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THE SMALL AND MEDIUM-SIZE CITIES (ALSO) REQUIRE (REQUISITELY) HOLISTIC APPROACH AND (ETHICS OF) INTERDEPENDENCE

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The small and medium-size cities (also) require (requisitely) holistic approach and (ethics of) interdependence[138]

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Abstract: The small and medium-size cities tend to be governed by specialists of single professions, whose education for interdisciplinary creative cooperation is very rare, rather than by persons with knowledge of systems theory. Democracy of over-voting does not replace it. Ludwig von Bertalanffy (1978, p. VII) explicitly stated that he had created his General Systems Theory against over-specialization, i.e. to support interdisciplinary creative cooperation as the best way toward the necessary holism of approach and wholeness of outcomes of human activity. But he did not support his intention methodologically a lot. Mulej did it with his Dialectical Systems Theory (DST). Narrow specialization is still necessary, but equally so is the other specialists' capacity: cooperation helps humans prevent oversights and resulting failures, because it enables more holistic thinking/behavior. The role of the narrow specializations is so strong that people hardly see that holistic thinking/behavior – enabled by interdisciplinary creative cooperation, backed by (ethics of) interdependence – makes specialization of any profession much more beneficial than any operation inside a specialization alone. Nobody, whatever their profession, can live well without co-operation with people of other professions. De Bono's '6 Thinking Hats' support it, so does DST from the same period of time. Both of them have been fruitfully applied all four decades since. A new support was recently offered: social responsibility (SR) with its all-linking concepts of (1) interdependence and (2) holistic approach is close to DST and (liberal rather than neo-liberal) economics, as authors understand the essence of the recently published ISO 26000 on social responsibility and European Union's (2011) support to it. Here, the authors aim to address use of DST/SR (via SR) in running of small and medium-sized cities; politicians and staff are supposed to be interested in social responsibility as a source of their benefit, but need knowledge and values to work on implementation of SR, perhaps with a specialized professional team support. The suggested findings should help humans find their way out from the current crisis, but in synergy; this crisis results from obsolete management and government style, including the small and medium-sized cities.

Keywords: dialectical system theory, ethic of interdependence, ISO 26000, organization and management, requisite holism, small and medium-sized cities, social responsibility.

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1. The Selected problem and Viewpoint of Dealing With it Here

The neo-liberal economic model of the entire period after the Second World War does not cover governance of enterprises only, but all organizations, including the small and medium-sized cities[139] (Potočnik, 2010). But this model is now finally found obsolete by many around the world; it causes *prevailing of one-sidedness* over holistic decision-making and action, including the international, national and local politics with very dangerous consequences, such as the current global social, economic, and environmental crisis. The model's consequences cannot be solved by itself, because it has caused them. The old-main-stream economists offer no new solutions, but theorists of systems and cybernetic theories, United Nations, European Union, and most recently the International Standard Organization (ISO) do, although on the level of basic principles, so far. Market alone has not proved to be able to rebalance crucial consequences of human one-sidedness, neither have governments alone. Systems theory and cybernetics have offered *holism of approach* for *wholeness of outcomes* for close to seven decades, now United Nations, European Union and ISO do it with their new concept of *social responsibility* (SR) (ISO 2010; EU 2011). We will discuss the links between systemic behavior that offers most of holism, and SR, to offer a suggestion toward the transition from the current fictitious democracy in running municipalities from a more real one. We think that the *essence of democracy is the highest possible level of holism in decision making and taking rather than outvoting*. We are afraid that the representative type of democracy organizing cannot be overcome yet (Grün, Zeitz, 2012). But the process in the elected bodies can be made more holistic in its approach and lead to more wholeness in its outcomes. We will show the basis for it in this contribution.

2. Conditions requiring requisite holism, ethics of interdependence and social responsibility in the contemporary society and economy

In the 20th century the world, and especially Europe, went through a triple terrible crisis: two World Wars and Big depression between them, in 1914-1945. Details have no room here, but a few facts do. (1) The crisis resulted from one-sidedness of the influential persons and their organizations, both governments/countries and enterprises. (2) The one-sided demand in the peace treaty after the First World War demanded Germany to repay huge war reparations with no export. (3) The one-sided decision of Hitler's 3rd Reich to open several war fronts helped the more holistic Allies to win the WWII. (4) The Keynesian model of finishing the crisis looked quite holistic, but Hitler's usage of similar methods of public works etc. finished unemployment by war, which was a very one-sided and terrible decision. (5) Democracy in politics did not prevent troubles. Etc.

Now, again, around the world many countries face severe economic and social difficulties; important economic sectors are in crises, leading to high unemployment and budget deficits, e.g. in Greece, Ireland, Portugal, Slovenia, Croatia, Spain, etc. (Mašanovič, 2011; Kosec, 2011; Stojan, 2012; Štefančič, 2012). So

[139] Our hometown Maribor is such a city. Its population is 112.642 on 30th June 2009; its administrative unit covers 148.340 inhabitants. It is the capital of Podravje region with 322.949 inhabitants (1st July 2010). It used to be an industrial manufacturing town since 1850s when the railway from Vienna to Trieste had started to change Maribor's character of a small city of 4.000 based on agriculture and related commerce after seven centuries. It grew to 30.000 before the first world war (in Austria), to 50.000 between the two world wars (in Kingdom of Yugoslavia) and to 200.000 (in Tito's Yugoslavia) before splitting in several boroughs (in independent Slovenia, after 1991). It used to serve the Tito's Yugoslavia market with textiles, trucks, buses, civil construction, food, wine, etc., and the international markets with the same, harbor-cranes, prefabricated houses, etc. Then, Maribor provided up to 90.000 jobs. After dissolution of Yugoslavia its markets were gone. University of Maribor with +20.000 students, hospital, and mostly small and medium-sized enterprises producing semi-products for foreign producers of final products became the main employers. The multi-party democracy has kept putting the issue of holism of the local government's decisions and actions on the list of problems of governance no less than the previous one-party governance. (Potočnik, 2010, and reference in it)

does USA (Kopušar, 2011). Even China might soon face troubles (Barboza, 2011). With tight financial funds severe restrictions were made in many companies, institutes, and public organizations in the most vital parts: investments, education, research, development, and health care; such short-term thinking will result in stall of innovativeness, loss of markets and in uneconomic behavior (e.g. Fidermuc, 2011; Hribernik, 2012; Stepišnik and Stojan 2011; Teršek, 2011). The short-term and narrow-minded behavior is typical of the neo-liberal economics that can no longer work (e.g. Senge et al., 2008; Toth, 2008; Bošković, 2011). It caused a crisis that differs from all crises of so far – crisis of affluence (James, 2007; Mulej, Hrast, editors, 2010; Mulej, Dyck, editors, forthcoming). In affluence the real human needs and ambitions are covered, greed and shopping-addiction no longer create enough demand for suppliers to find consumers, and human ambitions address well-being and SR beyond ownership of goods (Gerzema, 2010; Šarotar Žižek et al, 2010; Zgonik, 2011).

