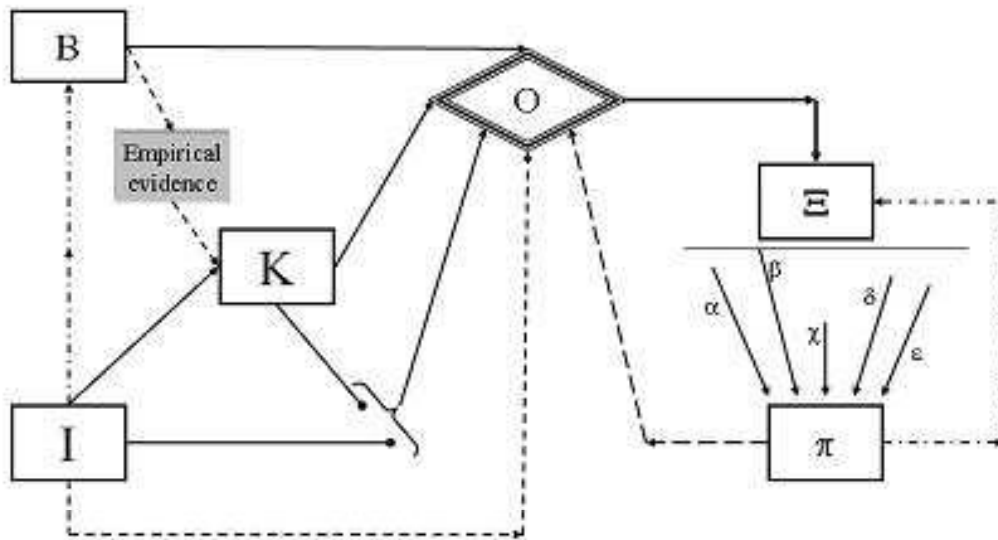


Figure 2

Information can be acquired through different fashions. One of the most important ways is through experience, meaning through interaction, direct or indirect, with the environment.

There are a few types of information that are interesting to us. *Fresh information* is the information that an individual is introduced to in the present. *Sedimental information* is the information that had time to store itself and create either values or beliefs. *Residue information* is the information that did have time to sediment, but was neglected because it did not correspond with the values or beliefs of the individual. *Concealed information* is the information that an individual analyzed, but did not have time to sediment itself. All these types of information are looked at from the individual's perspective.

Using these types of information, an individual strives to enlarge the means set Λ , and eventually, coordinate between means and ends.

A belief is a mental state, the result/conclusion of internal contemplation that manifests itself as an attitude vis-à-vis a concept. An important observation that psychology demonstrated is that information shapes beliefs. Thus, we state that Beliefs are derived from certain evidence or information.

Through information and sound evidence of proper beliefs, knowledge is created. Moreover, one increases knowledge through cognitive processes.

We remark that knowledge can have many meanings. For us, knowledge is information acquired directly, indirectly or deductively, and has a potential purpose. In other words, knowledge is information connected to intent, information that is ready to be used in an action. We note that the information transformed into knowledge enables a wider range of purposes.

For us, purpose is the elementary motive in achieving an intention. Knowledge and beliefs enable purposes. We also notice that every purpose has its own knowledge and belief systems.

Definition 3. An action is a state or process forming an organized activity in the course of accomplishing an objective.

One essential property of actions is that they require at least one purpose. Ξ is the set of actions available to the individual. Jack must define his goal before one can suggest a course of action. In addition, actions are determined by purposes. Through deliberation, an individual uses different standards of knowledge and beliefs (through purposes) to consider possible actions.

We point out that there are different potential actions available to reach a specific goal. One can use Occam's razor to analyze them, however this is not necessary.

One must use its *reason* as the path from action to attainment of the goal of the action. The actual process of thinking from action to goal and vice-versa is called deliberation. The latter is a pattern of thoughts. The main question that Jack asks is *How can I achieve this goal?* There are three major types of reasoning (Hartshore 1958, vol.5, para. 145): 1. deductive, from general to particular; 2. inductive, from particular to general; and 3. abductive, from best available information to best explanation.

In the end, the actions of a player determine the (full, partial, or unfulfilled) achievement of the desired goal.

We have to note that the concept of intelligence is quite important in our process. Intelligence, for us, is the 'expression' of sets of principles that are complex in nature. This process enables us to model, predict and manipulate the environment at different degrees. We realize that a higher degree of intelligence would yield more options, more paths to achieve a goal.

Through the description of the RM, we see that the goal and the achievement of the specific goal are the acumens of our approach. However, we have to notice that there are situations where the main goal is not achieved in a single attempt. Our RM can be employed for the achievement of any sub-goal. Accomplishing all the appropriate sub-goals, would lead the decision maker to his main goal.

Deliberating, Jack uses all the information and knowledge that he has in order to achieve the goal. In analyzing and choosing his action(s), Jack must take in consideration possible intervention of outside factors once the action is taken. Nature imposes different situations. These situations may or may not have constraints. Depending on the environment (closed, open, controlled, etc.) in which Jack is, Nature can intervene at different degrees. It is Jack's duty to foresee, at his best capacity and with the information available, possible influences of the environment. However, this does not mean that Blue must anticipate *all* variations in Nature. If Jack deviates from his goal because of outside intervention(s) of Nature, which Jack could have not anticipated, then Jack is not responsible for the failure. Moreover, Jack cannot be considered irrational. He used appropriately the RM. He may be consider as having a lower ability to reason, less intelligent, but not irrational. If however, he could have anticipated Nature's influence, then Jack took the wrong decision, the wrong action.

2.4. Ration

The RM refers to the attainment of any goal. From one perspective, RM is self-interested because it looks at a goal that an actor has acknowledged. Moreover, the RM has no connection with moral or ethical values, just as HE. The principal drive for HE is the achievement of the highest welfare. For RM, it is the goal and the way to achieve this goal. The only manner that moral or ethical values can be incorporated is through the establishment of moral or ethical goals.

We call ‘ration’ the ability to reason in the RM framework.

Theorem 2. *Ration is a singularity in time and space.*

Proof. For every π , the schematic apparatus of Figure 2 does not change, the skeleton of relations do not change. However, the content of the elements of the apparatus change.

Through time, and therefore through experience, information changes; it enriches itself; beliefs change, disappear, or are reinforced; knowledge augments or decreases. All these elements determine shifts in purpose, and change the set Λ of available actions.

Any change in space and time is a change in the experience. This is the logic why ration is a singularity, and it does never happen twice in the same manner.

3. Further remarks

3.1 Everything that we do, we do with a purpose, consecutively to achieve a goal. In order to achieve π , there is a possibility that smaller goals, sub-goals, have to be accomplished sequentially. This is not contradictory to our RM. An individual uses our methodology to satisfy the particular sub-goals. The sub-goals are treated as regular singular goals. Once all the appropriate sub-goals are archived, π is achieved by default.

We also note that all the rm_i are sub-goals of RM. One must satisfy these sub-goals, in order to arrive at π

3.2 Using the distribution axiom of modal logic where *necessary* $(A \rightarrow B) \Rightarrow (\text{necessary } A \rightarrow \text{necessary } B)$, we realize that if it is necessary that the RM leads to the accomplishment of a specific goal, then it is necessary to use the RM, which leads necessarily to the accomplishment of the specific goal.

3.3 The RM has no link with preferences. As stated before, preferences play a central role in any theory or model that deals with traditional rationality. We have demonstrated that true rationality is a method. If one is to employ any method, one cannot look at its own preferences while using the method. An individual has preferences regarding certain goals. However, the RM does not distinguish between them and does not form any utilities regarding these goals. Once Jack decides the ‘preference’ of a goal, he must take the RM in order to accomplish that goal. Preferences are outside the RM.

3.4 **Observation:** Ration has no principles outside of RM.

We state that a principle is the fundamental component of a set of rules or standards. Ration is an ability, the ability to reason in a precise framework. This framework is the RM. Our methodology has operational principles. However, any other principle that is outside RM cannot be incorporated in this framework while keeping the operational value intact. Any moral or ethical principles that a player has can be incorporated only in the pursuit of ethical or moral goals. Again, the RM does not state anything about moral or immoral goals, just how goals can be achieved. However, ethics can be and are incorporated by the ethical individual as boundaries or standards of the actions available.

3.5 We feel obliged to respond to Feinberg (2005b) regarding ‘maximum amount of rationality’ (MAR). We have seen that rationality is bivalent and therefore, MAR cannot exist. Yet, Jack may refer to different degrees of ration because the ability to reason has different degrees. As stated before, having more information, more knowledge would increase the ability to reason, thus giving it different scales.

3.6

While economic man maximizes ... administrative man, (organization man) satisfices.... Human beings ... satisfice because they have not the wits to maximize. (Stahl 1999, pp. 122)

People satisfice because it is easier, and because their ability to reason varies. From an economic perspective, satisficing is the acumen of an individual to achieve a minimal level of a goal, the minimal value of that goal. Jack is not attempting to get the maximum possible value. He just wants to be content. For our purposes, we say that the players use bounded ration, where some limits are put on ration for various reasons. Satisficing is a conditional ration, which is any constrain on ration or on the methodology to achieve a specific goal. Most of the time these conditions are imposed by nature.

4. Conclusion

a. We recognize rationality as a super-system concept, a conceptual conglomerate where reason, judgment, deliberation, relativity, behavior, experience, and pragmatism interact.

Rationality is both a *method* and a *sequence*. The Rational Method is characterized by four steps. Showing the sequence and quantifying it enables us to have a mathematical model for rationality. This mathematical model enables us to determine the level of reason that a player uses. Moreover, our working definition of rationality can be quantifiable.

As in real situations, Nature is present, and we have to take it in consideration. We demonstrated that if one employs the rational method, one would reach the desired goal. We also showed that Nature can be either beneficial or detrimental. In both cases, we illustrated the different scenarios. With or without Nature's influence, we have proven that our rational methodology is the only manner to reach a goal. However, if Nature fully diverges with the scope of the individual, the RM does not ensure the accomplishment of a player's goal.

We also have described the network of elements that interact in the reasoning process of an individual. Information plays the first step in the achievement of a goal. Our actions are determined by information, beliefs, knowledge and purposes. Moreover, our actions determine the fulfillment of a desired goal.

We described ratiom as the ability of reasoning using the rational method frame. We realize that ratiom, as well as any other thinking process, is a singularity in space and time.

b. Decision opportunity is frequent; however, taking the 'right' decision can be disputed. What would be considered as the *right* decision? For us, the right decision is a decision that reaches the desired goal, taking the appropriate method. If an alternative does not lead to the desired goal, then the decision is wrong.

It is a fact that people do mistakes. There are a few explanations which are equal in importance and latter research should take them in consideration. People take wrong decisions because they have wrong information; because they use wrong assumptions; because they have a low ability to reason; because the methods used in rationality are not the appropriate ones. Should we consider these people irrational? Or, do our models that try to explain the world are out of focus and do not explain the world accurately? Irrational people are not taken out of the game (as some may argue). They play games also, because they are in social situations as well.

Postulate: Any individual that is in a situation plays a game.

c. We point out that the majority of economists are faith-based, using Assumption 1, instead of being realistic. The evidence drawn from current rational choice models points to a very important fact: RCT is limited and it is ideal.

The current TR models that are used are incomplete because they use partial definitions. Being incomplete, some of their definitions should not be assumed or believed. These partial definitions are only small pieces of a greater puzzle. What we tried to do in this paper is to complete the picture by putting all the pieces together in order to be able to move on a higher level/dimension to perceive the *ensemble* view. The result is having a unified understanding and theory of what is true rationality: it is a method.

d. Having a unilateral definition of rationality, we surpass one major obstacle preventing the development of any authoritarian unified theory. Furthermore, different models and theories now have a common ground on which we can judge their soundness.

Appendix

MAP OF TRADITIONAL RATIONALITY

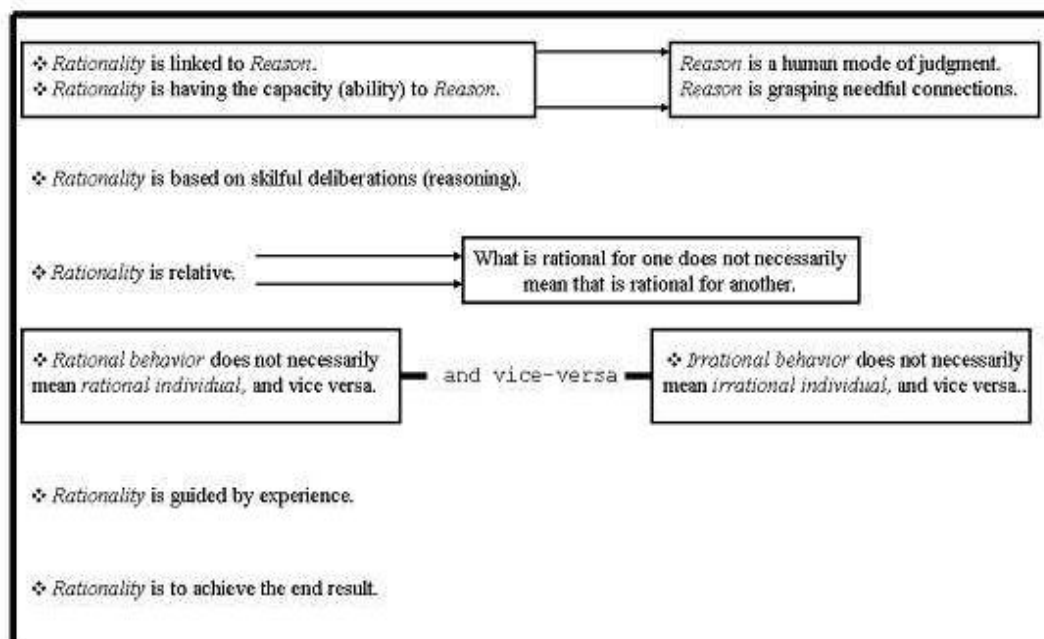


Figure 3

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RATIONAL GOVERNING OF PERSONAL FINANCES AS A RESULT OF TEACHING PROCESS

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Abstract: *Personal finances are the financial field of study underestimated by the financial theoreticians from Croatia. The contemporary study programs for students from field of economy in Croatia and majority of European countries don't deal with this subject. This kind of treatment of subject in question has to be changed, especially at economies in transition. Economies in transition have passed true fast and invasive changes which led to completely different positioning of general public segment in all contexts. Changes are very visible in roles division and division of responsibility in banking industry. Banks from communistic history of Croatia were public property and their orientation was less profit driven than it is for the banks of today. On the other hand the financial market in Croatia has grown in its volume and diversity of products in offer. Since the social goals are not primer to financial institutions it becomes very important for general public to understand all benefits and threats that can be accepted from usage of certain financial instruments. Lack of institutional support makes this segment of society vulnerable. Our mission as HE teachers from the field of finances should be to equip our students with theoretical and practical tools that should help them to be successful in their future career. The aim of this survey is to emphasize that we as HE teachers are obliged to do more. We should prepare them to live stable financial future by rational governing of personal finances as a result of teaching process. The purpose of this paper is to diagnose what kind of implication has our contemporary program on the level of knowledge from the field of personal finance of our students. By measuring the level of knowledge, from this particular field of study, of our students on the first year of our program and those from third year we will measure the knowledge we transferred.*

Keywords: *personal finances, social responsibility, HE, general public*

1. Personal finances and HE

Teaching of Personal finances is not an easy task. There are several basic approaches or frameworks used in theoretical studying and teaching of subject in question. Usually used are neo-classical frameworks; classical utility maximization, goal-directed financial planning, risk management and family cycle (Robinson C., 2000). Majority of HE teachers and theoreticians use one of these frameworks but contemporary development of this field of study shows that more efficiency is obtained by combining these frameworks. The main goal for all teachers from field of finances should be to transfer as much useful and applicable knowledge as they are capable taking in consideration the limited time they have at disposal. Majority of teachers have to deal with specific parts of finances such as: Business Finances, Public Finances, Corporate Finances, Financial Institutions and Markets and other parts of finances, so they don't have sufficient time to devote it to Personal Finances. And if we take into consideration some articles from Croatian Constitution (Croatian Government, 2001) we can see that among other liberties the financial liberty is also guaranteed to all Croatian citizens. Similar provisions are to be found in the Constitutions of majority of countries. But how can one person reach financial liberty if basic prerequisites don't exist? The main prerequisite for each person to become financially free is to have possibility to earn decent income and to have a sufficient knowledge on how to allocate earned money in most efficient way to provide certain level of quality life for each individual and person living in its household. Since governments and financial

institutions don't take a responsibility (Buljan Barbača D., Matošić Radić M., Rimac Smiljanić A., 2009) in educating and advising general public including our students how to make good financial decisions, maybe we teachers of finances from the field or finances are obliged to do so. Of course some prerequisites should exist in order to make the teaching of Personal Finances a efficient teaching process: more teachers should be sub specialized in this particular field of study, the Personal finances make the part of finances less explored in European countries, especially transitional countries, such as Croatia. In more developed countries, especially USA, Canada and Australia exists a tradition of teaching Personal finances in all University programs. In mentioned countries professors are encouraged to work together to find optimal solutions for their students. In recent time very famous collaboration has been established between three professors from different countries and universities. Professor Morrison from University of Queensland, teaching at Faculty of Law, professor emeritus Gitman from San Diego State University and professor emeritus Joehnk from Arizona State University have published a book "Personal Financial Planning". This text has been designed to make the material relevant and accessible. The aim of the book is to provide students with the tools they need to prepare personal financial plans that serve as 'road maps for goal achievement'. The text emphasizes the dynamics of the personal financial planning process by considering the impact of life changes such as birth, marriage, divorce, job and career, and death. There is also valuable book published in UK by three professors (Callaghan G., Fribbance I., Higginson M., 2007) from Open University. Their book "Personal Finance" is the first major personal finance textbook to combine practical financial planning skills with an analysis of the wider economic and social picture, situating students' understanding of financial matters in a relevant, holistic context. The chapters covering retirement planning and caring, for example, discuss underlying demographic trends, while those on housing and investments not only examine mortgage and investment products but also explore how changes in economic conditions can impact them. Concepts such liberalisation, regulation, and the consumer society are considered. This broader, academic approach equips students with a much deeper understanding of personal finance issues than has been available until now.

On the other hand while Universities give a touch of science in the field of Personal Finances it is very interesting to see how Colleges in USA deal with subject in matter. If we take a peak into course of Personal Finances of Anne Arundel Community College we can see that they emphasize more skills and knowledge. They promise to their students to: "learn how to invest your money wisely, with the help of our non-credit personal finance classes! AACC offers a wide selection of non-credit classes geared to answering all of your financial needs. Our instructors are working in the financial field and bring their knowledge to the classroom". (<http://www.aacc.edu/finance/>

But it is not to be underestimated another source of knowledge also available for free to English speaking population. These are online courses that promise some home wonders: "How would you like to learn more about personal finance issues and economics at the college level from the comfort of your home? And wouldn't it be nice if you could do it for free? Thanks to the power of the internet and the growing popularity of courses being offered online for free, this has become a reality." (Generation X Finances, 2010). At this useful website (<http://genxfinance.com/2009/03/16/20-free-online-finance-courses-take-money-classes-from-the-comfort-of-your-home/>) you can find 20 free courses that have been offered in collaboration with famous USA universities such as Michigan State University, Open University, Carnegie Mellon University, etc.

All above mentioned efforts taken by the HE teachers from USA, Australia and other above mentioned countries are valuable starting points for HE teachers from the countries that have not yet develop any tools from this field of study, such as Croatia. We need to learn from the experience of more developed countries in order to help our students to reach their financial goals.

1.1. The case of economies in transition: Croatia

Position of Personal finances in context of HE programs in Croatia is very diverse. Only recently Faculty of Economics in Zagreb (Ivanov M., Lovrinović I., 2009.) has recognized the need to focus on this subject in question. But unfortunately there is a lack of concrete support from scientists and theoreticians which results in lack of relevant research and relevant literature from this specific field of study. It looks like the financial experts from Croatia have completely underestimated the importance of Personal finances. Reasons are probably historical. Before the last decade of 20th century Croatia as all transitional countries was under the communistic regime. From the position of household investment and allocation of income it wasn't much to be done. The possibilities and

options for the free allocation of income was almost none. The general public didn't have the opportunity to use majority of financial instruments present on today's Croatian financial market. But when the changes took place transformation of economic environment most scared enterprises and they were the first ones who asked for help and new theoretical frameworks to help them survive this new financial situation. In mean time general public was left on its own. After the decades of consumption hunger "the doors of heaven opened". Everyone was buying, investing and becoming more and more dependent upon banking loans.

But why should we even bother with the subject in question? If we take a look into the data shown in Table 1 and Table 2 we will become aware that something went wrong! The distribution of loans issued to general public in Croatia differs completely from the structure of loans issued to households in Euro Area.

*Table 1.
Distribution of Banks' loans to households in Euro Area at the end of 2008*

| Bank Facilities | Percents (%) |
|-------------------|--------------|
| 1 Loans for house | 65,06 % |
| 2 Consumer credit | 13,16 % |
| 3 Other loans | 21,77 % |

Source: ECB "Monthly Bulletin", Euro Area Statistics Online, October 2009
<http://www.ecb.eu/pub/pdf/mobu/mb200910en.pdf>

*Table 2.
Distribution of Banks' loans to households in Croatia at the end of 2008*

| Bank Facilities | Percents (%) |
|--------------------|--------------|
| 1 Loans for house | 42,32 % |
| 2 Mortgage loans | 2,46 % |
| 3 Car loans | 7,70 % |
| 4 Credit card debt | 4,44 % |
| 5 Other loans | 43,08 % |

Source: Croatian National Bank, Online Statistical data of banking institutions, October 2009,
<http://www.hnb.hr/statistika/estatistika.htm>

If we compare data from these two tables we can say that the structure of the loans for general public in Euro Area and Croatia are significantly different. The share of housing loans at the end of 2008 in Euro Area is 65,06%. "Consumer loans" represent less than 15% of loans to general public and little more than 20% is to be spent on different goods in Euro Area. Distribution of banks loans to households in Croatia looks much different; housing loans take only little bit more than 40% of the whole amount that is distributed for loans to general public, and what is even more scaring is that "consumers' loans" take more than 43% of all loans to general public. Reason of this "consumption hunger" could be found in a sudden opening of the market in Croatia to export of the different goods that were not so easily accessible before in times of socialism (D.Buljan Barbača, 2007).

Guste Santini, a Croatian professor from Faculty of Economics in Zagreb has tried to do something useful. He published several reference books dealing with different questions regarding the Personal finances. Main ideas and information on financial instruments and true practical examples have been shown in his reference book "Guide for understanding the Personal finances" (Santini, G., Bebek, S.2005). In his latest publication, from this line of publications, "Guide for understanding the Household Budget and Accounting" (Santini, G., 2008) he attempted to develop the skills of households in planning and monitoring the Household Budget. His books deal with practical financial problems and give to interested reader possibility to increase its understanding what are the consequences of certain financial decisions. By giving very interesting examples of different financial behavior of two exemplary households he follows a lifecycle of family finances where all short term decisions imply lifelong consequences. Unfortunately his publications are not listed as course books, probably because they are more practically then scientifically orientated.

Lack of knowledge and skills when it comes to dealing with financial products is very visible from before mentioned distribution of household loans. But since the lack of knowledge is not a valuable excuse when the annuity comes to payment we need to do more as a HE teachers from the

field of finances. We can also try to learn from experience of other countries such as USA which has a long tradition in dealing with Personal finances.

1.2. Personal finances in USA

Completely opposite than Croatian example is the example of USA when it comes to Personal finance. The American authors are intensively working on the subject in matter. Scientists are paying a special attention on Personal finances dealing with this segment of finances as a integrated part of the investment chain (Weagley R.O., Gannon C.F., 1991). Message is loud and clear: the money of our citizens is a valuable source of investment. The experts from different field of study are dealing with this problem and depending on to which basic branch they belong to they explore a different prospective. Experts from the field of Marketing are more focused to Consumption function and effects of Personal consumption on global marketing trends (Caliendo, Frank and Huang, Kevin X. D., 2007). If Management expert is to focus on Personal finances it is inevitable that he will deal with objectives of personal portfolios (Ramaswami s.n., Srivastava, R.K., McInish T.H., 2009) and a hierarchy of financial needs (Xiao J.J., Noring F.E., 1994). Collaboration of the experts from Finances, Marketing and Management was also very fruitful and has resulted with extension of tools used for research in the field of finances (Shim S., Xiao J.J., Barber B. L., Lyons A. C., 2009). The Lifecycle model has become a very useful tool in the field of Personal finances and it frequently helps to investigate correlation between belonging to specific life stages and habit of saving and investing (Xiao J.J., 1995).

But American authors have also handled a practical part of the problem of dealing with Personal finances (Kiyosaki R. T., Lechter S. L., 2002). Majority of these authors are giving practical advices from their own experience (Kiyosaki R. T., Lechter S. L., 2006) which makes the main prerequisite to become the member of this club of authors, to have impressive personal wealth on your own.

It is also necessary to underline that all different kinds of computers and other useful tools for general public are available free of any charge on all respectable web-sites that deal with financial subjects.

The result of all mentioned activities is very well known to educated general public in USA. It is visible from Table 3. that the structure of loans issued to general public in USA looks completely different than the structure in Croatia, but it is similar to the structure in Euro Area.

*Table 3.
Loans to general public USA at the end of 2004*

| Bank Facilities | Percents (%) |
|------------------|--------------|
| 1 Housing loans | 66,70 % |
| 2 Personal loans | 14,80 % |
| 3 Other loans | 18,50 % |

Source: Flow of funds account of the U.S., 4Q 2005, adopted from Leko, V. (2005), p.8

It is obvious that general public in Croatia has a problem of dealing with financial products in offer. The reasons are probably to be found in history but if we want to make a progress than we must learn from good experience of developed countries. What better place of transferring this package of knowledge and skills to our general public is than University programs?

2. Analytical framework: Research Hypotheses, methodology and data

In order to improve the status of Personal finances as a HE subject we will begin by diagnosing the current situation on our own institution. We will try to determine how much impact our current program has on basic knowledge of our students in field of Personal finances.

The authors wish to provoke discussion on this subject and to suggest what the first steps to be taken are.

2.1 Research Hypotheses

Personal finances as a subject in university programs of University Centre for the Professional Studies in Split do not exist. Our basic working hypothesis is that our current program for the students of Commercial Business and the students of Accounting and Finances does not give them sufficient

knowledge from this specific field. We expect to find that they have learned something about Personal finances from other financial subjects, but that there is still possibility of some major improvement.

Since the students of Commercial Business and the students of Accounting and Finances at the University of Split, University Centre for the Professional Studies, represent population with very wide general characteristics; regarding to their interests, previous education, age and current professional occupation, we can say that their opinion of the subject in matter is to be considered as very relevant.

2.2 Methodology and data

This survey is focused on two groups of students. The first group of students is at first year, and the second group at the third year of the three year program of Commercial Business and the students of Accounting and Finances at the University of Split, University Centre for the Professional Studies. Identical research was applied on both groups. Written questionnaire with 7 questions was distributed among these two groups. Students were asked to give some general information about them (age, agenda, work status), to determine what financial instruments do they use in their every day life, to define the distribution channels that they utilize to inform themselves about financial instruments and also to express how they perceive their knowledge on lending and investing practice . By comparing the results of 1st group with those of the 2nd group we will try to withdraw our conclusion.

The survey results presented in this paper are based on the written answers of the students which agreed to participate. Total number of examinees is 170 students.

The number of the responses precludes strong statistical conclusions.

3. Results and analyses

The results obtained by this research have proved the working hypotheses. The presumption that there is necessary to induce Personal finances as a subject to our HE institution has been confirmed. We will present the results that emphasize this conclusion.

The analysis defines elementary properties of our sample.

Table 4

Structure of sample by the agenda

| | students on the first year of study | | students on the third year of study | | all students in sample | |
|----------|-------------------------------------|------|-------------------------------------|------|----------------------------|------|
| | <i>Number of examinees</i> | % | <i>Number of examinees</i> | % | <i>Number of examinees</i> | % |
| 1 Female | 72 | 84 % | 60 | 71 % | 132 | 78 % |
| 2 Male | 14 | 16 % | 24 | 29 % | 38 | 22 % |

Results presented in Table 4. show the structure of the sample by the agenda criteria. The share of female students in sample make 78%, and the rest 22% makes male students.

Table 5

Students employment.

| | students on the first year of study | | students on the third year of study | | all students in sample | |
|--------------|-------------------------------------|------|-------------------------------------|------|----------------------------|------|
| | <i>Number of examinees</i> | % | <i>Number of examinees</i> | % | <i>Number of examinees</i> | % |
| 1 Employed | 20 | 23 % | 20 | 24 % | 40 | 24 % |
| 2 Unemployed | 66 | 77 % | 64 | 76 % | 130 | 76 % |

As shown in Table 5. 24% of all participants in survey are employed and 76% are unemployed. The results are similar also on the first and third year of study.

Along with the sex of the students in the sample and their employment we asked all participants in survey to fill their age.

Average age of students in the sample is 22,5 years.

Table 6

Income earning?

| | students on the first year of study | | students on the third year of study | | all students in sample | |
|-------|-------------------------------------|----------|-------------------------------------|----------|----------------------------|----------|
| | <i>Number of examinees</i> | <i>%</i> | <i>Number of examinees</i> | <i>%</i> | <i>Number of examinees</i> | <i>%</i> |
| 1 Yes | 35 | 41 % | 45 | 54 % | 80 | 47 % |
| 2 No | 51 | 59 % | 39 | 46 % | 90 | 53 % |

Further analysis of the results consists in Table 6. show that 47% of all participants in survey have income earnings and 53 % don't.

54% of students on third year of study income earnings, and on the first year of study this number is 41%.

Table 7

Usage of financial instruments

| | students on the first year of study | | students on the third year of study | |
|-----------------------------------|-------------------------------------|----------|-------------------------------------|----------|
| | <i>Number of examinees</i> | <i>%</i> | <i>Number of examinees</i> | <i>%</i> |
| 1 Current account or giro account | 77 | 90 % | 78 | 93 % |
| 2 Savings deposit | 15 | 17 % | 10 | 12 % |
| 3 Purpose loans | 4 | 5 % | 4 | 5 % |
| 4 Non-purpose loans | 6 | 7 % | 4 | 5 % |
| 5 Stocks and bonds | 13 | 15 % | 7 | 8 % |
| 6 Life insurance policy | 12 | 14 % | 14 | 17 % |
| 7 Credit card | 24 | 28 % | 28 | 33 % |

Table 7. presents most frequent used financial instruments like: current account, giro account, savings deposit, loans, stocks, bonds, insurance and credit cards. Students on the first years of study use the most current or giro account, then credit cards, some of the have saving deposits but least 5% use purpose loans as financial instrument.

Students on the third year of study use almost in the same percentage accounts and credit cards but 17% of them are using life insurance policy as financial instrument, more than the students on the first year of study.

Table 8.

Distribution channels students use to inform themselves of financial instruments

| | students on the first year of study | | students on the third year of study | |
|----------------------------|-------------------------------------|----------|-------------------------------------|----------|
| | <i>Number of examinees</i> | <i>%</i> | <i>Number of examinees</i> | <i>%</i> |
| 1 Banks | 47 | 55 % | 45 | 54 % |
| 2 Different media | 16 | 19 % | 14 | 17 % |
| 3 Responsible Ministries | 2 | 2 % | 1 | 1 % |
| 4 Family and friends | 56 | 65 % | 51 | 61 % |
| 5 Educational institutions | 3 | 3 % | 17 | 20 % |

We gave students to choose which channels do they use to inform themselves on financial instruments. They choose between banks, different media, responsible ministries, family, friends and education institutions.

No matter on which study year they are they get most information from their family and friends. Next channel is bank and this result is expected since 90 -93% of students use current account or giro account in banks. The highest difference in results in Table 8 is between usage of educational institutions as information channel of financial instrument from students on third year of study and those on the first year. Since 20% of students of the third year and only 3% on the first year of study

use educational institutions as information channel of financial instrument, it is obviously that students during their education on university learn more about financial instruments.

Table 9
Do you know enough about financial instruments to use them efficiently
students on the first year of study students on the third year of study

| | <i>Number of examinees</i> | <i>%</i> | <i>Number of examinees</i> | <i>%</i> |
|-------|----------------------------|----------|----------------------------|----------|
| 1 Yes | 41 | 48 % | 48 | 57 % |
| 2 No | 45 | 52 % | 36 | 43 % |

From the difference in results we can conclude that more than half of students on the first year of study believe they don't know enough to use efficiently financial instruments, but there are 57% of the students on the third year who are sure about their knowledge how to use efficiently financial instruments. The difference again emphasize important role of educational institutions to approach financial instruments to students.

Table 10
Counsel when making financial decisions
students on the first year of study students on the third year of study

| | <i>Number of examinees</i> | <i>%</i> | <i>Number of examinees</i> | <i>%</i> |
|--------------------------|----------------------------|----------|----------------------------|----------|
| 1 Bank (personal banker) | 14 | 16 % | 9 | 11 % |
| 2 Financial counsel | 6 | 7 % | 4 | 5 % |
| 3 Family or friends | 53 | 62 % | 37 | 44 % |
| 4 Self decision | 42 | 49 % | 54 | 64 % |

The last table present counsel when our students are making financial decision. The students of the first year of study take advice most from their family and friends, least from the official financial counsel. 49% of them decide on their own. But 64% students on the third year of study most use their own knowledge and make self decisions regarding financial questions. This high number is expected since 57% of them are certain in their usage of financial instruments.

Generally, we can say that students during the three year program evolve. We can see that their self confidence grows when it comes to making their financial choose, but we can also see that there is only a slight change in the structure of chosen financial instruments. That gives us the right to say that there is a place for improvement of our programs in the form of induction of Personal finances as a separate subject.

Conclusion

Personal finances are underestimated as a field of study in Croatia. Reasonable governing of Personal finances provides to every individual and household a long-term existence and satisfaction. As the current structure of loans to general public issued in Croatia show, we HE teachers from field of finances have to work on it. We have to educate our students to deal with their finances in rational ways. General policy should be to implement the Personal finances in every course of study, so that we educate all of our students as much as possible.

First step at our institution has already been withdrawn as we have listed the subject Personal finances to our new curriculum for students of Accounting and Finances. We are hoping that we will obtain the licence of Ministry of Education of Croatia for this new program, so we could expect to deliver the first lessons in the forthcoming academic year.

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CHALLENGES OF AN EFFECTIVE STRATEGY FORMATION FOR THE INVESTMENT CLIMATE IN MOLDOVA

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Abstract: *In the context of European Union integration, Moldova needs to record economic performance. This is not possible without forming a proper investment climate, in order to attract effective investments.*

Investment plays an extraordinary and growing role at the level of macroeconomics and for business development as well. This is why, a careful analysis of theoretical aspects related to investment solutions, which form the basis for the development of methodological management instrumentation of the investment process, should be carried out. In our view, a contradictory understanding of the investment process at the microeconomic and the macro level has its origin in a lack of theoretical development of the very nature of the investment process.

Like any other process, the investment process needs to be managed. This investment process is based on the corporation investment strategy, developed with various financial and economic methods, which together make scientific funding methodology for the formation of investment decisions of the enterprise. Typically, when making investment decisions take into account the risk projects associated with the volatility of cash generated flows. Financing of investment projects at risk and uncertainty requires science-based approach to investment decisions. In the scientific literature, the basics of decision-making under uncertainty is described, but economic instruments of practical application not completely take into account the categories of "risk" and "return" that does not provide the possibility of adopting science-based solutions and reduces the reliability to estimate the investment project. This connection, the practice of investment planning needs adequate economic tools to more effective use of scientific potential.

Keywords: *Investment climate, efficiency, risk assessment*

Introduction

Every investment represents a series of management decisions which must be based on analytical calculations. In the Republic of Moldova, the problem of investment decision-making has been the center of attention, as for academics, as for business practitioners. And this is understandable: Investment plays a key role in the fundamental economic processes occurring at both the macro and micro levels. In this regard, from the qualitative and quantitative characteristics of the investment process depends on the country's productive capacity and efficiency of its operation, the reproductive structure of social production, as well as tackling problems such as unemployment, conditions of living.

The **scope and objectives of this article:** a complex analysis investment decision, the development of the scientific, theoretical-applied mechanisms that can serve as a basis for the increased economic effectiveness of the production assets, the industrial potential of the sustainable development of the Moldovan economy; the development of economic-mathematical mechanisms for optimal distribution of investments to sectors, to territories, block-schemes to optimize foreign investments in the context of Moldovan economic policy.

In our view, a contradictory understanding of the investment process at the level of economic activity of enterprises and at the macro level has its origin in a lack of theoretical developed of the

very nature of the investment process. Therefore, it should: consider the investment costs as spending of various economic agents in the acquisition of material factors of production and the hiring of workers involved in the production process; conduct theoretical differences notions of "investment expenses, and investment demand. Investment demand, in our opinion - is the potential need for entrepreneurs, expressed in monetary terms, the acquisition of investment goods to generate income; Investment demand can not be equated with "planned" or "expects," costs, since the basis of the demand is the availability of real, rather than the expected cash flows, emerging from different sources; Investment demand - an independent economic category, does not agree with the notion of temporarily idle funds.

There are various alternatives for the utilization of available funds, one of which is investment; conditions for the formation of investment demand vary depending on whether temporarily free funds own or borrowed; each of the alternative uses of available funds are objective conditions of tools and effects; The presence of only investment demand if they wish to take a decision on the acquisition of material and material factors of production is not a yardstick of real investment.

In addition to the demand for investment goods should take into account their availability, on the formation of the real volume of investment is influenced not only demand, but also the volume of supply of investment goods in the relevant markets.

