

*Dr. Matjaž Mulej*

# MEDNARODNA ODLIČNOST IN INOVATIVNOST

## **Povzetek**

*Globalizacija spreminja merila, kakšno poslovanje je za odjemalce sprejemljivo. Merila odličnosti, ki so zadoščala v nedavnih desetletjih, ne zadoščajo več. Podjetje ne more več računati na trg s presežkom povpraševanja nad ponudbo niti na trg, na katerem zadošča, če prekaša konkurente glede stroškov in cen, glede komercialne in tehnične kakovosti, glede izbire, glede edinstvenosti svoje ponudbe, merjene po kakšnih ožje izbranih spletnih meril, ampak mora dosegati vsa ta merila in hkrati tudi merila sonaravnosti. Govorimo o sonaravnih podjetjih, ki manj od drugih obremenjujejo naravo, ker uporabljajo več inoviranja, zasnovanega na upoštevanju zakona zadostne in potrebne celovitosti opazovanja, razmišljanja, odločanja in delovanja. To pomeni, da upoštevajo celoten splet dejavnikov iz enačbe pogojev za nastanek inovacije iz zamisli, obenem pa jim uspeva, da za njih ne velja znana ugotovitev, da uspe samo manj kot pet odstotkov inovacijskih projektov. To jim uspe, ker se za razliko od večine, tudi tistih na svetovnem vrhu, ne ukvarjajo samo s tehnično-tehnološkimi invencijami in njihovim raziskovalnim, razvojnim, operativnim in tržnim spreminjanjem v inovacije, ampak tudi z inoviranjem vrednot, kulture, etike in norm v svojih organizacijah in družbenih okoljih, zato pa z inoviranjem svojega stila menedžmenta in poslovanja. Tako bodo postala in ostala družbeno odgovorna. Vse to je važno, da se človeštvo ne bi ustavilo v svojem sodobnem razvoju v četrti fazi konkurenčnosti, ki jo je predvidel Porter. Gre za razvoj od 1. faze naravnih virov preko 2. faze investiranja in 3. faze inoviranja kot podlage ekonomskega uspeha do 4. faze izobilja. V slednji ekonomske zakonitosti, ki veljajo za razmere pomanjkanja, ne delujejo več. Zato odpadejo ambicije ustvarjati z namenom imeti. Potrebna so nova merila*

*ekonomske uspešnosti, ki jih ponujajo nekateri psihologi in sociologi bolj kot ekonomisti, s skupnim imenovalcem 'srečnost'. Le-to lahko zagotavlja težnja ustvarjati in biti koristen preko meja težnje imeti. Tako se oblikuje (morda) nov koncept mednarodne odličnosti, pri katerem inovativnost ni več zgolj tehnično-tehnološka niti zgolj profitno-ekonomska, ampak uporablja in razvija človeško ustvarjalnost, sposobnost sodelovati in strokovnost kot vir za srečnost, ki nima zgolj materialne podlage, ampak v veliki meri tudi duhovno, saj daje smiselnost življenju.*

*Ključne besede: celovitost, dialektično sistemsko razmišljanje, inoviranje, kakovost, odličnost, sonaravno podjetje, srečnost, ustvarjalnost*

## **INTERNATIONAL EXCELLENCE AND INNOVATIVENESS<sup>1,2</sup>**

### **Summary**

*Globalization changes rules what kind of business is acceptable for customers. Measures of excellence that used to be good enough in recent decades are no longer so. Enterprises can no longer reckon with a market with supply exceeding demand or a market that allows survival to supplier that are better than their competitor in cost and price, in commercial and technological quality, in range offered, in uniqueness of their meeting some rather narrow systems of measures of quality; all these criteria must be met as well as the ones of environmental care. We talk about the 'sustainable enterprises'. They burden nature less than others do, because they use more innovating and innovation that is based on meeting the law of requisite holism of observation, thinking, decision making, and action. This means that they consider the entire system of preconditions summarized in the equation of innovation. At the same time they are not those enterprises, in which only five percent of innovation projects succeed. Sustainable enterprises succeed, because they differ from the others in the world top group by working not only on technological inventions and converting them in innovations by development, daily business of all phases and marketing, but also on innovation of values, culture, ethics and norms inside and outside their walls, therefore on innovation of their managerial style and business. Thus, they are becoming and remaining socially responsible. All of this matters for humankind not to stop its contemporary evolution in the phase 4 foreseen by Porter. He models evolution of bases of competitiveness from the phase 1, based on natural resources, via phase 2, based on investment and*

- 1 This contribution is based on research project 'From the institutional to the real transition to an innovative enterprise' that enjoys support of the Public Agency for Research, Republic of Slovenia, in 2004-2007
- 2 I thank for very fruitful contributions to Prof. Dr. Vojko Potočan, Prof. Dr. Jožica Knez-Riedl, Damijan Prosenak, MBA, Branko Škafar, M.A., and Anita Ilrast.

*phase 3, based on innovation as the background of success, to the phase 4 – affluence. In the latter the economic laws on covering needs with scarce resources no longer fit. This kills the ambition to create in order to have. New measures of economic success are needed that some psychologists and sociologists are offering under the common denominator of 'happiness'. The latter can result from the ambition to create and be beneficial beyond the ambition to have. Thus, maybe, a new concept of international excellence is showing up, in which innovativeness is no longer a technological or profit-oriented one only, but an attribute using and developing human creativity, co-operation capacity, and professionalism as a source of happiness reaching beyond the material content into the spiritual one, because it helps life make sense.*

Key words: creativity, Dialectical Systems Thinking, excellence, happiness, holism, innovation, quality, sustainable enterprise

## **0. THE SELECTED PROBLEM AND VIEWPOINT OF CONSIDERATION OF IT HERE**

**Local markets**, free of global pressures, no longer exist. Consumers are increasingly spoiled and demanding, since **supply exceeds demand** very much, except in areas of the World in which scarcity and dying due to hunger and epidemic diseases still prevail, which provides a lack of market for the advanced ones; thus, their organizations as business systems cannot fully develop. This fact does not tackle a minority or even a small minority of humankind, but **beyond 75% of all humans**. Before the industrial revolution China and India used to contribute 80% (eighty) of the World's gross product, and today their good progress helps them march toward 10% (ten) (Bošković, 2006). Weakening of the narrow limits and poor success of the medieval guild economy made room for the **industrial revolution** and resulted, step by step, in **abolishment of the essential monopolies**, in 1870s, in the 'West'. **Guilds** enabled a constant quality of products, but no competition, by which they prevented new quality from appearing, since they prevented entrepreneurial spirit and its need for innovation. **Twining of church and government** enabled a constant quality of thinking, but **no new quality**, because it prevented new ideas from appearing; it reduced logic to the old experience and made church dogmas un-

touchable. – What is *quality today and in the coming periods of time*, if it is called international excellence rather than a local one and coincides with the global market rules demanding innovation permanently?