The crises require solutions, including the ones to be realized locally, e.g. in small and medium-sized cities. In previous periods and economic orders, e.g. the humans' natural environment was only a resource, for which the price was not fully charged to the businesses and other users, not an asset as now (clean water, air, soil). Humankind's over-production changed the environment so drastically, that the same practice of nature's over-exploitation is no longer possible. E.g., the Nobel-laureate Kajfez-Bogataj (2009) states, that regarding e.g. the climate changes at least three aspects should be considered: direct impact of changed climate on economy, adaptation of economy to changed climate, and remediation of the climate changes. This time, in human responses to crises, the natural and social environment and sustainability should be included.[140] All of them depend on human behavior, hence on human thinking, values and knowledge. One-sidedness causes also these troubles. Only respect for systemic/holistic thinking and resulting synergies could create good results. Social responsibility (SR) supports it, although informally (ISO, 2010).

Innovation of human behavior by SR thinking – from independence to interdependence and from one-sidedness toward holism – will require drastic changes in both human perception of the objective reality and acting. Changes have already started. The Kyoto protocol of 1990 e.g. has not brought the desired results, but it induced global changes; Rio +20 conference may reinforce them. The awareness of the impact of human activities (agriculture, industry, energy production, traffic, consumption) has increased and environmental changes have become better studied and discussed (Božičnik et al, 2008; Đukić, editor, 2012; Ćosić, ed. 2012). Many countries also invest into new technologies, new sources of energy, and more sustainable agriculture (ecological farming). The most important, though, is the innovation in human perception of natural environment, fragility of global community, thinking, and values, because on this basis decisions are made and taken.

Decision-making practices and policies should include more than ever before the SR thinking and acting, in order to abolish/diminish one-sidedness and resulting oversights and failures. We suggest SR should be more explicitly based on dialectical systemic thinking/behavior, with which we have had four decades of good experiences in many organizations (Mulej et al, 2012). In DST, we stress the importance of the ethics of interdependence and requisite holism in systemic thinking and acting (Mulej, Kajzer, 1998); both of them appear in ISO 26000 on SR (ISO, 2010). With ethics of interdependence cooperation of many specialists and participants becomes possible and leads to requisite holism, thus making systemic SR acting achievable. So does mutual reliability, honesty, hence longer-term and more holistic criteria and practice of behavior, and similar human attributes making life and business better and cheaper via SR.

[140] In the case of our Maribor, one speaks of the need for investment creating new jobs, too. Foreign direct investment is hoped for, but it requires (1) demand for investors' products, (2) geographical room for building the factories and related infrastructure, while agriculture should stay able to provide local food rather import of it, which makes food less healthy due to unavoidable chemical treatment etc. All these and other viewpoints are difficult to balance, especially without systemic thinking/behavior.

The (corporate) SR behavior is also required to improve the employees' satisfaction and the influence of the corporation on community and on global environment. Based on analysis of current economic and environmental climate a crucially innovated acting on corporate level is needed (Esposito 2009). Before the 2008- crises the 85% majority of humankind had to manage to survive on less than 6 (six) USD per day (Nixon, 2004 in Crowther, and Caliyut eds. 2004). The global population cannot enjoy the standard of the most developed countries (that are also in big debts), under the global neo-liberalism. It is neither possible due to the achieved level of innovativeness of the majority, nor due to the limited resources, especially natural resources on our planet, nor due to the monopolized and abused rather than free market. In (Božičnik et al, 2008), Dr. Gary Metcalf posed two crucial questions:
(1) If the American standard of living is not acceptable, which one is? And:
(2) If the Planet Earth is capable of supporting one billion humans, who and what will do with the other billions?

So far, these questions are still open and crucial. They are even more so in the light of high debts of the most economically and technologically advanced democratic countries, not only the others. Data on their debts explain why the ISO 26000 has finally been passed: to offer a new chance for a new management that activates more creativity by more well-being in order for SR managers, owners, and governors to develop more non-technological innovations to solve the given problems resulting from neo-liberalistic economics, related monopolistic management, and political parties' one-sidedness instead of democracy leading toward holism and wholeness. The non-technological innovations are at least equally crucial than the technological ones; they make room for creation of the technological ones (Mulej et al., 2012), Table 1:

Table 1: 40 basic types of inventions, suggestions, potential innovation and innovations

'Innovation is every (!) novelty, once its users (!) find it beneficial (!) in practice (!)'.				
Three networked criteria of inventions, suggestions, potential innovations, and innovations	*(2) Consequences of innovations*		*(3) On-job-duty to create inventions, suggestions, potential innovations, and innovations*	
(1) Content of inventions, suggestions, potential innovations, and innovations	*1. Radical*	*2. In-cremental*	*1. Duty exists*	*2. No duty*
1. Business program items	1.1.	1.2.	1.3.	1.4.
2. Technology (products, work processes)	2.1.	2.2.	2.3.	2.4.
3. Organization (process-based rather than subordination-based)	3.1.	3.2.	3.3.	3.4.
4. Managerial style (co-operative rather than one-way commanding)	4.1.	4.2.	4.3.	4.4.
5. Methods of leading, working and co-working (supportive of co-operation)	5.1.	5.2.	5.3.	5.4.
6. Business style (co-operation with business partners)	6.1	6.2	6.3	6.4
7. Governance & management process (supportive of co-operation)	7.1	7.2	7.3	7.4
8. VCEN (supportive of co-operation and reflecting interdependence)	8.1	8.2	8.3	8.4
9. Our habits (realizing contemporary VCEN in our practice)	9.1	9.2	9.3	9.4
10. Habits of others (realizing contemporary VCEN in their practice)	10.1	10.2	10.3	10.4

SR responsibility must become a non-technological innovation for humankind's current civilization to survive. The development of the society that humankind has experienced in recent decades is neither sustainable, neither achievable, neither desirable for majority of beings on this planet (Ečimovič et al., 2007;

Božičnik et al., 2008; Ečimovič et al., 2012; Senge et al., 2008; Toth, 2008). Before the industrialization, growth on our planet was small and steady; it was measured in three percent per millennium (quote in Mulej, Hrast, ed., 2010). This may also mean that the contemporary ambition for growth has not been as natural in the entire human history as it is found today, after the renaissance times. Since 1820 there are 6 times more humans on our planet. Each person is using +5 times more energy, is much more mobile, and travels 40 km per day, on average. Humans cut down every hour 1.500 hectares of forest, emit in our air 4 million tons of CO_2, and add 1.7 million tons of nitrogen by fertilizing agricultural land (Kajfez-Bogataj, 2009). She learned from her research and warns humans: "History is full of belated learning from early warnings". One-sidedness belongs here, too.