Financing of investment projects in terms of risk and uncertainty, requires science-based approach to investment decisions. Currently, investment planning, taking into account uncertainties, has following features. First, the conditions for their implementation and the results are nondeterministic, forcing to take into account the full range of possible values of key parameters, the probability of each possible option, as well as the distribution of this probability. Second, risk factors and uncertainties leads to a significant change in the content of project materials, which necessitates the use of new methods and tools for investment planning.

One of the conditions that determine the importance of developing an investment strategy of the organization is its forthcoming stage life cycle. Each of the stages of the life cycle of the organization inherent characteristic of her level of investment activity, trends and forms of investment activity, particularly of investment resources. Investment strategies for early investment are developed to adapt the organization's activities for the upcoming opportunities for radical changes in its economic development.

In our view, an essential condition for determining the importance of developing an investment strategy is a radical change in the operating goals of the organization associated with opening new business opportunities. Realization of these goals requires a change in product range, introducing new production technologies, developing new markets, etc. In these conditions, a significant increase in investment activity organization and diversification of its investment activities should be predictable nature, for the development of a well-defined investment strategy.

1. Theoretical aspects of investment decisions

In the Republic of Moldova, the problem of investment decision-making has been the center of attention, as for academics, as for business practitioners. And this is understandable: Investment plays a key role in the fundamental economic processes occurring at both the macro and micro levels. In this regard, from the qualitative and quantitative characteristics of the investment process depends on the country's productive capacity and efficiency of its operation, the reproductive structure of social production, as well as tackling problems such as unemployment, conditions of living.

From the theoretical point of view, is very important to define what is meant by investment in the economic literature. It should be noted a significant difference in the interpretation of the definition of investment expenditures at the level of the industry economy and at the level of macroeconomics. Thus, at the micro level the concept is treated as investment funds, special bank deposits, shares and other securities, technology, equipment, licenses, loans, any other forms or property rights, intellectual values invested in the business facilities and other activities for profit and achievement of positive economic and social effect. In macroeconomics, investments include the costs of acquiring the means of production and purchase of housing. At the same time it should be noted that also uniquely determined by the content of investment activity. At the enterprise level it refers to any activity that brings some form of income. At the macro level, investment activity is associated with the development of the real sector, which includes both manufacturing and non-productive sphere. And, at the macro level, the size of investment is the criterion of economic development.

Based on the differences in the treatment of investment, its forms and results for different levels of the economy led to the conclusion that they are fundamental. So, macroeconomics, designing regulations of the national economy, uses one interpretation of the nature of investment, and for businesses there is a different interpretation, according to which, they set up their investment policies. This contradiction is, in our opinion, one of the major causes of lack of communication between the theoretical models and practical results, which has adverse implications for both the science and practice.

Theoretical postulates of investment were laid by mercantilists and further developed in the teachings of various schools, each of them reflecting the appropriate level of development of society. In this context, to identify the causes of these contradictions evolution of theories of investing and basic theories of leading economic schools about the essence of investing must be analyzed.

The earliest scientific direction which considers issues of investment is mercantilism. Representatives of this school identified the wealth of the nation with money, and money with precious metals. The source of wealth according to the theory is foreign trade, providing the influx of gold and silver money by maintaining a trade surplus with the representatives of the early school believed that the multiplication of the nation's wealth can be achieved using the money for the organization of social production. In essence, mercantilists considered money as a fixed form of capital, which should turn first to the performance, and then in the commodity form, thus ensuring continuity of production and employment for farmers and artisans. They found that the accumulation of treasure is not an end to the nation, and represents only one element of social reproduction, Representatives of the school noticed the need for productive investment in order to overcome the negative phenomena in the economy and wealth creation of the nation.

Mercantilist ideas were expanded by Physiocrats. Thus, F. Kene, first identified natural-material structure of investment, dividing them into "avances primitives" and "avances annuelles", He stressed that the distinction between them arises only when the advance money transformed into elements of productive capital. In Physiocrats theory only form of productive capital is capital used in agriculture and therefore, applies only to investments productive form of capital used in agriculture. At the same time, they are to the initial or annual advances, absented money and goods on the market In the later period of "advances" such called capital. At the same time, making no distinction between the essence of investment at the level of individual farms or social production in general, the Physiocrats have identified a direct relationship between the amount of productive capital and wealth of the nation, introducing economic theory in the name of the material and material factors – capital. As you can see, the investment appears as a process aimed at renewing and increasing use of capital, with which the production process in agriculture and increases the wealth of the nation. The distinctive feature of investment at different levels of economy is to introduce a farmer's cost of acquisition costs of production and hiring of agricultural workers, while at the national level to the capital attributed only to the material factors of production.

Further on, the theoretical aspects of the investment process have been reviewed by founder of the classical theory Adam Smith, who, like the Physiocrats, singled out the objectivity of the process of capital formation. In his opinion the result of the annual labor of any nation can be increased in two ways: either by increasing the number of productive workers, or increase the productive power of workers hired before. In both cases, the need to increase capital, or to create jobs for new workers or improvement of machinery and tools that enhance the productivity of labor is already employed in social production. Thus, the process of raising capital at the national level A. Smith connects with the increase of wealth.

Based on its research Smith points out in what ways the use of capital can achieve a capital increase, as well as displays wealth among people - the number of productive workers - the productive power of labor - the amount of capital embodied in the means of production. As used in similar ways, in addition to augmenting the capital of national wealth generates income in the form of profits to its owner, and economic actors, whose capitals are used by one of the following methods, are productive workers. Their work increases the cost of manufactured product and the profit they receive is part of this cost.

Thus, investment multiplies the social wealth, while makes profitable entities engaged in these forms of activity. However, Smith points out that if a commodity is used to generate income, it is capital for its owner, but is not a capital in a public sense, the basis on which we can speak of dual interpretation of the capital. This ambivalence not always can be attributed as social capital for the individual. The principal difference lies in the ability of capital to be used to increase national wealth.

In this case, the labor of workers is productive, and income received by them, shall be paid from the value created.

Theory of the scientists it concludes that in the social scale, to include investment costs, to redress and to increase capital, existing in these forms, resulting in multiplied national wealth and the owner of the capital derives income from its created value. Another form of investment represents the cost of purchasing the property, which brings profit to the owner of income, without increasing the national wealth. Consequently, we can conclude that the dual interpretation of the essence of the investment process appeared more in the teachings of Adam Smith and it consists of uneven understanding of the object of investment - capital. On the one hand, the classic attributes to him the property and money of an individual, can bring him income, on the other - factors of production, can in addition increase the wealth of society.

A different approach to the study of the investment process is found in **Alfred Marshall theory**, founder of the neoclassical school. Scientist analyzes the investment process as part of the functioning of the capital market. The capital market is foreseen as interaction of supply and demand, and the subjects of supply and demand of capital market are different individuals with different motivations of its activities. From these positions the formation of the supply of capital is determined by the savings of private individuals. The subjects of the savings, in his opinion, may become all members of society, although most of the savings are made by owners of capital is regulated by the accumulation of a diverse array of reasons, among them - bank interest rate, serving as a regulator of savings. The level of interest rate A. Marshall sees the reward loss, associated with the expectation of future satisfaction of material resources, explaining that an increase in savings with an increase in interest rates. Moreover, the interest rate depends on whether the employer uses its own funds or borrowed funds. Marshall, the first time in economic theory emphasized the impact of savings by the amount of bank interest rates, which serves as the offer price in the capital market. The second element of the capital market - demand - is regulated rate of return on invested capital, and A. Marshall, focused on the cost structure of the entrepreneur, the issue of discounting, time to balance investments and their impact, and also gives the definition of investment conditions, consisting in comparing the costs and benefits. Investments will be made if in addition to cost an entrepreneur gets an extra profit.

At the societal level, Marshall gives the concept of capital and hence investment, more narrowly. Like A. Smith, he does not relate to the social capital of its monetary form, but on the other hand, makes no distinction between capital goods and consumer durables, including in the composition of social capital. The scientist, more specifically, than its predecessors, defines the mechanism of formation of investment decisions.

Further study of the principles of the investment process was undertaken by **J. M. Keynes**. A distinctive feature of this research scientist is to postpone the analysis of the investment process at the level of macroeconomics. In his studies, Keynes criticized the postulates of the classical school that was established in the work of Ricardo, Pigou, Edgeworth and his teacher - Marshall. Their main mistake he had seen in ignoring the factors that have independently from the proposal, the impact on demand, which, in turn, inhibits the production and leads to unemployment.

In his study Keynes came with the following argument: for a given state of the art, the amount of resources used and the level of domestic production costs depend on the level of employment, the ratio between output and the expected value of consumption expenditure depends on the psychological characteristics of the society, called the propensity to consume, the amount labor costs, which entrepreneurs present a demand depends on the expected costs to society of consumption and of the expected costs to society for new investments. Consequently, the equilibrium level of employment depends on: the function of aggregate supply; of propensity to consume and the amount of investment.

Thus, in the arguments of Keynes's investment demand appears as an element of aggregate demand and as a factor influencing employment. Its value is determined, on the one hand, the so-called "expected" costs to society for investment goods, on the other - the investment costs are defined as the difference between the amount of aggregate supply and expected expenditures on consumer goods. In their model, the scientist identifies conditions for the formation of expected investment costs "as part of aggregate demand. Originally Keynes decide on their size, placing a reliance on consumption expenditure. Expenditure on consumption are determined as a function of employment and the marginal propensity to consume. Introduction to the analysis of this indicator is due to the action highlighted by Keynes fundamental psychological law behavior of the population, according to

which people are inclined to increase their consumption to income growth, but not to such an extent that increases income.

At the same time, Keynes does not distinguish between two separate processes: the first - is the formation of investment demand and the second - to provide business revenue for manufactured products.

Expected costs - it costs next planning period, and they can not influence the formation of demand in the current time interval. Demand depends on consumer spending for the purchase of goods manufactured in the preceding time interval. It is from these costs depends on size of business receipts and, consequently, profit margins, personal income and business deductions to the sinking fund. Therefore, we believe the use of Keynes's rate of expected costs as a factor in creating demand logical error. The current investment demand is a function of consumer spending the previous interim period. But to make available funds received for the realization of output, the investment demand, need certain conditions.

Consider the problem of making investment decisions in the event of their own funds. This problem consists in comparing the benefits that can be obtained on the two alternative options for their use. The first option - it is investment and profit from productive activities, the second option - making available funds in the capital, and getting on him for income from bank interest. Selecting determined by the ratio of income derived from investments and bank interest rate. Investment decisions are made if the marginal efficiency of capital above the rate of bank interest.

In our opinion, the bank interest rate and the marginal efficiency of capital do not determine the actual amount of investment, and allow evaluating the profitability of the two alternatives available funds. It should be noted another factor affecting the evaluation of these two options in the case when entrepreneurs do not have the money and they turn to borrowing. It seems that this variant form of investment demand should be considered separately from the case using their own funds, because the borrower must take into account the higher rate of bank interest. These two rates of bank interest were named A. Marshall 'gross interest "and" net interest ".

In accordance with the foregoing, we believe it necessary in the analysis of investment demand into account the ratio of own funds and debt businesses. Naturally, with a high specific weight of own funds impact on them will have a "net interest". With an increase in borrowing to investment demand growing influence will have a gross interest rate, causing its decline.

In our view, a contradictory understanding of the investment process at the level of economic activity of enterprises and at the macro level has its origin in a lack of theoretical developed of the very nature of the investment process. Therefore, it should:

- 1) Consider the investment costs as spending of various economic agents in the acquisition of material factors of production and the hiring of workers involved in the production process.
- 2) Conduct theoretical differences notions of "investment expenses, and investment demand. "Investment demand, in our opinion - is the potential need for entrepreneurs, expressed in monetary terms, the acquisition of investment goods to generate income.
- 3) Investment demand can not be equated with "planned" or "expects," costs, since the basis of the demand is the availability of real, rather than the expected cash flows, emerging from different sources.
- 4) Investment demand - an independent economic category, does not agree with the notion of temporarily idle funds. There are various alternatives for the utilization of available funds, one of which is investment.
- 5) Conditions for the formation of investment demand vary depending on whether temporarily free funds own or borrowed.
- 6) Each of the alternative uses of available funds are objective conditions of tools and effects.
- 7) The presence of only investment demand if they wish to take a decision on the acquisition of material and material factors of production is not a yardstick of real investment.

In addition to the demand for investment goods should take into account their availability, ie on the formation of the real volume of investment is influenced not only demand, but also the volume of supply of investment goods in the relevant markets.

2. Methodological aspects of investment decisions based on stochastic models

Any business structure, as a result of the operation, was faced with the need to invest in the development of their infrastructure. In this context, it becomes relevant management investment process. Like any other process, subordinate achieve a certain goal, the investment process needs to

be managed. This investment process is based on the Corporation's investment strategy, developed with the use of various financial and economic methods, which together constitute the scientific methodology of formation of financial investment solutions company.

Typically, when making investment decisions take into account the risk of projects associated with the volatility of cash flows generated. Taken into account by the method of RADR (Risk-Adjusted Discount Rate): the discount rate used in calculating the NPV of each project, increasing the prize for the specific risk of the project. The obvious drawback of this approach is that there is no unambiguous and mathematically sound approach to correcting the discount rate risk; and risk taking in the value of NPV for each project individually, does not allow explicitly take into account the interdependence of the projects which had manifested itself through the correlation of cash flows generated by them, and, in general, which may significantly affect the volatility of the NPV of the total possible combinations of projects. At the same time, restrictions on funding levels in most cases accounted for a further stage investment opportunities from which management would have to choose, and by changing the magnitude of projects that may lead to an unjustified rejection of lucrative opportunities. A typical formulation of the constraints in the form of simple terms such as "total net investments during the first year must not exceed this amount," also has significant drawbacks: first, it completely ignores the volatility of the company's cash flow and its distribution by period, and not take into account the correlation cash flows on the draft and gross cash flow of the company.

In this regard, typical approaches to formulating and solving the problem of making investment decisions deliberately simplified and do not account for a significant piece of information that can be utilized when making decisions that might lead to unnecessary rejection of profitable investment opportunities. Thus, a number of simplifications are unjustified and can be waived, thus significantly improving the quality of the solutions. To address these shortcomings, it is advisable to use a mathematical model of investment decisions, allowing explicitly take into account the volatility of each individual project and the correlation between the projects themselves, reflect the attitude of the investor to risk and to trace its influence on the resulting solution with maximum flexibility to use funds for companies financing of projects under consideration. In this model should be based on an optimization problem, in which the main parameter used criterion MVC (Mean Variance Criterion):

$$f = m(NPV) - \lambda \times \sigma^2(NPV) \quad (2.1)$$

(Further, instead of symbols m , σ^2 , and σ will use E , V and S respectively)

As the volatility of NPV of possible combinations of projects considered in the criteria for calculating the NPV of each project using the same not be adjusted to a specific project risk discount rate that reflects the price of capital. NPV of each project is calculated by the limit AP generated by the project for a fixed number of periods since the start, the same for all projects. To be able to add NPV of all projects presented to the same period.

In this case, the possibility of financing projects must be in a position considered to ensure the solvency of the company, namely: the total amount of money in the future with a high probability to exceed a certain critical value, which requires the establishment of a reserve currency in the form of insurance available at the company in any If the unlikely event happens. Price insurance is that the reserve can be invested only in a totally risk-free liquid assets, which leads to a loss in profitability.

Such an approach to solvency is the most flexible because it allows to decide on an acceptable level of risk of insolvency and the value of the insurance reserve. With his use of restrictions on financing of projects expressed as follows: for each possible combination of the projects total amount of money a company formed by the implementation of this combination on a set date of the investment horizon with a given probability P exceeds a predetermined insurance reserve, optimization problem is as follows:

$$f(x) = m(NPV_x) - \lambda \times \sigma^2(NPV_x) \rightarrow \max \quad (2.2)$$

$$\forall m \in M : \text{квантиль}(1-P, CE_m(x)) \geq D,$$

where,

X - number of possible combinations of projects;

M - the set of periods;

$CE_m(x)$ - the total amount of DS at the date of m in the case of implementation of a combination of

x;
P - selected confidence level;
D - required insurance reserve.

Obviously, the use of the model parameters of distributions of random variables (expectation, variance, quintiles) requires some initial assumptions about the distribution of components of cash flows, since it affects the accuracy of the model, and its advantage disappears. However, the optimization model for investment decisions can be built based on solid theoretical and statistical assumptions.

To this end, for each segment of the mathematical model of marginal income, in which the sale of the segment as a whole (SS), for each of the months simulated normally distributed random variable (s). They are based on sales forecast by segment and forecast the dynamics of sales in the segment, with sales of own brand simulated normal random variable with E (OS), equal to E (SS), multiplied by the forecast of the share of own brands in sales for the segment in a given month. This oss calculated based on estimates of initial and maximum proportion of own brand sales in the segment.

It should be noted that sales of existing brands (BS) are divided into two components. First, the constant part (K), are considered for each month as a constant and is calculated as a percentage of E (SS). For each segment of the marketing department was used to estimate the proportion of permanent part of the sales of existing brands in sales in the segment as a whole (obozn. bsp). Second - the random part (B), negatively correlated with sales of own brands in this segment in a given month (due to displacement). It is modeled by a normal random variable and is calculated by the formula

$$E(B) = E(SS) \times (100\% - oss - bsp). \quad (2.3)$$

Introduction of sales of existing brands as a sum of constant and random components can reflect the impossibility of complete replacement of existing brands of its own, keeping a negative correlation between their sales in the month. Marginal income (MD) on a permanent part of sales of existing brands is calculated as the product of the appropriate level of margin on the value of the constant part of sales and, thus, is constant as the product of two constants. In the random part of the MD of sales is calculated as the product of the appropriate level of margin on sales. This MD, as the product of a constant and normal random variable is normally distributed with the MoD, equal to the product of the appropriate level of margin on the relevant MoD sales. Based on statistics for each of the segments are estimated coefficients of variation of the MD of sales of own brands and MD sales of existing brands, so the standard deviations are calculated as the product of the Defense Ministry and the coefficient of variation.

Thus, if the SCM (Segment Contribution Margin) - MD of the segment in general, less costs to promote its own brand; K - MD on a permanent part of sales of existing brands, B - MD of the random part of sales of existing brands, O - MD of sales of own brands, M - the planned costs of promoting its own brand, the $SCM = KBO - M$. In situations. When K and M - constant, B and O are normally distributed, therefore, SCM is normally distributed with the following parameters:

$$\begin{aligned} E(SCM) &= E(B) + E(O) + K - M, \\ V(SCM) &= V(B + O) = V(B) + V(O) + 2 \times cov(B,O), \\ cov(B,O) &= S(B) \times S(O) \times R(B,O), \end{aligned} \quad (2.4)$$

where R (B, O) - the correlation coefficient of MD on sales of own brands and MD of the random part of the sales of existing brands (sales in the same month). R (B, O) in each of the segments is assumed the same for all considered months. For each of the segments are estimates R (B, O).

Detailing the model is based on the assumption of normality of distribution of sales by segment and reporting of sales of existing brands as the sum of constants and the normal component. Then the MD for each of the segments, excluding the cost of promoting its own brand, is normally distributed with the calculated above parameters.

Further, the mathematical model of the marginal income units. For this purpose, in each month of the MD unit, minus the cost of promoting their own brands (obozn. CM - Contribution

Margin), formed as the sum of the MD for each structure: $CM = \sum_{s=1}^5 SCM_s$ (Hereinafter the index s indicates the number of segments). CM as the sum of normal random variables is normally distributed with parameters:

$$E(CM) = \sum_{s=1}^5 E(SCM_s), \quad V(CM) = V\left(\sum_{s=1}^5 SCM_s\right) = \sum_{s1=1}^5 \sum_{s2=1}^5 cov(SCM_{s1}, SCM_{s2}),$$

$$\begin{aligned} \text{cov}(SCM_{s1}, SCM_{s2}) &= \text{cov}(K_{s1} + B_{s1} + O_{s1} - M_{s1}, K_{s2} + B_{s2} + O_{s2} - M_{s2}) = \\ &= \text{cov}(B_{s1} + O_{s1}, B_{s2} + O_{s2}) = \text{cov}(B_{s1}, B_{s2}) + \text{cov}(B_{s1}, O_{s2}) + \text{cov}(O_{s1}, B_{s2}) + \text{cov}(O_{s1}, O_{s2}). \end{aligned} \quad (2.5)$$

The latter covariance is calculated as the product of standard deviations, multiplied by the corresponding correlation coefficient. Evaluation of correlation coefficients as follows: a score that the values of MD of sales in various departments within the network belonging to the same month, are correlated with each other with an average correlation coefficient of RCM = 0,3 .Statistics show that the correlation coefficient RCM reflects well the correlation between the different price segments of juice, between segments of juices and milk division, between the segments of milk production. It is estimated that all other factors not related to membership segments to the same network, balance each other.

It does not distinguish between correlation marginal income on sales of existing brands in two different segments of the available marks in one segment and its own brand to another, our own brands in two different segments. Thus, for s1 s2 R (Bs1, Bs2) = R (Bs1, Os2) = R (Os1, Os2), and for s1 = s2 R (Bs1, Bs2) = R (Os1, Os2) = 1; R (Bs1, Os2) = R (B, O).

The next stage, the mathematical model of the cash flow network works as a whole. In constructing this model, the DP network balance in each of the months in the light of this simplification is presented as follows: CF = CM OCM - OC - CC, where CF (Cash Flow) - DP network balance, CM - MD for two be separated, OCM (Other departments "Contribution Margin) - MD in other sections of the network, CC (Capital Costs) - Costs for the payment of loans and interest thereon, OC (Other Costs) - all other costs. OCM is modeled by a normal random variable. SS are set separately for each of months in accordance with the schedule of repayment of loans and interest thereon. The amount of money the network at the end of the month m (obozn. CEm - Cash & its Equivalents) calculated as follows:

$$CE_m = CE_0 + \sum_{i=1}^m CF_i = CE_0 + \sum_{i=1}^m (CM_i + OCM_i - OC_i - CC_i) \quad (2.6)$$

where,

i - index of the month;

CE0 - the value of the DC network at home - is considered as a constant with a given estimate.

According to the approach to ensure the solvency of the companies used in the model, an amount equal quintiles CEm level (1P), where P - the chosen confidence level, are free to invest in a totally risk-free liquid (or close to risk-free) assets at least 1 month. The maximum accuracy of the model would be obtained by taking into account of CEm revenue opportunities from these sums. However, for the purposes of this paper this possibility is not essential for the sake of simplicity will not be considered.

CEm normally distributed as the sum of normal variables and constants. Consider the parameters of the distribution

$$\begin{aligned} E(CE_m) &= CE_0 + \sum_{i=1}^m (E(CM_i) + E(OCM_i) - OC_i - CC_i), \\ V(CE_m) &= V \sum_{i=1}^m (CM_i + OCM_i - OC_i - CC_i) = \\ &= \sum_{i=1}^m \sum_{j=1}^m \text{cov}(CM_i + OCM_i - OC_i - CC_i, CM_j + OCM_j - OC_j - CC_j) = \end{aligned} \quad (2.7)$$

Consider each of the components of this sum of covariance:

$$\begin{aligned} \text{cov}(CM_i, CM_j) &= \text{cov} \left(\sum_{s=1}^5 SCM_{s,i}, \sum_{s=1}^5 SCM_{s,j} \right) = \sum_{s1=1}^5 \sum_{s2=1}^5 \text{cov}(SCM_{s1,i}, SCM_{s2,j}) \\ \text{cov}(SCM_{s1,i}, SCM_{s2,j}) &= \text{cov}(K_{s1,i} + B_{s1,i} + O_{s1,i} - M_{s1,i}, K_{s2,j} + B_{s2,j} + O_{s2,j} - M_{s2,j}) = \\ &= \text{cov}(B_{s1,i} + O_{s1,i}, B_{s2,j} + O_{s2,j}) = \text{cov}(B_{s1,i}, B_{s2,j}) + \text{cov}(B_{s1,i}, O_{s2,j}) + \\ &+ \text{cov}(O_{s1,i}, B_{s2,j}) + \text{cov}(O_{s1,i}, O_{s2,j}) \end{aligned} \quad (2.8)$$

Covariance forming this sum are different from the covariance calculated by the calculation is the fact that the values of CBMs belong to different months. Each of the data covariance is calculated as the product of standard deviations, multiplied by the corresponding correlation coefficient. For CBM belonging to the same month, the correlation coefficients are estimated by the above method. Based on statistics developed following the model of correlation weakening MD in time: when you remove the MD from each other on a monthly correlation coefficient retains its sign with a

gradual (linear) decrease in absolute value, with distances of 6 months or more this

$$|R(B_{s1,i}, B_{s2,j})| = \begin{cases} R(B_{s1,i}, B_{s2,j}), & \text{при } i = j \\ |R(B_{s1,i}, B_{s2,j})| \times (1 - |i - j| / 6), & \text{при } i - j < 6 \\ 0, & \text{при } i - j \geq 6 \end{cases} \quad (2.9)$$

way,

Similarly calculated

$$\begin{aligned} & |R(B_{s1,i}, O_{s2,j})| \text{ и } |R(O_{s1,i}, O_{s2,j})| \\ \text{cov}(CM_i, OCM_j) &= S(CM_i) \times S(OCM_j) \times R(CM_i, OCM_j) \end{aligned} \quad (2.10)$$

CM and OCM, relating to the same month, correlate with the average correlation coefficient of sales of various departments within the network (RCM). To reflect the correlation of CM and OCM, belonging to different months, using a model of correlation weakening MD time.

Similarly, paragraph 2.

$$\text{cov}(OCM_i, OCM_j) = S(OCM_i) \times S(OCM_j) \times R(OCM_i, OCM_j) \quad (2.11)$$

Use the above model of correlation weakening over time. $V(CE_m)$. Thus, all components are designed.

Thus, the volume of the DC network in the end each month is normally distributed with the calculated above parameters. Based on the model used in the approach to the solvency of the company are set limits on financing by month

$$\forall m = \overline{1,16} : \text{quantile}(1 - P, CE_m(x)) \geq D \quad (2.12)$$

In the last stage the mathematical model of NPV launch his own brand on the segment. To be able to add NPV of all projects presented to the same period (discounting at once made to the beginning of this month). Discounting factor for the i-th month will be denoted $k^{(i)} = \frac{1}{(1+d)^i}$, where d - the discount rate used for the month.

We introduce the following notation:

NPV-NPV launch own brand in the segment s;

NPV-total NPV of any possible combination of projects launched his own brand across all segments structured units;

Ss-month number starting his own brand in the segment s; if the segment s own brand does not start, Ss = 0;

Es - number of the last month, the limit AP takes into account when calculating the NPVs. Es = Ss + 1.

The combination of projects and months of launch will be denoted by a combination of numbers s1, s2, s3, s4, s5. A variable symbol which stands for the digit "0" refers to the case of refusal to run his own brand in all segments be separated (a combination of 00000).

For the combination 00000: E(NPV) = V(NPV) = 0.

For all other combinations:

$$NPV = \sum_{s=1}^5 NPV_s = \sum_{s=1}^5 \sum_{i=S_s}^{E_s} k^{(i)} * (SCM_{s,i} - SCMO_{s,i}) \quad (2.13)$$

Here and below summation is over those s (segments), which runs its own brand). NPV is normally distributed as the sum of normal St. Calculate the distribution parameters:

$$\begin{aligned} E(NPV) &= \sum_{s=1}^5 \sum_{i=S_s}^{E_s} k^{(i)} * (E(SCM_{s,i}) - E(SCMO_{s,i})) \\ V(NPV) &= V\left(\sum_{s=1}^5 \sum_{i=S_s}^{E_s} k^{(i)} * (E(SCM_{s,i}) - E(SCMO_{s,i}))\right) = \\ &= \sum_{s=1}^5 \sum_{j=S_s}^{E_s} \text{cov}\left(\sum_{i=S_{s1}}^{E_{s1}} k^{(i)} * (SCM_{s1,i} - SCMO_{s1,i}), \sum_{j=S_{s2}}^{E_{s2}} k^{(j)} * (SCM_{s2,j} - SCMO_{s2,j})\right) = \\ &= \sum_{s=1}^5 \sum_{i=S_s}^{E_s} \sum_{j=S_{s1}}^{E_{s1}} \sum_{k=S_{s2}}^{E_{s2}} k^{(i)} * k^{(j)} * \text{cov}(SCM_{s1,i} - SCMO_{s1,i}, SCM_{s2,j} - SCMO_{s2,j}), \end{aligned}$$

$$\begin{aligned} \text{cov}(SCM_{s1i} - SCMO_{s1i}, SCM_{s2j} - SCMO_{s2j}) &= \text{cov}(SCM_{s1i} - SCMO_{s2j}) - \\ - \text{cov}(SCMO_{s1i} - SCMO_{s2j}) &- \text{cov}(SCM_{s1i}, SCMO_{s2j}) + \text{cov}(SCMO_{s1i}, SCMO_{s2j}) \end{aligned} \quad (2.14)$$

In this case, the calculation of covariance, forming this sum is similar to the calculation of covariance, executed in the previous section. Thus, the total NPV of any possible combination of projects launched his own brand across all segments of the two divisions is normally distributed with calculated above parameters.

Thus, production optimization problem into a mathematical model of the proposed investment decision-making looks like: $f_x(x) = m(NPV_x) - \lambda \times \sigma^2(NPV_x) \rightarrow \max$, $\forall m \in M : \text{quantile}(1-P, CE_m(x)) \geq D$.

Thus, the approach used in the model of investment decisions reveals that the distribution of NPV projects and the amount of cash the company, but also calculated the parameters of these distributions can be made on the basis of a small number of theoretically and statistically based assumptions about the distribution of cash flows, which means practical applicability of the model in a wide class of problems. The model allows full and mathematically reasonably take into account in decision-making volatility of cash flows generated by each project, other cash flows that adequately reflects the correlation between different projects.

The analyst has the opportunity to reflect management's attitude to the degree of volatility of cash flows generated by such a project, by changing a single parameter -. The model allows to refuse a substantial part of the simplifications used in typical approaches, and use a larger amount of information, thereby significantly improving the quality of solutions obtained analyst. Used in the model approach to ensure the solvency of the company allows you to explicitly decide on an acceptable level of risk of insolvency and the amount of the insurance reserve and track their impact on the range of acceptable in terms of combinations of projects and funding for the optimal solution.

3. Economic methods for designing investment risk assessment

Financing of investment projects in terms of risk and uncertainty, requires science-based approach to investment decisions. In the scientific literature, the basics of decision making under uncertainty, but the practical application of economic instruments do not fully take into account the categories of "risk" and "yield", that does not provide the possibility of adopting science-based solutions and reduces the reliability of estimates of the investment project. In this regard, the practice of investment planning needs adequate economic tools to make better use of scientific potential.

The first theoretical development of risk management and uncertainty arose in the early XX century. Thus, in FH Knight was submitted to qualitative analysis of risks in the context of the theory of finance. Practical interest, and the first practical development of forecasting and risk assessment, there were abroad in connection with the global economic crisis. For example, Charles Dow developed the theory of cyclical movements in the market value of securities, I. Fisher initiated the investment designing its basic design modern theory of money, but also identified the impact of inflation on interest rates. J. Keynes in their theories also focus on risk assessment.

A new surge of research on this topic occurred in 1952, when H. Markowitz and J. Danzig suggested that scientific method to account for risk in choosing investment strategies. In the early 60's work of Johnson and D. Stein expanded portfolio theory, expanding its hedging. In the 60-ies W. Sharp formulated the basic concepts of risk, types, ways of its hedging and proposed an evaluation model of capital assets - Capital Assets Pricing Model - CAPM. Significantly increased the influence of "portfolio theory" J. Tobin, who proposed to include in the analysis of the risk-free assets, thereby suggesting a macroeconomic approach, in contrast to the microeconomic approach H. Markowitz.

By the mid 60-ies of William Sharpe, John Lintner and J. Mossina summed up this phase of development of modern investment theory, formulated the MSAR as macroeconomic generalization of the theory of Markowitz. All subsequent decade CAPM been criticized, and in 1977 Richard Roll suggested reject CAPM, as it in principle not allow an empirical test. At the same time, Steve Ross proposed an alternative model of capital asset pricing-Arbitrage Pricing Model.

A cornerstone of the problem formalized approach to the choice of strategy under uncertainty laid J. von Neumann and O. Morgenstern.

In parallel with the development of investment theory is widely developed in other parts of the financial science. In 50-60-ies of F. Modigliani and M. Miller dedicated their work analyzing the

capital structure of corporations and accounting for risk assessment of the investment project, which even today are considered classics of financial science. In general terms, at the risk of understanding the possibility of occurrence of some adverse events, entailing different kinds of losses. From this it follows that the risk exists only in relation to the future, it is associated with forecasting and planning, as categories of "risk" and "uncertainty" are closely linked. Because uncertainty is a source of risk, it should be minimized, which is practically very difficult to do. Therefore, when making decisions under uncertainty, the need to formalize and evaluate the risks arising due to this uncertainty. The risk exists in virtually all spheres of life, so when considering the investment planning in addition to assessing the possible damage, weighted according to their likelihood, the opportunity costs, loss of profits, etc., the risk should be considered as a possibility of loss arising from the need to make investment decisions conditions of uncertainty. The extent of this possibility can be characterized by such criteria as: the probability of an event, the deviation from the predicted value (the intensity variation); dispersion, the expectation, standard deviation, etc.

Because uncertainty can be given a probability distribution, the interval uncertainty, subjective probabilities, etc., and the manifestations of risk are extremely varied, it is advisable to use the most appropriate criteria such as: the expectation and standard deviation. In addition, the risk assessment should take into account individual risk tolerance, which is described by the indifference curves or utility, as follows: Risk = (P; L; Y).

It should be noted that in theory and practice in addition to statistical criteria used indicators: the value of lost profits, lost income and other, calculated in monetary units. However, to adequately describe the risks they must take into account its probabilistic characterization. In this regard, more reasonable is use of generalized complex criterion - "the price of risk" (C risk), which characterizes the magnitude of losses possible with conventional realization of the investment decision: C risk = (P; L), where L - is defined as exposure to direct losses from investment decision. In determining the price of risk is necessary to use only the indicators that take into account the possibility of occurrence of adverse events and the magnitude of the damage from it, namely: variance, standard deviation (RMS) and coefficient of variation (CV), the value of which should be reflected in currency format.

Typically, investors' attitude to risk is subjective, so with equal probabilities of unfavorable outcome of the decisions would be opposite, which proves the need to calculate the "price risk", as well as the investor's tolerance for risk. Individual investor attitude to risk can be determined by the degree of steepness of the indifference curve. However, investors' attitude to risk can be described not only the curves of indifference, but also in terms of utility theory, ie through the utility function. The main advantages of this feature lies in the fact that the utility curve, as the expression of individual preferences of the investor, being built once, in the future can make investment decisions based on their preferences, and this function may change over time. At the same time, it should be borne in mind that utility theory can be formalized approach to risk and thus scientifically justified decisions under uncertainty.

Currently, investment planning, taking into account uncertainties, has following features. First, the conditions for their implementation and the results are nondeterministic, forcing to take into account the full range of possible values of key parameters, the probability of each possible option, as well as the distribution of this probability. Second, risk factors and uncertainties leads to a significant change in the content of project materials, which necessitates the use of new methods and tools for investment planning.

To measure the effectiveness of the project requires a quantitative analysis and accounting-based risk models "yield - risk" when discounting cash flows, and regard for the individual investor's tolerance for risk. Thus, in deciding on the effectiveness of the investment project in conditions of uncertainty, the investor decides to at least be criteria problem, since he must find the optimal mix of risk-return. As these goals are conflicting, the final investment decision is a compromise in which risk and return must be balanced in the optimum proportions for the investor. However, to find the ideal "maximum yield - minimal risk" is possible only in very rare cases.

Therefore, the solution of this optimization problem should take into account the following items: the maximum payoff, minimum risk optimal probability, and the combination, in practice, approach the optimal probability with optimal variability. Fluctuation indices are expressing their variance, standard deviation and coefficient of variation. The essence of strategy for the optimal oscillation result is that the possible solutions is chosen then, in which the probability of winning and losing for the same venture capital investments have a small gap, t. e. the smallest value of variance, standard deviation, variation..

In addition to the presented models in the scientific literature, known model alternative CAPM, among them: Arbitral pricing theory (Arbitrage Pricing Theory-APT); theory of option pricing (Option Pricing Theory - OPT); theory of preferences under uncertainty states (State - Preference Theory -SPT) and others. Thus, the theory of arbitrage pricing (Arbitrage Pricing Theory-APT), based on the idea that the yield of any asset consists of two parts: a risk-free and risky. Risk part in this case is determined by many financial and economic factors. The advantage of this model should recognize its multifactor and the lack of stringent assumptions, which are typical of CAPM. However, the practical realization of this model requires a fairly complex apparatus of mathematical statistics and a large amount of statistical data, so the model is sufficiently theorize character. The investment project involves the planning time the three major cash flows: the flow of investment, the flow of current payments and income flow. The flow of current income payments can not be planned completely accurate, since there is no complete certainty about the future of the market, and therefore, information uncertainty entails irremovable risk of making investment decisions. The investor will never have a comprehensive risk assessment, since the number of varieties of the external environment is always superior management capabilities, but must make efforts to enhance their awareness and attempt to measure the riskiness of their investment decisions as the design development phase, and during the investment process.

This problem can be solved using the principle of diversification project, not only in relation to securities, but also to the various assets, including those for investment projects, which from a financial point of view represents a set of cash flows. In this case, must proceed from the assumption that if each of the asset portfolio is characterized by some dispersion of income, the variance of the portfolio will be determined by its composition, thus altering the composition of the portfolio can minimize the variance and hence the risk. If the various indicators of income assets are statistically independent (not correlated), then the portfolio variance D_n are as follows: $D_n = \sum a_i^2 D_i$ (3.1)

where:

a_i - the share of the project i ;

D_i - the dispersion of income from the project i .