## **1. INNOVATION – BACKGROUND OF THE CONTEMPORARY QUALITY**

Contemporary customers require excellence. How can the foregoing level of quality become a new excellence without *innovation* resulting from invention-innovation process and meaning the novelty from which *customers yield a new benefit*? It cannot. Contemporary humans are *condemned to living for innovation and on innovation*, although this may be a huge burden for very many. We live in the first period in which routine is no longer enough, in all hundred and more millennia of humankind.

Humans, who are living now, are living in the time in which *innovation* has become as *frequent* and *unavoidable* as never before. The most advanced areas of the world – Europe, Northern America, Australia, New Zealand, Japan, and the four Pacific Rim Tigers: Singapore, Hong Kong, Taiwan, and South Korea – are making the 20% of humankind, who are living on innovation. In the innovative society/economy humans must master much more *entanglement* than ever before:

- There are no longer local markets hidden from the global market;
- There are no longer chances for many humans to live with no permanent renewal of their skills;
- There are no longer markets in which supply is not bigger than demand, except for the least advanced areas in which close to a billion people are hungry, while in the other areas about a billion people are too fat to be healthy;
- There are no longer many areas in which humans can live with no innovation and therefore with no requisitely holistic thinking, called systems thinking in systems theory;
- Still, there are very few humans around the world, who are allowed to teach holistic thinking; the role of the narrow specia-

lization, which is unavoidable, is so strong, that people hardly see that holistic thinking makes specialization of any profession much more beneficial than any specialization alone. Nobody, whatever is their profession, can live well without co-operation with people of other professions.

Good *fifty years after* the authors of Systems Theory had succeeded in making this theory known, and since politicians of the world had succeeded in using it (informally) by making the *United Nations Organization* as the most holistic political organization of humankind, the *European Union* (EU) found it necessary to explicitly link 'systemic' view with *innovation*. In (EU, 2000), EU after reminding readers of its previous documents enhancing innovation, states on page 6:

'The Action Plan<sup>3</sup> 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.'

If this *has to be stated* explicitly in such documents, the question arises:

- *What is interaction based on*, if not on interdependence rather than (in)dependence?
- *Why does interaction make sense, if not* due to differences completing each other up?
- *Which differences* matter more in the human work, than disciplines/professions?
- *Are we humans* capable of interdisciplinary co-operation *that we need almost every moment?*
- *What is the* theoretical basis *for those, who are not capable of it, to learn it?*

The empirical experience- and references based answer reads:

- *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. This teaching is O.K., but not enough: it may cause *hiding*

---

3 First Action Plan for Innovation in Europe, 1996, based on Green Paper on Innovation, 1995.

*from reality* behind the walls of one's specialization, and lacking respect (1) for other specializations and the *need of all of them for each other* as well as (2) for their capacity to solve real problems in interdisciplinary creative co-operation much better than in separation (Ackoff, 2001, 2003; Gigch, 2003).

- The theoretical basis to learn the skills of the interdisciplinary co-operation stems from the original authors of the *Systems Theory and Cybernetics*. But many forget that the fathers of Systems Theory and Cybernetics have created their answers to the burning problems of their and our time in *interdisciplinary approach*. This is where our *Dialectical Systems Theory* (DST) has come in good three decades ago to fill in the gap (Mulej, 1974, a, b; 1975; 1979; Mulej et al, 1992; Mulej et al, 2000; Mulej, Ženko, 2004a, b).

- The well intended and well applied versions of systems theory, which describe a part of reality inside the viewpoint of one or another traditional, specialized, scientific discipline, do not match the well stated EU's definition of 'systems view'. Thus, they help people solve other problems, but not the one of *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, Hornung, et al, eds, 2003).

- The more or less traditional incentives for *Total Quality* are often taken in a too bureaucratic way to really work as incentives for contemporary excellent quality as an incentive for invention-innovation processes to flourish (Pivka, Mulej, 2004; Pivka, Uršič, 1999; Škafar, in process, 2004).

- We want to help the catching-up areas, most of all, because they are facing the '*innovativeness-needs paradox*': those who need innovation most like it the least (Rogers, 1995, p. 275). The problem lies in mentality very much - in humans' *thinking* and *worldview* as well as other *values/emotions*. It results in a lack of contemporary quality/excellence. And it requires a *requisite holism* of observation, thinking, decision-making, and action for the contemporary international quality to result. They need systems thinking. Creech (1994) summarized the way of practical showing up of this link well. See Fig. 1.



Figure 1: Five Pillars of Total Quality

## 2. THE LAW OF REQUISITE HOLISM AND THE EMERGENCE OF CONTEMPORARY QUALITY

Systems *thinking* as the *practice* of *holistic* rather than one-sided *thinking* had been many millennia old practice of the *successful* humans, before systems *theory* as its theoretical generalization was created. Like most other human capabilities, the practice of systems thinking was *informal*, first, and *then* received the form of *theory* to make easier the transfer of good practice through teaching (Mulej et al, 1998; Mulej et al, 2003; Mulej, N., ed, 2004; Potočan, Mulej, Kajzer, 2002).

For our definition of holistic thinking see (Mulej, in Mulej et al, 1992, reworked in Mulej, 2006). Holistic thinking requires more holism than the human natural capacity can cover. An author (usually tacitly!) *selects a viewpoint*, to consider the object dealt with on the basis of *limitation* to one part of the really existing attributes only. When specialists of any profession use the word system to call something a system *inside* their own selected viewpoint - it makes a system *fictitiously holistic*. It does not include all existing attributes that could be seen from all viewpoints and all their synergies. See Fig. 2.