Similar studies also led to conclusions, that the crises of 2008- cannot be solved with the same neo-liberal economic concepts, which have caused them. At the same time, for too many decades, the influential individuals' human rights and their responsibilities were separated in the form of shareholding and limited liability companies, despite Adam Smith's disagreement (Toth 2008). Companies mostly end up in bankruptcy, or leave, before they fully repay to the society for the damages they have caused. The neo-liberal economic theory and practice included non-transparent and non-local economy; it included neither the holistic approach nor SR. Under the label of the free market, neo-liberalism even refused both of them, thus allowing monopolies to be formed and abuse others with their ethics of independence rather than interdependence. Hence, the management model of so far must be innovated - by application of SR.

3. Some Selected Viewpoints of Social Responsibility

SR became increasingly important in recent years, especially after a very long economic growth cycle had ended with 2008- crises. During our research on SR in 2009 we found on e–browser Google 25 million hits (Mulej et al., 2009). On May 7th 2010 we found 116 million hits, and on June 27th 2011 137 million hits, in June 2012 beyond 400 million. Then we gave up our hope to read them. The authors writing about SR from the viewpoint considered here include (Mulej, and Knez-Riedl 2011; Ženko 2011; Mulej, and Ženko 2010; Ženko, Mulej, and Božičnik 2010; Hrast, and Mulej eds. 2010; Hrast, and Mulej 2010; Šarotar Žižek et al. 2010; Esposito 2009; Hrast, and Mulej eds. 2009; Ženko et al. 2008; Božičnik et al. 2008; Prosenak, and Mulej 2008; Hrast, Mulej, and Knez-Riedl, eds. 2006; Knez-Riedl, Mulej, and Dyck 2006). For a list of more other authors see (KEN, 2011).

Contributions on SR are too many to read. Our selection shows the following situation:

- The simplest (and oldest) version of SR is charity, which is still important, but a small part of SR; it might only be a mask for real one-sidedness rather than RH of behavior of influential persons and their organizations, concerning many other aspects/topics in Figure 1.
- European Union (EU, 2001) mentions officially four contents of SR (of enterprises): the point is in a free-will-based acceptance of the end of abuse of employees, other business partners, broader society, and natural preconditions of humankind's survival, beyond law. The new EU's (2011) definition is shorter: organizational responsibility for one's impacts on society and nature.
- In literature on business excellence one requires more – upgrading of its measures with SR (For overview see: Gorenak, Mulej, 2010). A bridge is also offered, identifying SR as the acceptable modern values/culture/ethics/norms (VCEN) of human behavior (Potočan, Mulej, 2007), and business excellence as a method leading to it in practice (SFPO, 2010).
- In further literature one sees connection between systemic thinking and SR (Cordoba, Campbell, 2008), but it differs in the authors' selected viewpoint from the one under discussion here.
- A fourth group of references links SR with world peace (Crowther, Caliyurt, 2004).
- ISO 26000 (ISO, 2010) requires a *holistic approach* (based on *interdependence*) and includes seven content areas: (1) organization, management and governance, (2) human rights, (3) labor practices, (4) environment, (5) fair operating practices, (6) consumer issues, and (7) community involvement and

development. The definition in ISO 26000 was not passed by theorists and politicians, but by the international standards organization that is backed by businesses. Therefore, we prefer to build on it, when the topic tackles systemic behavior, education, innovation, and entrepreneurship. But SR is in the wording of ISO 26000 quite limited to organizations, but much less so in the spirit behind the words, as we see it; it is no longer limited to enterprises any more.

SR could be observed from two major views: shareholders and stakeholders. Prosenak and Mulej (2008) defined social responsibility as a concept in which care for social and environmental problems should become part of every activity. According to them SR has three dimensions: 1. social, 2.environmental, and 3. economic. Štoka Debevc (2008) observes the corporate SR for four groups of stakeholders: 1. employees, 2. suppliers, 3. nature, and 4. society. Different groups have different interests from which they derive their decisions. SR should be defined as a concept in which care for social and environmental problems should be included in activities to achieve human goals (Prosenak and Mulej 2008). Cities are no different: citizens are stakeholders, parties in powers are shareholders. SR matters.

The ISO 26000 on social responsibility was prepared by International Organization for Standards, connecting 169 countries; professionals, trade-unionists, and politicians from +90 countries and +40 other organizations worked on ISO 26000 for a decade (ISO, 2010) in a quite holistic way. Previous initiatives were limited mostly to the corporate SR (Hrast et al, 2006). ISO 26000 Standard on social responsibility (ISO 2010) was prepared to provide for harmonized, globally relevant guidance (but no certification). It helps all organizations including the public sector to understand and voluntarily include SR into their operations. ISO standard 26000 contributes to understanding and accepting relevant terms what is SR, definitions, and principles of SR. It also suggests how SR should be included in policy, strategy, integration and communication as well as the possible best practices how to apply SR. The major stakeholders are grouped as: government, industry, services, labor, non-governmental organizations, and customers.

To further develop the understanding and practicing of SR the most important in ISO 26000 are three groups of points with the number seven:

- 7 principles: 1. accountability, 2. transparency, 3. ethical behavior, 4. respect for stakeholder interests, 5. respect for the rule of law, 6. respect for international norms of behavior, and 7. respect for human rights (ISO 2010: 10-14).
- 7 core subjects (ibid:19-68): 1. Organizational governance, 2. Human rights, 3. Labor practices, 4. The environment, 5. Fair operating practices, 6. Consumer issues and 7. Community involvement and development. They are interrelated and bonded with organizational governance of the organization in the center. Due to objective circumstances the organization decides when it puts more emphasis on some core subjects and in different circumstances on the others. We find the two concepts linking them at least equally important: 1. interdependence, and 2. holistic approach (ISO, 2010: lines 896-900).
- Chapter seven that suggests seven steps of the procedure of introduction of social responsibility into the organization: 1. The relationship of an organization's characteristics to social responsibility, 2. Understanding the social responsibility of an organization, 3. Practices for integrating social responsibility throughout an organization, 4. Communication on social responsibility, 5. Enhancing credibility regarding social responsibility, 6. Reviewing and improving an organization's actions and practices related to social responsibility, and 7. Voluntary initiatives for social responsibility.