For the dependent in the statistical sense projects:

$$D_n = \sum a_i D_i + 2 \sum a_i a_j r_{ij} \sigma_i \sigma_j \quad (3.2)$$

where:

r_{ij} - correlation coefficient of income projects i and j ;

σ_i, σ_j – standard deviation of income from projects i and j .

The greatest effect of diversification is achieved at the maximum negative correlation. However, to reduce portfolio risk can be even positive correlation by increasing the scale of the portfolio that can be represented graphically by the formula: $\sigma_{портф} = \sqrt{1/n} \sigma_{базисный}$ (3.3)

So for two types of assets will be 0.71 standard deviation $\sigma_{портф}$, the three already 0,58 $\sigma_{портф}$, and for ten 0,31 $\sigma_{портф}$. Zoom in on the diversification of the project consisting of a sufficiently large number of assets gives very little effect, for example, increasing the number of projects in the portfolio with 20 to 30 gives the effect of only 0,04 $\sigma_{портф}$.

Significant effect on the risk of the portfolio has changed the structure of the portfolio. In this regard, it is recommended to use methods of diversification to optimize the structure of the project, which involves the implementation of several products with different profitability. This problem, formulate a problem to compile a portfolio with minimal risk. As the risk profile are encouraged to use the variance of sales of products using the following algorithm for solving the problem:

- determined by the risk profile of this product, ie– variance of sales;

- estimated share of each product in the project, at which the risk of the project (portfolio variance) will be minimal.

Thus, for a portfolio of three products

$$a_x = \frac{D_{y/z}}{D_{x/z} D_{y/z} + D_{x/z} + D_{y/z}} \quad (3.4)$$

$$\alpha_x = \frac{D_{x/z}}{D_{x/z}D_{y/z} + D_{x/z} + D_{y/z}} \quad (3.5)$$

$$\alpha_z = 1 - (\alpha_x + \alpha_y) \quad (3.6)$$

where:

oh, ay, az - the proportion of products X, Y and Z respectively in the portfolio;

DN / z - ratio of the variances in sales of products Y and Z;

Dx / z, - ratio of the variances in sales of products X and Z.

- estimated share of each product in the project, at which the risk of the project (portfolio variance) will be minimal. – Thus, for a portfolio of three products

$$\mathbf{D}_n = \mathbf{a}_2 \mathbf{D}_x + \mathbf{a}_2 \mathbf{D}_y + [1 - (\mathbf{a}_x + \mathbf{a}_y)] \mathbf{D}_z \quad (3.7)$$

Moreover, the profitability of the project with minimal risk is defined by the weighted average, where weights are the share of the product in the project.

The analysis and management of system risk of the investment project investor should use an algorithm of risk management. The main items of the process are as follows: by the identification of risks, their description and formulation of initial assumptions, a quantitative risk analysis, which aims at measuring risk, which leads to the solution of such problems as the formalization of the uncertainty calculation, valuation and risk, the risk of transforming analysis of a priori judgments into practical action for its management, and monitoring the risk of the investment project.

The most difficult is the process of quantitative analysis of the investment project. Involving the presence of such components as: the sensitivity of net present value (NPV) to changes in values of key indicators and the value of the range of possible changes in the key indicators, defined by their probability distributions. Both - based on the concept of temporary value of money and probabilistic approaches. At the same time, it should be noted that in international practice for risk analysis of investment projects using a wide range of methods. The most common are: the method of adjusting discount rate, the method reliable equivalents (coefficient of reliability); sensitivity analysis of performance criteria (NPV, IRR, etc.), the method of scenarios, and analysis of probability distributions of payment flows, decision trees, Monte Carlo (simulation) etc. All of them have certain advantages and disadvantages of their practical application.

In practical way to assess the investment risk associated with the method of describing information uncertainty of initial data of the project. If the original parameters are probabilistic, then the performance of investments also has the form of random variables with their implicative probability distribution. Moreover, the less statistically caused by those or other options, the more distorted is the information about the state of the market environment and, consequently, lower the validity of the use of any type of probability in investment analysis.

In this regard, an alternative way to deal with uncertainty is the so-called minimax approach of the wording of the expected scenarios in the investment process, from which selected two scenarios where it reaches its maximum and minimum efficiency. Then the expected effect is estimated by Hurwitz with the consent of the parameter L. When L = 0 (point Wald). It decides the basis, the most pessimistic assessment of the effectiveness of the project. Using this approach minimizes the risk of the investor, however, most projects, even those with a very decent chance of success, will be rejected.

In this regard, one of the tools designed to measure the capabilities (standby), is the theory of fuzzy sets. In accordance with this theory to calculate the complex index of risk assessment is carried out multivariate assessment of the investment project on further value of the index of net present value of investments: NPVmin - the minimum value of the index, NPVmax - the maximum value of the index, NPVexp - meaning the average projections. Under the effective investments we understand a set of states of the investment process, where the real value of the project purely modern more than zero. Assume that the equality NPVmin < 0 < NPVexp. Then the degree of risk of V & M inefficient investments is estimated by the following formula:

$$V \& M = R \times \left(1 + \frac{1-a}{a} \times \ln(1-a) \right),$$

where:

$$a = - \frac{NPV_{min}}{NPV_{exp} - NPV_{min}}, \quad (3.8)$$

$$R = - \frac{NPV_{\min}}{NPV_{\max} - NPV_{\min}}$$

The degree of risk of V & M takes values from 0 to 1.

Each investor, based on their investment preferences, may classify the values of V & M, for selecting a segment of unacceptable risk values. It is also possible for more gradation levels of risk. For example, if you enter the linguistic variable "Risk" with its term-set of values (Negligible, Low, Medium, relatively high, unacceptable), then every investor can make an independent description of the corresponding fuzzy subsets by setting five membership functions $m(V \& M)$. In this situation, the net value of the modern project can be estimated following formulas:

$$\begin{aligned} NPV_{\min} &= -I + \frac{CF_{\min}}{(1+RD_{\max})^1} + \frac{CF_{\min}}{(1+RD_{\max})^2} = -1,0 \\ NPV_{\max} &= -I + \frac{CF_{\max}}{(1+RD_{\min})^1} + \frac{CF_{\max}}{(1+RD_{\min})^2} = 2,5 \\ NPV_{\text{avg}} &= -I + \frac{CF_{\text{avg}}}{(1+RD_{\text{avg}})^1} + \frac{CF_{\text{avg}}}{(1+RD_{\text{avg}})^2} = 0,5 \end{aligned} \quad (3.9)$$

where $CF_{\text{avg}} = (CF_{\max} - CF_{\min}) / 2 = 1$ million rubles., $RD_{\text{avg}} = (RD_{\max} - RD_{\min}) / 2 = 20\%$ per annum.

Thus, fuzzy sets are a tool for calculating the capacity, in which the description of fuzzy initial data allows to proceed to fuzziness of the resulting indicators. Moreover, assessment of investment risk - this score measures the possibility of adverse developments in the investment process, which are expected events given by the membership function of the fuzzy numbers, known or determined by special methods. An approach based on ambiguity, overcomes the disadvantages of probabilistic and minimal approach of taking into account the uncertainty as: consider a full range of scenarios, investment process and decision is not based on two assessments of the effectiveness of the project, and the entire set of estimates; the expected efficiency of the project is not the point indicator, but a field interval of values with their expectations of distribution, characterized by the membership function of the fuzzy numbers. While the weighted complete set of expectations allows us to estimate the integral measure of expectations of negative results of the investment process, ie degree of investment risk.

4. Methodology to assess the efficiency of investment projects at the Present Stage

Enhancing the investment process is currently the most urgent and very painful problem at the macro and microeconomic level. Growth of investment and economic growth of Moldova as a whole was expected and predicted, yet since 1993, but the exit status of a cyclical downturn has not happened so far. At the same time, the reality is that without the merger of production and financial capital, enterprises find it increasingly difficult to withstand the requirements of ever-increasing competition. Therefore, objectively, has tended to search for effective sources of investment, as well as the formation of methodological tools of evaluation of investment decisions. Evaluating the effectiveness of investment projects is the main tool of the right choice most efficient investment projects, improving the investment programs and minimizes risks. Not in all cases methods for evaluation of investment projects may be the same, because they vary substantially in size costs, useful lives, as well as useful results.

In European countries and the U.S. in present there are several methods for evaluating the effectiveness of investments. They can be divided into two main groups: methods of evaluating the effectiveness of investment projects that do not include discounting and methods which include discounting. The methods, which do not include discounting, are indicators: payback period, rate of return on capital; Cash-flow or the accumulated balance of cash flow; the comparative effectiveness of reduced production costs, the method of comparing profits. These methods do not fully take into account the aspect value of money in time, factors associated with inflation and risk, as well as the complicated process of conducting a comparative analysis of design and the actual data by year of the investment project, and therefore, their most rational use in cases when the costs and benefits are evenly distributed by years for a investment projects and a payback period covers a short period of time. The main objectives of the investment planning in the traditional approach consisted in determining the break-even point, calculating the integral performance criteria and other parameters. Accordingly, the content of the investment planning reduced to the projection of cash flows in the future on the value of the investment horizon.

Justification of investment projects carried out in accordance with the theory of the time value of money. Thus, the classical approach to assess the effectiveness of investment projects foresees measures such as: discounted payback period (Pay-Back Period, PBP); net present value (Net Present Value, NPV); internal rate of return (Internal Rate of Return, IRR); profitability index, the method of annuity. The basis of these methods is the discounting of projected cash flows, include the selection of the discount rate, which allows the calculations to reflect the impact of the value of money. However, when the capital invested is taken from various sources, the calculation of the discount rate is complicated, as instead of interest on loans, to calculate it we use the concept of average cost of capital (Weighted Average Cost of Capital, WACC). This is calculated as follows:

$$WACC = k_{kr} \times r_{kr} + k_{sk} \times r_{sk} \quad (4.1)$$

where:

k_{kr} - the share of credit funds in the sources of funding;

k_{sk} - share of equity;

r_{kr} - rate of interest on the loan;

r_{sk} - return on equity required by the shareholder.

It turns out that each component of the capital lays in the cost of money of the project share proportionate to his share in the source of capital. In fact, through this mechanism for calculating the discount rate is taken into account the requirement of each of the investors in its earnings on invested funds.

The main criterion for the effectiveness of the investment project has always been considered the value of NPV, because it is easier to calculate and interpret, in comparison with other indicators. But in practice often turns out that to calculate the NPV will not always be easy, and correct conclusions, having its value, even more difficult. The main reason for difficulties is that almost every real project, we are confronted with two shortcomings NPV, namely: to build a detailed forecast for the entire period during which the work made by the investment is not always justified, so every project is a significant piece of unreported income but NPV does not complete withdrawal of how profitable an investment decision is.

The above indicators of efficiency of the investment project are closely linked. This is explained by the fact that they are based on the discounted stream of payments. But it is not always an investment project, the preferred one indicator will also be the preferred and other indicators as well as the background and characteristics of each indicator vary. Due to differences in the evaluation of investment projects that can be monitored using various performance indicators, the question arises about the preference of certain indicators measuring effectiveness.

The effectiveness of investment characterized by a system of indicators reflects the balance of costs and outcomes for the interests of its members. Evaluation of the upcoming costs and benefits in determining the effectiveness of investments made within the billing period, which duration is usually limited to a period of investment.

Payment rates can be expressed in lei or stable currency (USD, EUR, etc.).

In assessing the effectiveness of the comparison of different periods of investment performance is done by discounting of their values in the initial period. To approximate costs occurring in different periods of time, results, effects, is used discount rate (E), equal to an acceptable rate of return for investors on capital.

Technically, the reduction to the reference point in time cost, the results and effects occurring on the t -th step of calculation of the project, it is convenient to produce by multiplying them by a discount rate α_t , defined for the constant discount rate E as:

$$\alpha_t = \frac{1}{(1 + E)^t} \quad (4.2)$$

where,

t - step number calculation ($t = 0, 1, 2, \dots T$),

T - calculation horizon.

To evaluate the effectiveness of investments, there are several different indicators, which include:

- ✓ profitability index (IP) element;
- ✓ net present value (NPV) or the integral effect of the use of a particular element of the investment portfolio;

- ✓ internal rate of return (IRRs) of the element;
- ✓ payback time for real investment and the repayment term for financial investments;
- ✓ other indicators that investors needed to assess the effectiveness of investments and reflect the specifics of a particular element of the portfolio.

Net present value (NPV) is defined as the sum of current effects for the entire period of the investment portfolio, reduced to the initial step, or as the excess of the integral results of the integral costs.

If during the billing period, there is no inflationary price changes or the calculation is made at constant prices, the value of NPV for the constant discount rate is calculated by the formula:

$$NPV = \sum_{t=0}^T (R_t - Z_t) * \frac{1}{(1+E)^t} \quad (4.3)$$

where:

Z_t - costs carried on the same step,

T - calculation horizon (equal number of the step of calculation, which is the elimination of the object).

$E_t = (R_t - Z_t)$ - an effect achieved in the t-th step.

If the NPV of a particular object of investment is positive, investment is efficient (at a given discount rate) and may be considered for adoption. The greater the NPV, the more efficient is investment using this investment tool. If the investment will be implemented with a negative NPV, the investor will suffer losses, the tool is inefficient.

Profitability index (TAI) is the ratio of the sum given to the effects of the initial investment in tools – ID is equal to:

$$ID = \frac{1}{K} * \sum_{t=0}^T (R_t - Z_t) * \frac{1}{(1+E)^t} \quad (4.4)$$

Profitability index is closely related to NPV. It is constructed of the same elements and its value is associated with the value NPV: if the NPV is positive, then the ID > 1 and vice versa. If ID > 1, the project is effective, if ID < 1 - inefficient.

Internal rate of return (IRRs) represents that the discount rate (EVN), in which the value of the above effects is equal to investment costs.

In other words EVN (GNI) is a solution:

$$\sum_{t=0}^T \frac{R_t - Z_t}{(1+E_{GNI})^t} = \sum_{t=0}^T \frac{K_t}{(1+E_{GNI})^t} \quad (4.5)$$

If the calculation of the NPV of the investment project provides an answer to a question, is it effective or not at some specified rate of discount (E), the GNI of the project is determined during the calculation and then compared with the required rate of return to invest.

Analysis of the current state corporations shows that the most frequently used measure of investment efficiency is the internal rate of return, and the second frequency of use - net present value. All other indicators of investment are used much less frequently. It should be noted that both of the above figure is advisable to apply at the same time, as the internal rate of return can be considered as a qualitative measure of the profitability of a unit of invested capital and net present value is an absolute indicator of the extent of the investment project and the resulting income.

In addition to the formal evaluation criteria when deciding whether to finance an investment project are taken into account the various constraints and informal criteria. As the restrictions may make the deadline ROI requirements for environmental protection, safety personnel and others informal criteria may be: a promising entry into the market of products, removal from the market of competing companies, political motivation, etc.

It is this set of indicators contained in the summary of the business plan of the investment project and is used to assess the commercial attractiveness of investment ideas. The basis for calculating performance indicators are the so-called net cash flow (Net Cash-Flow, NCF), which include revenues from sales, operating and investment costs, increase working capital requirements and tax payments.

However, the so-called net flows do not take into account the types of sources. At the same time, you should take into account that the investor is interested in multiple meanings. First, it is payback period. This period is determined by the time required to aggregate net proceeds of the draft

caught up with its expenses. But no investor would agree to part with today's money in favor of the future, far enough revenues if those revenues will only cover the investment. Therefore, in assessing the effectiveness of the project always uses discounted cash flows.

Payback period - the minimum time interval (from the beginning of the project), beyond which the effect becomes an integral and in the future remains nonnegative. In other words, for a real project - this time (measured in months, quarters or years), from which the initial investment and other costs associated with the investment project shall be borne by the combined effect of its implementation and for the security - it is maturity, after which the financial tool does not work.

Results and costs associated with making investments, we can calculate with discounting or without him. Accordingly, you get two different payback period.

Payback period (payback method) - this is one of the most frequently used indicators, especially for preliminary evaluation of the effectiveness of investments. It is defined as the period of time during which the investment will be returned at the expense of the proceeds from the sale of an investment project. More precisely, under a payback period means the duration of the period during which the sum of net revenues, discounted at the time of completion of investment, equal to the amount of investment.

To determine the payback period you can use a formula, which assumes that all investments made at the time of completion. The equation for determining the payback period can be written as:

$$\sum_{t=0}^T \frac{P(t)}{(1+d^*)^t} = KV \quad (4.6)$$

where

KV - total investment costs in the investment project.

Note that in this equation, $t = 0$ corresponds to the time of completion. The magnitude of the interval payback period is determined by the successive summation of the discounted income until the pending receipt of an amount equal to or greater than the investment.

Denote the aggregate income at time m through S_m , then

$$S_m = \sum_{t=0}^m \frac{P(t)}{(1+d)}, \quad (4.7)$$

and, at time m is chosen so that

$$S_m < KV < S_{m+1} \quad (4.7)$$

Then the payback period is approximately equal to

$$h = m + \frac{KV - S_m * (1+d)^{m+1}}{P(m) + 1} \quad (4.8)$$

Obviously, the value of the payback period, in addition to the intensity of revenue generation, is significantly affected by discount rate used by revenue. Naturally, the lowest payback period corresponds to the absence of discounting proceeds monotonically increasing with the increase in interest rates. In practice, there might be cases when the payback period does not exist (or is equal to infinity). In the absence of discounting, this situation occurs only if the payback period is longer than the income from production activities. Discounting revenue payback period may simply not exist (tends to infinity) for certain relations between investment, income and discount rate.

The main disadvantage of the payback period as an indicator of the effectiveness of capital investments is that it does not account for the entire period of operation of production and, consequently, it will not affect revenues to be received outside the payback period. Such a measure, as the payback period should not be used as a criterion for choosing an investment project, but only in the form of restrictions on the decision. This means that if the payback period is greater than some limiting value received, the investment project is excluded from consideration.

Calculation NPV, usually is enough to make decisions on the project. But its importance does not look very revealing, it may be clear that the project is profitable and attractive, but difficult to assess - how attractive. Therefore, NPV is used to help the third standard indicator - the internal rate of return, a value of the discount rate d , in which the NPV becomes equal to 0. Thus, IRR shows a maximum requirement for annual returns on invested money an investor can base their calculations so that the project still looks attractive. Profitability index (benefit-cost ratio), or profitability index (profitability index) investment project, is the ratio of reduced revenues to the directions on the same date, investment costs. Formula of Profitability (R) should be represented as follows:

$$R = \frac{\sum_{t=t_n}^T \frac{P(t)}{(1+d)^t}}{\sum_{t=0}^{t_c} \frac{KV(t)}{(1+d)^t}} \quad (4.9)$$

As can be seen from this formula, it compares the two parts of adjusted net income - the income and investment. If at a certain rate of discount d profitability of the project is equal to unity, this means that these profits are given investment costs and net present value is zero. Consequently, d - an internal rate of return of the project, at a rate of discount is less than IRR, profitability is greater than 1. Thus, the excess over the unit cost of the project means some of his extra yield at the considered rate of interest. The case when the profitability of the project is less than unity, means its inefficiency at a given rate of interest.

So, in terms of classical ideas on the evaluation of investment projects, it is necessary to calculate the three indicators: NPV, PBP, and IRR. In this case the investor must arrange the values of payback and IRR, NPV and the value must be greater than zero. To a large extent, these problems are solved if we switch from the traditional performance to one of the methods used in valuing companies.

As is known, the company's value can be determined either by studying its assets, or by comparing it with other similar companies, either directly by analyzing its income. And the latter approach will be of interest to us as an alternative to NPV of the project. In order to understand the mechanisms for evaluating the company based on revenue, we must imagine that we have launched an investment project which lasts forever, has no time limitations.

Although it seems that the value of an infinite income may also be infinite, in reality it is not. NPV Formula with infinite horizon projection takes the following form:

$$NPV = \sum_{i=1}^{\infty} \frac{NCF}{(1+d)^i} = \frac{NCF}{d} \quad (4.10)$$

The calculation was not only possible, but also significantly. However, here we have one simplification: Assume that the NCF project will be unchanged from year to year. But in reality it will constantly change, at least, due to inflation, and sometimes and faster, due to gradual expansion activities. Therefore, this simplification would be excessive and need to add a record annual revenue growth. And our formula becomes:

$$NPV = \frac{NCF}{d - g} \quad (4.11)$$

where

g - annual growth rate of revenues.

And, finally, the last amendment, as can be easily verified, clean NCF project cash flow is operating profit plus depreciation. Depreciation is not considered a cost of investment projects, since it is not directly related to monetary costs, but reflects the depreciation of property. In short investment projects that were true, but if predict the development of the company on an infinite term, it would be correct, though not in the first year, to take into account regular investment of money in the gradual replacement and maintenance equipment. This means that the amount is close to the depreciation must be taken into account as the cost of the project.

Development of an investment strategy takes into account the possible variation in advance of uncontrollable external factors, the organization of the investment environment and to minimize their negative consequences for the organization. It reflects the comparative advantages of organizations in the investment activity in relation to its competitors.

Availability of investment strategy provides a clear linkage of strategic, operational, and the current investment management organization. It provides a program of organizational behavior in the framework of the most important strategic investment decisions.

The system's investment strategy is formed of core selection criterion estimates of real investment projects and financial investment instruments.

The urgency of developing an investment strategy of the organization by a number of conditions is relevant. Foremost among these conditions is the intensity of external factors change the investment environment. The high dynamics of basic macroeconomic indicators related to investment

activities of organizations, the pace of scientific and technological progress, frequent fluctuations in investment market conditions, the volatility of public investment policies and forms of regulation of investment activities do not allow companies to effectively manage their investments based solely on past experience and traditional methods of financial management. Under these conditions, the lack of developed investment strategies, adapted to possible changes in factors of the investment environment, can lead to the fact that investment decisions of individual structural units of the organization will be multidirectional in nature, lead to tensions and reduce the efficiency of investment activity in general.

One of the conditions that determine the importance of developing an investment strategy of the organization is its forthcoming stage life cycle. Each of the stages of the life cycle of the organization inherent characteristic of her level of investment activity, trends and forms of investment activity, particularly of investment resources. Investment strategies for early investment are developed to adapt the organization's activities for the upcoming opportunities for radical changes in its economic development.

In our view, an essential condition for determining the importance of developing an investment strategy is a radical change in the operating goals of the organization associated with opening new business opportunities. Realization of these goals requires a change in product range, introducing new production technologies, developing new markets, etc. In these conditions, a significant increase in investment activity organization and diversification of its investment activities should be predictable nature, for the development of a well-defined investment strategy.

Thus, the investment attractiveness of the business entity - a set of characteristics that allow investors to assess how a particular object of investment more attractive than others. The result is a challenge to improve the investment attractiveness of the corporation in both the short and long term. In this regard, it is necessary to form a credit strategy, whose main task would be to optimize the investment attractiveness, on the other - a problem of distribution of the resources (investment). In order to assess investment opportunities necessary to investigate creditworthiness, this is a set of characteristics for assessing the investment potential of the corporation. Investment attractiveness and trustworthiness enterprise corporations can be represented as the main components of its financial capacity. Since the volume of investment resources of the subject is restricted, and the potential investment objects have different investment attractiveness, society should optimally allocate their investment resources. This raises the need for an investment strategy of the enterprise. Thus, in aggregate investment strategy and credit strategies constitute the financial strategy of economic agents. In the financial activities of the enterprise, certainly, there are two of the same importance tasks: the task of attracting resources for economic activity and task allocation of the resources (investment). Investment attractiveness and solvency of enterprises can be represented as the main components of financial capacity.

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***SOME THEORETICAL AND PRACTICAL ASPECTS
CONCERNING CONTRAVENTIONS AFFECTING
THE NORMS OF LIVING TOGETHER,
SOCIAL ORDER AND PUBLIC PEACE***

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Abstract: *The article is a study about justice and practical situations related to some contraventions covered by the law no.61/1991.*

The paper makes a critical assessment of the problems encountered in implementing legislation.

In conclusion some proposals for amendments to this law are formulated in this paper.

Keywords: *legislation, contravention, jurisprudence, social order, public peace*

I. General aspects regarding the regulation of the penalizing of contraventions which affect the norms of living together, social order and public peace

1. General considerations

In the field of internal legislation legal provisions concerning contraventions are to be encountered within a large number of governmental laws issued by the Parliament as well as by the central and local government department authorities.

In the contraventional field legislation is not encompassed in a unitary way in a code as is the case with the penal law¹. If contraventional common law is comprised in a single governmental law

¹In Romania, in the field of contraventions there have existed several general regulations. For example, in 1865 the contravention was considered as criminal offence, its definition being achieved by means of penalty, by the formulation "the criminal offence which the law punishes by police prison or fine".

Subsequently, the explanation of contravention by means of punishment was dropped, as there were situations in which some penal punishments were lighter than the contraventional ones.

By the Romanian Penal code from 1936 the principle of criminal liability was adjusted to the principle of legalizing incrimination in the sense that the acts which represented a contravention had to be explicitly provided by the law, by regulation, or by an ordination of the administrative authority.

By Decree nr.184/1954, contraventions were placed outside the penal law field and considered illicit acts which triggered an administrative liability.

There followed, in 1968, Law nr.38, regarding the establishing and the penalizing of contraventions, followed by different governmental laws with a special status which comprise the description of some illicit acts which represent contraventions.

In 2001, the Romanian Government passed Ordinance nr.2, regarding the judicial system of contraventions, published in the Official Journal nr.410 from 25.07.2001, which became the framework norm in the contraventional law field. The new governmental law structured in 6 chapters and 51 articles also included in its content provisions regarding its enforcement as well as the enforcement of special contraventional norms.

(the Government Ordinance nr.2/2001¹ concerning the judicial system of contraventions), the special part of this field does not enjoy a unitary regulation, a variety of governmental laws which penalize contraventions in different fields being present.

The governmental laws with a special status from the Government Ordinance nr.2/2001 can include derogatory procedures regarding the acknowledgement of contraventions, the application and enforcement of civil sanctions which will be applied in a priority and exclusive way for the contraventions stipulated in these law standards.

In specialized literature a distinction is made between the contraventions committed in different fields of activity². A distinction is made between contraventions concerning: traffic on public roads, official secret defence, population record, land record, tax evasion, environment protection, forest protection, water careful management and utilization, labour protection, railway transport, the norms of living together, social order and public peace.

Some of the most frequently committed contraventions are stipulated in Law nr.61/1991³ regarding the penalizing of the acts of breaking some norms of living together, social order and public peace. The governmental law was issued for the ensuring of the climate of social order and public peace necessary for the normal carrying on of economic and socio-cultural activities for the promotion of civilized relationships in daily life.

It can be appreciated that this governmental law stipulates and penalizes contraventions which break the norms of public order having a social character, the committing of social acts not depending, as a rule, on the existence of some special qualities of the delinquent, or on the performance of a function or profession. Sometimes, the active subject of the contravention performs activities of a commercial type. But, these contraventions generally encountered can be grouped depending on the social and moral values which are affected by the committing of the antisocial act. We can distinguish between contraventions which: affect people's honour and dignity as well as the prestige of public institutions; affect public order, good morals and manners; trigger danger related circumstances; prevent the good unfolding of activities of public and socio-economic interest; break norms which protect some categories of persons; break the legal framework of the selling, marketing and consumption of some categories of goods; regard acts of violence, destruction and degradation.

Among the contraventions stipulated in Law nr.61/1991, the highest frequency is to be noticed, according to the activity reports of the community police and gendarmerie, with the contraventions stipulated in:

- art.2 p.(1) from the law – the performance in public of obscene acts and gestures, the uttering of insulting words, of offensive or vulgar phrases;
- art.2 p. (3) – the repeated appealing to the people's mercy by a person who is able to work;
- art. 2 p.(6) – the luring of persons with a view to have sexual intercourse with them in order to gain material benefits;

The administrative governmental laws by which contraventions are established and penalized come into force within 30 days from the publishing date or, depending on the situation, from the date of their public notification according to the law, excepting the case in which a longer term is stipulated in their content.

In urgent cases the coming into force in a shorter term can be stipulated, but not sooner than 10 days from the publishing date. The orders from the local or district government department stipulated in art.1 from G.O. nr.2/2001, by which contraventions are established and penalized, can be notified to the public by posting or by any other form of publicity stipulated by the law only on the basis of the legality notice issued by the prefect.

¹The Government Ordinance nr.2/2001 regarding the judicial system of contraventions was published in the Official Journal nr.410/25.07.200. The provisions of the Government Ordinance nr.2/2001 regarding the judicial policy of contraventions were endorsed by Law nr.180/2002 and modified by the provisions of the Government Ordinance nr.61/2002 regarding the collecting of budget debts (abrogated by G.O. nr.92/2003), the provisions of Law nr.357/2003 for the endorsing of the Governmental Emergency Ordinance nr.194/2002 regarding the policy of foreigners in Romania, the provisions of the Government Ordinance nr.108/2003 for the abolishing of contraventional prison, the provisions of Law nr.526/2004 for the modifying and completing of the Government Ordinance nr.2/2001 regarding the judicial policy of contraventions as well as the provisions of Law nr.293/2009.

²Alexandru Ioan, Carausan Mihaela, Bucur Sorin, Administrative law, II Edition, Lumina Lex Publishing house, Bucharest, 2007, pages 475-480.

³Law nr.61/27.09.1991 was published in the Official Journal, Part I, nr.196/27.09.1991 and republished on the grounds of article II from Law nr.2 from 17 January 2000, in the Official Journal of Romania, I Part, nr.16 from 18 January 2000, the texts being given a new numbering. This governmental law was subsequently modified by Law nr.169/2002, Law nr.265/2004, Law nr.355/2004 and Law nr.234/2008.

- art.2 p.(25) – the consumption of alcoholic drinks in public places;
- art.2 p.(26) – the causing of scandal;
- art.2 p.(28) – the disturbing, without having the right to, of the inhabitants' peace;

The acts stipulated in article 2 of Law nr.61/1991 are contravenitionally penalized, unless they are performed under the conditions in which, according to the penal law, they are considered criminal offences, thus being found, depending on the situation, within the provisions of articles 204, 222, 223, 255, 364-371, 373 from the Penal code or of article 1 from the same administrative act of Parliament.

As this governmental law¹ does not define the notion of contravention, the provisions of the act of Parliament will be completed by the provisions of article 1 of the Government Ordinance nr.2/2001 concerning the judicial policy of contraventions which defines the contravention as “the act committed with guilt, established and penalized as such by the law, by Government decision or by a decision of the local council of the commune, town or municipal town or district of the municipal town of Bucharest, of the district council or of the General Council of the municipal town of Bucharest”.

Even if the existing regulation of the judicial policy of contraventions does not mention in the defining of the contravention the fact that it implies a social danger less serious than the criminal offence, this fact obviously remains valid².

Law nr.61/1991 decrees as representing contraventions directed against the norms of living together, social order and public peace a range of antisocial acts among which some will be dealt with in this study.

2. The national authorities qualified to enforce contravenitional penalties on the basis of Law nr.61/1991 for the penalizing of the acts of breaking some norms of living together, social order and public peace

The above mentioned governmental law does not establish special competences for the enforcement of the law.

In this situation the common norm is enforced, the provisions of art.15 item (3) from the Government Ordinance nr.2/2001 concerning the judicial policy of contraventions being incidental. It stipulates that “the officers and non-commissioned officers from the Ministry of Internal Affairs assess contraventions regarding: the protection of social order; the traffic on public roads; the general rules of trading; the selling, circulation and transportation of food and non-food products, cigarettes and alcoholic drinks; other fields of activity established by law or by Government decision”.

Art.26 item(1) from Law nr.218 from 23 April 2002¹ regarding the organizing and functioning of the Romanian Police stipulates among the attributions of this structure:

¹ I aim to consider the contraventions penalized by Law nr.61/1991 under two aspects: as a **social** phenomenon and as a **judicial** phenomenon.

Regarded upon as a social phenomenon the notion of contravention evolves in the same way as the notion of morality, the declaring of a social act as contravention depending on the appreciation the majority of the members of society give to a certain act.

As a judicial phenomenon the contravention is characterized by its incrimination, by the qualifying of a certain socially dangerous action or inaction as contravention, but also by the establishing by the legislative power or by a certain administrative authority of a penalty for its commitment.

² Unlike Law nr.32/1968, the new act of Parliament does not stipulate in the defining of the contravention the fact that it implies a social danger less serious than the criminal offence, but under a theoretical aspect this thing remains valid.

The social danger of a contravention results from the prejudice that this act has caused or may in an objective way cause to a social value protected by the administrative law norm.

It is necessary for the social danger of a contravention to meet a fundamental condition: to be generated by the committing of the contravention. Thus it is the contravention which carries along social danger, not the delinquent.

The estimation of the abstract social danger of the act and of its committing conditions trigger the legislator's choice between enforcing the penal law or the administrative law policy.

When having to choose the form of liability and the establishing of the degree of social danger of the act the following aspects will be taken into consideration: the manner and the means of its committing; the purpose targeted by the perpetrator; the circumstances in which the act was committed; the consequence which was triggered or may have been triggered; the person and the behaviour of the perpetrator.

- the enforcement of measures regarding the preserving of the social order and public peace as well as of the citizen's safety;
- the assessment of the contraventions and the enforcement of contraventional penalties.

According to art.21 let. 1) and o) from the Emergency Ordinance nr.104 from 27 June 2001, concerning the organizing and functioning of the Romanian Frontier Police, this structure also has the following attributions:

- the assessment of the contraventions and the enforcement of contraventional penalties;
- the ensuring of the preserving of social order and public peace in crossing the state border places, and at the request of other state authorities it takes part in such actions in the localities in the frontier area².

In its turn, the Romanian Gendarmerie³ has, on the basis of⁴ art. 19 from Law nr.550/2004 attributions regarding:

- the ensuring and reestablishing of public order;
- the assessment of contraventions and the enforcement of contraventional penalties.

Community Police also has, according to art.7 from Law nr.371 from 20 September 2004 regarding the establishing, organizing and functioning of the Community Police, attributions concerning⁵:

- the ensuring of social order and public peace in the areas and places established by means of the guard and social order plan;
- the prevention and fighting of the breaking of legal norms regarding the cleanliness of localities and street trading, as well as of other acts established by decisions of the local council;
- the assessment of contraventions and the enforcement of contraventional penalties for the breaking of the legal provisions regarding the disturbing of social order and public peace, the cleanliness of localities, street trading, the protection of the environment, as well as for the acts which affect the social climate, established by the law, decisions of the local council or the mayor's provisions;
- the participation in ensuring the order measures on the occasion of public assemblies, meetings, cultural-artistic and sports demonstrations organized at a local level;
- the intervention, together with the authorized bodies, at the citizens' request, for the settling of conflicting situations, the catching of some perpetrators, the solving of some social cases, the establishing of some notified situations and their solving.

Analysing the attributions of the four public order structures an overlapping of competences in the field of public order contraventions can be noticed.

These authorities often function in the same territorial competence area, thus in the same place policemen, gendarmes and community policemen can operate. Gendarmes and community policemen feel forced to escort the detented person to the police stations in the case in which the assessed antisocial act exceeds the level of mere contraventions.

This situation is to be debated under the aspect of the efficiency of the control upon contraventions, often in the cases of competence concurrence the premise of the non-intervention of any authority being present.

On the other hand, the competence concurrence aims at increasing the public control upon antisocial phenomena.

¹ Law nr. 218 from 23/2002 regarding the organizing and functioning of the Romanian Police was published in the Official Journal nr.305 from 9 May 2002.

² The Emergency Ordinance nr.104 from 27 June 2001, regarding the organizing and functioning of the Romanian Frontier Police was published in the Official Journal Part I, nr.351/2001.

³ <http://www.jandarmeriaromana.ro>

⁴ Law nr.550/2004 regarding the organizing and functioning of the Romanian Gendarmerie was published in the Official Journal nr.1175/2004.

⁵ Law nr.371/2004 regarding the establishing, organizing and functioning of the Community Police was published in the Official Journal nr.878 from 27 September 2004.

II. Contraventions which affect the persons' honour and dignity as well as the prestige of public institutions

1. General aspects

Art.2 p. (1) from Law nr.61 from 1991 penalizes the performing in public of obscene **deeds, acts** or **gestures**, the uttering of **insulting words, offensive** or **vulgar phrases, threats** with violent acts against persons or their goods, in a way to disturb social order and public peace or to trigger the citizens' indignation or to harm their **dignity** and **honour** or that of **public institutions**. The act is penalized by fine from 200-1000 lei.

If the acts are performed on the premises of an educational institution, medical institution or one intended for the special protection of some categories of deprived persons, the applicable penalties are the fines from 1.000 lei to 3.000 lei.

The act of Parliament penalizes the committing of a wide range of acts and deeds which disturb social order and public peace.

On the other hand, the New Penal Code¹ stipulated in art.184 that "the act is considered as committed in public when it was performed: in a place which by its nature or destination is always accessible to the public, even if no person is present; in any other place accessible to the public, if two or more persons are present; in a place inaccessible to the public, but with the purpose of the deed being heard or seen and if this result has occurred in the presence of two or more persons²; in a meeting or reunion of several persons, excepting the reunions that can be considered as having a family character, due to the kind of relationships existing between the participating persons".

When the antisocial act is committed in public by using violence or by seriously affecting the persons' dignity, and the concrete social danger of the act is higher, the administrative penalizing policy will be replaced by the penal one, the provisions of article³ 371 regarding the Disturbance of social order and public peace from the New Penal Code⁴ being incidental.

If the threat aims at the committing of a criminal offence or the inflicting of an injury which has the capacity to alarm and there is the beforehand complaint of the injured person the provisions of article 193 regarding threat from the Penal code⁵ will be enforced. If the threat is directed against a clerk⁶ who is in a position¹ which involves the exercise of the state authority and who carries out job duties, the act will represent the criminal offence of insulting behaviour.

¹ Law nr. 286/2009 regarding the New Penal Code of Romania, was passed on 25 June 2009 and published in the Of. J. nr. 510 from 24 July 2009.