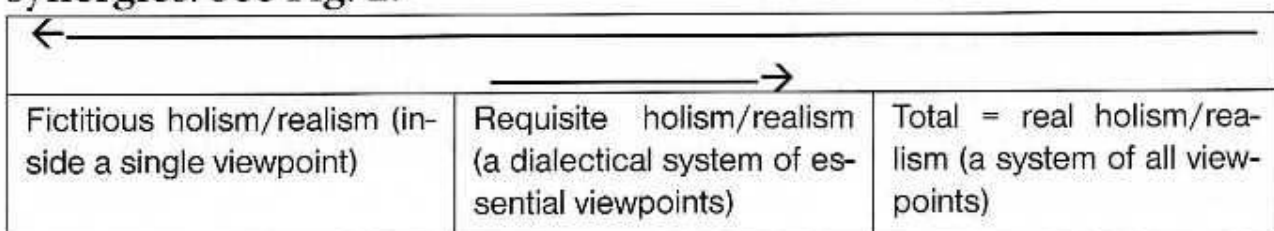


Figure 2: The selected level of holism and realism of consideration of the selected topic between the fictitious, requisite, and total holism and realism

For the requisite holism to be achieved three *preconditions*, at least, matter:

1) Both specialists and generalists are needed, in teams that feel *ethics of interdependence* and co-operate to attain the requisite holism.

2) They include professionals from *all and only essential* professions/disciplines.

3) Their values are expressed in their *ethics of interdependence* and practiced in a creative teamwork, task force, session(s) based on an *equal-footed cooperation* rather than top-down one-way commanding.

Requisitely holistic thinking *cannot* include the *global attributes only*, because they make *a part* of the really existing attributes only, although they matter very much and tend to be subject to *oversight* by specialists. *Neither* can holistic thinking include the *parts' attributes only*, although they matter very much and tend to be subject of *focus* by specialists of single disciplines and professions. Oversight of *relations*, especially interdependences causing influences of parts over each other, may not be forgotten about in requisitely holistic thinking; especially specialists, who have not developed the *habit to consider specialists*, who *differ* from themselves, tend to make crucial *oversights* in this respect. This experience means that they are not *realistic* enough.

Requisitely holistic thinking matters for scientific reasons, for individual success in whatever activity, and for economic reasons, too. See Figures 3 and 4 for a quick look at the *changes* requiring holistic thinking more and more today e.g. in relation to humans' natural environment, on which humankind's survival depends, but humankind threatens it by one-sided thinking, decision-making, and action, which cause its destruction rather than excellence. (See [www.climatecrisis.net](http://www.climatecrisis.net); Ećimović, Mulej, Mayur, 2002; Vezjak, et al, eds, 1997; etc.).



Viewpoints Type of Market	Basic Relation/s Between Produc- tion and Con- sumption	Impact of Humans on Natural Environ- ment	Quality - excellence
RANDOM MAR- KET	Producers' own consumption and occasional exchange of random sur- pluses	Minimal impact, grow- ing as humankind grows in number and needs / requirements	Defined randomly and by tradition rather than innovation
PRODUCERS' MARKET	Growing produc- tion for poorly considered, known/unknown, customers, who lack impact over suppliers	Specialization and narrow thinking grow and so does the humans' detrimental impact over nature (espec. by industrial- ized production)	Defined by producers rather than by consu- mers, who are happy to buy what they can find (even with need for immediate repair etc.); no innovation
BUYERS' MAR- KET	Growing impact of customers requiring satisfac- tion / total quality of products and services, and con- ditions of life	Specialization and its bad one-sided impact over nature keep growing, so does biased application of science, causing need for interdispli- nary cooperation	Defined by buyers and consumers and pressing producers and suppliers to com- pete to meet require- ments in Figures 1 and 2 by innovation
STATE / GOVERNMENT SUPPORTED BUYERS' MAR- KET	Increasingly orga- nized / legalized impact of custo- mers demanding total quality of pro- ducts, services and conditions of life	Growing awareness about the terrible im- pact of humankind's one-sided impact over nature & its dra- matic consequences for humans' survival	Defined by buyers and consumers and pressing producers and suppliers to com- pete to meet require- ments in Figures 1 and 2 by innovation; official quality stan- dards are added

**Figure 3: Development of market relations and environmental care quality – a case of growing awareness of the requisite holism as a precondition of humankind's survival and quality of life**

Why are facts in Figures 1-3 so *alien* to so many contemporary people?

For most time of the 100.000 or millions of years of its history (Bryson, 2005), humankind has lived in self-sustained economy

with a random market, e.g. in the form of fairs. **Innovation** did not matter; **requisite holism** was reduced to local and family relations, mostly, so was **ethics of interdependence**. In producers' market they and/or **sustainable development** did not matter either, because **competition** was negligible; cases may include medieval guilds, strong trade unions, or market monopolists of other types. Once their power had been broken, after 1870s (Rosenberg, Birdzell, 1986), innovation and hence requisite holism and ethics of interdependence gradually became crucial – in the emerging buyers' and state supported buyers' market. Hence, in a **very short period of time** people have become supposed to change millennia old habits – add **innovation** to routine, and **requisite holism** to growing narrow specialization, as well as **interdisciplinary co-operation** to self-sufficiency of specialists. Narrow specialization that is unavoidable today, may add to either ethics of interdependence or ethics of self-sufficiency, depending on **human values**.

Prescribed standards, such as **ISO 9000** (quality), **ISO 14000** (environment), are cases of the related change in the buyers'-market situation. In addition, in recent decades market changes became much quicker (Fig. 4). People of today are **overwhelmed** by market demands for change and they must match these changes with innovation and hence requisite holism and hence ethics of interdependence, like never before. Changes happened in **one-generation time**, rather than as slowly as people were used to earlier, and are keeping this speed.