Holistic approach and interdependence are defined (lines 896 – 900 in ISO 26000) as follows: »An organization should look at the core subjects holistically, that is, it should consider all core subjects and issues, in their interdependence, rather than concentrating on a single issue. Organizations should be aware that efforts to address one issue may involve a trade-off with other issues. Particular improvements targeted at a specific issue should not affect other issues adversely or create adverse impacts on the life cycle of its products or services, on its stakeholders or on the value chain.« Holistic approach and interdependence between process participants are addressed indirectly in ISO 26000 by usage of terms such as: stakeholders, accountability, transparency, ethical behavior, respect for rule of law and other rules, honesty, human rights,

dialogue, wider impact, no abuse, no discrimination, healthy environment, no exploitation. This means that interdependence is considered and leads to (requisite) holism attainable by their interaction like in an informal systems/cybernetics thinking/behavior. This is namely very close to the pioneers of systems theory and cybernetics: Bertalanffy (1968: VII) wrote explicitly that he had created his General Systems Theory 'against overspecialization', Wiener practiced interdisciplinary creative cooperation, Mulej and other authors supported further development with several methodologies (François, 2004).

ISO 26000 neither explicitly writes about system theory or cybernetics nor includes their methods. Also the figure 2 Relationship between an organization, its stakeholders and society (ISO, 2010: 27) and figure 4 Integrating social responsibility throughout the organization (ISO, 2010: 81) state that the prevailing relations among are participants are only one way. Our critical conclusion is that ISO does not include enough the importance of interrelations and interdependencies. Implicitly some systemic thinking can be found in Figure 2 (ISO 2010: 15) the relations between society and environment are interrelated to organizations and stakeholders. Relations are expressed as interests, expectations and impacts. Though, the Figure 3 in ISO 2010: 20 contains two crucial concepts from systems and cybernetic theories: interdependence and holistic approach. See Figure 1. Thus, the law of requisite holism and ethics of interdependence (by Mulej and Kajzer, 1998) are reinforced on the global level.

The human need to formulate documents of United Nations and European Union on social responsibility a decade ago and ISO 26000 in 2010 reflects the blind alley of the socio-economic model of neo-liberalism. Hence, SR could and should be perceived as a complex invention-innovation-diffusion process, which should include dialectical systems thinking and acting (Ženko, Mulej, 2011). Complex process can be managed only with interdisciplinary cooperation of many specialists (specialized scientific disciplines), who feel and practice ethics of interdependence because they are complementary with their mutual differences, which enables them to attain requisite holism. The total holism that is addressed in ISO 26000, see Figure 1, reaches beyond human capabilities; holism with limitation inside a single viewpoint and discipline is only very exceptionally sufficient – requisite (Mulej et al., 2012).

Figure 1: The seven core subjects and two crucial linking concepts:
Interdependence and holistic approach, of social responsibility in ISO 26000

International Standard ISO 26000 is a great guidance to SR, actually to systemic behavior. We expect that as Kyoto protocol since 1990 has introduces many global changes, so will the ISO 26000. At the same time ISO 26000 is guidance, not an international law. It is more about the terms in SR and cases of best practices then about the requisitely holistic SR behavior. We believe that including the theory and methods of the Dialectical Systems Theory (Mulej, 1974; Mulej et al, 1992; Mulej et al, 2000; Mulej et al, 2008; Mulej et al., 2012) helps the stakeholders' SR acting to be easier to accept, practice and demand globally. This can be attained on an informal basis, too, which we will suggest later. The point is not in SR as something self-sufficient, but in its role of the systemic/DST alternative to the neo-liberalistic blind alley.

4. Systems theory: a semi-hidden background of SR

Some sixty years ago the authors of Systems Theory and Cybernetics had succeeded in making their theories known; politicians of the world succeeded in using it (informally) by making the United Nations Organization the most holistic political organization of humankind. Much later, the European Union (EU) found it necessary to explicitly link 'systemic' views with innovation. The EU, after reminding readers of its previous documents enhancing innovation, states on page 6:

> "The Action Plan [First Action Plan for Innovation in Europe, 1996, based on Green Paper on Innovation, 1995] was firmly based on the 'systemic' view, in which innovation is seen as arising from complex interactions between many individuals, organizations and environmental factors, rather than as a linear trajectory from new knowledge to new product. Support for this view has deepened in recent years (EU, 2000)".

Such a move to support and even require systemic thinking is taking place currently again under the label of social responsibility: United Nations Organization worked on UN Global Compact for a decade, International Standards Organization launched ISO 26000 (ISO, 2010), and European Union advises its member states and big enterprises to use ISO 26000 as a way out from the current socio-economic crisis (EU, 2011), etc. Figure 1 states this clear.

Thus, the concepts of 'interdependence' and 'holistic approach', i.e. systemic behavior, are found crucial on the world-top level by politicians, professionals, and business persons.

If this has to be stated explicitly in such documents, these questions arise:

- Are we humans capable of the interdisciplinary co-operation that we need almost every moment?
- What is the theoretical basis for those, who are not capable of it, to learn?

The empirical experience- and reference-based answers are:

- Very few humans are by their nature and education capable of interdisciplinary co-operation, because specialists teach specialists to be specialists, including being proud of their specialization (alone).
- This teaching is reasonable, but it is not enough: it may cause one to hide from reality behind the walls of one's specialization and lack respect for other specializations and their need for each other - as well as restricting their capacity to solve real problems by interdisciplinary creative co-operation much better than by separation (Ackoff, Rovin, 2003; Gigch, 2003; Mulej, 1974, 1979; Mulej et al., 1992; Mulej et al., 2000; Mulej et al., 2012).
- Very few universities offer courses on methods of holistic approach.
- The good novelty says that about 50 countries teach De Bono's methods to teachers in primary schools, in China in 600.000 schools (N. Mulej, oral message from De Bono's team, 2011).

4.1 The General Systems Theory – insufficient basis for holism and wholeness

The theoretical basis to learn the skills of the interdisciplinary co-operation, as the basis for holism of approach to human work and wholeness of its outcome, stems from the original authors of the Systems Theory and Cybernetics: Bertalanffy and Wiener. But many humans, even theorists of systems theory and cybernetics (see e.g.: François, 2004; Hofkirchner et al., editors, 2012; Mulej et al., 2006) now often use them inside traditional disciplines and forget that the fathers of the Systems Theory and Cybernetics have created their answers to the burning problems of their and our time through their interdisciplinary approach. This is where Dialectical Systems Theory (DST) (Mulej, 1974; 1979; 1992; 2000; 2012) of nearly 4 decades ago, allows us to fill the gap. François (2004) calls DST peculiar, for this reason, obviously.