² The committing of a contravention in a personal space is also penalized, but on a freely accessible internet site (hi 5 for example) or from a personal vehicle having the window open.

³ Article 371 from the New Penal Code has the following content: "The act of the person who, in public, by violence inflicted upon persons or goods or by threats or serious harm to the persons' dignity, disturbs the social order and public peace, is punished by prison from 3 months to 2 years or by fine".

⁴ Law nr.286/2009 regarding the New Penal Code was published in the Of. J. nr.510 from 24 July 2009.

⁵ Article 206 from the New Penal Code has the following content: "(1) The act of threatening a person with the committing of a criminal offence or of a deed causing damage directed against the person herself or against another person, is punished by prison from 3 months to one year or by fine, without the possibility of the enforced punishment to exceed the penalty stipulated by the law for the threat that constituted the object of threat. (2) The criminal proceedings are set to work on the making of the beforehand complaint of the injured person".

⁶ In my opinion the notion of clerk must be estimated from the point of view of the provisions of the penal law, the provisions of article 175 from the New Penal Code being applicable in the situation in question, provisions which stipulate that the term "clerk" designates "the person who carries on, permanently or temporarily, attributions which allow him to take decisions, to participate in decision taking or to influence their taking within a judicial person who carries on an activity which cannot represent the object of the private field".

We can also consider as clerk in the sense of the penal law the person who carries on an activity for which she was invested by a public authority and who is subjected to it. Together with these provisions of the penal law there are the provisions of the administrative law regarding the legal defining of the notion of public servant stated in art.2 item (2) of Law nr. 188/1999 regarding the status of public servants (governmental law published in the Official Journal, Part I, nr 600/8.12.1999). The administrative law defines the public servant as "the person appointed in the terms of Law nr. 188/1999 in a public position". We can notice the legislator's express will to exclude from the notional sphere of public servants the state employees who carry on public service, but who are not placed within the provisions of Law nr.188/1999 (a fact which distinguishes the provisions of the administrative law from the penal law).

2. The Jurisprudence of the European Court of Human Rights in the subject matter of art.2 item (1) from Law nr. 61 from 1991

Decision nr.28183/2003 of the European Court of Human Rights, case Anghel against Romania.

By Decision nr.28183/2003, Case Anghel against Romania² passed on 4 October 2007, the European Court of Human Rights noticed that some provisions of the contraventional law encouraged a jurisprudence contrary to the presumption of innocence.

Alleging art.6 from the Convention³, the plaintiff complains about his right to a rightful trial being infringed regarding the carrying out and the result of the procedure related to the challenging of the contraventional minutes from 8 July 2002. He considers that he was placed in an unfavourable position during the procedure compared to the adverse party, to the police from Ramnicu-Valcea respectively, and reproaches especially to the notified jurisdictions that they wrongly handled the proofs and they had preconceived ideas regarding his innocence.

It is also to be noticed that unlike the definitions given to the notion by specialized judicial literature, which are quite ample, the legal definition of the institution of the public servant is much more concise. Relating the legal definition of the institution of the public servant to that of public position, it results that the public servant is the person who in the terms of the Status of public servants, carries on the attributions and the responsibilities established on the grounds of the law, with the purpose of carrying out the prerogatives of the public power by the central and local public administration. By the notion of public servant we understand those categories of public employees, remunerated from the public money, who, by carrying on their activity within the public bodies, institutions and services with the purpose of meeting the general and legitimate interests of the members of the state society, are subjected to the provisions of the Status of public servants and of the special derogatory statuses. This is the legal and restricted meaning of the analysed notion.

But, not only the public servants who are subjected to Law nr.188/1999 carry on activities of public interest and are in the public service. For example, high officials (who are not subjected to this governmental law) aim by their activity at satisfying or meeting public interest.

In the doctrine and in some acts of Parliament the notion of public servant is used in the broadest sense, the notion also including other categories of state employees who use the public authority exercise with the purpose of carrying on public service. By the notion of administrative public servant, the public servants who carry on their activity within public administration authorities and services are meant.

The administrative public servants are not only to be found within the services and authorities that make up the executive power, but also within public administrative services in the field of legislative and judiciary power.

The provisions of the Status of public servants will not apply to: the wage-earning staff from the personal body of the authorities and public institutions who carries on maintenance, repair, protocol, careful management, administrative activities, secretaryship and working for a community activities; to other categories of staff who do not carry on public power prerogatives; to the wage-earning staff appointed on the grounds of personal trust, at the high official's cabinet; to the magistrate body; to the teaching staff; to the persons appointed or chosen in positions of public dignity.

¹ The notion of function which involves the exercise of state authority is broader than that of public function. The public function is defined in art.2 item (1) of Law nr.188/1999 with the subsequent changes as representing "the totality of the attributions and responsibilities, established on the grounds of the law, with the purpose of carrying on the public power prerogatives by the local and central public administration. The sphere of the categories of persons who carry on state authority is broader also including high officials, the military, the magistrates etc.

² The official site of the European Court of Human Rights.

³ Art.6 from the Convention stipulates the following:"(1). Any person is entitled to fair judging (...) carried out by an independent and impartial court (...) which will decide (...) upon the firmness of each accusation in penal terms directed against her. (...). (2). Any person accused of a criminal offence is considered not guilty until her guilt is legally assessed. (3). Any accused person especially has the right: a. to be informed, in the shortest time, in a language she understands and in a detailed manner, upon the sort and cause of the accusation brought against her; b. to enjoy the time and the necessary facilities for the preparation of her defence; c. to defend herself or to be attended by a defender chosen by her (...); d. to ask about and to request for the hearing of the witnesses of the accusation and to obtain the calling and hearing of the witnesses of the defence under the same conditions as the witnesses of the accusation; (...)".

Alleging, in essence, art.3 from the Convention, the plaintiff complains about the ill treatments inflicted upon him by a policeman from Ramnicu-Valcea on 3 July 2002 as well as about the impossibility of demonstrating the criminal liability of the author of the presumed ill treatments.

Actually, the plaintiff had a verbal argument with a policeman, being subsequently accused of having insulted him, and therefore having been contravenitionally penalized on the grounds of Law nr.61/1991 for the disturbance of public peace. Within a few days after the incident the plaintiff was notified about a contravenitional minutes by which a contravenitional fine of 200 lei was settled.

The contestation he formulated against the contravenitional minutes was rejected, chiefly because the plaintiff did not demonstrate that he had not insulted the civil servant in question.

The European Court of Human Rights firstly noticed that, taking into consideration the sort of act the plaintiff was accused of as well as the fact that the penalty for that contravention could also have been, at that moment, a denying freedom one¹, the plaintiff was accused in penal terms, thus art.6 from the Convention being applicable.

Basically, the European Court of Human Rights considered that the Romanian procedural system in contravenitional terms, having at its basis principles of civil procedure which compel the person who starts a judicial proceeding to demonstrate the truthfulness of her statements, is contrary to the presumption of innocence. The Court considered that the presumption of legality and truth of the contravenitional minutes is a presumption lacking reasonableness, placing a penal law accused person in a too unfavourable situation.

Consequently, it was decided that art.6 from the Convention, regarding the presumption of innocence, was infringed.

3.The Jurisprudence of the Constitutional Court in the subject matter of art.2 item (1) from Law nr.61 from 1991

3.1 Decision nr.568/14/04/2009 of the Constitutional Court regarding the disallowance of the plea of the unconstitutionality of the provisions of art.2 p.1 from Law nr.61/1991 for the penalizing of the acts of breaking some norms of living together, social order and public peace, of art.1 and art.34 from the Government Ordinance nr.2/2001 regarding the judicial policy of contraventions.

By the Ruling from 14 November 2008, stated in Record nr.7.246/245/2008, Iasi Law Court – Civil Section notified the Constitutional Court with the plea of unconstitutionality of the provisions of art.2 p.1 from Law nr.61/1991, a plea raised by Corneliu Caileanu in the case which has as purpose the judging of a contravenitional complaint formulated by the plea's author.

In the reasoning of the unconstitutionality plea it is stated that art.2 p.1 from Law nr 61/1991 infringes the provisions of art21 from the Constitution by the vagueness of the acts of Parliament.

The unconstitutionality plea preeminently takes into account art. 21 (The free access to justice) item (3) from the fundamental law which stipulates that “the parties are entitled to a fair trial and to the solving of their cases within a reasonable term”.

The unconstitutionality plea's author shows that the criticized legal provisions use **terms which are not defined in the civil legislation** which allow the persons' abusing penalizing².

¹ By Law nr.82 from 18 May 1999 (governmental law published in the Official Journal nr. 228/21 May 1999) the denying freedom penalty of the contravenitional prison is replaced, with the plaintiff's consent, by the penalty of forcing him to perform some activities in the community service (See art.1 from Law nr.82 from 18 May 1999).

The provisions regarding the contravenitional prison included in G.O. nr.2/2001 obviously became unconstitutional after the coming into operation of the constitutional changes from 2003. In item (13) of art.23 of the revised Constitution it is stipulated that “the denying freedom penalty can only be of a penal kind”.

There results the unconstitutionality of the legal provisions which regulated the contravenitional-administrative prison. The penalty of forcing the delinquent to perform an activity in the community service does not trigger a real denying of freedom upon the person.

From the constitutional text it results that the prison punishment will only be enforced for the committing of criminal offences and under no circumstances for the committing of a contravention or deviation from the military regulations. (See Giurgiu Liviu, Zaharie Christian Giuseppe, Administrative law, IX Edition, Prouniversitaria Publishing house, Bucharest, 2009, pages 557-558).

² Decision number 568/14/04/2009 of the Constitutional Court regarding the rejection of the unconstitutionality plea of the provisions of art.2 p.1 from Law nr.61/1991 for the penalizing of the acts of breaking some norms of

Examining the unconstitutionality plea regarding the provisions of art.2 p.1 from Law nr. 61/1991, the Court decides that it is unfounded, underlining, in essence, that the legal provisions apply to all the persons mentioned in the assumption of the norm and **do not affect in any way the right to a fair trial**, acknowledged by art.6 from the Convention for the defending of human rights and of the fundamental liberties as well as by art.10 from the Universal Declaration of Human Rights, as it does not settle a measure meant **to infringe the right of any person to be listened to in a fair and public way by an independent and impartial trial court** which will decide upon her rights. Moreover, art.9 from Law nr.61/1991 explicitly stipulates the right to set forth a complaint against the assessing contravention minutes at the trial court.

I personally consider the unconstitutionality plea as unfounded. Even if the civil law does not define certain terms, reference can be made to the provisions of the penal law. This fact does not infringe the person's constitutional right to a fair trial.

3.2 Decision nr. 750/24 from June 2008 of the Constitutional Court regarding the rejection of the unconstitutionality plea of the provisions of art.16 item (1) and art. 19 item (1) from the Government Ordinance nr.2/2001 regarding the judicial policy of contraventions and art.2 p.1 from Law nr. 61/1991 for the penalizing of the acts of breaking some norms of living together, social order and public peace.

The Constitutional Court also passed a similar decision in the case of the unconstitutionality plea with the same purpose raised by Maria Igiescu in Record nr.1.052/300/2008 of District 2 Bucharest Law Court – the Civil section¹.

Given the facts, the acts stipulated in art.2 p.1 are not acts against the persons, but against the **norms of living together, social order and public peace**. In our law system, the acts mentioned in the criticized text represent contraventions if, being performed in public, have the ability to trigger any of the consequences stipulated by the law.

The existence of an incrimination which is not allowed by the fundamental law could be retained only in the situation in which the legislator would not take into consideration the prohibited criteria, the way they are stipulated in art.53 from the Constitution. Or, on the contrary, in accordance with the constitutional provisions of art.57, according to which “Romanian citizens, foreign citizens and the stateless persons must exercise their constitutional rights and liberties in good faith, without infringing the other persons’ rights and liberties”, and in accordance with the provisions of art. 73 item (3) let.h) from the fundamental law, according to which the Parliament regulates, by organic law, aspects regarding criminal offences, punishments and the policy of their serving, the incrimination of some antisocial acts was initiated, acts which can affect public peace and can endanger citizens’ life.

3.3. Decision nr.74 from 7 March 2002 of the Constitutional Court regarding the unconstitutionality plea of the provisions of art.2 p.1) from Law nr.61/1991 for the penalizing of the acts of breaking some norms of living together, social order and public peace.

Another unconstitutionality plea was submitted to the debate of the Constitutional Court by the Ruling of 30 November 2001, pronounced in Record nr. 5.269/2001 by Brasov Trial Court. The plea was raised by Ion Cojocaru in the appeal declared by him against a civil sentence by which his complaint formulated against a contraventional minutes drawn up by the Police of the Municipal town of Brasov was rejected.

In the reasoning of the unconstitutionality plea the author claims that the criticized legal provisions infringe the provisions of art. 30 items (6) and (7) from the Constitution. The plea's author considers that the syntagm “or the public institutions” included in the text of art.2 p.1) from Law nr.61/1991 is inconsistent with the constitutional provisions of art.30 item (6), which establish that “The freedom of speech cannot bring prejudice to the persons’ dignity, honour, private life or to the right to one’s own image”, and the provisions of art. 30 item (7), by which “the defamation of the

living together, social order and public peace of art.1 and art. 34 from the Government Ordinance nr.2/2001 regarding the judicial policy of contraventions, published in the Official Journal nr. 351 from 26/05/2009.

¹ Decision nr.750/24 June 2008 of the Constitutional Court regarding the rejection of the unconstitutionality plea of the provisions of art. 16 item (1) and art.19 item (1) from the Government Ordinance nr.2/2001 regarding the judicial policy of contraventions and art.2 p.1 from Law nr.61/1991 for the penalizing of the acts of breaking some norms of living together, social order and public peace published in the Official Journal nr.577/2008.

country and the defamation of the nation are forbidden by the law”. Or, the plea’s author points out, honour and dignity are traits specific to private persons, and not to public institutions, and the including in the field of contraventions of acts regarding the harming of the dignity and honour of public institutions would be inconsistent with the provisions of the Constitution.

The Court retains that although the text contains some drafting imprecisions, when it refers to the possibility that the mentioned blameworthy manifestations might harm the dignity of the public institutions, it cannot be claimed that the provision of the law could be unconstitutional.

Therefore, although item (6) of art.30 from the Constitution takes into account the limits of the exercising of the freedom of speech – this being unable to bring prejudice, among other supreme values of the rule of law, to the person’s right to her own image –, the mentioned constitutional text has, corroborated with other constitutional provisions, the effect of consecrating a constitutional right with an independent identity and thus with applicability in a more extended field.

This constitutional text is in full accord with the provisions of art.10 p.2 from the Convention for the defending of the human rights and fundamental liberties, according to which “The exercising of these liberties which require obligations and responsibilities can be submitted to some formalities, conditions, restrictions or penalties stipulated by the law, which represent necessary measures, in a democratic society, for national security, territorial integrity or public safety, the protection of social order and the prevention of criminal offences, the protection of health or of morality, the protection of reputation or of somebody else’s rights, to prevent the divulging of confidential information or to guarantee the authority and impartiality of the judiciary power”.

Social order and public peace involve the decent and respectful attitude towards public institutions, and the arguments which the plea’s author was trying to impose by alleging the provisions of art.30 item (6) from the Constitution, namely that such antisocial manifestations could be permitted in connection to public institutions, cannot be accepted.

According to the provisions of art.54 from the Constitution “Romanian citizens, foreign citizens and the stateless persons must exercise their constitutional rights and liberties in good faith, without infringing the other persons’ rights and liberties”. Thus, social order and public peace must be observed by each and every person with the purpose of enabling the normal carrying on of the activities of public authorities and institutions namely in order for these to ensure the observance of the fundamental rights and liberties consecrated by the Constitution.

It is obvious that by committing the act stipulated in art.2, p.1) from Law nr.61/1991, republished, against a public institution, the proper working of this institution is disturbed, which can indirectly affect the other citizens’ constitutional rights and liberties.

In the same way in which the feeling of honour and dignity is characteristic of the private person, we can talk about the fame and good name of a public institution or authority, attributes which the law protects by contraventional penalizing of the acts stipulated in art.2 p.1) from Law nr.61/1991, republished. Although they are not mentioned among the values enumerated at art.30 from the Constitution, it does not mean that their infringement is allowed.

Consequently the syntagm “the dignity and honour of public institutions” does not come into contradiction with the constitutional provisions, as it subscribes itself to the applicability sphere of items (6) and (7) of art.30 from the Constitution which consecrates the limits of the freedom of speech¹.

I personally consider that the legal formulation “the dignity and honour of public institutions” is **inappropriate, but this does not give the act of Parliament an unconstitutional character**. The fact that public institutions have dignity or honour is doubtful, but this issue has no connection with the provisions of art.30 items (6) and (7) from the Constitution, regarding the private persons’ rights and liberties.

The provisions of art.30 items (6) and (7) from the Constitution cannot be interpreted in the same sense that they would allow the breaking of social order and the affecting of the working of a public institution by the abusive exercising of the right to the freedom of speech.

I consider that in a more appropriate formulation the phrase “**the prestige of public institutions**” could be used.

¹ Decision nr.74 from 7 March 2002 of the Constitutional Court regarding the unconstitutionality plea of the provisions of art.2 p. 1) from Law nr 61/1991 for the penalizing of the acts of breaking some norms of living together, social order and public peace, published in the Official Journal nr.283 from 26/04/2002.

In conclusion, de lege ferenda, I suggest the alteration of article 2 item (1) from Law nr.61 from 1991 in the sense of penalizing the performing in public of obscene deeds, acts or gestures, the uttering of insulting words, offensive or vulgar phrases, threats with violent acts against the persons or their goods, of a nature to disturb social order and public peace or to trigger the citizens' indignation or to harm their dignity or honour or the prestige of public institutions.

III. Contraventions regarding prostitution

Law nr.61 from 1991 stipulates several contraventions regarding prostitution:

Art.2 p.6 from¹ Law nr.61 from 1991 penalizes the **luring** of persons, under any form, performed in pubs, parks, on streets or in other public places with the purpose of having sexual intercourse **with them** in order to gain material benefits, as well as **the urging** and **the determining** of a person to commit such acts, with the same purpose.

The purpose of the act of Parliament is represented by the fighting of the acts of luring clients with a view to practice prostitution. The luring act cannot be performed by any person but only by the person who practices prostitution. In the incrimination of the administrative law it is not necessary for the sexual intercourse committed with the purpose of gaining material benefits to occur.

The person who **urges** or **determines** the luring of persons with a view to the performing of sexual intercourse with them in order to gain material benefits is contravenitionally held responsible.

But, article 211 from the Penal code in item (1) penalizes the **determining** (...) to practice prostitution in a more severe way by prison punishment and the forbidding of exercising some rights².

By the practicing of prostitution we understand "the performing of sexual intercourse with different persons in order to gain patrimonial benefits for oneself or for somebody"³.

Prostitution represents a form of social parasitism⁴, in which the contempt for work combines with an immoral lifestyle⁵.

The penal law thus establishes that the **determining** for the practicing of prostitution represents a **criminal offence**.

From the analysis of the administrative legal text it results that the determining for the practicing of sexual intercourse in order to gain material benefits represents a **contravention** penalized by fine.

This fact represents a double regulation which may cause **confusion**.

The acts of **determining, facilitating, urging** and **constraining** with a view to gain patrimonial benefits must be strictly found within the provisions of the **penal law** because the perpetrator, as a rule, gains unfair material benefits as a result of the activity performed by the prostitute.

In conclusion, we suggest the elimination from the contents of art.2 p.6 from Law nr. 61 from 1991 of the methods of the determining of a person to perform acts of prostitution, because the enforcement of the contraventional penalty for this act would make the punishment be insufficient for the discouraging of their performing. We consider that the act must be punished in terms of a criminal offence.

On the other hand, the acceptance and tolerance of the method of luring (persons with a view to perform sexual intercourse with them in order to gain material benefits), as well as the acceptance

¹ At p.7 of the same article it is stipulated that the acceptance and tolerance of the act of luring persons with the purpose of having sexual intercourse with them in order to gain material benefits are also penalized, as well as the acceptance or tolerance of the urging or determining, with the same purpose, of a person to commit such acts, in hotels, motels, campsites, bars, restaurants, clubs, pensions, discos and their annexes by the owners or administrators or heads of the places in question.

² Art.213 The Procurement from the New Penal Code stipulates in items (1) and (2) that "the determining or the facilitating of the performing of prostitution or of the gaining of patrimonial benefits as a result of the practicing of prostitution by one or more persons is punished by prison from 2 to 7 years and by forbidding the exercising of certain rights. In the case in which the determining of the initiation or the carrying on of the performing of prostitution was achieved by constraint, the punishment is prison from 3 to 10 years and the forbidding of the exercising of some rights.

³ Art.213 item (4) from the New Penal Code.

⁴ Gheorghe Nistoreanu, Vasile Dobrinou, Alexandru Boroi, Ilie Pascu, Ioan Molnar, Valerica Lazar, Penal Law – Special Part, Continent XXI Publishing House, Bucharest, 1996.

⁵ Ilie Badescu, The Sociology of Prostitution, on-line article.

or tolerance of urging or determining, (with the same purpose, of a person to perform such acts, in hotels, motels, campsites, bars, restaurants, clubs, pensions, discos or their annexes by the owners, administrators or the heads of the places in question) can still remain within the provisions of the administrative law because it involves the “in omitendo” guilt, that is a less serious form of guilt.

Another problem was represented by **the difficulty of the enforcement** of the contraventional fine penalties in the case of the contraventions stipulated by Law nr.61 from 1991 in general and by art.2 p.6 of this governmental law in particular.

In this case, as the provisions of Law nr.61 from 1991 are very concise under the analysed aspect, we make reference to the supplementary norms included in art. 25-29 from the Government Ordinance nr.2 from 2001. Concisely rendered, the procedure is as follows:

If the delinquent was penalized with a fine, as well as if he was forced to pay some damages, at the same time with the minutes he will be informed about **the payment notice**. In the payment notice mention will be made regarding the compulsion of paying the fine and, depending on the situation, the damages, within 15 days from the notice¹.

If the assessing inspector also enforces the penalty, and the delinquent is present at the concluding of the minutes, its copy and the payment notice will be handed to the delinquent, mention of this being made in the minutes. The delinquent will give his signature of acknowledgement. In the case in which the delinquent is not present or, although present, he refuses to sign the minutes, the informing about it as well as about the payment notice will be performed by the assessing agent within no more than a month from the concluding date.

The informing about the minutes and the payment notice is done by post, with receiving notice, or by posting at the dwelling place or headquarters of the delinquent. The delinquent can pay off on the spot or half of the minimum of the fine stipulated in the governmental law within no more than 48 hours from the date of the concluding of the minutes, the assessing agent mentioning this possibility in the minutes. The payment of the fine is made at the Deposit Bank or at the public finances Exchequer, and a copy of the receipt is handed by the delinquent to the assessing agent or is sent by post to the body he belongs to².

According to Law nr 293/2009³ for the modifying of the Government Ordinance nr.2/2009 regarding the judicial policy of contraventions, “in the case in which the delinquent does not pay off⁴ the fine (...), the court initiates the replacement of the fine with the penalty of enforcing the practicing of an activity in the community service”.

In the old regulation, G.O. nr.2/2001 stipulated that the court can replace the fine with the practicing of an activity in the community service, only with the delinquent’s **consent**. Thus, the court can force the delinquent to practice an activity in the community service for a maximum of 50 hours, and in the case of infants starting with the age of 16, for a maximum of 25 hours.

¹ Art. 25 item (3) from the Government Ordinance nr.2 from 2001.

² Art. 28 from the same act of Parliament.

³ Law nr.293/2009 for the modifying of the Government Ordinance nr.2/2009 regarding the judicial policy of contraventions was published in the Official Journal of Romania, Part I, Nr.645, from 1 October 2009.

⁴ In the previous regulation of the Government Ordinance nr.21/2009 regarding the judicial policy of contraventions in the situation in which the female delinquent did not pay off the fine she followed the procedure of forced execution performed by the tax authority. As a rule, she did not have taxable incomes and did not own goods which could be sued for the recovering of the debits.

By way of example, we can mention the case of three female delinquents living in Drobeta-Turnu-Severin, who owe to the local budget, for the fines received from the bodies of public order, the sum of 225.910 lei. Only for one of the three, the Severin Direction of Local Duties and Taxes received 346 contraventional records of proceeding, with a total value of 179.000 lei. Despite the efforts made by the tax inspectors it was impossible to recover any money.

The representatives of the Direction of Local Duties and Taxes from Drobeta-Turnu-Severin claim that it is very difficult for these sums to be recovered, taking into account that the female delinquents do not own properties and do not have incomes which could be liable to executions.

In addition, the tax authorities spent money on correspondence, but each and every time the summons were returned from that particular address, as the prostitutes did not live at the address mentioned in the identity card. Moreover, the new Penal Code no longer penalizes prostitution acts.

Unlike its previous regulation, the contraventional law does not condition the enforcement of the penalty by the actual performing of sexual intercourse, but only by the existence of the intention.

Law nr.294/2009¹ also modifies the Government Ordinance nr. 55/2002 regarding the judicial policy of the penalty concerning the practicing of an activity in the community service in the same direction, namely the elimination of the delinquent's consent. Law nr.234/2009 repeals the provision according to which "the penalty of the exercising of an activity in the community service can be enforced only if the delinquent's **consent** exists".

The law also stipulates that the court will enforce "the penalty of the performing of an activity in the community service, if it considers that the enforcing of the contraventional fine is not enough or the delinquent does not have the financial and material means for its payment".

In addition, the court will establish the kind of activities that will be performed in the community service, on the basis of the data communicated by the mayor of the locality which is the delinquent's dwelling place or residence, taking into account his physical and mental abilities as well as the level of his professional preparation.

We consider as beneficial the legislative modifications enforced in order to avoid the accumulation of unpaid debts towards the inland revenue by the delinquents who are bad payers.

IV. The Conventions which break the legal setting of the selling, marketing and consumption of alcoholic drinks

Law nr.61 from 1991 penalizes several legal acts concerning the selling, marketing and consumption of alcoholic drinks. Among these,² two are most frequently encountered:

1. The consumption of alcoholic drinks in the following public places: public roads, parks, stadiums and sportsgrounds, cultural institutions, auditoriums, economic institutions or centres, all public means of transport, motor coach stations, railway stations as well as state and private airports, or other places stipulated by the law. On the premises of these public places alcoholic drinks can be consumed by the delimitation of some spaces especially arranged for the consumption of alcoholic drinks, upon the decision of the owners of those particular public places;

The provisions of p.23 of article 2 from Law nr.61 from 1991 are related to those of p.25. This is one of the most frequently committed contravention in Romania.

2. The selling, marketing and consumption of alcoholic drinks at the yard entrance, on the premises, on the pavements and driveways of public places such as: hospitals and other medical centres, infant placement centres, centres and institutions of education and instruction, religious dwellings and religious institutions adherent to cults which forbid the consumption of alcoholic drinks in the practicing of their particular religion.

An exception is represented by the touristic and public nutrition places, such as: restaurants, bars and discos. In the above mentioned public places the consumption of alcoholic drinks by persons who have not turned 18 is totally forbidden.

The provisions included at p.23 and 25 of art. 2 from Law nr.61 from 1991 are part of a set of normative regulations³ which protect good social morals and manners as well as the raising and

¹ Law nr.294/2009 for the modifying of the Government Ordinance nr.55/2002 regarding the judicial policy of the penalizing of the practicing of an activity in the community service was published in the Official Journal, Part I, nr.645 from 1 October 2009.

² The other acts penalized by the law which break the legal setting of the selling, marketing and consumption of alcoholic drinks are:

- the consumer's refusal to leave the public premises on which alcoholic drinks are consumed, after the closing time or at the justified request of an employee of the premises;
- the consumer's serving with alcoholic drinks inside and outside the public premises, on days and at hours when, according to the legal provisions, they are closed or when the selling of alcoholic drinks is forbidden or after the closing time settled by the running permit;
- the serving, in the very proximity, of alcoholic drinks inside and outside public premises during the carrying on of public assemblies, strikes, sports manifestations or other such public meetings, as well as the consumption of alcoholic drinks under such circumstances by participants;
- the serving of alcoholic drinks, in public places, to the consumers who are in an obvious state of intoxication, as well as to infants.

³ In this setting we also include points 20-25 of article 2 of Law nr.61/1991 for the penalizing of the acts of breaking some norms of living together, social order and public peace.

educating of infants in a public place protected against negative examples as well as possible. To this we can add the fact that alcohol is an encouraging factor for the committing of antisocial acts including contraventions¹ and criminal offences.

The Romanian legislator, by forbidding the consumption of alcoholic drinks in public places (unarranged and unauthorized), does not make the distinction between the types of drinks consumed.

Beer home producers have been trying for quite a while to convince the authorities that beer does not belong to the category of alcoholic drinks harmful to the body and, moreover, that in fact it is an aliment. Because of this, they consider that beer should be treated differently from distilled drinks.

At an international level the Nisa Commitment², which Romania also adopted, is applied; it regulates the beer product in “Class 32” alongside with “soda and mineral water and other non-alcoholic drinks”.

According to the regulation of EEC 1576/89³, in Europe the used term is that of “spirits drink”, and not of alcoholic drink, and it is applied to “distilled drinks and drinks made of alcohol”, beer not being included in this group⁴.

According to a study⁵ from 2003, financed by the Management of Beer Industry from Romania, “beer represents a mixture of the main nutritive elements (sugars proteins, vitamins, minerals etc) having a low alcohol quantity and high nutritional value (14 kilocalories per 100 grams)”. The same study shows that beer contains, on average, 1.200 milligrams of mineral elements per litre and “it is an excellent source of vitamins, especially B vitamins (B1, B2, B6, B12) and folic acid⁶”.

But some normative acts such as Order nr.233 from 08.04.2004 of the Ministry of Agriculture, Forests and Rural Development for the approval of the norms regarding the specificity certificates for agricultural and food products⁷ classify beer as food product.

The community and internal regulation regard the commercial policy, but they can complete the provisions of Law nr.61 from 1991.

But the contraventional law does not focus only on the protection of the society members against the disapprobative behaviour of the consumers of alcoholic drinks, but also against the negative example offered by the consumption of alcoholic drinks in a public place.

The selling of alcoholic drinks should not be permitted – although at present it is authorized by the local councils – in the arranged places which allow the viewing of the consumers by passers-by either.

In this case, the society members are partially protected against the behaviour specific to customers, but the socially harmful effect upon infants generated by the viewing of the act of consumption does not disappear.

Another example is Decision nr.36/2003 of the National Board of the Audio-Visual regarding the forbidding of the broadcasting of any form of advertising for distilled alcoholic drinks between 6am-10pm.

¹ As an example, the public peace patrol of Baia Mare Gendarmerie, being on duty, on Friday 16 October 2009, Mara Park area, from Baia Mare, found several persons consuming alcoholic drinks on the premises of the park, the persons obviously not being in a place destined to this particular purpose. The patrol was informed about this by a citizen who was passing through the park. The delinquents were identified as being: V.Severian, age 36, L.Florin, age 37 and L.Lavinia, age 25, all of them jobless, having their dwelling place in Gârboiu, Sălaj district and being penalized with a contraventional fine of 100 lei each of them for infringing p.25 of art.2 from Law nr.61 from 1991. The delinquents have also been penalized on the grounds of the same law for generating scandal.

² The Nisa Commitment regarding the international classification of products and services with a view to brand registration from 15 June 1957, revised at Stockholm on 14 July 1967 and at Geneva on 13 May 1977 and modified on 2 October 1979, published on www.osim.ro/legis/marci/nisa.htm.

³ The Regulation of the EEC Board nr.1576/89 from 29 May 1989 regarding the setting of the general rules concerning the defining, nomination and presentation of spirits drinks published on eur-lex.europa.eu.site.

⁴ The situation is also similar in the case of the Board Directive 79/112/EEC from 18 December 1978 regarding the legislative bringing together of member states concerning the labelling and presentation of food products, as well as the advertising they receive, modified by Directive 86/197/EEC published on eur-lex.europa.eu.site.

⁵ Published in the National Courier from 22 ay 2003.

⁶ See Alexe Gabriela, Tudorica Ionut, article “Beer, a food product”, in the National Courier from 22 May 2003.

⁷ Order nr.233 from 08.04.2004 of the Ministry of Agriculture, Forests and Rural Development for the approval of the norms regarding the specificity certificates for agricultural and food products is published on the ministry site www.madr.ro/pages/152/55. See p.1 of Annex nr.2 of the Order.

From the careful analysis and corroboration of the two points (23 and 25) of art.2 of Law nr.61 from 1991 there results the forbidding of the **consumption** of alcoholic drinks in public places, in parks, stadiums and sportsgrounds, cultural institutions, auditoriums, economic institutions or centres, all public means of transport, motor coach stations, railway stations as well as state and private airports, at the yard entrance, on the premises, on the pavements and driveways of: hospitals and other medical centres, infant placement centres, centres and institutions of education and instruction, religious dwellings and religious institutions adherent to cults which forbid the consumption of alcoholic drinks in the practicing of their particular religion or in other places stipulated by the law.

On the other hand, their **selling and marketing** are forbidden only at the yard entrance, on the premises, on the pavements and driveways of: hospitals and other medical centres, infant placement centres, centres and institutions of education and instruction, religious dwellings and religious institutions adherent to cults which forbid the consumption of alcoholic drinks in the practicing of their particular religion.

We ask ourselves the question, isn't it normal to penalize the selling of alcoholic drinks as well in the places in which their consumption is penalized?

The term of selling involves an activity which is broader than that of marketing. The marketing only involves the selling of alcoholic drinks together with their packing material with a view to get profit. The selling also involves other actions such as: the opening of the bottle cap, the offering of glasses, the pouring of the alcoholic drinks into them.

The trader who performs the opening of alcoholic drinks in a public place in which the consumption of alcoholic drinks is forbidden is aware of the fact that their opening will be followed by their consumption.

That is why **we recommend the forbidding and penalizing of the opening of alcoholic drinks in all the places in which their consumption is as well forbidden.**

We do not share the same opinion regarding the penalizing of the marketing. The issue of only marketing the alcoholic drinks without also opening them involves several aspects. Generally speaking, the public place selling of alcoholic drinks meant for home consumption or for any other private place consumption cannot be forbidden. The freedom of commerce would be infringed, as well as the citizens' rights and liberties. The trader could not possibly know - especially when it comes to can or pet bottled drinks - if the consumption will be performed in a place authorized or unauthorized by the law.

In conclusion we recommend the forbidding of alcoholic drinks in public places, in parks, stadiums and sportsgrounds, cultural institutions, auditoriums, economic institutions or centres, all public means of transport, motor coach stations, railway stations as well as state and private airports, at the yard entrance, on the premises, on the pavements and driveways of: hospitals and other medical centres, infant placement centres, centres and institutions of education and instruction, religious dwellings and religious institutions adherent to cults which forbid the consumption of alcoholic drinks in the practicing of their particular religion or in other places stipulated by the law.

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*** Decision no.750 from 24 June 2008 of the Constitutional Court regarding the rejection of the unconstitutionality plea of the provisions of art.16 item (1) and art. 19 item (1) from the Government Ordinance no.2/2001 regarding the judicial policy of contraventions and art.2 p.1 from Law no. 61/1991 for the penalizing of the acts of breaking some norms of living together, social order and public peace.

*** Decision no.74 from 7 March 2002 of the Constitutional Court regarding the unconstitutionality plea of the provisions of art.2 p.1) from Law no.61/1991 for the penalizing of the acts of breaking some norms of living together, social order and public peace.

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CONSIDERATIONS ON RESEARCH METHODOLOGY IN BUSINESS COMMUNICATION

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Abstract: *Business Communication is essentially a phenomenon, a process, an art and a science needed actants and is omnipresent in a society where competition is increasingly fierce. Therefore, business communication can be studied from the perspective of economic development, environment, culture national history axiologiei, ethics and psychology. Also, a relevant research co m unicării business requires a systemic approach and its behavior.*

Whatever the subject of communication in business and approached the point of view, using the structural-functionalist paradigm in the definition and communication analysis, but also procedural and semiotic models, the study of communication, sociological research methods are absolutely necessary. Way, business communication research can be used effectively, at least, the method of observation, investigation method, experimental methods, biographical method and method Call blindness, because communication is primarily a social phenomenon. Representing a content analysis of forms ized observation often useful research methodology in business communication.

Keywords: *research methods, business communication, communication model, observation, content analysis*

Introduction

Today the world is conquered by the communication. Hence the major consequence of knowledge-based economy: *the tyranny of communication*. People are forced to communicate in order to survive and to thrive. The emergence of modern communications requires the individuals to adapt to new demands of communication. Today a professional communicator must know how to use modern communication techniques and technologies as oratory without video and audio means is losing its effectiveness.

So, I present, exists many reasons studying **communication** which justify the growing interest of theorists and managers for this issue today in vogue. Proof is the multitude of editorial that are centered on or refer to the concept of communication. In a dynamic environment, marked by profound changes generated by the current global crisis, people hardly found appropriate action to adapt at changes. In this sense, individuals have three main options on trying to master the uncertainty environment and its potential impact: adapting elements of the environment, trying to influence positive character of the existing environment and change in scope of activity. But all these options cannot be successfully completed if people do not take in account communication and community skills. The one that helps people to identify changes, enabling them to adapt to the environment is communication.

In knowledge-based economy, global communication seems to direct the contemporary models of social development, while communicative behavior has gain universal facets, being inappropriate used to explain organizational and institutional deficits area. In this context, communication is essentially a phenomenon, a process required, an art and a science needed for a company, regardless of how privileged manifestation of the interaction between business and the environment.

In the changes that marks global economic crisis, in the need for survival or ensure high performance, enterprise considers communication as a major component of the managerial process.

This and that business development is driven by effective communication. In this respect, communication provides scientific support in theory and practical to provide a high efficiency by undertaking activities, by generating a communications culture in which all organizational members have market awareness, product and company.