De- cade	Market & Social Require- ments	Enterprise's Ways To Meet Requirements	Type of Enterprise
1945-	Covering of post-war conditions of scarcity, rebuilding, etc.	Supply anything; supply does not yet exceed demand	Supplying Enterprise

1960-	Suitable price (as judged by customers)	Internal efficiency, i.e. cost management	Efficient Enterprise
1970-	Suitable price X <sup>1</sup> quality (as judged by customers)	Efficiency X technical & commercial quality management	Quality Enterprise
1980-	Suitable price X quality X range (as judged by customers)	Efficiency X technical & commercial quality X flexibility management	Flexible Enterprise
1990-	Suitable price X quality X range X uniqueness (as judged by customers)	Efficiency X technical & commercial quality X flexibility X innovativeness management	Innovative Enterprise
2000-	Suitable price X quality X range X uniqueness X contribution to sustainable development (as judged by customers)	Efficiency X technical & commercial quality X flexibility X innovativeness X sustainable development (SD)	Sustainable Enterprise (SE)

**Figure 4: From a supplying to a sustainable enterprise and increasing requisite holism**

Over the decades *after the 2<sup>nd</sup> World War*, market requirements have been changing more quickly than the human capacity to *unlearn the old and accept the new culture*. In every next decade, rather than a two-generation cycle of about 70 years (Mulej, 1994), new attributes preconditioned success in addition to the previous ones. Every phase after 1960, in the West (and Japan, Taiwan, South Korea, Hong Kong, Singapore, Australia and New Zealand) with their 20% of population of the world, expresses the buyers' and state supported buyers' market (in Fig. 3). Competition keeps causing *lower cost*, including a lack of care for natural environment, if short-term and one-sided views prevail. Monopolies are no better. A need results for costly eco-remediation, health care, organizational, managerial, business and technological innovation causing the development toward the *sustainable enterprise (SE)*. This is the basis of the contemporary international excellence.

### **3. SUSTAINABLE ENTERPRISES – A CRUCIAL STEP TOWARD THE CONTEMPORARY INTERNATIONAL QUALITY**

As we see above, humankind needs the development level of *SE* with full right (in Fig. 4: 'decade of 2000-'). It requires *requisitely holistic understanding* of the current reality and of the role and importance of all humans in that reality, especially of the critical entities such as enterprises. This means that humans *need* requisitely holistic thinking in their perception, thinking, decision-making and action for *humankind to survive*; they can use it with *ethics of interdependence* (For details see: Knez-Riedl, 2000a; Knez-Riedl, Mulej, Ženko, 2001; Mulej, 1979; Mulej et al, 2000; Mulej, Kajzer, 1998 and 1998a; Potočan, 2000; and Potočan, Mulej, Kajzer, 2005).

How can enterprises and other organizations of so far *become* SEs? According to data in Figures 1-4, especially Fig. 4 - 'decade of 2000', humans, as consumers, buyers, citizens, and competitors need and require enterprises to take a *new, more/requisitely holistic and future-anticipatory, criterion* of their own long-term *viability*. Consequences of one-sidedness in enterprises' decisions are clear: the economic and other *crises* of recent decades, which include *high cost* of SD that has become unavoidable. It is much easier to make decisions than to think requisitely holistically, unfortunately. More attention must be paid to a requisitely holistic preparation, definition and realization of goals including long-term SD in order for humankind to *overcome* its permanent and costly economic crises and to *survive*. Otherwise *profit* (as the financial outcome of one-sided decisions and actions) *kills profit* (as the long-term benefit).

Bosses and other members of modern enterprises are, hence, facing a *basic question*: How should they define their new development and future business? By *SD principles* (Potočan, Mulej, 2006): the most probable *alternative of requisite holism* is one-sidedness including *crucial oversights* and hence *new crises* due to which very few new firms live more than a few years (Gerber, 2004). Enterprises exist and develop best if their actions are requi-

sitely holistic. However, in both theory and practice, we detected **no holistic model of business** that provides a requisitely holistic, harmonized, and goal-oriented development. The SD concept offers a (possible) solution, at least, to achieve a sustainable orientation of human activities (Potočan, Mulej, Kajzer, 2005).

One can define SEs, in the most general sense, as enterprises attaining a **synergetic whole of economic, ecological, social, and ethical dimensions** (e.g. goals) of their business, along with the requirements listed in Figures 4 - 'decade of 2000', 5 and 6 (Ackoff, Rovin, 2003; Brandon, Lombardi, 2005; Breu, Hemingway, 2005; Drucker, 1985; EU, 2005; Goerner, 2004; Lunati, 1997; Potočan, 2002; Schermerhorn, Chappell, 2000; WBCSD, 2004; WCED, 1987). Their **synergy** makes the basis of the contemporary quality. It is based on **innovation** as a **permanent** practice.

Figure 5 shows the basic aspects and resulting **criteria** of what are SEs, and possible **means** of implementing market and social requirements as imperatives in and beyond the decade of 2000. SEs try to conceive and run their working and behavior in a way that meets both **human and environmental** needs and requirements (For details concerning each aspect and its criteria, see also: Ackoff, Rovin, 2003; Brandon, Lombardi, 2005; Cooper, Vargas, 2004; Daft, 2000; Dees, Emerson, 2002; Drucker, 1985; Ećimović, et al, 2002; Edwards, Orr, 2005; EU, 2005; Florida, 2002; Goerner, 2004; Koch, 1998; Lunati, 1997; McIntyre, 2005; Potočan, Mulej, 2003, 2005; Schermerhorn, Chappell, 2000; UNESCO, 2000; WBCSD, 2004, 2005; and WCED, 1987).

Humans namely live on **four basic levels** to be considered in SD, therefore by **sustainable ethics**: Individual level; Enterprise (e.g. corporate) level; **closer** environment (e.g. natural, social, and ethical) level; and **broader** (i.e. global) environment level. On all four of them four main criteria make the dialectical system to be considered. See Fig. 5.

Aspect	General Criteria
Economic imperative	Competitiveness
Ecological imperative	Habitability
Social imperative	Community
Ethical imperative	Legitimacy
All aspects for requisite holism	Combined criteria

**Figure 5: Sustainable enterprise's basic aspects and main criteria of its quality level**

The needs, which we have summarized in Fig. 5, require SEs to conceive, formulate, and apply *requisitely holistic criteria*, and to evaluate their business practices critically.

Figure 6 summarizes some basic criteria to *evaluate* SEs' business from some critical viewpoints. Hence, SEs attain the *highest level* of requisite holism and destroy the human condition for survival *the least* of all enterprises.

Criteria Aspects	Individual Performance Criterion	Corporate Performance Criterion	Societal Performance Criterion	Global Performance Criterion
Economic Imperative	Individual prosperity	Corporate profitability	Societal wealth	Global wealth
Ecological Imperative	Individual eco-efficiency	Corporate eco-efficiency	Societal eco-efficiency	Global eco-efficiency
Social Imperative	Individual quality of life	Corporate reputation	Societal quality of life	Global quality of life
Ethical Imperative	Individual values	Corporate values	Societal values	Humankind values
All requisite aspects in synergy	Individual sustainable life index	Corporate sustainable behavior index	Societal sustainable development index	Global sustainable development index

**Figure 6: Basic criteria for evaluation of sustainable enterprise – a suggestion**

SEs do not only command with the most modern and comprehensive *knowledge*, but use ethics that allow SEs to do no / to do the least *harm*, such as *sustainable ethics* resulting from SD principles.