The well-intended and well-applied versions of systems theory, which describe a part of reality inside a viewpoint of one single traditional, specialized, scientific discipline, are beneficial, but they do not match the well stated EU's and others' definition of 'systems view' (See: François, 2004). They help people solve other problems, but not that of the holism of thinking, decision-making, and action, as a precondition of survival of humankind and the planet on which we live, and/or of success in any human action (Geyer et al, 2003). Interdependence of different professions is left aside; unity in diversity is not attained. The current crisis is an obvious consequence.

Beyond 40 years ago Mulej learned about the General Systems Theory (GST) and started using it. Soon, he became disappointed because many GST users reduced GST to their basis for a formal description inside their own selected viewpoint and profession: he did not see holism that he expected. Holism means consideration of everything rather than another reductionism to e.g. a single viewpoint, literally. In our experience one can come requisitely close to holism best in interdisciplinary creative co-operation, making a synergy of insights (based on viewpoints different from each other) emerge from their differences from each other and networking with each other in networks. Hence we invented the notion 'Dialectical System' (DS) – Table 2.

A system is *at the same time*: 1) From the viewpoint of the *mathematical formalism*: a round-off whole, i.e. a network of any/no content; and 2) From the viewpoint of its *content*: a partial (one-sided) picture / representation (mental and/or emotional) of an object, which is considered / dealt with from either a selected viewpoint or a number or even a system of viewpoints. Thus, a system is holistic, formally, and one-sided, in content, at the same time. A dialectical system (DS) is a system (formally) of all essential systems (in content) presenting the same topic / object from different viewpoints, which are therefore interdependent and interactive; they make a synergy. DS includes all essential and only essential viewpoints, relations and synergies.

Table 2: Definition of a system and a dialectical system in DST

←----------		----------→
Fictitious holism/realism (inside a single viewpoint)	Requisite holism/realism (a dialectical system /DS/ of all essential viewpoints)	Total = real holism/realism (a system, i.e. network, of all viewpoints)

Table 3: The selected level of holism and realism of consideration of the selected topic between the fictitious, requisite, and total holism and realism

What viewpoints and networks are essential? This remains authors' decision and responsibility. This fact requires impact over humans' attributes (knowledge and values – K&V). But K&V, taken literally, is not necessarily requisitely holistic (= a DS), neither is so motivation alone or creation of preconditions for life and work alone. K&V and outer conditions are all inter-dependent rather than independent, and make the starting points of every human activity. The mentioned one-sided practices of many GST users deviated and deviate from Bertalanffy's (1979, p. VII) basic intention and definition: he 'created GST against over-specialization of the current times'. This means that Mulej's work has been in line with Bertalanffy's intentions to make holism a worldview with methodological support leading to wholeness of outcomes. The practice of N. Wiener, the author of cybernetics can be seen as practitioner of what Mulej calls 'requisite holism' (Mulej, Kajzer, 1998), a part of DST. See subchapters 4.2 – 4.4 for a summary.

4.2. Essence of the Dialectical Systems Theory

DST is a peculiar version of systems theory (François, 2004, p. 169 in Part I). It does not provide tools for humans to use on whatever basis, but tries to *impact human thinking and feeling*, too. Namely, the level of holism to be attained in their observation, perception, thinking, communication, decision-making, and action depends on the humans' subjective starting points (KV). DST *fights the fictitious holism*, which some other versions of systems theory may support (see Tables 2 and 3). DST has enabled several thousand successful applications both in research and "the real world" practice, especially in (non-technological) innovation, management, and organization.

DST's point is the *inter-disciplinary approach as a precondition of (the requisite) holism* of humans at work etc.; the lack of inter-disciplinary approach may namely make the presupposed holism – a central concern of cybernetics and systems theory – rather fictitious. This lack is found in practice (Mulej et al, 1974; 1979; 2006; 2012) and it opposes the Bertalanffy's and Wiener's groups / teams. The original authors of both systems theory and cybernetics were interdisciplinary and aiming at synthesis (Hammond, 2003).

This means: to make the concept of DS workable, Mulej created the DST as a methodology of behavior, especially thinking (in observing, reflecting, communicating, decision-making, and impacting) based on the following findings about reality:

- Humans observe, think, decide, communicate, act, and impact, on the basis of their *subjective starting points* (K&V), which are in turn subject to *influence of other humans, experiences, insights and feelings*.
- The starting points, especially the subjective ones – K&V (which select, by observation and decision, the attributes of the objective, i.e. outer reality to be taken in account), *influence further processes* of definition of objectives and their attainment, in which many features and attributes are interdependent, rather than simply linearly dependent.
- The starting points can be influenced, especially ones' K&V, by education and other information processes. But the receivers of those influences tend to *react* to them *differently*, if their role is to define objectives, or to attain (imposed?) objectives with the partial tasks to be accomplished by receivers.
- In acting according to their roles, humans try to be holistic, in order to avoid failures and resulting difficulties. But people tend to define *holism* rather *differently*.
- It is impossible for people to be *totally holistic*, at the level of Bertalanffy's requirements (Bertalanffy, 1979, p. VII). But if one defines one's own holism *very narrowly*, e.g. inside one single specialization, a *fictitious* holism is produced rather than a *realistic* one. Even worse, one can *imagine* that a realistic holism has been attained, despite its unreality.

4.3. The Six Components and Relationsmaking the Dialectical Systems Theory, in Summary

DST reflects these findings (in English see Mulej, Zenko, 2004 for some details and scientific backgrounds, and Mulej et al, 2012):

1. *The law of entropy*. One must take in account that there is a permanent natural tendency of everything to change into something else, i.e. to be destroyed, and to help create something else, simultaneously. Entropy requires people to be requisitely holistic and creative in order to succeed, rather than one-sided and routine-loving/addicted. Hence:

2. *The law of requisite holism*. There is a continuing need for a DS when a one-sided system is not a holistic enough picture of reality and a total (Bertalanffian) one cannot be attained (Table 3). Decision makers must take responsibility for their selection of what enters the DS, and what is omitted, but their decision does not prevent the omissions from influencing outcomes (Mulej, Kajzer, 1998). (The concept of meta-synthesis (Gu, 2006) seems to be leading in the same direction.). Hence:

3. *The law of hierarchy of succession) and interdependence*. It is not the structure of subordination, but processes that cause results. It is cooperation that makes processes happen. Therefore, one must start with the definition of salient objectives. This process depends on subjective (K&V) and objective starting points

(outer needs and possibilities). These are interdependent; so are the phases following later on in the process and their content, including perceived needs and possibilities, preferential needs and related possibilities, objectives, tasks to meet them, and processes to execute tasks. Consequently:

4. *The ten guidelines on how to form the subjective starting points of persons defining the objectives.* These guidelines must be used before the definition of objectives, in order to support requisite holism and creativity in this phase of the work process. We will brief them soon ('Ad 4'). The decision makers must be rather broad and synthesis-oriented. But they are not alone in the entire work process. Hence:

5. *The ten guidelines on how to form the subjective starting points of persons realizing the objectives.* These guidelines must be used after the definition of objectives, in order to support requisite holism and creativity in this phase of the work process. We will brief them soon, too ('Ad 5'). These decision makers / co-workers must be narrowly specialized and analysis-oriented, with responsibility for single details, while understanding and supporting a broader definition of requisite holism, with creative co-operation with specialists of other skills.