Communication within the enterprise can be considered from two different perspectives: from culturally and strategically. So are relevant organizational issues regarding strategic communication and cultural differences.

Regardless of what approach should be taken into account in business, communication must be studied to identify patterns of positive communication, effective communication behaviors, disruptive elements in the communication process, types of influence in the communication features of their speech (sonority, flow, intonation, vocabulary, structure, suitability at content), elements of nonverbal communication (gestures, mimes, posture, look, distance), communicative context, difficulties and constraints in the communicational process, etc. Since communication is primarily a social phenomenon, studying social reality can be done in several ways: empirical sociological research, sociological research field, concrete sociological research, sociological inquiry, investigation and sociological survey.

1. Perspectives approach to business communication research.

The concept of communication has several meanings, as it was developed by a number of quite different sciences, such as philosophy, history, geography, psychology, sociology, ethnology, economics, political science, biology, linguistics, cybernetics, cognitive science, ethology, etc. Therefore, communication is different for a biologist, that stabled by an informatician or an economist. Thus, each *field of knowledge has definitions that emphasize one side or another of the term communication: case, exchange, transfer, transport, energy, information*, etc. Apparent contradiction between the various definitions of the concept that there is now due to the fact that most of these definitions are developed, as already mentioned, in the light and for a given area and, as such, each definition is reported to an own system of that domain.

Therefore, communication could be the main object of divers Sciences: anthropology, sociology, psychology, history, linguistics, economics, biology, chemistry, engineering, etc. From the perspective of those sciences, communication can be analyzed starting from multiple angles of view: the elements of communication, communication characteristics, communication process components, analysis of communication systems, etc.

Regarding *an object of study of communication*, it can be given by:

- *Components and communication concepts;*
- *Influence factors of communication;*
- *Comparison of communication processes in different environments;*
- *Comparison between forms and processes of communication in the same field of activity and that in different areas;*
- *Highlighting differences and similarities between different communication processes;*
- *Ways to facilitate the transfer of communication forms and processes to increase efficiency of firms.*

Due to the complexity of the concept, research is a deeply interdisciplinary communication, without that, adapting uniform methodological perspectives to be qualified in such a way as to put into question the principle of disciplinarity. This makes that the *use of research methods and techniques of communication through interdisciplinary teams* (philosophers, sociologists, psychologists, ethnologists, linguists) and intra-disciplinarity (socio-demographic, labor sociology, sociology of organizations, folklorists, etc.) *to facilitate a comprehensive research of business communication, research able to provide the most realistic solution, to multiple problems faced by commercial firms.* Therefore, as element in communication investigation may be used:

- processes
- functions and principles of communication;
- communication system;
- strategy and communication;
- organizational structure;
- Information System;

- decision-making system;
- methods, techniques and management processes;
- Human Resource Management;
- executives;
- management efficiency;
- employee efficiency.

Successfully deployment of communication research involves both qualitative and quantitative research. Qualitative research on communication purpose is to build a "holistic picture", a complex one, starting from a multitude of narratives about the dimensions of communication context.

Of course, business communication can be investigated in terms of:

- **economic development;**
- **environment;**
- **national culture;**
- **historical;**
- **axiological;**
- **ethics;**
- **psychological**
- **systemic;**
- **behavior.**

From the perspective of **economic development**, communication can be understood as a synergistic whole that contributes to organizational effectiveness activity. Communication philosophy has universal applicability. By comparing the different forms of communication of companies that activates in the same industry, same geographic area and same environment can shed some positive characteristics and behaviors which can have a legitimate character, giving rise to some functions and principles of communication and organizational applicable sub-branches at the same site and same business type, regarding the number of employees.

Analysis of **communication depending on the manifestation context (environment)** it was and it is recognized both as a comprehensive and easy approach. Specialists of any kind concern in determining quantitative and qualitative environmental influence on the efficiency of commercial companies is very old (Whiting¹, 1971, 1974 and 1976, Berry², 1980, Brislin³, in 1981 and 1983). Most researchers believe that the efficiency of firms is the result of external environmental factors influence, with social, cultural, political, legal, economic and educational nature. Also is considered that even the internal environmental factors influencing domestic greater or lesser efficiency of commercial firms. Cole and colleagues (1971, 1974) were able to specify the precise context of the situation responsible for a given performance. Berry, distinguishing between individual predisposition to behave in a specific, particular and specific behavior as a function of the context, refers to an ecological context that provides a framework for human action and includes different situations. The issue of keen interest to specialists is the extent to which these factors influence the efficiency of firms and their importance. Attempts to quantify the influence of various kinds of factors and factors of those categories of commercial firms relied more on support of research models⁴. Qualitative interpretations of the specialists on the influence of environmental factors on the efficiency of commercial companies are usually closer to reality⁵. But even in this area, there was also a clarification that would have resulted in practical use of findings and their transformation into true principles and laws which contributes - from this perspective - in increasing the efficiency of commercial firms.

¹ Whiting B. B., , „*The problem of the packaged variable*”, în 1979, *The developing individual in a changing world*, vol. I, Den Haag, Mouton,.

² Berry J. W., „Introduction to methodology”, in 1980, *Handbook of Cross Cultural Psychology*, vol 2, Allzn & Bacon, Boston,.

³ Brislin R. W., „Cross cultural encounters: Face to face interaction”, N Y Pergaman, Elmsford, 1981; Brislin R. W., „Cross cultural research in psychology”, *Annual Review of Psychology* 34/1983, pp. 363-400.

⁴ Hellriegel D., Slocum J. W., Richard Jr., Woodman W., 1992 „*Organizational behavior*”, West Publishing Company, St. Paul, , pp. 54-58.

⁵ Hellriegel D., Slocum J. W., Richard Jr., Woodman W., op. cit. pp. 61-65.

From the perspective of **national culture**, communication can be known and analyzed, and could extract some features and characteristics of the communication process that can be used with positive results in influencing the activity of commercial firms. This is because it is known that **business communication research in historical perspective** means reporting them to the form of human community that gave birth and that it represents, is a global issue in which, in general, treated the relationship between communication and history. Such elements can be identified by specific language period, artifacts with communicational value, categories of factors with communicational influence, context dimensions of communication, etc.

General theory of values (axiology) examines the birth, structure, evolution, knowledge, recognition and hierarchy of values, role and place into the social life of values in different states of social-historical dynamics of value systems, depending on the validity of the reassessment values, their overall role and function of historical values, mutation-values and critical reception of their practice in different historical stages, their meanings in different social groups in different times and places.

Values arising from the more or less conflict interaction between individuals and their living environment as a social cognitive reality by which individuals determine what is acceptable or unacceptable, desirable or avoid, good or bad for them.

Value is defined as "an explicit or implicit conception of what is desirable, distinctive for individual or group, which influences the choice of modes, means and aims of the action."

Ethical values are important in any society. Ethical responsibility (a concept introduced by M. Weber (1919), in the lecture Politics as Vocation), must direct the work of any organization, and now, especially business organizations.

Their weight in an organization depends heavily on how that organization honors its ethical and social responsibilities to its members and to the society that allowed it to work.

Ethical dimensions of social action and social relations (ethical values, standards, choice, decision and activities) is one of particular social phenomena, in order to achieve basic communication policy in the development of individual consciousness, forming a personality human creativity and design as an agent of development and organization in particular, the development of society in general.

Psychic, as essential to human determination, along with the social, biological and historical participates in reshaping the nature of the receiving and processing incoming messages.

From this perspective, communication research means study of: general psychological mechanisms, human capacity to work, think, create and reproduce his works, the laws of the organization and functioning of individual creations, mental attitudes and behaviors (cultural, personal, group, between groups, etc.), general features of communication, material and spiritual profile of social and historical formations, laws and categories of communication and its different forms of socio-historical stages and in different places.

The word communication is related to a communication process, the outcome of this process and some specific phenomena. Some theories of communication talk about the systemic nature of communication. **Systemic approach** to communication is an attempt to look at the communication process as a socio-cybernetic system in which inputs and outputs are considered as important as the transformations which is taking place during communication.

Communication system approach allows knowledge about modifications that occur within the communication process, even if a single element of this is changing. Communication is also shaping responses or reaction of individuals at environment. Approach communications as a system in order of researching it, do not show which are the significant elements of the communication process and the way that they can be influenced, in order that those contributes substantially to ensure high performance. Instead, the researcher can identify, addressing the communication system, the system variables that impact on business efficiency.

Behavior and conduct has been called, i.e. the way you drive and take appropriate action incentives, goals and cognitive and sensory information available to the subject through his memory and how to orient to the situation. Behaviors often are considered to be indicators of internal states and relationships, subjective.

2. Operationalisation of research in business communication

According to some authors, including Wallace W. (1971)¹, any research starts from a theory on the phenomenon investigated, especially when it is a predominantly quantitative research. Type

¹ Wallace W., „The logic of science in sociology, Aldine, Chicago, 1971 în S. Chelcea, 2001, Metodologia

theory based on research aims to discover patterns of action of various social units. It focuses on processes as changes in patterns of action. According to other authors (C. Marshall and G. Rossman, 1989)¹, mainly qualitative research starts, not from theory but from observation of those abnormal phenomena, interesting. Thus, process knowledge, as a spiral, includes: testing hypotheses, more nuanced and richer description of reality, analysis of concepts and indicators, set generality results and need to change formal theories. The link between theory and practical phenomenon is achieved at a first level of research hypothesis. After RK Merton² hypothesis does not have exclusively a teoretical origin. It may also have empirical origin. It is already clear that any research requires some steps to be taken by the researcher. After some methodologists³ these steps are in number of six (D. Katz), where others which says there are 12 stages (R. Muechielli).

Considering that the structure made by R. Muechielli is complete and can provide an important methodological tool, we render here its main aspects. Stages of research:

- **Delimit the scope of research, i.e. the choice of research topic.** The theme is chosen is based on a theory of the phenomenon that helps identify its analytical or from observing an interesting phenomenon. Theory based research type aims to discover patterns of action of various social units;
- **Setting objectives, cost research, terms in which the research will be done;**
- **Determine the objectives and setting assumptions.** Is the phase in which the researcher puts the relationship between variables in a manner that allows meaningful measurement of the observable facts;
- **Delimit population in samples investigated.** Of the total number of employees are selected according to statistical criteria, a number of people considered to be representative of research subjects.
- **Select a sample.** The sample can be formed according to the research objectives. Selection is made either by random choice of subjects, which will take sample of the total number of employees, either by stratification;
- **Choose of research techniques.** Methodology and research techniques are decided after attending the first five phases as compared to the subject, and sample case are set methods;
- **Testing, with the pilot survey research techniques.** Pre-testing research tools are made to increase the accuracy of information to be obtained from the investigation of subjects;
- **Completion of tools.** Following pre-testing these instruments can be validated or modified to increase research efficiency;
- **Conduct the field research process.** It is envisaged that data collection is done according to plan based on research and established techniques. It is important to apply research tools on samples selected according to criteria set by the research team;
- **Data processing** stage in which special mention should be made to the process of codification of information, without which it can move to quantification. Registration is required to report all data relevant research, even those that consider them less researcher, to let other professionals the opportunity to study;
- **Analyze the results.** Interpretation of research data analysis is performed to empirical data in relation to the theory, the problem investigated and assumptions. Interpretation means making explanations to situations drawn from empirical research, which should demonstrate the conditions shown determining relationships between processes or phenomena that have been under investigation;
- **Writing the research report** in which is presented how to exploit research results and conclusions.

cercetării sociologice. Metode cantitative și calitative, Editura Economică, București, p. 59.

¹ Marshall C., Rossman G. B., 1989, „Designing qualitative research”, SAGE Publications, Inc., Newbury Park, p. 23.

² Merton R. K., „Social theory and social structure” în A. Bondrea, 1981, Sociologia culturii, Editura Didactică și Pedagogică, București.

³ Schifirneț Ctin., 2000, „Metodologia cercetării sociale”, Editura Universitatea creștină „Dimitrie Cantemir”, București

Operationalization is to link a concept with its indicators. **The operationalization of the research in communication**, has in mind that any research work with working hypotheses, which are "statements directly tested by empirical research." **Hypothesis** is simultaneously a question and answer that question. Remains as research to verify my answer, hypothetically, the researcher is true or false and if confirmed or not the facts investigated. But assumptions can be made through direct experience that, based on understanding reality through direct contact of the investigator, it offers the opportunity to establish links between cultural processes and thus to formulate hypotheses. Also, the assumptions can be developed and by analogy. E. Durkheim said about the analogy that is the only way that mankind has to make things comprehensible¹. In other words, any assumption made in a field of science can help to develop another hypothesis from another scientist.

Assumptions to be valids must be based on facts that are verifiable, that is to use operational concepts, and be specific to not lose the general.

Indicators are actually social facts which are given meaning by the average knowledge of other social facts which have a link. This means that research involves the identification of a social fact in its relations with other phenomena. These are the coordinates of this phenomenon and have the significance of phenomenon properties. Properties ensemble of a phenomenon is his space of attributes.

For example, any employee can be located based on several tests of skill (A), knowledge (B) and personality (C). If three employees are tested and their positions are determined according to the three tests will be achieved three classes of properties that organization has in knowledge of workers. This means that the dimensions of the phenomenon can be defined starting from a list of categories that give the essential properties of the phenomenon investigated. Most times these dimensions or attributes can be dichotomous (sex: male-female), multiple times. Fact is, that these dimensions can be measured through indicators known facts. For example, *performance in public relations*, where three employees, may be determined by the indicators: a record number of contacts dealt with customers, employee participation in meetings and meetings of the organization, making friendly contacts and friendships with customers, developing a relational storage with customer, etc.

In any research, an important place is occupied by *intermediate variables*. If concepts play constellation of experimental facts essential characters and their relationships, meaning variables play changes to the facts. When factors vary, variable also vary. But when a variable X is not a sufficient factor explaining the generation Y means that Y's production involvement is due to other additional factors (t), which are called intermediate variables. In relation to theory of action, an appropriate intermediate variable of personality traits which is equivalent stimulus and in relation to these behavioral stimuli, equivalent answers are sought and outlined all because of this feature. *For example*, tolerance to stress, as a personality trait will involve the same types of responses of different individuals, through the same situation - stimulus. In relation to tolerance to stress those individuals who have the same tolerance, will react in certain situations through various behavioral reactions (violence, attempts to address stress factors, the removal of stress factors, the use of different addictive substances, etc.) psychological reactions (efforts to reduce anxiety associated with stress, feelings of anger directed to a reliable source, all expressions in a manner contrary to their feelings, using personal capacity in an area to compensate for failure in another area, bringing back ideas awareness stress, etc.), physiological reactions (high blood pressure, rapid pulse, cholesterol, respiratory disease, bacterial infections, etc.). These reactions occur from case to case, with different probabilities of manifestation. Therefore the side - as indicators of variable - probability ties with every feature: some individuals lose control of the situation "X" are not words, others are not disturbed at all or too little, etc. Consequently, compared with factors X (generating situations typical behavior), will appear indicating stress tolerance (T). What makes the Y factor is to have those characteristics of the intervention (t) as the intermediate variable (personality trait). This means that the indicators likely play a relationship with a character variable expressing hidden underneath.

3. Sociological Methods used in business communication research

Among the methods used by a number of science, applied and in communication, the most important portant occurs: *method of observation, experiment method, the method call, method of*

¹ Schifirneț Ctin., 2000, „Metodologia cercetării sociale”, Editura Universității Creștine”DimitrieCantemir”, București

psychological investigation, biographical method, method of analysis products work, modeling and simulation methodology, psychometric testing method method monographs.

Data obtained from the application of different research methods of communication need to be processed and presented in an accessible, relevant and synthetic manner. For this purpose are used **statistical-mathematical methods and methods of presentation graphics**, plus a number of other methods analysis specific, such as prediction tests, group calls, call in depth study of motivation, factor analysis, multidimensional analysis, etc.

Observation method consists in accurate tracking, deliberate and systematic recording of behavioral manifestations as well as the oral situational context of behavior. *The content of the observations implies:* verbal behavior; variety of behavioral expressions, features of speech (sonority, flow, intonation, vocabulary, structure, adequacy to content), nonverbal communication (gestures, mimicry, posture, look, distance); contextual communication; difficulties and constraints in communication, etc. By recording the individual and collective behavior, even while carrying out their observation is required before the survey and study documents, research in business communication. Moreover, the observation recorded their behavior in natural conditions of deployment, making this method to be assessed more than experiment, for example.

There are various types of observation: monitoring, detection, content analysis, observation and observation of individual mechanical[3].

Past communication behavior detection, which is gathering information on past communication behavior of employees, without their being aware, is rarely used. Control consists in examination of regulation, rules and other documents of the firm, to know if they were well prepared, following the judgments and decisions taken in this regard. Content analysis is used to study communication. Observation quality is influenced and depends on the quality and perception of the observer. Quality Centre is shaped mainly by a number of peculiarities psycho-individuals thereof, such as:

- Ability to focus attention;
- Ability to selectivity;
- Initiating ability essential;
- Degree of suggestionabilite etc.

Also, to achieve a fair observation must be respected a number of conditions setting clear, precise purpose, in compliance with the rules, traditions of companies investigated, selecting the forms to be used, the conditions and means necessary (tape recorders, cameras, etc.), developing a rigorous plan of survey including assumptions on which it will start, where and when done, how long will it take etc. immediately deposit those observed in an observation protocol, as further record could be affected by forgetfulness, making an optimum number observations, conduct observation in conditions as varied, as achieving discrete observations.

Observation is the best way of nonverbal communication in business research. For example, observe how the arrangement of rooms and furniture in them can find out if the company is encouraged that communication, knowing that, as the settlement table and chairs around it affects interpersonal communication and cooperation. As for the seats meals around the council offices or managers know that they emphasize rank and power, if one takes into account the size and accessories, their height and location where will be placed. It also can measure the distance between participants in the discussion areas for decision making and even height and diameter of the table. This is to obtain information about how the perception of space is in that company. Many people have a negative behavior when is not respected their personal space, depending on culture, social membership type (female/male) type of relations (formal/informal) and the actual situation.

Content analysis is a research technique having as main purpose objective description, systematic and quantitative latent and manifest content of communication. Content of the analysis revealed the identification, systematic and objective description of the linguistic characteristics of a text in order to assess nonlinguistics features of individuals and socio-cultural structures. Consisting of cutting and classification of a significant background, items are counted and classified by category; their frequency is a measure of significance and importance in the context. Meaningful contexts or sources may be subject to analysis: **written, oral messages, sources pictorial texts obtained through conversations, etc.** Researcher proceeds to enumerate the elements of the same type and group them. Items with the same meaning of a certain frequency are indicating the importance of their class in the context in which it appears. These items can be a word, phrase, theme, etc.

Content analysis is structured in several stages[1]:

- **Problem formulation.** To be appropriate choice of method in a content analysis research is necessary to research the issue subject to satisfy three conditions: a) the amount of text analysis is sufficiently large, well defined and limited, a different frequency obtained from the analysis will be too small and therefore statistically insignificant, b) use content analysis method must stem from the very wording of the problem, c) The third condition is a strict definition of the texts used in the analysis;
- **Establish material for analysis.** The problem, once formulated, according to the extension that we want to study, by the time you have available, material and technical possibilities we have, choose the material to be analyzed, which may be lower or larger. A first step in establishing the material for analysis is the **selection of sources of communication.** From many sources of information to choose the class of documents that is most relevant to the topic of study. In this class by random sampling, materials are chosen to be subject to content analysis. Often, in the content analysis, there is no point using sampling techniques due to low volume of communication, for example;
- **Establishing and defining categories of assumptions.** Concepts or assumptions must be decomposed into constituent categories. The content analysis should be possible by tracking indicators of its class. Norms and values orientation - positive or negative - of the actions, attitudes or opinions are used to develop categories. After encoding (recording units' introduction scheme code categories and the association rules or symbols) are constructed frequency tables, matrices or tables of incidence and contingency matrices. Can be calculated coefficient of correlation (Spearman coefficients for correlation ranking and Kendell and Bravais-Pearson coefficient for the product-moment correlation) and apply the texts of significance (Student test, Z test, etc.);
- **Determination of indicators.** Each subset must be translated into indicators;
- **Election analysis units** (units for registration, background and counting). These units of analysis refer to what must be cut out of context. For example, if analyzed the role of internal regulations in the socialization of individuals in a firm, then recording or analysis unit may be a time, a subparagraph, phrase, sentence or word of regulation. Word or symbol is the smallest unit of registration.

It must be said that *not every issue can be addressed by content analysis, so any reading of a document content analysis.*

The analysis also applies not only to text content; any symbolic communication may be subject to such analysis.

The content analysis aimed at examining the socio-cultural and psychological traits of those who send a message.

Content analysis, representing a set of quantitative and qualitative research techniques of verbal and nonverbal communication can serve even for releasing latent or manifest tendency of a phenomenon[1]. To detach the tendency of a phenomenon by analyzing the content should be determined the positive trend of coefficient phenomenon. *Spectrum analysis*, consisting in determining the number of times recording unit, is the classic content analysis. *Trend analysis* has frequencies to study; offering guidance or relief is a positive attitude, neutral or negative transmitter to a person, an idea, a cultural fact, a socio-cultural event. It begins by identifying themes, each subject was classified as positive position, neutral or negative, and units' frequency is calculated in relation to the subject and reported the total number. Highlighting the trend is using the following formula: AT index trend analysis. It can be simply calculated by taking into account the content units in connection with the theme, in which case the formula is $AT=(F-D)/L$ or the total number of units of content with the following formula $AT=(F-D)/T$ is more developed as a formula that takes into account simultaneously both the content about the topic and the total:

$$AT = (F^2 - F*D)/L*T - (F*D - D^2)/L*T,$$

where:

F = number of friendly units (positive, pro, etc.);
D = number of units unfavorable (negative "against" etc.)
L = number of units in relation to the theme;
T = total number of units (total content).

Content about the topic includes all establishments favorable, unfavorable and neutral, while it adds to the total number of units unrelated to the topic which trend is calculated. The formulas presented content neutral units were not taken directly into account. *For example*, the issue of promotions in a company. In this matter each group or department has an opinion. After identifying topics proceed to their classification according to how the attitude towards them is positive or negative. If all units are neutral about the issue, then the trend index is zero, if no units neutral index trend resulting from reporting the number of units favorable to unfavorable. As an example, may be mentioned, *evaluative analysis*, prepared by Ch E. Osgood[8], which distinguishes between the attitude object (group, community, business, cultural phenomena and processes) and object assessment (cohesion, socialization, heroes, personalities, etc.). It involves identifying all the assertions of text on the subject of attitude and expression containing both direct measurements and indirect determinations. We also believe should be noted that *contingency analysis* which permits highlights the association structures of terms (concepts) from a text. Associated frequency of keywords in the text studied is compared with the theoretical probability of their association (expected value). If the difference is significant terms conclude that the association is not coincidental. Contingency analysis process is most suitable for studying the latent content of communication.

Currently, content analysis is experiencing a sustained development boom following the widespread use of computers.

Survey method. This involves the systematic collection of information about mental life of an individual or group of individuals by using a series of questions, written or oral, and their interpretation in psycho-behavioral significance for separation. *Stages questionnaire-based surveys* are:

- Establish the survey;
- Documentation;
- Hypothesis formulation;
- A determination of the population studied;
- Sampling, i.e. determining which segment of the population survey will be studied to generalize the findings;
- Choice questionnaire drafting techniques and strict compliance with the rules;
- Questionnaire pre-testing, to verify whether the questionnaire was well developed;
- history The final version of the questionnaire, choosing the administration of the questionnaire;
- Data collection (through administration of the questionnaire) and processing thus obtained;
- An analysis of results against objectives set;
- The final report of investigation.

The investigation involves *the interview* reports relationships between participants, centering on the theme pursued unilateral action and direction, each participant to retain the place of interview (the respondent) or investigator (researcher).

Biographical method is in fact regarding the potencies, human forces of any nature, characteristics and capabilities exteriorizing not only in motor behavior, verbal or expressive, but also - especially - in the products business. Biographical approach reinvests attribute man "measure of all things"[7]. Currently as *biographies* of *spontaneous* or *induced* by the researcher, as *biograme* (Abel, 1947) or *curriculum vitae*, biography method of communication is very important in the study.

The sociological monography method is useful in research communication within a company because allows preparing a communication history in the company, and the influences exerted by various factors in the development of organizational communication. So will consider internal rules, organizational, assessment reports to shareholders meetings, board decisions, reports and processes of meetings, quarterly and annual reports of activities of various departments within the company, program and annual work plans company etc., and *personal documents of professional communicators*.

Method of experiment. In order to achieve an experiment, researcher isolates studied variables called dependent variables, other variables are handled by the experimenter, called independent variables. **Experimental content** research in business communication is to: verbal and motric conduct, smart conduct etc., as well as a variety of behaviour expressions, such as emotional

expressions, attitudes, etc.; identity and spatial perception by individuals, time and its perception by individuals.

Stages of an experiment are[1]: setting the problem will be investigated and where it will study, issued hypothesis, establishing groups of subjects included in the experiment, the experimental group in which is introducing a change (independent variable) and control group continued their work without any modification, sequencing of events in the experimental group and the control behavior or recorded performance, processing and interpretation of results that will confirm or disprove the hypothesis, repeating the experiment to verify the conclusion. Data obtained by measuring variables is statistically fixing the frequencies, mean, calculating the dispersion, correlation coefficients and their significance.

Conclusions

By using this combination of research methods, over time or sequentially and, especially, by combining quantitative methods of interpretation with that qualitative, correlating investigations with analysis of communication and semiotic procedural approach to obtain valuable information, used to transform communication in an important factor influencing the efficiency and development business.

Consequently, although it is difficult to assess why and to what extend operating organizational communication within a company, however, may be obtained by methods presented viable answers to these problems. Also, many experts are asking questions like: What part of communication is affecting certain phenomena and processes within the firm is and under what conditions?; What types of individual conduct and organize communicational influences on firms lead? How can these influences be used for businesses?. To all these questions the methods described, which can be used successfully in studying communication as a whole or only certain components of the communication process, although not clear answers, leading finally to clarify the issues under consideration.

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THE END OF LITERATURE?

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I have read in the recently published *L'Adieu à la littérature* [Farewell to Literature] written by William Marx¹: „Ever since the end of the 19th century, all literature did was stage its own death. Announced suicide? Maybe. But it comes as a fact that deaths proclaimed from the house-tops are not always the ones that are actually happening.“

Another theorist, Antoine Compagnon, the one who declared some years ago that the demon of literature is exhausted and needs retiring to a rest home, advanced in 2007, in an opening lecture delivered at Collège de France, the idea that twentieth-century literature has done nothing but enact „un long suicide fastueux“². Tzvetan Todorov, the formalist school theorist and coordinator, along with Gérard Genette, of the *Poétique* journal, published in 2007, a manifesto with a messianic title, *Littérature en danger* [*Literature in danger*]³, that questioned everything: self-referential literature, the methods of literary criticism, the tyranny of literary theory, the teaching of literature in schools, and finally, the dominant ideological positions in the intellectual life of the last half-century: *formalism*, *nihilism* and *solipsism*. These are three powers which emptied literature of meaning and provoked, spectacularly or not, its marginalization and even disappearance. A simmering, long-prepared marginalization conducted by the learned men. An announced and well-conducted disappearance. Todorov, who had an active role in this operation, is struggling now to save what is left to save... Touching confession, spectacular recovery, real concern expressed by a wise man who would not die defending, for the sake of consistency, a ‘broke’ concept or, one which, though initially positive and creative, came to cause ‘collateral damage’. In this instance, the victim is literature itself, seen as a therapy of the human being, instrument of knowledge and aesthetic pleasure. An intellectual position that is worth careful examination, as it puts forward the place and role of literature in the present educational system and its status in the postmodernist world.

If Tzvetan Todorov and Antoine Compagnon refuse to accept the death of literature and are trying to find a way out of this crisis, other essayists, moralists, sociologists and anthropologists proclaim the death of literature as a matter of fact and are trying to determine its causes and effects. The causes send far beyond literary boundaries; the root of evilness, or so they say, is to be found in the system in which contemporary world is living. Richard Millet⁴, for instance, is decidedly in favour of this idea. His opinions refer to the liberal political system, the political construction of the European Community, to media dominance, to the cynicism of the editors, the social and cultural (false, catastrophic) hierarchies and to what he calls a distant hermeneutics, less cynical and more desperate“ which would actually function within literature. Therefore, they all take their share of the blame: first and foremost, the writer who betrayed his language and the grammar of the world“ – says Richard Millet in this messianic speech. The author is not an unknown one. He published 30 books at important publishing houses (Gallimard, Mercure de France, Fayard, La Table Ronde, P.O.L), some of them republished in the „Folio“ collection. He is, programmatically, an *altermondialist* and is anxiously observing the „tenebrous order“ of today’s world. He is suspicious of “the declinists, the sociologists, the bigots and the dissident professionals“ and he sincerely

¹ William Marx: *L'Adieu à la littérature*. Histoire d’une dévalorisation, XVIII-XX siècle. Les Editions de Minuits, 2005)

² Antoine Compagnon: *La littérature pour quoi faire?*, Collège de France / Fayard, 2007

³ Editions Flammarion, 2007

⁴ Richard Millet: *Désenchantement de la littérature*, Gallimard, 2007

believes that we all – *nihilists, formalists, solipsists, bigots, declinists* – have entered a long strange spiritual winter. “The declinists“ are the ones who have followed Spengler’s lead and proclaimed the fall of the West for a century now. One term is worth considering. I am thinking that we, Romanians, have our own “declinists”. And they have also foreseen the spiritual collapse of the Western world for quite some time. Richard Millet, who is coming from within this world, is strongly criticising all fields, from language to morals. His main idea is that we witness «l’effondrement du vertical au profit de l’horizontal [the collapse of the vertical in favour of the horizontal]; in other words, a levelling, a sinking of the spirit in mediocrity, a general depreciation of values; this completely de-spiritualized world we are all living in has even lost its sense of making sense.

The arguments of this new prophet, angry with the postmodernist world, are not to be neglected. He puts forward, for instance, the dissolution of the individual in the crowd (a phenomenon about which Ortega Y Gasset was worriedly speaking about 70 years ago), the greater power held in today’s society by a televised-histrion than by the Nobel prize, this «esthétique du prêt-à-porter» fashionable on our cultural market. Pertinent observations, troubling questions. *What is the place of fiction in a world that is already fictionalised through lies? How can one be a writer in this general disillusion, «dans cet oubli du passé»* and with an impoverished language, («une langue de bas-empire») and *in a literature that has become a form of servitude?* – is wondering Richard Millet. Once again, not pointless questions. Slightly touched by panic and swelled by deceptionist rhetoric. An anxiety that turns to bitter nihilism, and yet, its discourse topics are, for the most part, real. What is to be done under such circumstances? Richard Millet cannot see a way out of this crisis situation. His prophecy stops at the gates of nothingness: «oui, la littérature est à présent adossée à une néant dont elle ne se distingue que par le surgissement grimaçant de son inanité». And, in guise of conclusion: «Nous serons bientôt seuls. Nous cheminons dans la désolation et dans l’angoisse, mais aussi dans une jubilation qui n’appartient qu’à nous. Jamais nous n’avons eu à montrer plus de courage, surtout si l’on accepte l’idée que la littérature est entrée en agonie. Notre langue s’est épuisée dans l’idée qu’elle a d’elle-même, telle que l’avaient perpétuée quatre siècles d’alliance entre le politique et le littéraire. Elle n’a plus de miroir humain ni de ciel. Nous sommes des héritiers sans descendance. Nous sommes seuls. Nous ne sommes pas de vrais pères. Nous n’avons plus d’autorité sur la langue, ni sur la jeunesse. Nos écrits sont probablement voués à l’oubli. Nous sommes les contemporains d’un effondrement. L’Université ne nous sauvera pas. La figure de l’abominable n’est plus le «tueur de cygnes» de Villiers, mais le consentement de l’Occident à sa propre négation – fatalité crépusculaire qui est au cœur des sociétés humaines. L’enténébrement du monde entraîne la déchéance de l’écrivain, qui n’est plus qu’un lecteur dépossédé de sa fable, ou une fable en quête de scripteur.»

Therefore, in a world which has lost its values, a world *growing dark* and living in a discouraging *horizontality*, a world spread with divergent minorities and weakened by a massive refusal of its authority, the writer is afloat, all alone, in despair and anxiety; his tongue is dried up, his work nullified, the young do not listen to him, society does not appreciate him; the writer has become, in our contemporary Western world (which does not accept its own negation), nothing but a reader deprived of his story or a story in search of a writer“... Richard Millet ends his speech with a vision that gathers all the negativities of this tenebrous world”: proliferation of the double, cloning, wide-spread belief that an analogue (virtual) universe is preferable to our universe; the writer has no (spiritual) descendants, his art has isolated him and cultural models become extinct with derision. Is there any chance left for literature? „Literature does not mean anything anymore, neither economically, nor symbolically“ – believes Richard Millet. „The future belongs to the insomniacs“. The end of literature is drawing near, everybody lives it, either in silence or singing like the Pan god, at the twilight of a lost mythology... *A historical end or a post-historical crisis?* The essayist seems to be terrified with the conclusion he has reached, so he avoids giving a straight answer to this question. He only promises to continue to write, bearing death in his soul, and in a Eastern European demonstrative silence, in order to denounce the spiritual decadence, the crimes against language („the destruction of one language is a crime, not only against the spirit, but also against the human being”), the horizontality of one world which is about to lose its myths, criteria, values, past, in one word: everything.

These are, briefly, the opinions of Richard Millet, a moralist from the spiritual family of Cioran. The difference between them is that, Cioran’s nihilism is metaphysical and concerns human condition, disrespectful of the world he lives in, whereas the author of this «désenchantement» conceives literature within the frame of postmodernist society. I do not intend to confirm or reject his ideas (some unquestionably correct, others apocalyptic), I just want to point at another fact, namely, that in «l’ère du soupçon» [the age of doubt] the writer does not feel comfortable and that «le déclinisme spenglerien» is beginning to be an accepted, generalised philosophy in Western intellectual world. The 1968 euphoria has

ended, the radicalists entered the European Parliament or are preaching crepuscular visions, whereas the philosophers of culture believe that arts, literature (culture, generally), has reached an end which looks on to a void... The last anxious ones, such as Tzvetan Todorov, are only saying that this end reaches a danger zone and there is still something to be salvaged. Let's do something about it! If only we knew what. And if we knew, can we change the natural course of action, defeat the media powers, the lack of interest in authentic culture, the Kitsch aggression in a society of meritocracy? These are questions I shall answer in this essay, starting from/based on the previously mentioned opinions. As these are opinions, I insist, that are neither isolated nor devoid of truth. They express some state of mind shared by both Westerners and Easterners, though it is differently expressed. The West accuses the *horizontal* of its meritocracy, the collapse of values, the East has not recovered from the diseases brought about by the totalitarian systems in which they lived for half a century. And when they entered freedom, they got contaminated with some new ones.

1. An Age of Ends

What shall I start with? With the idea favoured by many anthropologists and philosophers of culture, that we have entered for some decades an *age of ends* or of *posts* – post-industrial, post historical, post-Christian, post-national, postmodernist ages/ periods – and, as far as spiritual life is concerned, we are all confused and distressed, navigating in the European post-humanities waters. A frame of mind which Heidegger had anticipated in 1966. “Philosophy – he was saying in an interview published ten years later in “Spigel” – has passed on [...] Philosophy will not be able to effect any change, unmediated by the state of the present world; this is valid not only for philosophy, but for what human reflection and aspiration mean. Only a god could save us [...]; the role held by philosophy until now is taken by science“. Philosophy dissolves in particular sciences. Its place will be taken by cybernetics...¹ Scientists are not more optimistic. The physician and philosopher Ilya Prigojine, Nobel prize laureate, wrote in a study entitled *The end of certitudes*, that the present world has entered a specific “dynamics of unstable systems “. This means that, until now, it has been powered by *deterministic laws*, and from now on, by probabilistic laws. We are living in a physical and social world, formed of „dissipative structures” in a precarious balance of incertitudes, insecurities, fluctuations and probabilities. Man's chance is that of squeezing in through a limited space, which separates the old deterministic conception (where there is no room left for creativity) and the idea that God « qui joue aux dè», Prigojine says, hazard where there is no place left for *reason*. If this is true, then literature cannot be healthy, prosperous and trustworthy. It has entered itself “the dynamics of unstable systems“, living in this “end of certitudes”. William Marx considers that this crisis has started ever since the 17th century, when literature started changing form, function and mission... There followed, the theorist continues, a period of expansion, then one of autonomisation, and, finally, one century ago, there started the depreciation of literature. We are going through an obvious process of cleavage which is deepening and which means nothing but the divorce from literature. An « adieu» that announces a coming end: « la littérature de l'adieu, soumise à une crise existentielle permanente»... William Marx proclaims that three *ends* are close in literature: of writing, of the writer and of criticism... And then he adds: „three ends resembling collective suicide“. A suicide, as already noticed, well staged, in a performance which began at the end of the 19th century and played with other actors and masks in the twentieth century.

And now? Now, we can see what is happening: just striking of balance, sinking in general indifference, wailing on ruins, thinking apocalyptically and dreaming of impossible resurrections of rational order. Is this an emaciation of the species (as is often the case in nature) or a disappearance provoked by *le dehors* (by the diseases, the mentalities of a civilisation ready to close its evolutionary cycle? William Marx's demonstration is based on three case studies:

1) Arthur Rimbaud's giving up on poetry at the age of 21 and his departure for Africa, followed by an enigmatic absence; his gesture is significant, the essayist who knows how to read the signs of literature says, his running away means, in fact, the end of poetry (literature);

2) in 1892, Valéry suffers from a terrible mental breakdown which makes him abandon poetic writing and start studying physics and mathematics until 1917; this retirement is related by Marx with Rimbaud's and with the idea that literature is inevitably coming to an end; it is clear that Monsieur Teste is living in Rimbaud's drama and that, “the real first name of Mr. Teste is not Edmond, but Arthur“... This model has greatly influenced Paul Valéry's career, too: his absences and comings back, his hostility towards biography and confession, his conviction that the poem is actually “written by nobody”...