#### 4. AFTER INNOVATION AND SUSTAINABLE DEVELOPMENT – WHAT COMES NEXT? WELL-BEING?

There is an interesting view of *economic development phases* that stresses the notions that are summarized in Figures 1-6. See Figure 7. (Porter, quoted after Brglez, 1999, pp. 23-24; he speaks of competitiveness; we extend the idea to development and add our ideas about the related culture).

PHASE	ECONOMIC BASIS FOR DEVELOPMENT	RESULTING CULTURE
1. Natural factors	Natural resources and cheap labor, providing for a rather poor life for millennia	Scarcity and solidarity, collectivism, tradition rather than innovation
2. Investment in modern technology	Foreign investment into the area's economic development; hardly/poor competitiveness in international markets	Growing differences, local competition, individualism, ambition to have more, be rich
3. Innovation based on local knowledge	Nation or region lives on its own progress and attain a better and better standard of living by international competitiveness	Growing differences and standard of living, global competition, ethic of interdependence, social responsibility, ambition to create
4. Affluence	People have finally become rich, which makes them happy in material well-being as a blind alley	Complacency, no more ambition, consumerism; what is quality, then?
5. Holistic creation and social responsibility (SR)	Material wealth suffices; effort aimed at spiritual wealth, healthy natural and social environment as requisitely holistic well-being	Ethic of interdependence and SR, ambition to create, diminish social differences to those caused by creation, including innovation

**Figure 7: From scarcity via complacency to the danger of a new scarcity or a new, 5<sup>th</sup> phase**

Obviously, the affluence phase in Figure 7 is not the *highest* development phase so far, only; it is also the phase of *growing*

**problems** of employment, supporting everybody, etc. Conclusion: one must attain and keep capacity of requisite holism in order to enter the **innovation phase** quickly and remain in it as long as possible, and/or **renew its culture**. The latter may make room for a **5<sup>th</sup> phase**, which is needed because the 4<sup>th</sup> phase can hardly be avoided. (Mulej, Prosenak, 2007). Porter and Kramer (2006) do not reach so far.

SE concept means, among the other points, that the **traditional** economic criteria can no longer express reality, because they **oversimplify** (like Forbes does, in Mulej, N., 2006). Criteria of sustainability diminish the **impression of success** of the socio-economic development to **hardly any betterment of life** over the recent decades (Božičnik, in process). SE criteria are more realistic, but not enough, perhaps; criteria concerning **well-being** may serve, too.

Diener and Seligman (2004) offer a promising model. It includes important **non-economic predictors** of the level of well-being, such as social capital, democratic governance, and human rights; all of them influence work satisfaction and productivity well. **Supportive social relations** are necessary for well-being; well-being in its turn also leads to good social relationships with crucial economic policy implications. Desirable outcomes, even economic ones, often result from well-being rather than the other way around. People high in well-being later earn higher incomes and perform better at work than others. They also have better relationships, are healthier, and attain longer lives. Therefore these authors suggest **measuring well-being with variables** such as positive and negative emotions, engagement, purpose and meaning, optimism and trust, and life satisfaction.

Hornung (2006, p. 338) states that **happiness** is the permanent goal of humans and a holistic indicator of holistic well-being, well-functioning, and the physical, psychological, and social health of an individual.

**What else** should be added as criteria of the contemporary international excellent quality based on innovation?

One can consider companies (Collins, 2001; Collins, Porras, 1997; Gerber, 2004; etc), individuals, countries, or regions. Florida (2005)



found in his field research about the reasons of *differences in economic prosperity* between regions of United States two basic causes of them:

(1) In USA, the *creative class* is rising from 5 (five) percent a century ago to +30 % in 1999, with 12% in its super creative core, while the working class is dropping from 40% at its peak several decades ago to 25% now. The largest social group is the service class, but it does not earn much, because it only provides preconditions for the creative class to create most of all (Florida, 2005, pp. 90-99).

(2) In USA, the most prosperous regions have the highest *3T indicator: tolerance* for difference between neighbors all way from traditional families to gays etc; *talents* that are attracted by tolerance and chances to be creative; *technology* invested (Florida, 2005, pp. 257-273).<sup>4</sup>

*Tolerance* is a relation making room for differences between humans to complement each other; it helps them to avoid oversights and to attain more holism. *Talents* make the basis for creativity, including innovation, which in turn can best result from co-operation of specialists different from each other. Investment in *technology* supports them, and receives support from them: if various and different talents work hand in hand, results of their creativity have more chance to be requisitely holistic and therefore to succeed. In other words: *(informal) systems thinking* is the background of the creative class and creative society/regions. But it causes difference, obviously, because not all people are equally capable of requisitely holistic thinking and creation, including innovation as a type of it.

This may mean that the *affluence phase might be a dead alley*, if people lose *ambition for creation*, and thus become alienated from their human essence as the most creative living beings. People therefore need either a prolonged innovation phase based on requisitely holistic invention-innovation rather than one-sided

---

<sup>4</sup> Tolerance to failures in business risk-taking is much bigger in USA than e.g. in Europe. This makes USA much more innovative. USA is a product of the most entrepreneurial Europeans, who left Europe to take their risk more freely. The routine-lovers remained in Europe and their culture keeps prevailing in it. (See: Mulej, 2006a).

processes, or

a new phase, a 5<sup>th</sup> one, of

Creative happiness based on ethics of interdependence and interdisciplinary creative co-operation with SR replacing the phase of affluence; for selfish reasons, people are less selfish, short-term thinking, and narrow-minded.

To make this *innovation of culture and economy* happen, there is no need for the entire population to become the core of the creative class: Lester (2005) found authors detecting that about 15-20% of people are *willing to take risk and cooperate*, about the same many want to be (abusing) *free-riders*, and the majority just *waits to see*, what will the opinion makers undertake. But this majority includes many humans with *creative potential*. The leaders (See Figure 1) providing *role model* of interdisciplinary creative co-operation can activate this potential rather than the managers who do not. This would make humans happy and society prosperous. But it requires a less narrow world-view and values than the practice of so far.