6. Both groups (in points 4 and 5) need tools to behave in a systemic way implicitly. Therefore: *USOMID* (DTS-based applied methodology of interdisciplinary creative cooperation) is used to enable participants of the work process to consider and use the three laws and both dialectical systems of guidelines, even without knowledge of their theoretical background. Our experience with employment of DST in non-academic settings soon demonstrated the need for DST's rather philosophical concepts to be expressed in an organizational technology, i.e. methodology. This is why USOMID came about; its Slovenian acronym reads: Creative Co-operation of Many for an Innovating Work (Mulej et al., 1982 and later, including 2012). It helps people face complexity by using systems theory with no word of theory, but implicitly. Now, we combine it with '6 Thinking Hats' (Mulej M. and N., 2006; Mulej et al, 2012). The latter enables implicit systemic behavior, too.

We cannot provide details, here except the ones on the guidelines (points 'Ad 4' and 'Ad 5').

'Ad 4': *Guidelines about the subjective starting points before definition of objectives*:

(1) **Purpose of work in contemporary conditions:** Both the contemporary human capacity of global influences and the interdependence require humans to innovate their culture toward more holism in terms of the Tables 1-3, e.g. by awareness of complexity and purpose of facing it with a creative/innovative action rather than avoiding it. Hence, the purpose is requisitely holistic invention-innovation-diffusion process (IIDP) and innovation (i.e. IIDP's beneficial outcome in users' practice) in tackling any topic.

(2) **Approach:** For this general purpose to be attainable, systems thinking, e.g. by DST methods, must replace one-sidedness as the methodology of observing, thinking, communication, decision-making, and action.

(3) **The dialectical system of trouble, objective(s) and tasks:** If the problem/trouble is oversight by one-sidedness, and (requisite) holism is the objective, then more of the application of creative co-operation based on DST can be a task (among many more, such as the ones of the narrow specialists). (Scenario maps for chance discovery (Ohsawa, 2006; Ohsawa, Maeno, Ito, 2006) etc. can support the transition from the desired to the requisitely holistically grounded objectives definition.)

(4) **The procedure of work on tasks:** Application of the (D)ST in practice can belong to the necessary procedures for more creative co-operation and work, and so can all available and necessary and sufficient, i.e. requisite, knowledge and motivation of specialists to be no over-specialists.

(5) **Consideration of everything crucial:** Double-checking, whether meeting guidelines (1) – (4) is enough or not, says that no single theory is enough, but the practice of system thinking, related legal and political institutions, and prevailing culture must support requisitely holistic, creative, and even innovative behavior to attain synthesis of several theories. If, e.g., all crucial professionals are not involved in the team, one must introduce them.

(6) **Capacity of requisite holism:** Hence, the dialectical systems thinking, which stresses interdependence and creative co-operation of mutually different viewpoint-holders, such as the interested parties in business and society, is needed as a human attribute. Using the concepts of inter- and trans-

disciplinary approaches of single-disciplinary specialists supports this human attribute (See: Herrscher, ed., 2012).

(7) **Dialogue in team:** Teamwork is an organizational possibility for co-operation that enables participants of the work process and/or other stakeholders to diminish alienation and attain requisite holism. The combination of USOMID and '6 thinking hats' (Mulej M. and N., 2006, 2012) makes the dialogue less troublesome and more productive.

(8) **Continual updating:** Innovation of the subjective starting points of co-operating entities toward ethics of interdependence and knowledge of co-operation make their teamwork easier. Obsolete knowledge and values are obstacles to creative facing of the modern complexity and its challenges. Brugha (2006; 2006a) offers an overview of approaches, and a case. Both seem to be able to support updating of the given knowledge on management of complex processes and situations.

(9) **Interdependence of knowledge and values:** For creative co-operation, both knowledge and values/culture/ethic/norms need innovation because they are interdependent and support each other, either toward creative co-operation or against it. People with obsolete values of what is right and what is wrong will very rarely accept and develop contemporary knowledge, and vice versa, in ones' K&V. Several proofs are provided (in e.g. Hrast et al., editors, 2012).

(10) **Evolution and path dependence:** Innovation of human subjective starting points, e.g. toward the requisitely holistic behavior, is rarely easy, if the experience of the tackled humans lets them prefer the old K&V and allows the old K&V to keep impacting the current behavior, although circumstances and conditions have changed. In such a case it would be difficult to define up-to-date starting point and salient objectives. The likely alternative is poor success due to lagging behind competitors, who do not lack modernity. Several proofs are provided (in e.g. Hofkirchner, ed., 2012; e.g. Gagnidze, Maisuradze). The current crisis is an obvious case, too.

'Ad 5': *Guidelines on how to form the subjective starting points of persons realizing the objectives*

(1) **Requisite holism throughout the entire work process:** After the objectives have been defined, tasks and procedures for narrower specialists have their turn. Still, success may be poor, if specialists do not work hard enough for both their own and shared requisite holism. Their knowledge is unavoidable, but not sufficient without requisite holism in their K&V.

(2) **Openness:** Holism, including the one concerning the work of narrow specialists, is very rarely attained with a lack of co-operation, and hence specialists must be open to each other, because they differ from each other. They become complementary to each other in this way. If agents are humans, ones' K&V may even be usable in combination with project management (Lostado Bojo, 2012, Vrečko, 2011)

(3) **Dynamics, adaptability:** Many specialists lack training in openness and must change / innovate their K&V in this respect. Dynamics does not cover change in the course of time, e.g. in statistical terms, only; it includes human capacity to adapt to each other, e.g. to accept proofs that are based on another viewpoint. With ethics of interdependence this is easier to attain than with ethics of self-sufficiency. Experience in use of USOMID and 6 thinking hats helps.

(4) **Interdisciplinary approach:** Openness is closer to specialists, as long as they may stay inside their own specialty; inter-disciplinary approach is harder for many, but equally or even more necessary for requisite holism. Capacity to listen to and hear the disagreeing ones is crucial; application of '6 thinking hats' helps crucially.

(5) **Probability:** One can never know and master totally everything; rather, a hard-to-define level of probability must be expected. This is why we do not speak of holism, but of the requisite holism.