¹ Cf. *Caiete Critice*, 6-7, 2007; translation by Daniel Stuparu

I must say that it is not too clear how these things are interconnected in the demonstration of William Marx, but I notice that he is trying to link them: the interpretation of Valery's absence is unprecedented. Common sense and the chronology of events tell us differently, namely that, the poet, dissatisfied with literature, deserted it in order to study the laws of science, to enrich his spirit, to deepen his knowledge of methods other than those provided by metaphysics and poetry; once enlightened, he returned to poetry and aesthetics, convinced that (noted as such in a text of his *Notebooks*) true science is based not on answers (solutions), but on well-founded and well-expressed interrogations. William Marx finds another explanation for this curious two-decade abandonment; supposedly, it has to do with Valery's revelation that, with Rimbaud's running away from poetry, poetry has reached a limit and that art is not "an end in itself without ending, as Kant believed, but simply an outcome which, after serving its purpose, disappears. Once again: how credible is the idea that poetry can (literally) die intoxicated with general indifference or with self-sufficiency? Another open question.

Let us scrutinize the third example brought by William Marx to support his *adieu*: 3) - Hugo von Hofmannsthal, in 1902, after a prodigious start with Symbolist poetry, sent his friends a letter (signed as Lord Chandos) announcing that he would abandon poetic activity. An abandonment as abrupt and inexplicable as that of Rimbaud, with yet one difference: Hugo von Hofmannsthal does not entirely give up on literature; in refusing to write poetry, he continued to write plays. The author of the above mentioned volume (*L'Adieu ...*) thinks that his action enters the pattern he has been following since the eighteenth century: the gradual disappearance of literature. Rimbaud's exile, La Soirée avec Monsieur Teste and Lord Chandos' letter would be three phases of a refusal of literature. A refusal, an abandonment, from within the literary circle. Curious enough as, in Rimbaud's case at least, his giving up poetry comes five years after the same Rimbaud has called the poet a *capital messianic being*, a modern Prometheus... Valery comes back to poetry to make of it (in his essays) the unique product of *the pure self* ...

How can one explain, this sudden confidence in the poetic power of saying something (something that no other form of communication can make up for) about the poet's inner world and the world that bears him (outer world)? I do not know if William Marx manages to convince me completely. Perhaps there are other explanations for the final disappearance or only temporary ones. These justifications are related to the nature of the human being (an existential crisis, for instance) and, in effect, to a refusal of poetic expression. The writer suffers from time to time from an *existence sickness* extended in a far more serious *literature sickness*. Writing seems, at such times, an unbearable pain, and literature – a pure vanity. It normally gets out of the crisis, but she happens to be persistent and even permanent. What prevents us from believing that the poets quoted by William Marx did not witness such existential experiences? In support of his scenario, the essayist aims to enhance the idea of literature across ages, from Voltaire's triumphant welcoming back on the 30 March 1778, at his return from the self-imposed exile to the structuralist (formalist) period, when the author simply disappears from the literary stage, being replaced with/by the *auctorial function* (Foucault). Between these stages, the poet's social prestige has diminished considerably and literature prepares its own death, thanks to a "suicidal will of non-beingness" ... We live therefore in/at a time of endings: "end of writing, death of the author, end of criticism: behind all these events, another end is perceivable – that of literature – or of a specific idea of literature. It is tempting to imagine what other idea will come next. Who knows if this is not going to happen under our own eyes?"

The rhetorical question at the end of this excerpt seems legitimate and commonsensical, considering that, we all, writers and critics, theorists or simply literature historians, witness a paradoxical situation: conscious of the deep crisis that literature has been passing through for more than a century, well aware that literature is dying (if it is not already dead) or preparing to pass away, we continue to write, we keep on lamenting at the *Wall of Literature*, we thoroughly analyse the causes of disaster in scholarly studies about the pompously heralded suicide... However, we do all these in writing, in making literature. Isn't this curious, paradoxical and a contradiction that we accept and take advantage of? What moral and philosophical motivation do we have and how deep is this motivation to almost convince us, despite the fact that literature has lost all its titles for the past century, to continue to write literature and to publish our writings? Wouldn't it be more realistic to imagine that, after all these disasters, literature in crisis is preparing, visibly and invisibly, its own revival?

2. Is Literature Really Dying?

What is to follow is neither an upbeat nor a catastrophic discourse. Not even a prophetic speech. A literary critic cannot make predictions without running the risk of being contradicted and, ultimately, mocked at as a false prophet. The graveyards of literature are “peopled” with them. The critic had better be cautious and understand what has already happened in literature and carefully observe what happens under his own eyes. So I do not rush to confirm the death of literature, nor to announce its imminent extinction. I do not trust the prophets when it comes to this area where everything is changing fast and there is something essential that remains. Literature has its own laws (the most ineffable) when it comes to long-term development. We know even less when it comes to the short-term evolution of literature. We foresee, for instance, that the type of novel that is popular today will be read tomorrow, too or that a poem that stirred one generation will also echo, perhaps, in the next generation. But will it have the same effect on every following generation? How many of the writings acclaimed today will be of any interest in the next three or four decades? Most importantly, will many of them even survive aesthetically? Few, in any case. The law of aesthetic mutation is valid, let us not forget, in all ages of creation. What happens tomorrow with the Romanian novel, how will poetry look like in the next stage? Here's what we want to know, but it is reasonable and fair to admit that we do not really know. We can make assumptions, but we should have the wisdom to believe in them to the end.

Seeing the ideas popularized today, regarding the profound crisis that literature is undergoing, what could I conclude? Is literature really dying? And if it is, to quote the captain from Dostoevsky, what need is there for literary critics? And, even more than that, what hope can we have in a civilization in which art is systematically degraded (or so they say) and their creators are showily preparing the farewell ceremony? Some reflections based on these interrogations – this is what I would like to offer my readers, the ones that are left, in the introduction to this critical work in which the idea of crisis of literature is recurrent. I shall summarize my ideas on this anxiety-generating phenomenon below.

I shall start with the darkest idea in this discourse: the disappearance of literature. An idea that, in one form or another, we find in many theoretical writings or in the confessions made by men of letters of the last half century. Is literature, truly, on its death bed? Are its myths irreversibly disappearing, beginning with the one of the great writer, continuing with the myth of the masterpiece, as they all say? Apparently true. Or so claimed by some intellectuals of the century that has just ended. I think, for example, of Roland Barthes. He announced in the '60s or '70s, I do not know precisely, that the myth of the great writer disappeared. And French literature, at least, was quick to confirm it. After Céline, Malraux, Camus, Sartre, France never gave a great writer. After the surrealist generation, it has never imposed any great poet. Or it could not give one. In being present as an examiner for a PhD candidate at Paris IV – Sorbonne, on 8-9 November 2007, I asked a colleague of mine, a professor at a French university, interested in contemporary poetry, what great contemporary poet he could name from France. He replied to me, in complete honesty, that he did not know what to answer. If France does not have today a great novelist or poet, this does not mean that another culture does not have one either and could not have one in ten or twenty years. Who can provide such revelations? Barthes' opinion can be validated on short term, or in some area of culture. Frankly, I do not think that fatality has anything to do with this and that the above mentioned myths (of the great writer and of the literary masterpiece) are forever gone. Literature is the realm of revelations and we can expect that the mysterious energies of a nation will be harmonized and will feed again *the lily stalk/stem* of which Călinescu was speaking at the end of his study on Eminescu. It is enough for a genius to appear, says the critic, to turn all the rules, norms and ideologies silent. Really nice, encouraging, but I do not know why the genius got so upset to withdraw from the world. Unfortunately, Roland Barthes's prophecy seems to come true.

It was Barthes, too, who was fully convinced of the coming death of the *Author* in 1967-1968 and, about the same time, the philosopher Michel Foucault relativized this death saying that, with the *author* gone, its place is taken by the "auctorial function" in literary analysis. We notice today that the *Author* returned to literature and exercises, knowingly, the functions of which he has been deprived. The exile (its banishment from literary theory and criticism) ended decades ago and his biography is coming back in force, on the literary market. In short: the author did not die or more precisely: the Author (the Freudian horde leader) was not killed by the structuralist and post structuralist approaches. Those who wanted to assassinate it have biologically disappeared or methodologically converted themselves. Where is now the much feared Jean Ricardou who was terrorizing the Parisian

literary soirees of the '70s, claiming that a text must not be read to the end, it suffices to study only two to three pages to figure out how it works? Where are all those little despots of new criticism who ruled in Western universities in the '70s and whom Barthes himself disavowed after having provided them with a method of text analysis in the first place?

3. When Wasn't Literature in Crisis?

Is literature in crisis? I would rephrase this interrogation as follows: when wasn't literature in crisis? I have noticed, in reading old criticism that the general feeling given by those who comment on literature, irrespective of age, is that of crisis. The crisis of values, the crisis of literary structure, the crisis of language, talent crisis, moral crisis. This feeling is shared, for instance, in our inter-war literary journalism. Most of the important literary critics speak, in one way or another, of the crisis literature. The vanguardists are unhappy with what exists (confirmed styles, sustained values, academized literature, whored art) and will "disinfest" by any means literature; the modernists speak of the inertia and out-datedness of the traditionalists, the traditionalists accuse the decadence of the modernists from "Sburătoru", young critics (Eugene Ionesco, among them) deny them all, both modernists and traditionalists, on a charge of major imposition; the "criticismists" want to spiritualize culture and build a country based on the archetypes and values of peasant Christianity; N. Iorga is of the opinion that the poetry made by the young at the beginning of this angry century (the twentieth century) is meaningless and even pornographic. The generalized idea is that something is happening with/in Romanian literature and this is something alarming. Not avoided, again, is the term crisis. Today, we see that the inter-war period was an age of cultural flourishing and, as far as literature is concerned, it is going through a rapid and fortunate change of patterns (in novel and poetry) and, in general, almost all genres are synchronized with the ideological trends of the time. Literary criticism itself is, in large part, free from ideological influence and adopts the principle of aesthetic autonomy.

The provisional conclusion which can be drawn is that not all crisis in literature (or the feeling of a major crisis) is the sign of impending death. It is often a sign of profound changes, in attitude, vision, structure, language, in short, in models. We can say that literature is never peaceful, or living in a state of normality, of harmony, literature is by nature insurgent, insomniac, at war with the world outside (dominant ideologies, confirmed styles) and at war with itself. It lives, as Jean Paulhan said, on denials and turns refusal into an art of refusal.

The deepest "crisis" is undoubtedly generated by the divorce of literature from official ideology which tends to manipulate it. The fact is clearly seen in right or left-wing totalitarian regimes. In 1945, Romanian literature genuinely entered a crisis (a total crisis) and the poets and critics of that time have rightfully spoken of "crisisism". Each of them understood the crisis according to their ideological and aesthetic position. Some of them (representatives of the new regime) announced the crisis of the "bourgeois culture" (traditional culture) and denounced the autonomy of the aesthetic, others (those who carried forward the spirit of inter-war literature) manifested their justified concern with the crisis determined by the new ideological structures in the area of literature. Anxiety is, this time, highly motivated. Literature has entered a truly deep crisis and lived for decades in a system that has been subordinate to politics. It was not until the '60s that it began to gradually free itself from the constraints of the *unique method of creation* (socialist realism) and find more aesthetically authentic ways to assert itself in avoiding the official canon.

The crisis provoked by the totalitarian political regime, has obviously and violently caused a crisis within literature, too. A wide phenomenon that requires another type of analysis. We can say, here, only that the novel was back to twentieth century realism and poetry to pre-modern discourse. Modernity was entirely denounced as a form of dangerous decadence and, therefore, was ostracized, removed from the literary practice. The famous article (famous in its primitive character) written in 1948 against Arghezi published in „Scântea“ did not target only the greatest poet of the time, but the entire Romanian modernity. It took a generation for the young poets and critics of the time to try (and, fortunately, to succeed) to recover the values of modernity and for literature to manifest a *neomodernist* trend synchronized with other compatible forms of the period (the South American novel, for instance, or with the *new* Western European novel) ...and that was in the 60s, at a time of political „warming“... What followed thereafter is unknown. After 1970, there appeared the first signs of postmodernity in the poetry of Nichita Stănescu and Marin Sorescu, and young prose writers discovered self-referential narrative, aesthetic delirium, textualism and, in general, both young and not that young writers are concerned with changing literary patterns (the canons) ...

What conclusion can we draw from this glimpse into the Romanian literary phenomenon? One idea becomes prominent in the present discussion: the political (ideological) crises from the outside lead to a disruption in the development of literature causing a major crisis within its structures, a shift in pace and an abrupt change of message. Is genuine literature dying in the meantime? It is not, but it is agonizing, stepping aside, keeping silent and when it succeeds in expressing itself, it does it fragmentarily, indirectly and parabolically, and only rarely directly. It is lying in wait for a good time to recover and to rebuild what was lost under the pressure from the outside. It is an experience lived by all Eastern European literatures.

4. A discourse on the self or a discourse on the world?

The didactic canon.

What a student is learning today about literature...

Speaking of the crisis or the dangers that threaten literature nowadays (especially French literature), Tzvetan Todorov links this phenomenon with the dominance, among others (others being, we have seen, the ideology of solipsism and of nihilism!), of formalism in literary criticism. The phenomenon is already known. It is only now put into question and is accounted for effects. Effects which are divided among criticism, which has won something important in learning to discover the functional mechanisms of literary texts, and literature itself, which has gained self-awareness and the conviction that reflection on literature can become a narrative theme; last but not least, prose has abolished the borders between genres and brought in the novel, for example, psychoanalytical complexes, whereas literary theory introduced the reader as a leading character in the literary equation etc.

It must be said, however, that literature has lost something essential: its power of seduction and its readers; it has lessened its message and lost its position in society. Todorov examines all this with lucidity and, as I have already said, with a feeling – if not of guilt, a feeling, as the title of his volume indicates it, that literature is now in jeopardy. He's right, his fears are real. The "formalism" that he has theorized and he himself successfully practiced finally formalized literature as such, and if it did so, it extracted from it the live, exciting and essential parts. Instead of being what a novel is meant to be, and that is, a discourse on the human being and on the world, the novel turned into a discourse about the novel, a metanovel. Most of us who welcomed (including the one who wrote this essay) that change of canon, now see that the self-referential novel, replacing the one talking about what happens to *the Marquise going out in town at five o'clock in the afternoon*, does not tell us much. Nothing but the fact that the novel is contemplating its reflection in dead water, just like Narcissus. The reader, in having realised what it was all about, got bored and abandoned the self-referential, experimental narrative enamoured of itself, solipsist and nihilistic.

There is something more serious pointed at by Tzvetan Todorov and, in seeing his examples, I must say that I agree with him: it is how the schooling system reflects this change of paradigm in literary theory in the last half century. Under the influence of the formalist mandarins, the didactic discourse quickly adopted the new hermeneutical canon and, after a while, the class no longer studies literary works as such, but critical methods; there are performed studies on the *text* (how it functions), not on the *context*; it is the structures, figures of speech that are being learned and not what is flowing through them ... Todorov discovers, much to his stupefaction and freight, this new canon in teaching. He makes a digression in his discourse (a biographical one) and tells us how he came to this alarming discovery: he confesses about the world he is coming from (from communist Bulgaria), about his excitement in coming to Paris, how he translated, steered by Genette, the Russian formalists and what intellectual battles he had to fight against traditional criticism and now that his children became teenagers and are learning the methods of formalist criticism in school, the author is simply confused and frightened: "At school, he writes, they do not teach what the literary works are about any more, but what the critics are saying about them, and students are asked to know „the six Jakobsonian functions and the six Greimasian actants", to know in depth analepsis and prolepsis, not what Dante or Shakespeare are saying in their works. A reversal of meanings, a pedagogy that the author of *Fantastic Prose* does not hesitate to label as absurd. What should we do, he is asking, study analytical methods in school or use critical methods to study the works in their essence, that is, their discourse on the world at large? Todorov notes that the French education inverted the natural order of things when it comes to teaching literature and does not hesitate to call this fact "an abuse of power" and asks theorists and literary critics to be more modest and accept the idea that it is infinitely more important for a student to learn in school not so much (or not primarily) about literary criticism

theories, methods, conceptual frameworks etc. but about literature itself.

What follows in Todorov's discourse is evidence that he himself assumes this modesty: "we – specialists, literary critics, teachers – are often nothing but midgets climbing on the shoulders of giants; refocusing philological education on text study represents a perspective that would receive, I have no doubt, the secret vote of many teachers who have chosen this profession because they love literature and are passionate with the meanings and beauty of literary works; there is no reason to suppress this passion; teachers are not responsible for the ascetic way of talking about literature, it is true that the meaning of a work is not restricted to the student's purely subjective interpretation, but requires a certain theoretical background and, in order to engage in a discussion on a specific topic, the student must learn a number of elements of literary history or some specific principles of structural analysis; under no circumstance, must the study of the *means/ways of access* replace the study of the meaning [work], that is, its *purpose* [...]; the innovations brought about by structuralism in previous decades are welcome, provided that they remain information tools, and not become an end in itself [...]; we must go even further: we are studying the meaning of a text incorrectly if we disregard that there are always works in context and in dialogue with it [...]; we must also ask ourselves about the purpose of the works thought as worthy of being studied; as a rule, the non-professional reader is reading today (just as he was yesterday) these works not to learn a reading method, or to inform himself on the society in which they were created, but to find a meaning that enables a better understanding of the man and of the world and to discover the beauty that enriches his existence; in this way, he comes to understand himself much better; the knowledge of literature is not an end in itself, but one of the ways to self-accomplishment, the course that literary education is taking today, which turns from this horizon (*this week we have studied metonymy next week we shall study personification*) is likely to lead us to a dead end, not to mention the fact that it could make us not love literature at all"...

I reproduced this long passage because it makes it clear, I think, what literary criticism has refused to talk about the local imperialisms of formalism denounced before, we remember, by their creator, Barthes, after discovering what academic mediocrity it cultivates and how indigestible and sophisticated the structuralist approach has become. But his warning was not followed and, now, after almost 30 years, a *disciple* (an admirable, in fact, theorist of literature) comes and judges the consequences of this absurd formalization of the study of literature in school and beyond its precincts. His position is rational: he does not deny the role that the structuralist approach to studying literary texts had and still has, but rightfully asks that the *critical approach* not become an end in itself but a tool to help readers find the substance of literary works.

Would all these mean a return to traditional criticism, a rehabilitation of Mr. Picard, a humble recognition that structuralism and poststructuralism have only confused the readers who, bombarded on all sides by new methods, chased, repressed, insulted by enraged literary theorists, do not know what to do when holding a book in their hands: to follow the history of love "woven thread by thread" or to track the analepses and prolepses?!... Tzvetan Todorov suggests something else, more appropriate, I think, something that is in the interests of literature and to the reader's benefit, the one without whom the work exists only as a file of scribbled papers: in studying the text functions, the analyst should keep in view its deep meanings, those which ensure the originality, the power and the permanence of literature.

La littérature en péril suggests something else, namely that, if literature is indeed in danger of not being read any more, of being marginalized and eventually of disappearing from the expectations of a reader seduced by media resources, whether that disaster will happen or not, the first to blame are the literary theorists and critics. They have led the fashion and they have imposed a dictatorship in postmodernist letters, a dictatorship that has estranged the reader from literature. They have, today, the obligation to fix things. Todorov gives the tone. His speech shows why it is necessary to revise our methods and language and to try to overcome the crisis caused in the field of letters by formalism, negativism and solipsism. Right before this crisis becomes fatal and the patient dies on the operating table.

5. Literary criticism in a post-humanities age. O new synthesis

What is literary criticism supposed to do other than what it has been doing for almost two hundred years, ever since Sainte Beuve founded it as an intellectual institution with an essential role in modern society? After the explosion of methods, it is not the case to return literary criticism to biographical criticism and impressionistic practices, although there is no shame in admitting that

criticism has its own muse, its moment of grace and need for imagination, as the early twentieth century Impressionists used to believe. But it needs something else, too: a new synthesis in the critical approach, a summary of findings brought about by structuralism and other modern methods (psychoanalysis, archetypal criticism, thematic criticism etc.) and their association with creative critical approaches (analysis of meanings, context analysis), so that the literary work might be able to reveal its depths, myths, fundamental issues and its power of seduction. In this respect, Todorov considers that we should not consider the different ways/means as incompatible, but as complementary, based on the idea that each of them can say something important about the text, something that another approach cannot account for; why then exclude from competition some means that can prove useful in understanding literature? The novelist, the theorist adds, lives and, obviously, does not write in an absolute vacuum: *he/she observes and incorporates the world he lives in, before integrating this knowledge into the characters, stories, images, sounds from the text*. And, further, here are some sentences which, 30 years ago in the era of the theorists' dictatorship, we could hardly imagine printed in the *Poétique*: "said otherwise, the works are seeking to impose a certain meaning and the writer is thinking; the critic's role is to convert this meaning and thinking into the common language of his time – and little do we care about the means used to fulfil its purpose: "man" and "work", "history" and "structure" are equally welcome and the result is the following: it allows us to include the author's thinking into the endless debate on human condition "...

There is nothing to be corrected or conservative, neither didacticist nor utopian, in this discourse. It is only a test, as I mentioned earlier, in recognizing that, in separating literature from its substance and in preventing criticism to use all means available, not just one, we do not only jeopardize literature, but we also lessen the chances of literary criticism of saying the essential about the literary work. Literary criticism, Jean Starobinsky was saying 30 years ago, should not give up the opportunity to be a higher form of creation. In order to become modernist and postmodernist, criticism should not repress what it sets its ideas in motion, ie the imagination of ideas ...

6. Literature has power even when turned powerless

Can one still speak today of *the power of literature*? Does literature, in the age of the internet, hold the power of seducing its reader and of sending its message across in a society that is reading less and less and when it does so, it is *Harry Potter*, and not the novels of Claude Simon of which only 200 samples sold for the past five years?!... Delicate matter. Library success does not automatically mean passing a test in aesthetic value. A masterpiece may happen not to have, at its first release, a favourable reception and wait for another generation to discover and approve it. Speaking of the power of literature, we must bring into discussion the role taken by the writer in the hierarchies of a world that does nothing but depart from what it has cherished so far: religion, history, humanities, family values etc. Richard Millet is of the opinion that literature means nothing today. „The media diversion”, he is writing, has affected and falsified everything. The tele-star (*tele-histrion*) is invincible. The poet stands no chance when faced with such competition. He is all alone in a “tenebrous order”, poetry (literature, in general) is not possible any more as «acte différentiste absolu»: literature cannot impose its originality, language, power of suggesting and of influencing human destiny and social order. All that awaits it is despondency, anxiety, and solitary march in a de-spiritualised post modernity... Under these circumstances, the power of literature is reduced to the possibility of pondering upon its powerlessness and, just as Pascal's thinking reed, upon its tragic condition and loss of grandeur.

Is this the ultimate truth? Has the thinking reed lost all grandeur and power confronted with the nothingness that is unavoidably spreading? What is in the power of literature in a society in which the old European humanities have not completely disappeared, but just weakened in force in the computer-dominated society?!... As a forced paradox, we could say that literature has power, even when turned powerless. Of course, the poet is not written today with an initial capital and is not spoilt any more, but his work continues to represent an object of worship for a reduced number of devotees. To become visible in the consumer society, poetry must pass through the TV station, and in order to do that, the poet must give up all vanities, reveries and demonisms and cultivate profitable relationships. There is indeed the chance of the internet, the possibility of dropping the bottle with the poem manuscript in the virtual ocean, thinking that, who knows, somebody might catch it someday.

Many young poets practice this exercise, the poets of other generations go by the traditional formula: they create in pains, they read their poems for a week or a month in a circle of friends and, if they find a journal/magazine in the city where they live, they manage to publish them. Does anyone read them? Judging by the reactions posted on the net, the lovers of poetry are disappointingly scarce

in number, and yet, they exist. It is true that most of them take everything into derision, make bad jokes, banter with great pleasure and, I must admit, with enough skill. Mocking at sb./ sth. has become, at least to us, Romanians, a very popular strategy. We learn it ever since adolescence. Poetry is an easy target for “*the mockers in active service*”. Noica the philosopher once called them *brayers on service*. These brayers express themselves today in and through the silence of the Internet and under the profitable cover of anonymity. Give them the most beautiful poem of Eminescu, or an elegy by Nichita Stanesco: they will immediately take pleasure in destroying it. Ultimately, we know for long: everything can be taken into derision at this meridian. Why would poetry make an exception? However, the religion of poetry is not dead; in theory, it will continue to exist. The number of printed copies has declined catastrophically (in a country of culture as Romania, the number of poetry book copies dropped in the last 20 years from five to ten thousand copies for an average poet in the '80s, to one or two hundred, these being as many as one fairly known poet would manage to publish, most often at his own expense; a beginner starts with no more than 20-30 copies). Literary criticism does not show a particular interest in poetry and, indeed, criticism as an institution no longer works for selection. Finally, the expectations for poetry and, in general, for current literature have been considerably reduced. The novel still has some audience, whereas the moral and political essays have a larger readership.

Under these circumstances, what is, again, the power of literature? Is there anything (unique of its kind) it can say to the postmodern (wo)man absorbed with worries and seduced by a *civilization of the image* (with its most efficient tool: television), stressed by the urban crowding and by the life scenario in which he entered (*metro – boulot – dodo* [same old routine]), victim of a time that has no patience? ... And if this (wo)man manages to overcome all these problems and makes time for reading, on holiday or at weekend (or maybe even tonight, after the news time), a volume of poetry or begins the novel just released on the market and recommended in Bernard Pivot’s show (Pivot or anybody else), what is, I dare ask, the effect of reading, and, ultimately, the power of literature? If the novel is well written, says Baudelaire, *nobody will feel like violating the laws of nature*, even if the novel (or drama) speaks of abominable crimes. Literature, I remember Barthes saying, does not help us to walk, it helps us to breathe. Well, sceptics say, but to help us to breathe, the condition is to read. But the time of reading is gone, and then there are other more attractive and effective means to cultivate our spirit. A clip could trigger a revolution, a poem does not cause today a government to fall anywhere in the world. And then what? Then, we should ask from poetry only what it can give us by itself. I say poetry and, I mean, in fact, all literature.

Tzvetan Todorov, whom I have mentioned many times before, for reasons that can be easily understood (coming from among those who think that literature serves as an object of study and nothing more), thinks that literature is still capable of much more. Among others: *it brings us close to one another, it helps us understand the world and thus helps us live*. It is true, he points out, that literature is « *une technique de soins de l’âme* », but it can bring a change inside us and give meaning to our existence. The semiotician does not hesitate to make a prediction: “*literature has yet to play a vital role [...]; the normal reader, the one that continues to seek in the works he is reading for something that gives meaning to his life is right in contrast with the teachers, critics and writers who say that literature only speaks about itself or that it only teaches despair, if he were not right, he would be condemned to disappear soon*”... And in the same order: *Dante and Cervantes tell us more than scholars, sociologists and psychologists about the human condition; the novel does not give us a new savoir, but a new capacity to communicate and to perceive relationships between people, finally, to perceive and understand the Other* ...

All this is true, but the semiologist does not tell us whether the novel popular on the market today meets this message and if the writer, after the new novel trend has learnt, knows, or is willing, in abandoning the writing adventure, to return – once enriched with the self-referential experiences – to writing an adventure? In plain terms, if today's literature can assume other tasks besides speaking about itself? To create such a memorable typology, to build a history of the heart (repeat the formula of Balzac), to imagine forms of seduction to recover the reader he has lost? It is not about the novel returning to nineteenth century realism, but about studying in the narrative, not the condition of the novel, but the condition of the postmodernist, post-historical, post-religious man who knows or does not know if he lives in post-history but knows well what drama he is living and what to expect from a book that he is reading. He is expecting, first, to love it, to interest him, to say something, not about the performers, narrators, narrataires, speakers, but about repeated reference, about what happened to the Marquise who went out in town at five o'clock in the afternoon and never returned, or about what

happens to the young provincial who once reaching the city gates, declares that he wants to conquer it

...

For literature to regain power, it must, above all, to regain its subject (theme, point of reference), to redefine its goal and the means to attain it. In other words, literature should become again a *discourse about human condition, a discourse about the world*. Hence, its power and its future depend on this. Italo Calvino, quoted by Antoine Compagnon, was right: "things that literature can investigate and communicate are less numerous, but irreplaceable: the way, for instance, of seeing its peers and itself [...], of assigning value to small and large things [...] of guessing real life proportions and the place love holds in life, its strength and its pace, the place held by death, the way to think and not to think of it and other "necessary and difficult" things, such as roughness, pity, sadness, irony, humor"¹.

7. Literature – « un savoir des singularités »

Starting from this apparently modest but really profound discourse, which points, in simple terms, at the unique (specific and irreplaceable) power of literature, Antoine Compagnon is speaking himself of « a savoir irremplaçable, et non résumable circonstancié, sur la nature humaine, a savoir des singularités »(beautiful formula!) that lies solely within the power of literature, and which is a strong argument in favour of its survival. Can this be *a return to the ethics of literature*? Dangerous to support. All that comes in touch with the idea of programmed morality and, in general, with the idea of literary program causes a fully justified protest. Justified it is, because literature, in its modern understanding, has, for several centuries, abandoned its theological, moral, educational and political duties. It could not avoid, in the twentieth century (the century of revolutions including the century of art revolution) and even ideological constraints and political servitude, but, in general, literature has fought for its independence. That in this process literature has remained isolated from human problems is a consequence that falls within the logic of action. And yet, not a fatal irreversible consequence, because, after the dominance of the three despots named by Tzvetan Todorov (formalism, nihilism and solipsism), the critical spirit brings into discussion once again the forms and mission of literature, expecting just as Antoine Compagnon, a re-taking on practical ethics and speculation. As "source of inspiration," says the Professor at the Collège de France, literature helps developing our personality or training "sentimental education", as ecclesiastical readings did for our ancestors; it allows access to some sensitive experience and moral knowledge which philosophical treaties could hardly provide. It (literature) thereby contributes in an irreplaceable way to practical and speculative ethics.² The aesthetician is aware that this apology of literature and this ethical reinvestment of literature is deemed to be a conservative option. Though conscious of this danger, he does not give up on the idea that literature must assume a complex moral and spiritual project. Literature is not alone, he reassures us, literature has not exhausted its possibilities, it is more insightful than the image, and more effective than the document, despite what was said about its degradation, marginalization, self-devouring tendency, its showy suicide etc.. Literature remains the best introduction to image intelligence, this culture-anchored and well-balanced author points.

What is objectionable in this project? Very little, except for its utopian and apologetic language. Let us honestly admit that this discourse gives us courage, that we heartily wish the contemporary literature professor at the Collège de France to win the bet he has placed on literature, as this kind of bet in the era of self-referentiality, deconstruction and constructionism is a true act of courage ...

8. The paradox of literature living its end in style

What remains in this project of the old Enlightenment idea about literature as a tool for learning through aesthetic pleasure, literature as therapy for the spirit and soul, literature as an instrument of justice and tolerance, an idea taken by the Romantics and rejected by most modernity? I have found, in reading both the writers and theorists, a response to satisfy me. Sartre, who wrote in the first years after the Second World War, full of hope and pride, that the writer's task is the task of humanity, believed that literature cannot prevent the death of a child, but can help us escape "the forces of alienation and oppression." The philosopher Theodor Adorno pronounced a terrible sentence: "To write a poem after Auschwitz is a barbaric act." How can get all these literary visions

¹ Cf. Compagnon, *op. cit.*, pp. 59-60

² Antoine Compagnon, *op. cit.* p. 62

from the most nihilistic ("in talking about nothing, literature itself becomes a nothingness about which nothing more can be said" - William Marx playing with words) to the more moderate and reasonable opinions, as the ones of Todorov and Compagnon?

This is the place to say that literary criticism in the last half-century, with few exceptions, either took refuge in cultural journalism, or was submitted to literary theory and partook, with relish, of the terror imposed by theorists *à outrance* ... From those presented above, there can be inferred that we are witnessing a moment of reflection. Critics, theorists, aestheticians, sociologists of literature are rethinking the literary equation and reconsidering their discipline. A vague sense of guilt is perceivable in these articles calling into question the current diseases of both literature and literary criticism. Is literary criticism going to die as William Marx believes? I do not think it died or will die any sooner. It is just passing through a revision phase, a target adjustment and a strategy regulation. *The end of writing?* No way. There is a lot being written and more published than ever. Three million French people, says Philippe Lejeune, keep a diary. Doesn't this say anything about the individual need to express oneself? The problem is that literary criticism has scarce means to learn and to judge these writings aesthetically. The press service took its place, and its strategy is commercial, not aesthetic. Aesthetic criticism must return to power, get back in action and before applying a sophisticated method, it must fulfil its fundamental duty, that is, to accept or to reject the work that has just been released. How can this selection be made if ten thousand titles appear every week? I honestly admit that I have no answer to this question.

Is literature in a serious crisis? Is the taste for reading disappearing and the end of the writer coming? We spoke elsewhere about the *end of the writer*. I even mentioned it in this critical work. What is certain is that the semioticians could not kill the Author (Writer); therefore, I have already said it, *le refoulé* returns. Psychoanalysis has not convinced us that, for a better understanding of the work, you must first commit an act of parricide. The author returned to his work and in the critical comments on this work. William Marx is wrong; he has not sufficiently considered this phenomenon. It is true that the author does not enjoy the recognition of all his titles and traditional powers, but he regained, after his exile, much of his essential functions. It is again a character, that mysterious figure on the cover. What does this character (a product of the biographical self) have to do with the creation within the work? This is another topic which does not fall within the present essay.

Is the taste for literature fading away? I do not think this disaster is liable to happen. This would imply man's willingly falling out of one of the greatest and least expensive pleasures. And of a refined, efficient, far-reaching tool for shaping and enriching his spirit. Reading, it was said, is an unpunished vice. Reading as training and maintenance exercise, reading as therapeutic method, reading as thoughtful, gleeful and creative solitude. Whoever waives reading books, I think, is a candidate to barbarism.

Is literature in crisis? Literature has long been and will always be in crisis, perhaps to the end of history. The paradox is that good literature knows how to draw benefit from the crisis that generated it and in which it is continuously preparing to die: it can turn to profit failures, scepticism, systematically usurping revolutions, ontological sickness, self sickness (*literature sickness*); literature can exploit its own depreciation, unless it loses its sense of being and takes the idea of its uselessness so seriously that it is not able to aim at anything. All that is left to her is to take itself into derision and organize its ceremonious suicide. Is literature sick and dying? It has been preparing for some time, it is sinking, as Eugene Ionesco's king, but never dies, it has only got a taste for the sumptuous twilight in which it can recover its forces to finish what it has begun ... But how to regenerate and pull together these inner forces? Mircea Eliade was saying, three or four decades ago, that literature would grow well through the infusion of myths. This idea is coming back in full force today. Man must recover his spiritual dimension, "says a famous philosopher of culture; this is a way to his salvation and to that of literature, which can die of too many formal refinements.

I would like to finish this essay neither on an apothecic nor on a pessimistic tone. Not before, anyway, confessing that, in speaking of the destiny of literature at a time when many prominent intellectuals assert its disappearance, I could not talk about all its threats and humiliations. Nor about the fact that the man who is reading our books is not the same as the one of a century ago or even half a century ago. His traditional image of king of his castle was shattered. New humanities revealed their complexes. The twentieth century "humanities" have cultivated its peculiarities not its wholeness, and have revealed irregularities, aporias, not cohesion and unity. The semioticians' *grammatical man* does not resemble at all the *psychoanalytic man*, a sum of complexes formed and functional without his knowledge and without the control of reason. The classical *rational man*, who believed, under the

influence of philosophers, that the beautiful is the is good in the highest degree and the complete man is a synthesis of *good, beautiful and true*, well, this man discovered that he lives in the mouth of a volcano where his irrationalities, complexes, and dark sides of his beings are fuming. Is he confident, under these circumstances, in the sensitizing and regenerating power of literature? What frame of mind does he have when and if he begins to read a book of poetry? I'm asking for the last time: is literature in a major crisis, is literature dying? No, it's not; it is only its norms that are changing and have changed abruptly in his living this endless finality. Nearly one hundred years ago, Paul Valery warned us (in his *Outlook for Intelligence*, 1925) that a crisis is "the transition from one type of operational system to another; a transition perceived through signs or symptoms; time seems to alter its nature during a crisis, duration is not perceived as it is when things are in a normal state; instead of measuring permanence, it measures variation. Let us also say that the spirit that measures the crisis signs and variation in literature itself is very anxious, harassed, fallen prey to the dissonances, contradictions and fleetness which dominate the present-day world.