This might lead to society and economy of (requisitely holistically perceived) SR.

## **5. SOCIETY AND ECONOMY OF SOCIAL RESPONSIBILITY**

SR is a new response to the issue of the need for requisite holism. See Fig. 2 again, if necessary. Affluence is *no problem* as long as humans are *requisitely holistic* in their perception, thinking, decision making, and action. The requisite holism rather than a fictitious one could hardly cause the culture related to affluence. It would rather *extend the ambition to creation, including benefit of the entire society*. Requisite holism and related ethics of interdependence can help humans become ready for creative co-operation and perceiving them-selves as a part of the entire society/community (Mulej, Prosenak, 2007).

Namely: **SR** is in the definition by European Union a concept for enterprises to integrate, on the basis of their free will, social and economic concerns into their business (including sustainability, we

think) and relations with stakeholders (after EU, 2001, in the flyer of IRDO, Maribor, 2006). IRDO uses a broader definition (ibid.): SR of individuals, organizations of all kinds, professional groups, nations, peoples, unions. Following (Cooper, Vargas, 2004; Brandon, Lombardi, 2005) IRDO defines SR as the *humankind's obligation to realize shared objectives of the society*. (Hrast et al, 2006).

A renown expert on SR, Prof. Dr. Jožica Knez-Riedl explains, what the corporate social responsibility (CSR) actually is (Hrast, 2007): 'CSR reflects, first of all, an organization's attitude toward its employees, business partners and other stakeholders, and its responsible consideration of the natural environment and future generations. Acting with CSR includes broader and longer-term consequences of one's decisions, which means consideration of others, who must be treated fair and with causing no damage. CSR can be applied in all business functions such as human resources management, supply chains, production technology, attributes of products and services, advertising of them, investment, as well as innovating. CSR is not expected from bigger corporations only, but from everyone. They all benefit from their own CSR. They build and keep their own integrity, which supports their good image. They benefit from solving problems that tackle them indirectly, at least. They improve their own business and life success because they are more careful in choosing and using their business factors, loyalty of employees, customers, suppliers etc., benefit from their socially responsible investment, include less problems of health and honesty, which all diminishes cost and raises efficiency and effectiveness.'

Such attributes of behavior, obviously, create new ambition, reaching *beyond complacency* of the affluent ones. *No short-term efficiency*, including e.g. abuse of external economics, is enough, but happiness that we have mentioned above.

## 6. CONCLUSIONS

The innovative society of today does not yield success in more than about two percents of all attempts to innovate and the high tech industries do not contribute more than five percent of GDP (Likar, Fatur, 2007). Innovative society is still limited to about twenty

percent of humankind living in the oldest market economies. It is not successful, if criteria of sustainability are added (Božičnik, in process). Even if it is considering itself successful, public press reports about increasing numbers of humans feeling unhappy and hence abusing drugs from alcohol to marihuana etc, and doing so at an increasingly young age. This is a sign that there is a **lack of incentive for creation**. Such processes have been around before. History teaches that the Roman and other empires have faced ruining, once their people entered affluence and became complacent. Hopefully, **SR reaching beyond CSR to all, and incentives, such as happiness based on creativity**, can be a way out of the blind alley.

### References:

1. Ackoff, R. (2001), interviewed by Diane Staffors: »Interaction among departments is crucial«, Kansas City Star, 30 July, 2001. Article received by M. Mulej by e-mail from John Donges, jdonges@seas.upenn.edu
2. Ackoff, L. R. (2003): Iconoclastic management authority advocates a "systemic" approach to innovation. **Interview by Robert J. Allio** (sent to M. Mulej by e-mail, 11. July 2003, from Ackoff Center: [acasa@seas.upenn.edu](mailto:acasa@seas.upenn.edu))
3. Ackoff, R. L., & Rovin, S. (2003): **Redesigning Society**. Stanford Business Books. Stanford, Ca.
4. Bošković, D. (2006): Drugačen ekonomski zemljevid. **Delo, Sobotna priloga**, 23 September, 11
5. Božičnik, S. (in process): **Dialektično sistemski model inoviranja krmiljenja sonaravnega razvoja cestnega prometa**. University of Maribor, Faculty of Economics and Business, Maribor (= EPF)
6. Brandon, P., and Lombardi, P. (2005). **Evaluating Sustainable Development**. Blackwell, Oxford.
7. Breu, K., and Hemingway, C. (2005). Research Practitioner Partnering in Industry-Funded Participatory Action Research. **Systemic Practice and Action Research**, 18(5), 437-455.
8. Brglez, J. (1999): **Razvojni potenciali majhnih gospodarstev v razmerah evropskega integracijskega procesa**. EPF
9. Bryson, B. (2005): **Kratka zgodovina skoraj vsega**. Mladinska knjiga Založba, Ljubljana etc.
10. Collins, J. (2001): **Why Some Companies Make the Leap ... and others don't. Good to Great**. Random House Business Books. Sidney, etc.
11. Collins, J., Porras, J. (1994): **Built to Last. Successful Habits of Visionary Companies**. HarperBusiness. New York
12. Cooper, P., and Vargas, C. (2004). **Implementing Sustainable Development: From Global Policy to Local Action**. Rowman and Littlefield, Lanham.
13. Crecch, B. (1994): **The Five Pillars of TQM. How to Make Total Quality Work**