(6) **Interaction based on interdependence and flexibility:** If specialists use the modern dialectics rather than the one-sided medieval metaphysics ('independence, no mutual impact, no change, boss is always right'), all the above five demands that concern specialists, can be met more easily and reliably: ethics and practice of interdependence support co-operation and changing, including innovation of human subjective starting points (K&V).

(7) **Clear delimitation of roles, jobs, viewpoints and resulting systems:** Despite guidelines (1-6) requiring the participants' co-operation, the latter is easier to attain, if jobs of specialists are precisely delimited. Thus, responsibilities are clear-cut; nobody has the right of irresponsibility.

(8) **Realism in generalization of conclusions:** Once every specialist does his or her own job, one must from time to time generalize findings / results; this phase includes a simplification, in which some details are omitted. It is important that this generalization is realistic, e.g. for a salient judgment on the level of holism and performance attained so far. Tables 1-5 are crucial.

(9) **Application of a dialectical system:** To make the judgment realistic, one should go for requisite holism by using the dialectical system, rather than a total or fictitious/one-sided one. See Tables 1-3 again, if necessary.

(10) **Interdependence of analysis and synthesis:** Judgment results from analysis and from synthesis following it. But there is also another synthesis with a crucial impact: synthesis of the subjective starting points and the selected viewpoints before, and as the basis of, analysis. This synthesis influences the level of holism of specialists crucially, in every work. This is why both dialectical systems of guidelines for subjective points were defined here.

On this basis, in Mulej's DST, **holism** tends to be both close to the definition of holism found in Bertalanffy's work and workable. Holism is therefore a dialectical system networking four interdependent attributes; see Table 4:

- **Systemics** (attributes of the whole, but not of its single components), complexity, synergies.
- **Systematics** (attributes of the single components, but not of the whole), complicatedness, details.
- **Dialectics** (attributes of relations that form the attributes of the whole, by causing emergence, resulting in synergy), interdependence, and resulting interaction.
- **Materialism** (attributes of the observer, decision maker, and/or actor, called also realism), the smallest possible deviation from reality in observing, thinking, decision making, and action.

Table 4: Holism as a dialectical system of four interdependent attributes of human thinking

The attributes in Table 4 have been sought from the very beginning of cybernetics and (the general) systems theory, but have lost to the unavoidable narrow specialization of the contemporary times. Formally, Table 3 can be attained inside a single viewpoint, too, but practically the requisitely holistic interdisciplinary co-operation is needed for people to avoid crucial oversights.

A new method supportive of creative co-operation of requisite and mutually different and hence interdependent specialists, e.g. coming from different units/sectors of an organization, or different organizations, etc. surfaced in our research; we used it in several workshops and consultancies with very satisfactory responses from participants (Mulej M. and N., 2006). See P. 4.4.

4.4. Application of USOMID and Six Thinking Hats in Synergy

Methodologies of creative cooperation based on interdependence and aimed at requisite holism, USOMID (Mulej, 1982) and SIX THINKING HATS (De Bono, 1985; 2005) have been applied in separation for nearly three decades very successfully, before the following synergy was created (Mulej M, and N., 2006): Table 5.

USOMID elaborated the blue hat better by its 6 SREDIM phases and its 4 USOMID steps to be applied inside each of the 6 SREDIM phases. The 6 SREDIM phases were learned from the 'Work Simplification' method of IIDP; but we found them addressing more the procedure of work than the one of cooperation. This failure created the danger of fictitious rather than requisite holism. USOMID also pays more attention to the execution of the taken decisions.

On the other hand, the SIX THINKING HATS methodology elaborates better the application of four hats presenting the emotional part of human behavior, which USOMID has been missing; these hats prevent arguing from rigid individual viewpoints. This is crucial for success.

Table 6 briefs attributes of each of the six thinking hats, which are therefore used by all team members at the same time one after the other, not all in the same moment. This helps all emotional attributes of every team member to show up without arguing that causes fighting. One comes from argumentative thinking of people feeling infallible, to complementary thinking, called parallel thinking (De Bono 2005).

SREDIM Phases USOMID Steps inside the SREDIM phases	1. Select problem / opportunity to work on in an USO-MID circle	2. Record data about the selected topic (no 'Why')	3. Evaluate recorded data on the topic ('Why" - is central)	4. Determine and develop the chosen solution/s of the topic	5. Implement chosen solution of the topic in reality	6. Maintain implemented solution for a requisitely long term
1. Individual brain-writing by all in the organisational unit / circle	All 6 hats	White hat	All 6 hats; red, black, yellow, green, first of all	All 6 hats; red, black, yellow, green, first of all	All 6 hats in preparation of implementation	All 6 hats in preparation of mainte-nance
2. Circulation of notes for ad-ditional brain-writing by all	All 6 hats	White hat	All 6 hats; red, black, yellow, green, first of all	All 6 hats; red, black, yellow, green, first of all	All 6 hats in preparation of implementation	All 6 hats in preparation of maintenance
3. Brain-storming for synergy of ideas / proposals	All 6 hats	White hat	All 6 hats; red, black, yellow, green, first of all	All 6 hats; red, black, yellow, green, first of all	All 6 hats in preparation of implementation	All 6 hats in preparation of maintenance
4. Shared con-clusions of the circle	All 6 hats	White hat	All 6 hats; red, black, yellow, green, first of all	All 6 hats; red, black, yellow, green, first of all	All 6 hats in preparation of implementation	All 6 hats in preparation of maintenance

Table 5: Synergy of USOMID/SREDIM and 6TH Methodologies in Procedure of USOMID

• White = neutral, objective, facts without interpretation, like a computer; • Red = feelings, emotions, intuition, irrationality, unproved feelings, no justification; • Black = watching out, caution, pessimism, search for danger, doubt, critique; it all works well against mistakes and weak points of proposals; • Yellow = optimism, search for advantages of proposals, search for implementation ways, sensitivity for benefit of the idea, constructive approach; • Green = energy, novelty, creation, innovation, in order to be able to overcome all obstacles; • Blue = organization, mastering, control over procedure, thinking about thinking.

Table 6: Essence of Each of the Six Thinking Hats

5. Suggestion about how to introduce requisite holism in the working of small and mid-sized cities

We suggest governments of the small and mid-sized cities to introduce into the work of their bosses, offices, and parliament members, in general:

1. Values of social responsibility and especially the concepts of interdependence and holistic approach to cover all topics in Figure 1 by using the process from ISO 26000 mentioned earlier in this text;
2. Working in their daily practice in line with the methodology briefed in Tables 5 and 6;
3. Considering guidelines in the points 1 and 2 here a non-technological potential innovation in need of a related IIDP.