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BIOETHICAL CONNOTATIONS AS REGARDS THE MEDICAL MALPRACTICE LIABILITY

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Abstract: *The legal relations between the patient and the medical personnel, through the complexity and the diversity of the exercised rights and the undertaken obligations, are regulated by several law branches, such as: civil law (contractual and crime liability), commercial law (the organization of medical offices, the supply of medical services, the trade of medication), labour and social security law (employment of medical personnel based on individual labour agreement, disciplinary and material liability, dismissal, retirement, unemployment, health insurances), family law (the ascertainment of the state of need of the person requesting a maintenance alimony, the ascertainment of the diseases that can be the reason for marriage annulment or divorce), environmental law (the impact of the ecological damages on the population's life and health), administrative law (the organization and functioning of the of medical institutions, of the College of Physicians of Romania), constitutional law (the general principles of the fundamental human rights regarding life and bodily integrity, ensuring and guaranteeing health), criminal law (crimes done exercising the medical profession, such as third degree murder, bodily injury, know-how disclosure, professional negligence) etc.*

Keywords: *liability, civil, malpractice, health system*

1. Preliminary issues.

Professional medical specialty liability has been the object of studies of famous specialists in this field. This institution is treated differently by bioethics specialists, physicians, attorneys or other specialists. The medicine professionals will approach the professional malpractice liability in the context in which they carry out their activity in an imperfect health system, incapable of ensuring good conditions for the medical practice. Thus, according to the Report of the Residential Commission for the analysis and elaboration of policies in the field of public healthcare in Romania in 2008, due to the dysfunctions of the health system in Romania, 60,000 people die annually in Romania, hence the number of people equivalent to the population of a city such as Slobozia or Giurgiu <disappears> every year. The same Report, quoting a material published by the European Commission emphasizes the fact that "As regards the avoidable mortality, namely those affections that may be treated by a functional system, the statistical data place Romania in an even more difficult situation: almost half of the male deceases and over one third of the female deceases could have been avoided". Unquestionably, the institutional and functional frame of our health system is under the level reached by the countries of the European Union, despite all the financial efforts made by the Romanian state, especially after the initiation of the reform in the field of healthcare, through the promulgation of the Law no. 95/2006. From the point of view of the performance concept established by the World Health Organization, the Romanian health system occupies the 99th position in the world, after countries such as Albania (55), Slovakia (62), Hungary (66), Turkey (70), Estonia (77). Indeed all these unquestionable realities influence the medical professional liability. This circumstance may also serve as an explanation to the fact that the law giver, in articles 644-648 of Law no. 95/2006 also set the civil liability of the suppliers of medical services, sanitary materials, equipment, medical devices and medication, not only of the medical personnel. The realities of our health system described above are not able to reduce the medical personnel's liability, which is related especially to the physicians, to their training, to the strict observance of the therapeutic standards established in the practice guides for the specialties in question or of the standards recognized by the medical community of the specialty in question.

2. Law and medicine – interfering branches whose matter of study is man as a biological being and man as a social being

Medicine studies medical ethics (which is based on the moral aspects of the medical practice, principles, attitudes, customs and practices), bioethics (which studies the human rights to life and health from the point of view of the principles of medical ethics with the purpose of preventing abuses in the activity of scientific research and medical experiment) and the liability of physicians in exercising their noble profession serving the most important social values – human life and health. The two social values are fundamental human rights, which from the genetic point of view are unique, original, irreplaceable, which makes the entire society and especially the medical personnel responsible for protecting them through highly professional medical care, based on the latest scientific discoveries in the field. The physician-patient relation is a fully social relationship and that is why the medical personnel's attitude and behaviour must be analyzed from one human being to another, as well as a relation from the patient-man to the professional-physician. The law studies and incriminates the coordinates of the relation between the physician and the patient with the purpose of sanctioning a potential harmful medical act, but at the same time it aims at protecting physicians, who dedicate themselves passionately to saving people even from their student life, against abusive acts of patients or other malevolent people. The above assertions are sustained by the provisions of the Medical Deontology Code, according to which man's health is the supreme purpose of the medical act, the physician's obligation is to defend man's physical and mental health, to ease suffering, to respect human life and dignity, with no discriminations during peace time and during war. The respect due to the human person does not cease even after his/her death. In exercising their profession, physicians must give priority to the patient's interests and at the same time are bound to respect the fundamental human rights and the ethical principles in the biomedical field. (articles 3-5). According to the principles consecrated in Hippocrates' oath (in the modern wording adopted by the World Medical Association in the Statement from Geneva from 1975) as well as in the provisions of article 384 paragraph 2 of Law no. 95/2006 regarding the reform in the healthcare field, the main coordinates of the medical personnel's activities are availability, correctness, devotion, loyalty and respect towards the human being. The medical decisions will take into account the patient's interest and rights, the generally accepted medical principles, indiscrimination, the respect for the human dignity, the medical ethics and deontology principles, the care for the patient's health and the public health. The content of article 375 of the same regulations emphasizes the principle of the physicians' professional independence and freedom as well as their right to decide regarding the measures applicable to the medical care for the patient. In exercising the medical act, the medical personnel acts respecting the patient's will and the physician-patient relation must be based on full trust and mutual information. The medical liability ceases when the patient does not observe the medical prescription or recommendation. (article 376). The above mentioned information reveals obviously the implicit ethical character of any regulations and the implicit bioethical character of any legislative medical act. We also emphasize the fact that the legal relations between the patient and the medical personnel, which are established generally as a result of diagnosis, of treatment prescription and administration, of the cure or improvement of the patient's state, are interdisciplinary. The legal relations between the patient and the medical personnel, through the complexity and diversity of the exercised rights and the undertaken obligations, are regulated by several law branches, such as: civil law (contractual and crime liability), commercial law (the organization of medical offices, the supply of medical services, the trade of medication), labour and social security law (employment of medical personnel based on individual labour agreement, disciplinary and material liability, dismissal, retirement, unemployment, health insurances), family law (the ascertainment of the state of need of the person requesting a maintenance alimony, the ascertainment of the diseases that can be the reason for marriage annulment or divorce), environmental law (the impact of the ecological damages on the population's life and health), administrative law (the organization and functioning of the of sanitary institutions, of the College of Physicians of Romania), constitutional law (the general principles of the fundamental human rights regarding life and bodily integrity, ensuring and guaranteeing health), criminal law (crimes done exercising the medical practice, such as third degree murder, bodily injury, know-how disclosure, professional negligence) etc.

3. What is malpractice?

Malpractice is defined as the incorrect or careless treatment applied by a physician to a patient, causing the latter prejudices of any kind, in relation to the degree of damage to the physical and psychic capacity. The malpractice concept was used in the English legal practice at the beginning of the 18th century, being referred to as mala-praxis. The medical and the legal literature contain several definitions to the malpractice notion. Thus, in the medical doctrine, the medical professional liability notion is used, which aims at protecting the patient's interests on the one hand, and has prophylactic value on the other hand, stimulating the physician's initiative in favour of the sick person, avoiding the case of liability proceedings. In the legal literature, the malpractice is the professional behaviour inferior to the unanimously scientifically accepted standards of competence and skill specific to the profession, the lack of professionalism by medical technique or judgment error, able to bring material and moral prejudices to patients. The legal juridical content of the malpractice notion is included in article 642 paragraph 1, letter b, of Law no. 95/2006, according to which the malpractice is the professional error committed in exercising the medical or medical-pharmaceutical act, generating prejudices on the patient, involving civil liability of the medical personnel and the supplier of medical, sanitary and pharmaceutical products and services. As it results from the legal definition, the basis of civil liability of the medical personnel is professional error. According to article 642 paragraph 1 letter a of Law no. 95/2006, the medical personnel is the physician, the dentist, the pharmacist, the nurse and the midwife that provide medical care. As it can be seen, the 15th Title of Law no. 95/2006 refers to the civil liability of the medical personnel of the suppliers of medical, sanitary and pharmaceutical services, but article 624 paragraph 5 of the same regulations stipulates imperatively that civil liability does not exclude the liability engagement if the deed causing the prejudice constitutes a crime according to the law. According to the above mentioned information, the medical malpractice notion must be analyzed from a triple perspective, namely: as a medical act, from the perspective the specific legislation and the private deontological rules, as an antisocial deed prejudicing the rights protected by the criminal law and as a deed generating prejudices and claiming civil reparations. The civil liability, generally speaking, as well as the medical professional liability are based on the provisions of art. 998/999 of the Civil code that regulate the conditions in which this liability may be engaged, namely: the existence of an illicit deed – the existence of a prejudice – the existence of a causality relation between the illicit deed and the prejudice; - the existence of fault, guilt, of the author of the illicit deed. Generally, civilly specking, the form of guilt is not important, as the author must repair entirely the prejudice, regardless of his/her acting manner. The amount of the prejudice is set depending on its extension and not depending on the form of guilt. The professional error is tightly connected to the existence of the medical personnel's professional obligation. The above specifications are supported by the provisions of art. 654 paragraph 1 of Law no. 95/2006, according to which the physician, nurse, midwife – employees of an institution providing medical services – are bound to give medical cares within the institution, in compliance with the legal regulations. Article 652, paragraph 2 of the same regulations stipulates that the dentist, the nurse, the midwife cannot refuse to nurse or give medical cares depending on ethnic, religious, sexual orientation criteria or other discriminatory criteria forbidden by the law and much less their obligation of accepting the patient in emergency situations, when the lack of medical cares may endanger seriously and irreversibly the patient's health or life (article 652 paragraph 3 of Law no. 95/2006). The professional obligations I referred to above are detailed in the Medical Deontology Code of the College of Physicians of Romania (which, in its current form, observes the regulations regarding medical deontology included by the statement of Geneva from 1948, according to the Code of Nuremberg from 1947 and amended by the World Medical Association as well as by the International Medical Ethics Code), in the internal regulations and in medical practice guides, and in the agreement of private clinics. The professional error considers the civil liability for the prejudices caused to the patients and in the situations that include negligence, imprudence or insufficient medical knowledge in exercising the profession, by individual acts within the prevention, diagnosis and treatment procedures (article 642 paragraph 2 of Law no. 95/2006). On this line, article 7 of the Medical Deontology Code specifies that the physicians must never stop, during their professional life, acquiring the acquisitions of the medical science, with the purpose of improving their medical knowledge and article 5 of the same Code stipulates that during the medical practice, the physicians are bound to observe the fundamental human rights and the ethical principles in the biomedical field. Article 10 of the Medical Deontology Code stipulates: The physician will not guarantee the cure of the affection for the patient that appealed to him/her. This provision has a correspondent in the Civil

law as regards the institution of the obligations of diligence (of means or of prudence). The obligations of means (of prudence) are born in a binding legal relation and consist of the diligence that the debtor must make so that the creditor may obtain a certain result but which the debtor is not bound to achieve or guarantee. These obligations are characterized by the fact that the debtor (in this case the medical personnel) does not assume the obligation of obtaining a certain result but only the obligation of making all diligences necessary for the achievement of the wanted result, for reaching a certain finality. When we talk about the professional error of the physician in a malpractice situation, we take into account – of course – only that false representation of the reality generated by negligence in exercising the medical act, by imprudence or insufficient medical knowledge, by the inobservance of the prevention, diagnosis and treatment procedures, established by the medical practice guides; by the inobservance of confidentiality, of the informed consent and the compulsoriness of giving medical cares even when his/her professional competence limits are exceeded. The above mentioned situations are expressly presented in article 642 of Law no. 65/2006. According to authors of the medical literature, the above mentioned situations do not include the praxis errors (related to the professional attitude *lacunae*) and the errors that would be imputable, unlike another category of situations related to the nature of the medical act, to the nature of the work itself and that would compose the errors in fact, and that would not be imputable as the subject (the medical personnel) could have not foreseen the negative consequences of such an attitude despite careful and minute diligences. In my opinion, the praxis errors would fit perfectly the errors *de jure* as the generic situations in which the medical malpractice liability may emerge are expressly enumerated in article 642 of Law no. 95/2006; these situations must be taken into account in the investigation of any medical malpractice case, as they are imperatively established in the above mentioned regulations. The law also stipulates *expressis verbis* the situations in which the medical personnel is not liable for the damages and prejudices produced in practicing the profession. These situations are those included in the provisions of article 643 paragraph 2 of Law no. 95/2006, namely: a) when they are due to the work conditions, to the insufficient diagnosis and treatment equipment, nosocomial infections, secondary effects, complications and risks generally accepted of the investigation and treatment methods, hidden flaws of sanitary materials, medical equipment and devices, medical and sanitary substances used; b) when they act in good faith in emergency situations, observing the given competence. The above mentioned situations exonerate the medical personnel from the liability as this was the will of the law giver, who obviously took into consideration the precarious situation of our medical system. In such situations, the medical personnel have a true representation of facts that could attract civil liability, but they are bound to intervene in such precarious conditions that cannot be imputable to them. The circumstances described by the law cannot be included nonetheless in the so-called category of errors in fact since any physician has the representation of the consequences of their act and still accepts their occurrence by virtue of legal provisions. The situation is different, of course, when the consequences of a correct medical act are caused by the emergence of force majeure situations or of the fortuity, which exclude the legal liability in general and which could be included in the so-called non-imputable errors in fact. The content of the above quoted legal provisions reveals that the medical professional liability (malpractice) is based on the professional error of the medical personnel tightly connected to their professional obligation. We consider that we cannot distinguish between error as a false representation of the reality, and mistake, which is a (conscious or involuntary) deviation from the truth, from what is real, right, normal, good (and which may lead to something bad, to inconvenience); this error results from such a deed. This is why we cannot agree to the treatment of the factual errors as being mistakes, as the error supposes a mistake and the mistake implies the error, both of them having the same legal significance in the event of legal liability, be it civil, criminal, disciplinary or administrative. The professional error in the cases of medical malpractice may embody all forms of guilt in which the medical personnel could commit an illicit deed during the practice of a medical act, either when it is a civil deed or even a criminal one. A professional obligation is deemed unfulfilled when there is a customary and normal practice in the field, which the physician failed to adopt, and another physician – who has average medical knowledge – would have not acted like the guilty physician, manifesting a regular diligence. The guilt (fault) from the law point of view is a condition of the legal liability and is expressed in the psychic attitude of the author of the illicit deed, while it is carried out, towards his/her behaviour and its negative consequences. Psychically, guilt (fault) includes in its content the entire psychological process of representation of the reality that goes through and accompanies the consumption of the illicit deed. By right, the fault or the guilt has one of the following forms: a) intention – which stands out by the knowledge of the antisocial character of

the deed, the representation and acceptance of its negative effects. The intention may be simple or qualified, spontaneous or premeditated, unique or complex, b) imprudence – which consists of the fact that the author of the illicit deed foresees the possibility of the generation of its prejudicing result, but considers – completely unjustifiably – that that result will not be generated. This form of guilt is also known as indirect intention. An imprudence is deemed existent in the practice of the medical deed when the physician ceases the professional relation with his/her patient in a crucial moment, when continuous medical care and treatment are absolutely necessary to the latter, without warning him/her in good time and without giving him/her the possibility of resorting to another physician, c) negligence – which is ascertained when the author of the prejudicing deed does not foresee the result of their behaviour, though having the obligation and possibility of foreseeing it. Let us remember that the smallest form of guilt-fault is sufficient for the enforcement of civil liability. As regards medical guilt, it may be manifested by inefficiency (incompetence, lack of practice, lack of knowledge) or by unskilfulness (by lack of skills, lack of experience, of the necessary aptitudes), professional guilt by lack of foresight, by imprudence or by ease or carelessness. In medical practice, professional guilt may intervene through the refusal of giving medical care, through the refusal of intervening in emergency situations for a patient or through the refusal of continuing the treatment of a patient, even through the refusal of entitling the patient to a second opinion in the same medical cause or by not referring the patient to a specialist that would know how to treat the patient. Depending on the way in which the illicit deed is committed, the guilt may be: in adendo or commissive, which consists of an imprudence, unskilfulness, ease with which the medical act is carried out; omitendo or omissive, which may manifest by indifference, carelessness etc.; in eligendo, which consists for instance in the wrong choice of technical procedures for an inappropriate person; in vigilando – form of guilt that may consist of incorrect and inappropriate surveillance of patients or subordinates. Theoretically, all forms of guilt may be slightly differentiated, but in practice these forms are generally presented in interaction, in tight interference. The harmful result of the medical fault may be caused by a medical personnel member but, at the same time, may be the consequence of a common professional fault of several medical personnel members, which leads to a situation in which all of them will be held liable proportionally to the degree of guilt of each of them. In establishing correctly the persons responsible for the medical malpractice case, all the people who contributed or could contribute to the prejudicing result will be considered. On this line, Law no. 95/2006 stipulates the following: All persons involved in the medical act will be held liable proportionally to the degree of guilt of each of them (article 643 paragraph 1); The public or private medical units, in capacity of suppliers of medical services, will be held liable civilly, according to the common law for the prejudices produced in the prevention, diagnosis or treatment activity, when these are the consequence of: a) nosocomial infections, except when the existence of an external cause that could not be controlled by the institution is demonstrated; b) the known flaws of the medical devices and equipment used abusively, without repairs; c) the use of sanitary materials, medical devices, pharmaceutical and sanitary substances, after the expiry of the warranty period or of their validity period, as applicable; d) the acceptance of medical equipment and devices, sanitary materials, medication and sanitary substances from the suppliers, without the insurance required by the law, as well as the subcontracting of medical or non-medical services from the suppliers without civil liability insurance in the medical field (article 644). The second paragraph of this last article of Law no. 95/2006 institutes a joint liability of the public or private medical unit supplying medical services for the prejudices caused by the employed medical personnel. The correct determination of the responsible persons in a medical malpractice case apart from the suppliers of medical services and of medical products and equipment must take into account the attitude of the patient-victim who, through his/her guilty attitude could have contribute to the production of the prejudice or his/her precarious state could influence negatively the medical act itself. The international doctrine sustained that liability may intervene not only in the presence of and based on the ascertainment of a form of guilt, but in its absence as well – which means that we would be in the presence of strict liability, which would occur for those that manufacture and trade faulty or health-threatening products. Article 646 of Law no. 95/2006 regulates such a situation, meaning that the public or private sanitary units supplying medical services and the manufacturers of medical equipment and devices, pharmaceutical substances and the sanitary materials are liable according to the civil law for the prejudices caused to patients in the prevention, diagnosis and treatment activity, generated directly or indirectly by the hidden flaws of the medical equipment and devices, the pharmaceutical substances and sanitary materials, in the warranty/ validity period, according to the legislation in force. The interpretation of the above legal provisions leads to the conclusion according

to which the patient does not have the knowledge and possibilities necessary to check the safety and quality of a certain product. The patient is considered in good faith and trusts the suppliers of medical services, producers and traders of medication and medical equipment. The producer that obtains benefits by trading the products in question is the one that must also assume the responsibility for the prejudices. The producer must ensure the corresponding quality of a medicine and the suppliers of medical services must check the quality of the medication, assuming the risk of medical malpractice liability, together with the producers even in the event of hidden flaws. This legal provision utters the persons involved in applying it to maximum prudence in establishing the contractual relations between the medication producers and the suppliers of medical services and products. Certainly, for the concrete determination of the liability, the specific contribution of each party involved in the medical act to the prejudicing result. The medical personnel must take all the measures in carrying out the medical act so that they may not endanger the patients. When they act carelessly, indifferently, imprudently, failing to observe their professional obligations and the recognized standards of the medical community they belong to, the physician, the dentist, the nurse and the midwife providing medical services breach their professional obligation by unfulfilling it or by fulfilling it viciously, the medical malpractice professional liability is triggered. I must mention and everybody must understand the fact that the legal liability of the physician is always implicitly also a bioethical liability and the breach of the medical legislation in the medical field involves automatically the breach of the Hippocratic oath, which is a bioethical document by excellence. When the physician obtains the right to practice medicine, he/she takes Hippocrates' Oath (460-377 BC.) in its modern wording, as adopted by the World Medical Association within the Statement from Geneva from 1975. According to this Oath, the physicians undertake to dedicate their life to the humanity, to practice their profession consciously and dignifiedly, their patients' life is a sacred obligation, and they also undertake to keep the secrets entrusted by their patients even after their decease, not to discriminate their patients, to keep the secret of their profession and not use their medical knowledge against the humanity laws. The analysis of the content of the Oath emphasizes the fact that the Romanian law giver – upon the elaboration of the regulations regarding the reform in the healthcare field – took into consideration the principles of the noble medical profession set by it. Thus, according to the provisions of article 374 of Law no. 95/2006, the purpose of the physician profession is to ensure the health state regarding the sickening prevention, the promotion, maintenance and recovery of the individual and the collectivity's health. In order to fulfill this purpose during the practice of their profession, the physicians must prove availability, honesty, devotion, loyalty and respect to the human being. When making medical decisions, they will take into account the patient's interest and rights, the generally accepted medical principles, the indiscrimination between patients, the respect for the human dignity, the concern for the patient's health and the public health. A basic principle of the medical profession is *primum non nocere*, (first of all, let us not prejudice). Another part of the precepts consecrated in Hippocrates' Oath are also included in the Medical Deontology Code, where article 3 mentions: the human health is the supreme goal of the medical act and article 2 stipulates that the provisions of the Code, both the ones regarding moral rules and the ones regarding technical aspects, as well as the behaviour towards their fellow men are compulsory for the physicians. These are only a few reflections concerning the medical malpractice professional liability as a shaded form of the civil liability in general. In approaching the issues regarding the medical malpractice we focused on several legal aspects of the release of the civil liability mechanism and the aspects regarding the generation of a prejudice, of the causality connection between the illicit deed and its consequences – the prejudice – will be the object of another legal research on this topic.

4. By way of conclusions

It is questionless that this medical professional liability must not be turned into a form of harassment, of stressing out all the involved parties. When a malpractice situation appears, all the factors involved in this case must show objectivity, professional probity, in order to avoid completely unpleasant situations that may emerge both for the medical personnel and for the patient-victim. The physician' sacred duty to the patient is to nurse and cure the latter, applying all his/her professional knowledge, the standards specific in the given case, also according to the level of the medical science existent at the time and the patient must be of good faith, show complete confidence in the physician and in his/her medical training. Neither of the two participants to the medical act must put first the material gains. The conclusions of a recent British study are relevant here, being also adopted by the French doctrine in a specialty study, according to which the patients who sue the medical personnel

want: to obtain the information they are interested in related to the medical procedures whose victim they consider themselves, to receive apologies from the medical personnel, to have an active role so that what happened to them may not happen to others, to humiliate the guilty physicians and only lastly to receive an appropriate compensation. Most medical malpractice accusations appear when the patient who benefited from the medical services considers that the final result is unsatisfactory. Most medical treatments are successful due to the professional mastery of the medical personnel and due to the progress of the medical science. Despite all these, there are also situations in which the medical personnel interpret erroneously certain data or do not prove to be very skillful in carrying out the medical act, which can constitute the grounds for claiming medical liability. In order to solve these problems, the obligations of double nature – ethical and legal of the medical personnel and not only are taken into account. During the past ten years in Romania over 1,000 of malpractice cases were filed and most of them won the trial, even more after the favourable solving of the famous case of doctor Ciomu. Nevertheless I have to mention the fact that, in comparison to other countries, the number of claimed malpractice cases is small. In Germany or Italy, there are annually over 3,000 such cases. In this context, I find it interesting to bring up the result of the poll The guilty and the guilt in medicine ordered by the College of Physicians of Iași, carried out on 116 physicians and 384 patients with an error margin of plus/minus 3%. According to this poll, in case of malpractice 38% of the physicians would hide their mistakes from the patients, 20% would keep quiet if they noticed a case of medical mistake in a colleague. More than 1/3 of the physicians would rather hide their guilt from the patients, in the event they committed a medical mistake. Over 90% of the interviewees declared that they would rather not inform the press if there were a malpractice case, 10% of the physicians admit that they were accused because they committed a mistake. Asked about how they would react if one of their colleagues were accused of malpractice, 20% of the physicians mentioned that they would not get involved and would rather follow the case from a distance, 76% of the physicians said that they know physicians who had been accused of a medical mistake. This poll expresses as clear as possible the unfavourable state of mind of the medical personnel that are more and more frequently reported for such deeds. Let us not forget what we have emphasized from the very beginning of this material – the Romanian health system is faulty, imperfect, incapable of ensuring the best conditions for the development of the medical practice safely both for the patient and for the physician. Let us remove the causes that generated such a faulty health system in order to prevent all the effects of medical malpractice professional liability. On this line, we emphasize the intercession of the College of Physicians of Romania, which has recently filed a bill to the Ministry of Healthcare regarding the civil liability insurance in the medical field (malpractice). The bill proposes the creation of a quick compensation mechanism from the patient in the event of malpractice, on an amiable extrajudicial way – that of *mediation* – that transposes a recommendation of the European Union and the Council of Europe to Romania.

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Notes

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INTERNATIONAL SALE OF GOODS CONTRACT – INTERPRETATION ISSUES, FORM, PROBATION AND RESPONSIBILITY OF PARTIES

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Abstract: *Given that Romania is an E.U. member since 2007, international trade has increased and this is visible. Under these circumstances parties often come in unexpected situations and their solving is under European and national legislation. This article will present provisions of the Vienna Convention of 1980 related to interpretation of the international sale of goods contract, form, probation and responsibility of parties.*

Key words: *contract, international, interpretation, form, probation, responsibility*

I. Aspects regarding interpretation

Through this article I will present articles from the Vienna Convention from 1980 regarding the interpretation of the international sales of goods contract, the shape, the testing and the parties' responsibility.

The international sale-commercial purchase contract¹ is nothing more than a species of the contract of sale-commercial purchase² that is characterised essentially by the fact that in its contents there is a specific element of extraneity. This element produces effects at the level of all the elements or most of the elements of the international commercial sales contract, making this contract to have specific juridical and economical fizionomy.

The international commercial sales contract of goods is a complex juridical institution, that obeys different international laws and, in their absence or in their completion, the international stipulations from the different national law systems, that are *lex causae* in this matter.³

The most important international stipulation is the United Nations Convention regarding the international sales of goods contracts, adopted at Vienna, in the 11th of april 1980⁴, as final act of The United Nations Convention, organized with this purpose, according to resolution nr.33/93 from the 16th of December 1978 of the General Assembly of the O.N.U. Romania adhered to the Convention by Law nr. 24/1991.⁵

The Vienna Convention came into operation, internationally, on the 1st of January 1988, by the application of the stipulations of art. 99 paragraph 1, and nowadays, part of the Convention are over 50 states.

Romania adhered to the Convention by Law nr 24/1991, and its stipulations came into force starting with the 1st of June 1992, based on art. 99, paragraph 2.

The Convention carries out, regarding the formation of the contract, only the proposals to contract that interfere after its coming into effect regarding the contracting states, and regarding the

¹ D-A Sitaru..., C-P Buglea., S-A Stanescu., "International Commerce Law", Special part, Juridical universe, Bucharest, 2008, p.5

² for details see, as general studies regarding the commercial sale-purchase contract, especially I. L. Georgescu, "Roman commercial law. The general theory of the commercial bonds. Tests. The commercial sale-purchase contract. Revised, completed and brought to day edition by Ion Bacanu", ed. Lumina L, 1994, pp. 125-236; St. Carpenaru, "Roman Commercial law", ed. VII, Ed. U.J., 2007, p.448-449.

³ I.Macovei, "Institutions in the international commercail law", Ed.Junimea, Iasi, 1987, p.237-269.

⁴ The official title of the Convention is "United Nations Convention on Contracts for the International Sale of Goods".Respectively one can go to the site www.uncitral.org.

⁵ The law was published in the Official Monitor nr 54/1991.

part of the execution only the contracts that are sealed after its carrying into effect regarding the contracting states, according to stipulations of art. 100. Thus there is applied the principle of non-retroactivity of the Convention application.

According to the stipulations of art. 99, paragraph 3 the Vienna Convention replaces the Convention that referred to the homogenous law regarding the formation of the international sales contracts of corporal mobile objects, as well as the Convention that referred to the homogenous law of international sales of corporal mobile objects, both that were sealed in Hague on the 1st of July 1964, conventions that Romania wasn't a part of.¹

The Vienna Convention means a series of interpretations rules, leaving all the others on the contract law.

According to the stipulations of art. 7, paragraphs 1 and 2, the interpretation rules are applied to the stipulations of the Convention, but they also refer to the clauses of the sales contract that the Vienna Convention brings under regulations.

Next we will see the interpretation rules of Convention and of the contract that are stipulated by it and in addition interpretation aspects that the Convention implies.

First of all according to art. 7, paragraph 1 "to the interpretation of the present Convention we will have in mind its international character and the necessity to promote its homogenous application, as well as to ensure the respect of the good-faith in international commerce".²

The stipulation according to which in the interpretation of the Convention we must take into account its international character and the necessity of its homogenous application has as a purpose to avoid an excessive interpretation of the Convention, by the national courts, through the prism of the forum's conceptions.

The Convention dedicates the necessity of the contract's interpretation according to the principle of the good faith respect in the international commerce, that is generally admitted in the world's law systems. More stipulations of the Convention make the application of this principle. The Convention does not corroborate in an explicit manner the principle of the good faith with the one of the commercial loyalty, but such a corroboration can be made in the measure in which the law that applies to the contract says so.³

Secondly, art. 7, paragraph 2 stipulates the following aspect "the problems regarding the objects ruled by the present Convention and that are not solved in an express manner by it, they will be brought under regulations according to the general principles from which it was inspired or, in the lack of it, according to the law that is applied based on the rules of private international law."⁴

From the formulation of the text we can see that it was intended to give priority, as an interpretation rule, to the general principles from which the Vienna Convention is inspired, following that in subsidiary to resort to the national law, that is indicated by the conflictual law that can be applied in that case. The reason of this solution comes from the fact that it was intended to apply some homogenous principles to all sales contracts that are ruled by the Convention, thus avoiding the diversifications that exist in the national law systems.

Third, according to art. 8, paragraph 1, "in the purpose of this Convention, the indications and the others manifestations of a party have to be interpreted according to its intention, when the other party knew or not could have ignored this intention"

This interpretation rule refers to the unilateral acts of will of the parties (offer, acceptance, or notice), but in an implicit manner it refers to the contract itself, that is nothing more than the meeting of two unilateral manifestations of will, respectively the offer and the acceptance.

The consecration of the interpretation rule in the content of the Convention is an expression of the influence of the Romanic law system, the rule that we refer to has an explicit settlement in all the civil laws of French inspiration, including the Roman one, in art. 977.

According to art. 8, paragraph 2, "if the previous paragraph does not apply, the indications and the other manifestations of one party must be interpreted according to the signification that would

¹ D-A Sitaru., C-P Buglea., S-A Stanescu., "International Commerce Law", Special part, Juridical universe, Bucharest, 2008, p.8.

² www.uncitral.com

³ D-A Sitaru., C-P Buglea., S-A Stanescu., "International Commerce Law", Special part, Juridical universe, Bucharest, 2008, p.16.

⁴ www.uncitral.com

have been given to them by a reasonable person, with the same training as the other party, that is in the same situation”¹.

We can notice that this interpretation principle has a subsidiary character regarding the contractors' intention, applying only in the case in which the intention of the party from which the intent of will cannot be established or the other party did not know or could have known this intention.

In this case for the interpretation of the parties' will we use the criterion of the comparison with the abstract figure of the “reasonable person”, juridical institution of Anglo-Saxon influence.

For the interpretation of the party's intent – art. 8, paragraph 1 – or of the reasonable person's intent – art. 8, paragraph 2 – we will take into account the real will of the party, without limiting ourselves to the terms used – declared will – although they are the first ones that have to be analysed.

Art. 8, paragraph 3 stipulates that “in order to determine the intent of one party or what it would be understood by a reasonable person we have to take into account the pertinent circumstances, especially the negotiations that took part between the parties, of the habits that were established between them, by the usages and by the whole behaviour of the parties”². Thus, in the cases to which the text refers to, for the interpretation of the contract we will use criteria that are extrinsic to it, subjective or objective.

From the whole stipulation of art 8 from the Vienna Convention, we see that the contract has to be interpreted so that it produces effects, so to be saved anytime possible.

Another interpretation that we are particularly interested in is the interpretation according to the habits and usages.

According to art 9, paragraph 1 from the Convention “the parties are bound by the usages that they agreed to and the habits that were established between them”.

Further, regarding the usages, apart from the contrary convention, the parties are considered to refer to the contract in an implicit manner and for his formation to any usage that they knew or they should have known and that, in the international commerce is widely known and respected on a regular basis by the parties at the same type contracts, in the commercial branch that we refer to (art.9, paragraph 2). This text expresses the possibility of applying the international commercial usages and on the basis of the implicit will, including the alleged will, of the parties.³

This text seems to refer to the universal usages, but we do not believe that the local usages are excluded, from the countries or the geographical area in which the headquarters of the parties are located.

The encoded usages have to be the object of the express referral of the parties, to be incorporated to the international commercial sales contracts.

Next what is interesting is the fact that this Convention does not cover all the interpretation aspects of its stipulations and of the contract that it refers to, such aspects being relevant and finding a practical solution in the practise of applying the Convention and the dogma.

Thus, for example, the Convention does not clear the situation of the conflict of interpretation between its different linguistic versions, either that we are talking about the official languages of the O.N.U. in which the Convention was made, or to the translations in the languages of the states-parties. Such a conflict can appear due to the variation of interpretation of the juridical concepts that the Convention uses, in the different law systems. In the case of this interpretation conflict, if the parties did not indicate the variant of the Convention that they referred to, it is believed that we should take into account the variant in the language of the contract.

II. The shape and the testing of the international sales of goods contract

Regarding the shape of the international sale of goods contract, applying the principle of the consensus, the Convention stipulates in art. 11, thesis I that this “must not be sealed, or observed in writing and it is not the subject to any other condition of form”.

The Vienna Convention obeys the juridical symmetry principle when it stipulates in art. 29, paragraph 1 that “a contract can be modified or cancelled by the agreement of the parties”. Thus the modification and the cancelling of the contract does not imply any condition of form.⁴

¹ ibidem

² D-A Sitaru., C-P Buglea., S-A Stanescu., “International Commerce Law”, Special part, Juridical universe, Bucharest, 2008, p.18.

³ ibidem

⁴ See I. Macovei, “International commerce law”, vol II, Ed. C.H.Beck, Bucharest, 2009, p.10.

It would appear that this Convention adopted the consensus principle due to the numerous advantages that it has in the international commerce, especially the satisfaction of the celerity requirement and that of the simplification of the closing of the contracts formalities, that this field of activity demands. The consensus principle can have certain disadvantages, especially the uncertainty of the transaction that is sealed outside a written form, and this can have serious consequences for at least one of the parties in case of a litigation. This is why in the speciality literature and in the practise of the Convention's application the parties often limit the consensus rule through the imposing ad validitatem of the written condition either as an element of the their consensus, or for the closing of the contract.¹

Regarding the contract's testing, the Viena Convention consecrates the principle of the freedom of the test², stipulating in art 11, thesis II that this "can be tried by any means necessary, including through witnesses"³.

This solution is a natural consequence of the adoption of the consensus principle in the matter of the contract's form that the Convention brings under regulations.

Another special situation that we can face is the possibility of the states to declare the non-application of the stipulations regarding the unwritten form of the contract. In this case we can discuss about the imperative character of the stipulation.

According to art 12, thesis I, and art. 96 from the Convention a contracting state whose legislation requires that these sales contracts to be sealed or observed in writing, and they can declare at any time that the stipulations of the art 11, of art 29 or of the II part of the Convention (The forming of the contract), that gives authority to any other form than the written one for the sealing, modification or the cancellation of the contract or of any other offer, acceptance or any other manifestation of will does not apply while one of the parties has its headquarters in that country.

Art 12, thesis II, says that the sales contract cannot derogate from its stipulations, nor to modify its effects and this gives that article an imperative character, according to art. 6, the only one from the Convention that has such a character.

Romania did not make the statement to which art 12 and art 96 referred to, so that the condition of the written form is not required for the contracts that obey the Convention and for the international commercial contracts.

III. The contractual responsibility of the parties

In chapter 3 we will see important aspects from the Viena Convention from 1980 regarding the contractual responsibility of the seller and of the buyer.

We shall see next the seller's responsibility for the unfulfillment of his contractual obligations that is cleared by the Viena Convention under the title "Means that the buyer has in case of a contravention of the contract by the seller" (art. 45-52).

Thus the Viena Convention from 1980 focuses all the problem of the seller's responsibility in only one set of rules. This solution of legislative technique has the advantage to avoid repeating that would be implied the mentioning for each side of the means that are at the buyer's disposal in case of a breaching of the contract, to limit the crisscrossed referrals from one article to another, and in the same time to give the buyer a clear image of his action possibilities, what is of great importance in international commerce.

The concept "contravention of the contract", due to a direct translation from the French variant of the Convention, appears as being a barbarity in the Romanian juridical language. It would have been better to transcribe the expression "breach of contract" from English, that has as a correspondant in Romanian the notion "violation of the contract".⁴

The notion is defined, through a stipulation that has a generality aspect, in art 25. According to the text "a breach of contract made by one of the parties is essential, when it causes the other party a lesion that depives in a substantial manner of what is was in right to expect from the contract, except

¹ D-A Sitaru., C-P Buglea., S-A Stanescu., "International Commerce Law", Special part, Juridical universe, Bucharest, 2008, p.19

²I. Macovei, "International commerce law", vol II, Ed. C.H.Beck, Bucharest, 2009, p.10.

³ www.uncitral.com

⁴ D-A Sitaru., C-P Buglea., S-A Stanescu., "International Commerce Law", Special part, Juridical universe, Bucharest, 2008, p.65.

the case the guilty party did not foresee such a result, and a reasonable person with the same training and in the same situation would not have foreseen it either”.

The concept that we are referring to is used by the Vienna Convention and in other articles, that generally refer to the contractual responsibility of the parties and to the problem of the transfer of risks.

The basic principle for the qualifying of a breach of contract as being “essential” is the fact that it causes to the other party a damage that deprives it in a substantial manner of what it is entitled to expect from the contract. The notion is defined essentially through the prism of the notion of cause, that in all the Romanic law systems is a validity condition of all the contracts. The breach can be “essential” even if it does not affect an essential clause of the contract, like the goods or the price, but an unessential one, if through it it is affected the fundamental purpose for which the damaged party sealed the contract. The appreciation of a damage as being “substantial” is made in the light of the concrete circumstances of the case, like the pecuniary value of the damage to the value of the contract, the measure in which the breach of contract affects other activities of the damaged party. Through the collocation “this, the damaged party, is entitled to expect from the contract” the Convention wanted to express the idea that the respective party is protected only in the case in which the breach affects a legitimate interest.¹

The fulfillment of the basic criteria is a necessary condition but it is not enough for a breach of contract to be essential. Furthermore, it must be that the party that breached the contract to be at fault, and that is appreciated by rapportation to a reasonable person that is in the same situation. Thus, as the Vienna Convention from 1980 says, the breach is not essential in the case in which the “guilty party” did not foresee the substantial damage that is made to the other party and no reasonable person, with the same training and in the same situation, could not have foreseen it. The two negative conditions, that both belong to the condition of the predictability of the damage are cumulative so that the guilty party cannot escape the responsibility by saying that he did not foresee the damage, but it also has to prove that no reasonable person could have foreseen it. Regarding the moment according to which we can determine if the party foresaw the damage or not, we consider that, by the stillness of the Convention, this is the one when the contract is sealed or when the breach of contract occurs, according to the stipulations of the law that is applied in the case, according to art. 7, paragraph 2 from the Convention, or to the appreciation of the judge or of the referee, according to the circumstances.