- for You*. Truman Talley Books. Dutton, NY
14. Daft, R. (2000). *Organization Theory and Design*. South-Western College, Cincinnati.
  15. Dees, G., and Emerson, J. (2002). *Strategic Tools for Social Entrepreneurs*. John Wiley and Sons, New York.
  16. Diener, E. and Seligman M. E. P. (2004): Beyond Money. Toward an Economy of Well-Being. *Psychological Science in the Public Interest*, 5, 1, 1-31
  17. Druckcr, P. (1985). *Innovation and Entrepreneurship*. Harper Trade, New York.
  18. Ećimović, T., Mulej, M., Mayur, M. (2002): *System Thinking and Climate Change System*. SEM Institute for Climate Change. [www.institut-climatechange.si](http://www.institut-climatechange.si). Korte.
  19. Edwards, A., and Orr, D. (2005). *The Sustainability Revolution: Portrait of a Paradigm Shift*. New Society Publishers, Gabriola Island.
  20. EU (2005, and earlier). *Sustainable Development*. EU, [http:// europa.eu.int / comm. / environment / wssd / eu\\_documents\\_en.html](http://europa.eu.int/comm/environment/wssd/eu_documents_en.html).
  21. Florida, R. (2005): *Vzpon ustvarjalnega razreda*. IPAK, Velenje
  22. Gerber, M. E. (2004): *Mit o podjetniku. Zakaj večina podjetij ne uspe in kako to spremeniti*. Lisac & Lisac and Gea College, Ljubljana
  23. Geyer, F., Hornung, B., et al, eds. (2003): *The Fourth International Conference on Sociocybernetics: Sociocybernetics – the Future of the Social Sciences, Society from Ancient Greece to Cyberspace and Beyond. Abstracts and Program*. ISA, RC 51. Held At Kerkyra, Corfu, June 30 – July 5
  24. Gigch, J. P. v. (2003): The Paradigm and the Science of Management and of the Management Science Disciplines. *Sys. Res. & Beh. Sc.* 20, 6, 499-506
  25. Goerner, J. (2004). An Introduction. *World Future*, 60, 4, 273-286.
  26. Hornung, B. R. (2006): Happiness and the pursuit of happiness. A sociocybernetic approach. *Kybernetes*, 35, 3/4, 323-346
  27. Hrast, A., Mulej, M., Knez-Riedl, J., eds. (2006): *Družbena odgovornost in izzi- vi časa 2006. In Slovenian, mostly*. Book of abstracts and CD with full papers. IRDO Institute for Development of Social Responsibility, Maribor
  28. Hrast, A. (2007): Družbena odgovornost je v trendu. *Glas gospodarstva*, januar 2007
  29. IRDO (2006) *Leaflet*. Institute for Development of Social Responsibility, Mari- bor
  30. Knez-Riedl, J. (2000): *Pojmovanje in presojanje bonitete podjetja*. Zbirka Sre- brna knjiga, 15. Zveza računovodij, finančnikov in revizorjev Slovenije, Ljubljana
  31. Kncz - Riedl, J. (2000a): Individualnost in sodelovanje, *Naše gospodarstvo*, 46, 126 – 133
  32. Knez-Riedl, J., Mulej, M. and Ženko, Z. (2001): Approaching sustainable enterprise. In Lasker, G. E., Hiwaki, K. (Eds.): Sustainable development and global community, International Institute for Advanced Studies in Systems Research and Cybernetics
  33. Knez-Riedl, J., (2003): Kakovost, inovativnost in boniteta podjetja – prešibko upo- števanje kakovosti poslovanja in inovativnosti pri presojanju bonitete podjetja. *Organizacija* 36, 9, 620-627
  34. Knez-Riedl, J. (2003a): Corporate social responsibility and communication with external community = Korporacijska društvena odgovornost i komuniciranje sa vanjskim okruženjem. *Informatologia (Zagreb)*, 36, 3, 166-172

35. Knez-Riedl, J. (2003b): Social responsibility of a family business. *MER, Rev. ma-nag. razvoj*, 5, 2, 90-99
36. Knez-Riedl, J. (2003c): Corporate social responsibility and holistic analysis. in: Chroust, G. (ed.), Hofer, Ch. (ed.). *IDIMT-2003: proceedings*, (Schriftenreihe Informatik, Bd 9). Linz: Universitätsverlag R. Trauner, 187-198
37. Knez-Riedl, J. (2004): Slovenian SMEs: from the environmental responsibility to corporate social responsibility. In: Sharma, S. K. (ed.). *[An enterprise odyssey: building competitive advantage. 2004]*, (Zagreb International Review of Economics & Business). Zagreb: Graduate School of Economics and Business, 127-139
38. Knez-Riedl, J. (2006): Družbena odgovornost in univerza. In: Hrast, A., Mulej, M., Knez-Riedl, J., eds., referenced here
39. Kncz-Riedl, J., Mulej, M. and Dyck, B. (2006): Corporate social responsibility from the viewpoint of systems thinking, *Kybernetes, The international journal of systems and cybernetics*, Vol. 35, Number 3/4, 441-460
40. Koch, R. (1998). *The 80/20 Principle*. Currency, New York.
41. Lester, G. (2005): Researchers Define Who we Are When We Work Together and Evolutionary Origins of the "Wait and See" Approach. *Complexity Digest 2005-05*. Electronic. See also: <http://www.upenn.edu/pennnews/article.php?id=738>
42. Likar, B., Fatur, P. (2007): Sistemski pristop v uvajanju strategije inovativnosti - primer lesne industrije = The systemic approach to innovation strategy implementation - the case of wood industry, *LES wood*, 59, 1-2.
43. Lunati, T. (1997). *Ethical Issues in Economics from Altruism to Co-operation to Equity*. MacMillan Press, Houndsmills.
44. McIntyre, J. (2005). Critical Praxis to Address Fixed and Fluid Identity and Politics at the Local, National and International Level. *Systemic Practice and Action Research*, 18, 3, 223-259.
45. Mulej, M. (1974a): Dialektična teorija sistemov in ljudski reki. *Naše gospodarstvo*, 21, 3-4, 207-212
46. Mulej, M. (1974b): Dialektično sistemski pogled na gradivo za project Razvoj denarnega in kreditnega sistema Jugoslavije. In: *Posvetovanje o razvoju denarno-kreditnega in bančnega sistema*. Zveza ekonomistov Slovenije & Narodna banka Slovenije (multiplied)
47. Mulej, M. (1975): *Osnove dialektične teorije sistemov*. Lecture notes. Univerza v Ljubljani, Fak. za fiz. kult.
48. Mulej, M. (1979): *Ustvarjalno delo in dialektična teorija sistemov*. Razvojni center. Celje
49. Mulej, M. (1994): Three Years of Support for a Theory: Two-Generation Cycles in the Transition from a Preindustrial to a Modern Society. *Cybernetics and Systems*, Vol. 5, 861-877
50. Mulej, M. (2006): Systems theory - a worldview and/or a methodology. Ashby Memorial Lecture. In: Trappl, R. (ed), *European Meeting on Cybernetics and Systems Research EMCSR '06*. Austrian Society for Cybernetics Research, Vienna, XXV-XXVII
51. Mulej, M. (2006a): *Absorbcijska sposobnost tranzicijskih manjših podjetij za prenos invencij, vednosti in znanja iz univerz in inštitutov*. University of Primorska, Faculty of Management, Koper
52. Mulej, M., Kajzer, S., Vezjak, M., Mlakar, P. (1998): Teaching on/for Systems Thinking. In: Hofer, S., Beneder, M., eds., *IDIMT '98: 6th Interdisciplinary Information*