Precondition for this process and resulting innovation (rather than any change) is the fact that the organizations should look at humans as multi-layered, not only as professional entities. In synergy, not only individually, we define humans as: (i) physical, (ii) mental, (iii) social, (iv) spiritual, and (v) economic entities, marked by requisitely, though not absolutely holistic pattern of relatively permanent characteristics, due to which the individuals differ from each other, and also as specialized professionals. All these and other attributes form synergies. Thus, we define the requisite holism of an employee, coworker, local parliament member, or tackled citizen as an individual existing and conscious of self as:

- Physical person respectively, implementing active techniques to gain physical balance,
- Mental entity, enriching sentiment, perception, mind and will-power by life balancing techniques,
- Social entity, building quality communication with others by the techniques of professional and working development and social integrity,
- Spiritual entity, longing after self-actualization and the sense of life, carrying it into effect by the techniques of spiritual development,
- Economic entity, striving to satisfy her material needs as a person, family member, coworker, and as a member of a wider society.

In this way the behavior of individuals, who are willing to practice interdisciplinary co-operation, becomes socially responsible. It offers a possible answer to crisis; hence the individuals evolve from being merely owners to requisitely holistic creators, who enjoy subjective and objective welfare more than the others. For details see Šarotar Žižek (2010).

For the small and mid-size cities to solve their possible socio-economic problems the neo-liberal economic measures can hardly work, because the problems have been cause by such measures, unless the given city is very exceptional. Thus, for these cities' work against the given problems we can suggest the following combination of the well-proven experiences that reflect social responsibility with informal big attention to interdependence and requisite holism: see Chapter 6.

6. Suggestion for solution: Combine experiences for the way out from the current crisis

The way out from the current long-term socio-economic and managerial crisis is available, based on combinations of best global practices. Non-monopolized markets and governance, collaborative management, cooperation-based ownership, tolerance toward creative talents, interdependence, and achievement of holism through SR are required and possible. The alternatives to their synergy are continued crises and ultimate destruction by world war, including nuclear destruction. One can learn from e.g. the following books about the world-class management and organizational practices.

- Collins (first with Porras, then alone) found with their teams of empirical practice researchers that "visionary companies" have been best off over an entire century, based on their socially responsible governance and management practices (Collins, Porras, 1997; Collins, 2001; Collins 2005).
- US Air Force General Wilbur. L. Creech showed, after 47 years of experience that he stayed alive during thousands of flights by cooperating with rather than one-sidedly commanding his teams, which means use of ethics of interdependence for more holism (Creech, 1994).
- Mondragon is an exemplary community in the Basque region of Spain, which during the past good seven decades has successfully applied co-operative ownership and management to its industrial production, schools, housing, banking, etc. R. Dyck, M. Mulej and coauthors (1998) include this and 30 other case studies.
- Richard Florida's *The Rise of Creative Class* (2002) shows that the US regions with the highest 3T levels (tolerance, talents, technology) attract the most productive people and enjoy the highest standard of living.
- Jeffrey Sachs' crucial new book *The Price of Civilization* (2011) contains data and analysis showing why the US is in deep crisis, and also why SR is the solution.
- Along with these models we suggest use of the voluntary international standard, ISO 26000 (2010), *Guidance for Social Responsibility*.
- We could add N. Roubini's remark, in "Gordon Gekk Wakes up," in the Slovenian daily *Finance* (18 August 2010:10) that managers' pay needs a longer-term basis.
- To persuade people one might use data summarized from five other books in Mulej's review (2010).
- The process of making social responsibility a prevailing management and governance practice should be considered a complex non-technological invention-innovation-diffusion process applying the (dialectical) systems theory (Mulej et al., forthcoming in 2012).

There is one more poorly addressed issue: new jobs and profits cannot be generated in the absence of consumer demand; greed is no longer sufficient to operationalize an economy, since 95% of people around the world live on less than six US dollars a day. Shorter working hours may also be required to generate better distribution of employment. (See for some details: Mulej, 2010).

Cassiers (2011) points out another crucial view: (1) crisis is multi-dimensional, including culture, politics, finances, economics, food, ecology, and society; (2) growth that has been so much exposed over the recent several centuries, cannot be put equal to prosperity because we see (2.1.) distinction between economic growth and satisfaction with one's life, (2.2.) ecological limits, and (2.3.) inequality and poverty; (3) quality of life depends on human being and human having; human being can be measured by (3.1.) well-being, (3.2.) happiness, and (3.3.) good life, while human having depends on (3.4.) acquiring of richness, (3.5.) business success, and (3.6.) affluence. Measurements in their book backing the quoted text found that humans' having certainly is an important source of good life, but far from being the only one: Belgium, USA, Japan, France and Denmark showed no serious growth of prosperity in the period of the very rapid growth of GDP 1955-2010. Data also show that six decades of economic growth has neither increased life satisfaction in the West nor swept away world's misery. – These findings also say that the neo-liberal economics have failed to make humans happy except a too small percentage. SR offers an

alternative chance. But SR, of course, must still pass the entire non-technological invention-innovation-diffusion process to become a prevailing culture, political, social, and economic practice instead of neo-liberalism toward more ethics of interdependence (rather than abuse) and holism (rather than one-sidedness).

7. Conclusions

Without socially responsible thinking and acting the current civilization hardly has a chance to survive. Economics is a tool of governors and managers, while management and organization serve humans to improve their life, including economic viewpoints, if they succeed, i.e., if they are requisitely holistic by ethics of interdependence. SR should include the wider view, beyond CSR, taking into account the governance and management of profit and non-profit organizations, human resources, consumer and customer relations, human rights, fair and just business practice, community involvement and development and especially natural environment. Their interrelations should be with consideration of (1) interdependence as the basis, and (2) holism as the top intention/achievement.

We prefer no limitation of SR to companies: they follow influential humans' decisions. SR is a human attribute. Interdependence makes human honest and leads from one-sidedness to holism, and to survival of humankind.

The briefed DS of components of DTS means: the current crisis is extremely serious due to a critical lack of systemic thinking of the influential persons (e.g. references in Mulej 2010); for an accelerated transition to a requisitely holistic society, one **starts best in KV of the government** by a well-organized invention-innovation-diffusion process backed by systemic behavior (Ženko et al., 2008, 2011, 2011, 2012). Its members have had so far a poor chance to learn about and to practice requisite holism, innovation and its organization and managerial conditions; but they are *the most influential* societal group, once people find them *credible*. Then the *government office people* follow, and then all other *public services*, such as education, medicine, research, etc. Now, businesses will follow government's advices more openly than so far, when routine-lovers were telling them to be innovative. **Everybody must be innovative and requisitely holistic, if influential,** in one's values for the given knowledge to be applied with new benefit, i.e. innovation, rather than to exist only. Social responsibility reinforces DST to solve the current crisis. Methods such as USOMID and 6 thinking hats support them.

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