There are important the means that the buyer has in case of a breach of contract by the seller.

According to art. 45, paragraph 1² “if the seller did not fulfill any of the obligations that are his from the sales contract or from the present Convention, the buyer is entitled to:

- exert the rights stipulated by art. 46 – 52;
- to require the interest damages that are stipulated in art. 74 – 77.

This article of the Convention is an index of the means that the buyer has in the case of a breach of contract by the seller, and in the same time is the general juridical basis of the right of the buyer to ask interest-damages.

The text stipulates, first, that when the seller did not fulfill any of his obligations, no matter of their source, the contract or the Vienna Convention, the buyer is entitled to exert the rights stipulated by art. 46-52.

Secondly, the buyer can ask interest-damages that are stipulated in art. 74-77.

According to paragraph 2, art 45 “The buyer does not lose the right to ask interest-damages if he exerts his right to resort to any other mean”.³ Thus the interest-damage can corroborate with any of the rights stipulated by art. 46-52, as well as the ones from art. 71-73.

The stipulations of art. 45 from the Vienna Convention are corroborated with the ones of art 10 paragraph 1 from the New York Convention on the prescription regarding the international sales of goods.

Next we shall analyse the means that the buyer has in case of a breach of contract from the part of the seller in art 46-52 from the Vienna Convention.

¹ D-A Sitaru., C-P Buglea., S-A Stanescu., “International Commerce Law”, Special part, Juridical universe, Bucharest, 2008, p.65.

² I. Macovei, “International commerce law”, vol II, Ed. C.H.Beck, Bucharest, 2009, p.18.

³ www.uncitral.com

A first interesting aspect is the one connected with the buyer's right to require the execution of the obligations by the seller.

Art. 46 paragraph 1 stipulates the general possibility of the buyer to require the execution by the seller of any of his obligations. The stipulations of this article are closely correlated with the ones of art 28, that bring under regulations the conditions in order for the execution to take place in nature, as well as the ones from art. 47, regarding the buyer's possibility to give the seller an additional deadline for execution.

Secondly, the Convention clears up the buyer's right to ask the seller the giving of some replacement goods (art 46, paragraph 2) or to repair the lack of conformity (art 46, paragraph 3). These are special means of execution that the buyer has in the case of the breach of the obligation of conformity by the seller, being seen by the Convention as special forms of action of the buyer in the execution of the contract from art 46 paragraph 1, reason why they are included as subsequent paragraphs of the same articles. In art 50 there is stipulated the buyer's possibility to reduce the price, that is applied – as the execution means from art 46, paragraphs 2 and 3 – in case of a breach of contract by the seller of the conformity obligation. Also there is brought under regulation the seller's possibility to repair, at his expense, any lack of his obligations, after the deadline, in the conditions of art 48.

One can observe the fact that art 46-47 and art 50 give the buyer the right to choose the mean to obtain the execution of the obligation by the buyer. It results that the seller is not allowed to refuse the execution demanded by the buyer, offering him payment for the damages by equivalent, for example for the reason that the fulfillment of the obligation would imply bigger expenses than the profit that the buyer would have or for any other reason. The only case in which the Vienna Convention gives to the seller the right to act is the one from art 48, but it can be exerted only in the restrictive conditions stipulated by the text.¹

An important problem is the one that refers to the general possibility of the buyer to demand the execution by the seller of any of his obligations.

Art 46, paragraph 1 from the Vienna Convention stipulates the fact that “the buyer can demand the seller the execution of his obligations, except the case in which he uses a mean that is incompatible with this request”². Through this article the Convention gives to the buyer the right to ask the seller the execution of the contract after the seller breached his contractual obligations.

The text reveals that this is the mean to which the Convention gives importance, and that is in accordance with the principle of saving the contract that is one of the fundamental ideas that rule the interpretation of the contract, as we can deduce from art 8. The solution is natural because after the breach of any of his obligations by the seller, practically, most of the times, the buyer is interested that the seller makes in the manner in which he was obliged by the contract. This interest exists because the buyer needs the goods in nature, and not their value in money, especially since the obtaining of this damages often imply long and expensive trials. In the international sales of goods contracts that the Convention brings under regulation, the interest we are referring to is emphasised by the fact that for the buyer is often really difficult to get replacement goods from the internal market.

No matter of the nature of the obligation that is breached by the seller, the buyer's right to demand the execution of the contract exists. Thus the seller will have, at the request of the buyer, to deliver the goods or the missing part of it, to repair any lack of conformity material or juridical or to fulfill any necessary act so that the obligation is performed as it was negotiated by the respective contract.

Alongside the right to demand the execution of the contract, the buyer can ask interest-damages for the prejudices he suffered as a part of the non-execution of the contract, according to art 45 paragraph 1 letter a and paragraph 2. This situation can be easily confused in practice with the one in which the buyer accepted a modification of the contract, in an amiable manner, in the conditions of art 29, but in this situation the buyer cannot ask interest-damages. The framing of the manifestation of will of the seller in one or another of these two situations is an interpretation problem, that will be solved according to the stipulations of art 8 from the Vienna Convention.

Art 46 paragraph 1 conditions the exertion by the buyer of the right to ask the seller the execution of his obligations by the fact that he used a mean that is incompatible with this request. The

¹ D-A Sitaru..., C-P Buglea., S-A Stanescu., “International Commerce Law”, Special part, Juridical universe, Bucharest, 2008, p.68.

² www.uncitral.com

buyer must be considered that he used such a mean if, for example, declared the contract solved on the base of art 49 or he reduced the price according to art 50. In the case in which the buyer demanded from the seller the giving of some replacement goods (art 46, paragraph 2) or the repairing of the lack of conformity (art 46, paragraph 3) we cannot talk about the use of a mean that is incompatible with the request of execution, as long as these request are special forms of the buyer's action in the execution of the contract.

Art 46 paragraph 1 by the expression "the buyer can ask the seller the execution of his obligations"¹ covers the hypothesis in which the request is addressed by the buyer directly to the seller and he executes, as well as when the request is ordered, at the request of the buyer, by a court of law or by a referee.

A second very important aspect is the one that refers to the buyer's right to reduce the price in the case in which the seller breached the obligation of conformity of the goods.

Art 50 brings under regulation the conditions in which the buyer can reduce the price in the case in which the seller breached the obligation of the conformity of goods.

This article is applied in the case of the lack of material conformity of goods with the contract, as well as in the case of the lack of juridical conformity in the conditions of art 41 or art 42. In the support of this solution we can bring at least two arguments. In the first place we can apply the argument that the text refers to the case of a "lack of conformity of the goods with the contract", without making a distinction between of the types of the lack of conformity. In the second place, and this is the main argument, art 44 from the Convention gives to the buyer the possibility to cut down the price according to art 50 in the case of the lack of conformity, both material and juridical.

Next we shall see the conditions of exertion of the buyer's right to reduce the price.

Art 50 thesis I stipulates that "in case of lack of conformity of the goods with the contract, even if the price was paid or not, the buyer can reduce the price proportionally with the difference of value that the goods delivered had at the moment when they were delivered and the value that the goods would have had in this moment".²

According to the text the buyer can reduce the price no matter if the price of the contract was paid or not. In the case in which the price was paid the buyer has the right to receive the difference. This solution is similar to the one stipulated by art 81 paragraph 2 for the case in which it interferes the partial resolution of the contract.

Thus, the reduction of the price will be made proportionally with the difference of the value that the goods that were delivered had at the moment of deliver and the value that the conform goods would have had it in the same moment. Thus the moment of reference for the calculation of the difference of price is the one of the deliver of the goods, and not the one of the closing of the contract, respectively the price from the contract. The establishing of the difference between the value of the delivered goods and the conform ones, in the moment of deliver, is easier to establish when the seller delivered with a lack of quantity or quality and the goods have a current price on the market. In other circumstances, the evaluation belongs to the buyer and in case of a litigation it will be established by the court of law or by a referee, eventually based on a speciality expertise.³

The buyer's possibility to reduce the price, in the conditions of art 50, does not deprive him of the right to use other means that the Vienna Convention gives him in the case of a breach of contract by the seller, and the election of the mean used belonging to him exclusively.⁴

Thus, in the first place, the buyer's right to reduce the price competes with his possibility to ask interest-damages in the conditions of art 47. These two rights can be exerted alternative or cumulative. The alternative exertion of the two rights, that is possible in all the cases, can become necessary when the interest-damages cannot be demanded because the conditions for the giving of the damages according to art 47 are not fulfilled or if the seller is exonerated by responsibility in the conditions of art 79. Thus the right of the buyer to reduce the price is not affected by the clause that exonerates the responsibility from art 79. On the other hand the cumulative exertion of the two rights is possible because, according to art 45 paragraph 2, the buyer cannot lose the right to ask interest-damages if he exerts his right to use another mean.

¹ www.uncitral.com

² *ibidem*

³ D-A Sitaru., C-P Buglea., S-A Stanescu., "International Commerce Law", Special part, Juridical universe, Bucharest, 2008, p.78.

⁴ *ibidem*.

In the second place, the buyer that received a good that has qualitative lacks can proceed to the resolution of the contract if the stipulations of art 49 are fulfilled, case in which the interest-damages will be established according to art 75 or 76, their quantum can be different from the one of the difference to which he would have been entitled in the case of the reduction of the price according to art 50.¹

Another situation is the limitation of the buyer's right to cut down the price. According to art 50, thesis II, "Yet if the seller repairs any deficiency of his obligations, according to art 37 or art 48 or if the buyer refuses to accept the execution by the seller, in conformity of these articles, the buyer cannot reduce the price".

Thus the solution of cutting down the price is seen by the Convention as having a subsidiary and restrictive character. The buyer cannot make such a reduction if the seller repairs any deficiency of his obligations, to be anterior to the date of payment in case of an anticipatory offering (art 37), or after the due date (art 48) or if the buyer refuses to accept the execution by the seller of any of his obligations according to these articles. Through this stipulation the Convention gives priority to the execution of contract principle.

Also, the buyer has the right to declare the resolution of the contract.

The resolution of the contract can be declared by the buyer only if the stipulations of art 49 paragraphs 1 and 2 are fulfilled.

Art 49 paragraphs 1 and 2 brings under regulations the resolution that occurs after the execution date of the contract, thus at the date of payment. The resolution of the contract that is prior to the date of its payment can be declared by the buyer in the conditions of art 72.

A second very important aspect is the one referring to the **special situations of responsibility of the seller stipulated by art 51 and 52 from the Vienna Convention**. Here we can talk about the partial, prior delivery and the delivery that is in quantitative excess.

The first that we will be talking about is the partial delivery.

Art 51 paragraph 1 from the Convention stipulates: "If the seller does not deliver but a part of the goods or if only a part of the delivered goods is according to the contract, art 46-50 apply regarding the missing part or the one that is not compliant".²

Thus in the case in which the seller makes a partial delivery of the goods or if only a part of the delivered goods is compliant with the contract the seller benefits from all the means that are stipulated by art 46-50, but that apply only to the missing part or to the part that is not compliant with the contract.

Through this stipulation the Vienna Convention consecrates the possibility to partially resolve the contract when the conditions of the resolution are applied to that part.

Next art 51 paragraph 2 stipulates "The buyer cannot declare the resolution of the contract in its wholeness unless the partial non-execution or the lack of conformity is an essential contravention in the contract".³

Through this stipulation is reiterated the condition from art 49, paragraph 1 letter a.

The condition that the breach is essential is required as in the situation from art 49 paragraph 1 letter b, when the buyer gave to the seller an extra deadline, but the seller delivers only part of the goods at this deadline. This thing results from the use of the word "unless". Thus, in case of a partial delivery, the buyer can declare the contract resolved in its wholeness only if this is an essential breach of contract.

The second possibility is the anticipated delivery. In this sense art 52 paragraph 1 stipulates the following: "If the seller delivers the goods before the deadline, the buyer has the possibility to take them or to turn them away".

Through this article it is brought under regulation the situation in which the seller makes an anticipatory delivery, before the deadline according to art 33. In this case the buyer has the right to choose between taking the goods and turning them down. This solution is justified at least for the reasons that, in the case in which the buyer would be forced to accept the goods that are delivered prior to the deadline, he would be put in the position to have unplanned expenses with the storage of the goods, and if the contract ties the payday with the delivery day according to art 58 paragraph 1

¹ D-A Sitaru., C-P Buglea., S-A Stanescu., "International Commerce Law", Special part, Juridical universe, Bucharest, 2008, p.79.

² ibidem.

³ www.uncitral.com

from the Convention, this anticipatory delivery would force the buyer to pay anticipate the goods, what could lead to supplementary costs.¹

The option right of the buyer is generated by the anticipatory delivery. Thus this right does not depend by the condition if the anticipatory delivery caused inconveniences or supplementary expenses. Thus the buyer has to have a reasonable commercial justification for the refusal of the goods that are delivered anticipatory, because art 7 paragraph 1 from the Convention imposes the compliance of the good faith principle in the international commerce.

When the buyer choses to take that goods that are delivered before the deadline, he still has the possibility to ask the seller interest-damages for the lesions suffered as a consequence of this situation, based on the stipulations of art 45 paragraph 1 letter b from the Viena Convention. By exception, the buyer is deprived of this right if the anticipatory delivery can be considered, according to the circumstances, as being the consequence of an amicable modification of the contract, in the conditions of art 29. Such a circumstance can be the one in which the buyer took the goods that were delivered anticipatory without any objection.

In the case in which the buyer refuses to take the goods that are delivered anticipatory, the seller is forced to deliver them again at the term of the contract.

When the buyer received the good that are delivered anticipatory, although he understands to exert his right to refuse, he is forced to take reasonable measures to preserve them, according to art 86 paragraph 1 from the Convention. Futhermore, the buyer has the obligation to take them in his possession, on account of the seller, although he is going to exert his right to refuse, if the goods were put at his disposal at their place of destination and if there are fulfilled the other conditions stipulated by art 86, paragraph 2.

The rights of the seller in case of anticipatory delivery are brought under regulation by art 37 from the Viena Convention.

The third option is the delivery in quantitative excess.

Art 52 paragraph 2 stipulates “If the seller delivers a superiour quantity of the one that is agreed in the contract, the buyer can accept or decline the taking of the quantity that is a surplus. In the case in which the buyer accepts it partially or integral, he has to pay it at the price from the contract”.

In the case in which the seller delivers a quantity that is superiour to the one that is stipulated by the contract, the buyer is forced to accept at least the quantity from the contract. For the surplus the buyer has the right to chose between to accept it, totally or partially, or to decline it. If he declines it the buyer is entitled to interest-damages for the loses suffered because of the excess delivery. But if the buyer accepts to take the goods, totally or partially, he has to pay it at the price of the contract.

But when it is not possible for the buyer to decline only the excess quantity, the buyer can declare the contract cancelled if the excess delivery is an essential breach of the contract. If such a delivery is not an essential breach of the contract or for commercial reasons the buyer is forced to take the whole quantity of goods that is delivered he can ask for interest-damages for the loses suffered as the consequence of this delivery.

Next we shall see the final aspects regarding the means that the seller has in case of a breach of contract from the part of the buyer. In other words we shall see the contractual responsibility of the buyer in the frame of the international sales of goods contract.

The means that the seller has in case of a breach of contract by the buyer are enumerated in art 61 from the Viena Convention. This article is symmetrical to art 45 that brings under regulation the means that the buyer can use in the case of a breach of contract from the part of the seller.

This article is an index of the means that the seller has in case of a breach of contract from the part of the buyer and , in the same time, is the general juridical basis of the seller’s right to ask interest-damages.²

In the first place according to the text “In the case in which the buyer did not fulfilled any of his obligations that he has according to the contract or by the present Convention, the seller is entitled to: a) exert the rights stipulated by art 62-65” [art 61, paragraph 1, letter a]. The sending to the mentioned articles does not exclude the possibility to benefit from the rights that are given to him by

¹ D-A Sitaru., C-P Buglea., S-A Stanescu., “International Commerce Law”, Special part, Juridical universe, Bucharest, 2008, p.84.

² D-A Sitaru., C-P Buglea., S-A Stanescu., “International Commerce Law”, Special part, Juridical universe, Bucharest, 2008, p.95.

art 71-73 from the Convention these last articles being comprised into Chapter V – Common dispositions for the obligations of the seller and the buyer.

In the second place, in the hypothesis we have in view, the seller is entitled to “b) ask interest-damages stipulated by art 74-77” [art 61, paragraph 1 letter b].

It is considered that the seller has the right to interests, in the conditions of art 78, although the Convention does not refer in an explicit manner to this article. The right to interests appears as being intrinsic to the seller, because it is applied in the case in which a part does not pay “the price or any other owed sum” and such obligations fall back on the buyer.

Art 61 paragraph 2 stipulates “The seller does not lose the right to ask for interest-damages when he exerts his right to use another mean”.¹ Thus the interest-damages can corroborate with any of the right stipulated by art 62-65 as well as those from art 71-73.

Next we shall see the analysis of the means that the seller has in a case of a breach of contract from the part of the buyer.

In this context we shall analyse only the rights stipulated by art 62-65. The exertion of the rights stipulated by art 62-65 imply, symmetrical to the ones given to the buyer in case of a breach of contract from the part of the seller, two possibilities that the Vienna Convention puts at the disposal of the seller: to ask for the exertion of the obligations by the buyer according to art 62 and to declare the annulment of the contract according to art 64. Article 65 brings under regulation the special means that the seller has in the case in which the buyer did not fulfill his obligation to point out the characteristic elements of the goods.

A first situation that deserves attention is the seller’s right to ask the execution of the obligation by the buyer.

In this sense art 62 from the Convention stipulates the following aspects: “The seller can ask the buyer the payment of the price, the taking of the goods that are delivered or the execution of other obligations of the buyer, except the case he used a mean that is incompatible with these demands”.

This is the mean that the Vienna Convention gives priority as it results from the formulation of the text, that is in accordance with the saving of the contract principle according to art 8.

Article 62 conditions the exertion by the seller of the right to ask the buyer the execution of his obligations by the fact that he did not use an incompatible mean with this demand. The seller must be considered that he used such a right if, for example, declared the contract void according to art 64.

Art 62 through the collocation “the seller can ask the buyer” to exert his obligations covers the hypothesis in which the demand is addressed directly to the buyer and this executes, as well as the one in which the execution is ordered, at the request of the seller, by a court of law or by a referee.

The general dispositions of art 28 can be applied. From the corroborated application of these articles it results that, when the seller demands the court of law on the basis of art 67 to force the buyer to execute literally his obligations, and the competent court of law that can solve this litigation is not forced to dispose such an execution unless it is allowed by its own law system, in the conditions of art 28. When the court’s law system admits the execution in nature, this can dispose the forcing of the buyer to the execution in nature, if the criterion from art 62 is fulfilled.

A second situation is the seller’s possibility to give the buyer an additional execution deadline.

In this sense art 63 paragraph 1 stipulates “The seller can give the buyer an additional deadline, that has a reasonable duration, for the execution of his obligations”.

This stipulation appears as a natural consequence of art 62, that allows the seller to ask the buyer, directly or through the a court of law, to execute any of his obligations. In the same time the stipulation that we are referring to is a natural corrolary of the fact that the judge or the referee cannot give the buyer a grace period in the case in which the seller uses one of the means that he has at his disposal in the case of a breach of contract from the part of the seller (art 61 paragraph 3).²

The giving of additional deadline for the buyer’s execution is a right, and not an obligation for the seller.

The reason for the reglementation of this right lies in the fact that for the seller it can have more advantages, from the point of view of time and expenses to give the buyer an additional deadline than to turn to a juridical procedure in order to force him to execute. In some cases the uridical

¹ www.uncitral.com

² D-A Sitaru., C-P Buglea., S-A Stanescu., “International Commerce Law”, Special part, Juridical universe, Bucharest, 2008, p.97-98.

execution of the buyer appears as impossible, like when the non-execution means the delay in the issuance of a bank warranty, in obtaining of an import authorisation or in the fulfillment of some bank formalities for the payment of the price.

Also, the giving of such a deadline allows the seller that, in the case in which the buyer does not respect it, to go on with the annulment of the contract in the conditions of art 64 paragraph 1 letter b) and eventually to a compensatory selling according to art 76. The seller can turn to this right more when it is not sure in that moment that the non-execution by the buyer of any of his obligations is an essential breach of the contract that allows him to declare the contract annulled directly according to art 64 paragraph 1 letter a).

Article 63 paragraph 1 gives the seller the right to give the buyer an additional deadline for the execution of his obligation no matter of the type of the obligation that he breached.

This additional deadline has to be “of reasonable duration”. The justification of this requirement results from the corroboration of the article we are referring to with article 64 paragraph 1 letter b) that gives the seller the right to declare the contract void in the case in which the buyer did not fulfill his obligation to pay the price or to take the goods that are delivered even in the additional deadline. This right of the seller could turn into an abuse in the case in which he would give the buyer an additional time that is insignificant for the execution. In such a case, the buyer would be in the situation to not be able to carry out his obligation in that deadline, and the seller, although he is not the victim of an essential breach of contract that would entitle him to annul the contract according to the rule from art 64 paragraph 1. letter a) would obtain the same result by the abusive use of the special reglementation from art 64 paragraph 1 letter b) from the Viena Convention.¹

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¹ Ibidem

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Book essay

Emil DINGA, Studii de economie. Contribuții de analiză logică, epistemologică și metodologică. Editura Economică (<http://e-economicshop.com>), București, 2009, 563 p. ISBN 978-973-709-488-9.

Emil DINGA, Studies on Economics. Contributions to logical, epistemological and methodological analysis. Editura Economică (Economica Publishing House), <http://e-economicshop.com>, București, 2009, 563 p. ISBN 978-973-709-488-9

It is a real courage nowadays to write a very big book on Economics viewed from a slightly “trivial”¹ point of view. This come from at least two reasons: the information age offers less and less time for writing huge books on a large scale of (economic) issues; the compression of time leaves less time for reading, so reading this book and writing a book essay on it generated a very postmodern mixing up of pleasure and pain into my daily existence. Anyway, decision to allocate time resource for this activity comes from a quite cognitive motivation. I had the real pleasure to attend, together with a great number of first hand Romanian thinkers, at a Georgescu Roegen Seminar (well) organized by Mr. Emil Dinga, the founder-president of the Seminar. Quite amazing and challenging ideas were spread out in the hall from “Victor Slavescu” Financial and Monetary Research Center of the Romanian Academy. The pleasant surprise to hear a lot of new and courageous ideas determined me to read and review this book.

The author, an economist with a great research and administrative experience, is still hesitating to shock the world joining the contesting chorus of critics ignoring the “scientific” status of Economics. Personally, I decided not to use at all this obsolete and empty of meaning term I already put into inverted commas. This is not to lower the status of those (hard) working on the field of research and knowledge. I’ll use alternatively the words *research* and *knowledge* for *searching truth* and for *inserting this truth into the general corpus of human knowledge*. Emil Dinga do not use the word “science” in the title of his book, but the very first word used in the first line of his introduction is, fatally, “(economic) science”, but he immediately explains that it is still debatable about the scientific or hermeneutic nature of economic discipline. As a matter of fact, the first paragraph of the Foreword is a very condensed into a nut-shell history of the evolution of what is called today Economics: from mechanicism to economism, from quantitativism to its lack of predictability (the impossibility of real fallibility²), credited to explain all or nothing, considered as the ground of any human behavior or completed excluded from the social human field, ridiculized by positivists. Even very controversial Economics is still effervescent. To assume a “scientific” and predictive status for Economics is a very risky affair into the nowadays world financial and economic crisis. It deserves to be mentioned here a very critical essay on the fate of Economic “science” with the very suggestive title: “Time has come to throw out the windows the Economics textbooks” (by Costy Rogozanu a critical voice of Romanian realities). Instead of choosing normative or deductive dimension of Economics³, Emil Dinga decided to be Solomon and to say: both! So, the book is not a textbook, nor a

¹ Trivial comes from old Roman Empire curriculum formed from two levels: 1. TRIVIUM (formed from three basic disciplines: grammar, logic, rhetoric); 2. QVADRIUM (formed from four disciplines: mathematics, physics, astronomy and music). So, trivial is the first level of any systematized knowledge with the very idea of something fundamental, basic or absolute necessary for a good thinking. Another (postmodern) TRIVIUM is formed in my mind from Politics, Economics and Ethics. I mentioned this personal form of TRIVIUM/ triviality from the very beginning just to prepare the ground for a real dialogue with the author.

² Fallibility was translated into Romanian as “falsibility”/ falsicabilitate, but that is not very correct. I suggest translate fallibility (probability of making errors) as “imperfețiune asumata”/ assumed imperfection. A pretended perfect theory (even “theory” comes from theo/ god) is unreliable from the beginning. Of course, a perfect theory is only a utopian one, so its realism may come from defining it as non-utopian.

³ Economics is a plural of “economic theories”, the adequate translation of the Aristotle and Xenophon books called *Economica*. I proposed in 1990 (*Revista Economica*, Bucuresti) to distinguish between Economics and economy, and to promote this dichotomy in the Romanian language but our linguists accepted to translate both

treaty, but a sui generis collection of studies (24) grouped into five big classes. I must confess that reading the acknowledgement list I felt envy to find out that the author has an excellent critical filter to his ideas from his really valuable colleagues and collaborators. It is worth mentioning the five parts of the book that well describes the ideological and economic background of the author. I mention them with a direct and sincere suggestion to editing houses abroad to have in their views a translation of this book into English as a good way to spread its valuable ideas throughout the world.

Part I – “*Economic science – a critical evaluation*” presents a short and synthetical description of what economics is.

Part II – “*Sustainability and economic process*” comprises six studies (on semantic and pragmatic definition of sustainability as opposed to durability, entropy and sustainability in the economic process, automatic fiscal stabilizers, sustainability of the financing source, unemployment-retirement trade-off, and taxing the personal revenue).

Part III – “*Sectorial economic studies*” with also six studies (on inflation, on real economic convergence in European Union, on dual (underground) economy – interesting to note the term corruption is not used as a real name of underground economy, fiscal impulse to monetary economy, on fiscal evasion, on the virtual basis for taxing).

Part IV - “*Epistemology and economic logic*” has four studies (on the vivid logic system, on undistinguishness subject-object in the economic process, epistemological suggestions in Nicholas Georgescu Roegen’s book “The Entropy Law and the economic process”, and on the study methodology of economic history).

Part V – “*Opinions on different economic problems*” with seven studies (on minimal wage variation in economy, on single salary in public sphere, accounting and fiscal evasion, short conceptual appraisal on financial crisis from 2007, conceptual aspects on fiscal reform in 2005 Romania, on a new index of aggregate unemployment evaluation, economic reform and the informal institutions).

In the auto presentation of his own beliefs the author confess his “deep dissatisfaction on the nature and present status of the economic science” (p. 21). As a possible solution Emil Dinga sees the necessity of subject insertion into economic process. This is an anti positivistic attitude that implies a metaphysical, moral and philosophical dimension of economic science viewed by author as an excellent catalyze in the conceptual reconstruction. The author is against the actional optimality paradigm of classic liberalism (monetarists included) and propose instead the sustainability paradigm (viabilism, i.e. an ethical view of sustainability). Viabilism will be the core of the next work of the author expected to be read this year (2010). Objectivity – as the basic principle of cognition – is rejected and replaced by reintegration of subject in the social process. It comes to be as natural as possible including the ethical and axiological dimensions into the “conceptual reconstruction of economic science” (p. 22). As a subjective reader I address the author my whole support into this direction, just because my End Means Methodology¹ is a transdisciplinary revolutionary vision on integrating all so called “social science” into a single and coherent discourse (economics, politics and ethics included).

I try to resist temptation to comment the whole book and to write another book with both agreements and disagreements on the theoretical debate the author is challenging to his readers. I’ll underline the importance to have such a provocative approach made by Emil Dinga and I’ll enter the dialogue on some conceptual aspects. After rejecting the dominant views on “what is economics

words (Economics and economy) with one and the same word: “economie”. I suggested to use *Economica* as the Romanian for Economics, but this has a small support. After 5 years prof. Paul Bran suggested to use *Economica* and he still has some supporters in the Academy of Economic Studies in Bucharest. To better promote this new Romanian equivalent for Economics I founded, edited and managed an economic journal in Chisinau (Republic of Moldova) for three years (1993-1995). It is remarkable to find out *Economica* is still alive after 17 years from its foundation.

¹ See recent contributions on this issue in my papers “Management as an Actional Transdisciplinary Approach of Humna Beings. Application to the Management of Education”, in: *Economy Transdisciplinarity Cognition (ETC)*, vol xi, issue 2/ 2008, pp. 79-88 (see www.ugb.ro/etc) and “Science is dead. Long live knowledge!” in *ETC* vol XII, issue 2/ 2009).

about” Emil Dinga suggests some points of start in the conceptual reconstruction process: 1. without prime causal impulse, all the other impulses should be included in the economic process through reaction-diffusion equations; 2. the economic process modeling is not still possible as a punctual modeling; 3. The science of integral human action should be a sin-nomic science, i.e:

- is a science which subject is LVS (Logic Vivid System);
- is a science based on local finalist argument (i.e. non divine) of human action;
- is a science integrating axiology in the dynamic of LVS
- is a science that integrates the moral criterion as evaluator of human action, i.e of the sin-nomic process;
- is a science which assures the viability of the economic process;
- is a science whose (sin-nomic modeling) is constructivist type, is an axiological engagement (the future is morally created not passively predicted);
- is a science which integrates praxiology, axiology and morality;
- is a science that will rebuild social-democracy as a political way of global social life.

This third part of the suggested conceptual reconstruction of economics is similar with my three decades old End Means Methodology in which economics will disappear as a discipline and will be part of a triadic transdisciplinary simultaneous continuum called **Politics-Economics-Ethics continuum**. This similitude among our vision is a good ground for cooperation. I proposed it many times as a core curriculum replacing all “social sciences” taught in high school. This could be later on studied on as many components we wish but having in mind the teleological-instrumental-ethical dimension of any human being.

Even my temptation of commenting a bigger part of the book, I’ll stop here with some concluding remarks: the book is very useful to economic students, but to political studies and moral philosophy students as well. The figures should be more useful if colored and with more clear writing inside them; a more colloquial instead of an excessive very precious language would be recommended, especially if this book will be dedicated to first year students. Too long and mathematized equations could be read from the original books, using here only the conclusions or the slightly modifications of these demonstrations; the book has a clear interdisciplinary, multidisciplinary and sometimes transdisciplinary approaches that is a very good ground for generating new ideas. In this respect I mention here my proposal to Develop Research Units Generating Unified Science (this was before declaring the death of science and replacing it with knowledge).

Emil Dinga’s book is really valuable for non-disciplinary economic practitioners just because a goo fiscal analyst is not possible to have without a macroeconomic researcher and a theoretical thinker to environments and the complex networks. That is why I suggest a possible compression of this big book for the use of every man interested in the personal and social life of human beings. One possible tool that could be used in this respect is EMMY, i.e. discussing many of the concepts and processes implied in terms of ends, means and end-means adequation. In the last chapter of the book the author is revealing his ideological belief as a state interventionist and as an adept of a very visible hand in the economic management. Some brakes put in the reforming process of Romanian institutions are, in the E, Dinga’s vision union paternalism and the conservatorism of the new elite. I would add the huge corruption of every institution (in public administration, education, health care or in social assistance. A future edition could have a Chapter 10 of the book “On dual (underground) economy” to have a bigger extent and a more clear use of terms (corruption included)¹

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¹ Interesting for the study of corruption is “Organizational Immunity to Corruption. Building Theoretical and Research Foundations; edited by Agata Stachowicz-Stanowich and published by The Katowice Branch of the polish Academy of Sciences, Katowice, 2009, Poland (ISBN 978-83-88657-37-5, and my chapter 7 “Is Corruption Un-Ethical? The Politics and Economics of Corruption. Corrupt Universities”, pp. 119-130

About ETC

ETC (Economy Transdisciplinarity Cognition) is an English language journal published biannually by the George Bacovia Publishing House (Editura Universitatii George Bacovia), as part of George Bacovia University from Bacau, Romania (www.ugb.ro). The electronic version is hosted at www.ugb.ro/etc. The printing data are the end of June and the end of December. ETC is ranked B+ by CNCSIS (National Council for Research in Higher Education) since issue 1/ 2009. ETC is distributed worldwide by Pro Quest and is included in Copernicus database. Thompson Reuters is monitoring our journal since December 2009 and we do all our best to be included in this first hand data base for journals.

The name of our publication tries to suggest the area of subjects, disciplines and approaches we are very much stimulating. **“Economy”** is about our daily life in production, marketing, commerce, finances, management, public administration, tourism, accountancy, environment, etc. **“Transdisciplinarity”** is the heart of the name just because we are stimulating non-disciplinary (multidisciplinary, interdisciplinary and transdisciplinary) approaches as a first hand source for new ideas, new methods and better results in research. **“Cognition”** is quite important for any serious research. Any articles aims at improving ways of cognition and the total sum of useful knowledge. In the Knowledge Society (Information Society, Knowledge based Economy, Sustainable Economy etc.) the psychological and sociological dimensions are to be largely promoted.

As a result, the humanistic visions are encouraged and stimulated. **Developing Research Units Generating Unified Science** is an integral and integrative vision on cognition and knowledge. The word “science” is a problematic one, especially when we are discussing about “sciences”. Any new discipline, interdisciplinary approach or even some methodological improvements are, sometimes, accepted as “new sciences”, but this is only a contribution to destroying the unity of knowledge. That is why holistic and integrative visions, transdisciplinary approaches have priority in being accepted to be reviewed and published. As a matter of fact, the only sintagm where could be accepted the using of the word “science” is “unified science”, i.e. knowledge.

ETC is highly stimulating the book reviews and book essays in order to help stimulating reading or at least to largely share the new ideas from books and articles. We address ourselves to the publishing houses worldwide to send us new books to be reviewed and published in ETC. At least a list of new books could be sent to us to be distributed together with our journal. Finally, publishing houses may use ETC as a means to enter in new circles of potential readers. Ads for universities or other cultural institutions may be hosted by our journal.

Instructions to authors

1. The articles should be written in English and prepared in Microsoft Word for Windows format
2. Text margins: bottom, top – 2 cm., right, left – 2,5 cm., orientation: portrait, paper size: A4 (210x297 mm)
3. Text: TNR, 11 pts., justified, line spacing: single
4. Do not put numbers to Introduction, Conclusion and References
5. A minimum of 3 chapters are required
6. A chapter should have at least 5 pages
7. The total length of an article is at least 10 – 15 pages. The maximum length of an article is about 40 pages
8. References are to be split into Bibliography and Webography. The title of the book or article from References should be in the original language with an English translation in parenthesis. No translation for the Publishing House is required. Do not consider as a reference journals collections or general websites. Only papers with concrete authors and pages should be included in References
9. Footnotes are recommended for short supplementary explanations, for quoting concrete articles and books, indicating the pages
10. Tables, figures and graphics should be indicated with Arabic ciphers. The graphics must be well-contrasted, square-shaped and accompanied by a concise legend
11. The photos should be white-black or color, with high resolution and contrast
12. Quotations are needed to show the genuine thinking of the quoted authors. At least a phrase or a paragraph with concrete page numbers is needed when referring to quite important and useful ideas for the economy of the paper
13. Quotations are written with Italics and author names will be written with Bold (both in the body of the article and at References)
14. In order to clearly distinguish the original ideas from the other authors' ideas "I" is recommended to be used when genuine and own ideas or results are written. The impersonal "we" can be used only in multiple authors' articles, but even in this case it is necessary to clearly show if a contribution is due to the first or the second author
15. Explain an acronym when for the first time used
16. The respect for the intellectual property is an absolute value we are respecting most. That is why we strongly suggest not to send us already previous published articles, chapter of published books or parts of an article which is not the result of your own efforts. Plagiarism is highly discouraged and any author will sign an accompanying document to prove the fact that the article is an original and unpublished one
17. A careful linguistic and grammatical control is needed before sending the article. At least the automatic corrector should be used to make easier the work of reviewers
18. The articles should be sent by email at one of the following addresses: etc_journal@ugb.ro , liviu.drugus@ugb.ro or liviudrugus@yahoo.com

The presentation of the research results must respect the following requirements:

1. The Abstract should describe clearly the content of the article, without general phrases or well known truths. So, only significant and useful info will be included in the Abstract. The original results, new ideas and essential contributions will be clearly presented in the Abstract. The Abstract may have ½ of a page and is followed by maximum 5 keywords.

2. The main structure of an article should have the following info:

- what are the motivation for making that research and writing that article
- what is the field of reality covered by this article (not necessary in terms of disciplines or “sciences”)
- what is the state of the art in the respective field of research (most known literature and authors). The level of knowledge at the moment of starting the research is necessary to be established in order to clearly underline the new knowledge generated by the research
- what are the working hypothesis starting the research
- what are the methods, techniques, procedures etc. used during the research process
- what are the principal findings/ results of research and what is the degree of novelty and usefulness in the author(s) view
- what are the theoretical conclusions of the research and suggestions for future research

3. Ideally, an article should include a Case Study – as a practical demonstration of the usefulness of the theoretical research and as a concrete application to improve the present or future life of humans. Simple synthesis of the present literature in a specific field should be avoided; this may be only the beginning for a future concrete research.