- Management Talks.** Universitaetsverlag Rudolf Trauner, Linz
53. Mulej, M., Bastič, M., Belak, J., Knez-Riedl, J., Pivka, M., Potočan, V., Rebernik, M., Uršič, D., Ženko, Z., Mulej, N. (2003): Informal Systems Thinking or Systems Theory. *Cyb & Sys.* 34, 2, 71-92
  54. Mulej, M., de Zeeuw, G., Espejo, R., Flood, R., Jackson, M., Kajzer, Š., Mingers, J., Rafolt, B., Rebernik, M., Suojanen, W., Thornton, P., Uršič, D. (1992): *Teorije sistemov.* EPF.
  55. Mulej, M., Espejo, R., Jackson, M., Kajzer, S., Mingers, J., Mlakar, P., Mulej, N., Potočan, V., Rebernik, M., Rosicky, A., Schiemenz, B., Umpleby, S., Uršič, D., and Vallee, R., (2000): *Dialektična in druge mehkosistemske teorije (podlaga za uspešen management).* EPF
  56. Mulej, M., Kajzer, S. (1998): Tehnološki razvoj in etika soodvisnosti. *Raziskovalec*, Vol. 28, 1
  57. Mulej, M., Kajzer, S. (1998a): Ethic of interdependence and the law of requisite holism. In: Rebernik, M., Mulej, M., eds. (1998): *STIQE '98.* ISRUM et al., Maribor, 56-67
  58. Mulej, M. Prosenak, D. (2007): Society and Economy of Social Responsibility – The Fifth Phase of Socio-economic Development? In: Hrast, A., Mulej, M., Knez-Riedl, J., eds. (2007): *Družbena odgovornost in izzivi časa 2006. In Slovenian, mostly.* Book of abstracts and CD with full papers. IRDO Institute for Development of Social Responsibility, Maribor
  59. Mulej, N. (2006): Steve Forbes, predsednik uprave in glavni urednik Forbesa. *Marketing magazine.* No 307, November, 26-27
  60. Mulej, N., ed. (2004): New Moment Ideas Campus: Think Like Leonardo. *New Moment*, 22 (entire journal)
  61. Pivka, M., Mulej, M. (2004): Requisitely Holistic ISO 9000 Audit Leads to Continuous Innovation/Improvement. *Cybernetics and Systems.* 35, 4, 363-378
  62. Pivka, M., in Uršič, D., ur. (1999): *ISO 9000 in konkurenčnost podjetij. Slovenske izkušnje.* Posvetovanje. EPF
  63. Porter, M. E., and Kramer, M. R. (2006): Strategy & Society. *Harvard Business Review.* December, 2-15
  64. Potočan, V. (2000). New Perspectives on BDM. *Management*, 5, 1, 13-28.
  65. Potočan, V., and Mulej, M. (2003). On requisitely holistic understanding of sustainable development. *Systemic Practice and Action Research*, 16, 6, 421-436.
  66. Potočan, V., and Mulej, M. (2005). Ethics of Sustainable Development in Corporate Governance. *Global Business & Economics Anthology 2005*, 323-334.
  67. Potočan, V., Mulej, M. (2006): Social responsibility of a sustainable enterprise In: Rozman, R., Kovač, J., (eds) 2006: *Družbena odgovornost in etika v organizacijah. Proceedings of the 7<sup>th</sup> scientific conference on organisation. (In Slovenian).* Univerza v Mariboru, Fakulteta za organizacijske vede, Kranj, Zveza organizatorjev Slovenije, Kranj; Univerza v Ljubljani, Ekonomska fakulteta, Ljubljana; 41-44
  68. Potočan, V., Mulej, M., Kajzer, S. (2002): Standardisierung der Entscheidungsprozesse in komplexen und komplizierten Geschäftssystemen: Zwischen der echten und der scheinbaren Ganzheitlichkeit. In: Milling, P., Hrsg.: *Entscheiden in komplexen Systemen.* Dunkler & Humblot, Berlin (Wirtschaftskybernetik und Systemanalyse, Band 20), 221-234
  69. Potočan, V., Mulej, K., and Kajzer, S. (2005). Business Cybernetics. *Kybernetes*, 34,

- 9/10, 1496-1516.
70. Rogers, E. M. (1995): *Diffusion of Innovation. Fourth Edition*. The Free Press, New York
71. Rosenberg, N., Birdzell, L. E. (1986): *The Past: How the West Grew Rich*. Basic Books, New York.
72. Schermerhorn, J., and Chappell, D. (2000). *Introducing Management*. John Wiley and Sons, New York.
73. Škafar, B. (2004): *Inovativnost in motivacija na poti k poslovni odličnosti v komunalnem podjetju*. EPF
74. Škafar, B. (in process): *Inovativnost kot pogoj za poslovno odličnost v komunalnem podjetju*. EPF  
UNESCO (2000). *UNESCO Courier*. UNESCO, Paris.
75. Vezjak, M., Stuhler, E., Mulej, M., (eds) (1997): *Environmental Problem Solving. From Cases and Experiments to Concepts, Knowledge, Tools, and Motivation. Proceedings of the 12th International Conference on Case Method Research and Case Method Application* (held 1995 in Maribor). Muenchen, Rainer Hamp Verlag
76. WBCSD (2004). *A Business Guide to Development Actors*. WBCSD, Geneva.
77. WBCSD (2005). *Business for Development*. WBCSD, Geneva.
78. WCED (1987, ed. 1998). *Our common future on environment and development*. Oxford University Press, Oxford.
79. [www.climatecrisis.net](http://www.climatecrisis.net);

## Footnotes

- 1 X denotes interdependence. No attribute is avoidable any longer for a longer-term success. The original table (Bolwijn, Kumpe, 1990) did not contain X, but +. The sign + denotes that interdependencies and resulting synergies are not considered; elements are only summed up. This is an oversimplification. The original did not contain the decades of 1950 and 2000 either.