# SUSTAINABILITY STRATEGIES

## ROOTS, STATE AND CHALLENGES

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### Abstract

The term and concept of sustainable development date back to 18th century Germany, when economic shortages (firewood for silver smelting) led to the introduction of sustainability principles in forest management. Similar concepts arose in France and in Britain.

The strategies suggested in feudal Europe resemble quite closely today's discussion: to shift towards sustainable consumption and production patterns, or to overcome resource scarcity (these days including pollution sinks) by means of global trade, relocating industries or forcefully seizing foreign resources. These strategies are discussed regarding their present applicability, and the need for structural change is highlighted.

Such a change of orientation is needed for the European Union anyway: whereas on the international level the era of neoliberal hegemony is over, and the Union in some respects already reacts to this, domestically the neoliberal discourse dominates the policies of almost all governments. The result is slow growth and high unemployment, and the introduction of a repressive welfare state.

As an alternative to this orientation, the model of a substantial sustainability strategy is briefly outlined, as a basis for safeguarding peace, social security, welfare and well-being in Europe, i.e. the European model of civilisation.

## 1. Deep roots of unsustainability

Over utilisation of the environment has been a constant feature of human behaviour since the stone age. Again and again, human intervention caused unintended environmental side effects from reversible local disturbances to the irreversible extinction of species and regional changes in fauna, flora and farming conditions.

While hunters and gatherers minimised their environmental impact by migrating before resource problems emerged, early settlement changed their lifestyles as well as their impact on the biosphere dramatically. With less abundant food supply they had to extend working times and intensify work, resulting in the significantly higher yields needed to feed a growing population, and in first irreversible environmental impacts which grew with population and the development of ever more forceful technologies. So for instance Middle East migratory wildlife became extinct due to large scale hunting in the earliest phases of the Neolithic revolution of humans settling down for agriculture. Large birds in the Pacific islands including New Zealand fell victim to highly skilled stone age hunters and gatherers *(Pimm 2002)*, despite their low population densities.

Salinisation and deforestation occurred in the ancient Chinese, Mesopotamian, Egyptian, Greek, Roman and other empires: organic, i.e. chemicals free agriculture is not necessarily sustainable (Rigby, Bown 2003). Wood shortage and the need for imports are one of the central motives in humanities oldest known piece of literature, the 5000 years old Mesopotamian Gilgamesch epos *(Mielke 1993)*. Deforestation for heating and ship building can have long term devastating impacts, as the landscapes around the Adriatic Sea illustrate. Similarly, the growth of the northern Sahara desert (caused by climate change) was accelerated by unsustainable use patterns of Roman, Byzantine and Arabic rulers.

Nonetheless, if examples of a rather sustainable economy are referred to, it is frequently case studies about ancient agro-economic systems (most often neglecting the dire social sustainability perspective of poor peasants, slaves, and the suppression of women). This can be explained by the attempt of creating a retrospective vision, inventing an idealised past (Giddens 1996; in these cases the legitimation base of environmentalists can be rightly claimed to be an idealised pre-modern situation), but partly also by the simple fact that modernity has neither lasted long enough nor has it produced stable enough situations to identify any of them as sustainable. In this case, the reference base is not an idealised past, but the lack of present examples in the globalised European civilisation, often in combination with (early) modern values like social security, solidarity and a good life (Spangenberg 2000).

Pollution from semi-industrial activities is not new, as waste management in ancient Rome, regulation of water use patterns (one day for tanning, one day for brewing) in 15$^{th}$ century Cologne, technical installations for reducing heavy metal emissions in 16$^{th}$ century Saxony or the complaints about the impacts of hard coal burning in China in the 13$^{th}$ and in England since the 16$^{th}$ century show. However, most these perceived damages (for which coal was considered an inferior good but cheaper than coal in England) were rather local ones and manageable by local communities (when the king came to London, to improve the air quality the poor had to stop heating while the rich continued to burn wood). With the development of the mercantilist nation state, the institutional setting changed and rapidly growing energy and resource demand stretched the limits of the available stocks. As in pre-industrial societies biomass is the common resource base for food, materials and energy, their economic and population growth had been limited by the lack of additional resources, given the inherent difficulties and time constraints in increasing biomass production. Consequently, the availability of increasingly scarce resources a prominent policy issue. Scarcity of resource supply first became obvious in the most industrialising nations during the late 17$^{th}$ century, when pre-modern industrial production led to the emergence of a foreseeable shortage and a continuous price increase of wood (by this time coal use as a replacement for charcoal was already wide spread in the English industry, but it took another two generations before it was used in iron production (Common, 1995). This most important material was used for construction of houses and ships, production of goods and as the main energy carrier, making a shortage of supply a serious economic and security problem. Earlier in 17$^{th}$ century, Great Britain had felt to be in urgent need to rebuild the ‘wooden walls’ of the country after having suffered significant losses of warships in a defeat against the Dutch navy, whereas in France in the latter half of the century the need was similarly urgent to construct a navy capable of challenging the British (and to some degree the Spanish) supremacy at sea in order to build and maintain its colonial empire in North America (as later in Africa and Asia), and to balance the British influence in Europe. In Germany, the division into a multitude of kingdoms inhibited colonial

aspirations until the early 19th century, but the emerging industrial production was dependant on wood, for instance as the key construction material in mining and as the energy carrier for metal smelting. Little wonder, then, that the fuel wood crisis challenging the silver industry of August II of Saxony and Poland was of serious concern for king and country, and experience from France, Britain and Switzerland was used to develop a concept to deal with it. The result was a book by Carl von Carlowitz titled 'Sylvicultura Oeconomica' and published in 1713 which coined the term 'nachhaltendes Wirtschaften', later translated into English as 'sustainable yield'. The publication draw heavily on British and French sources like John Evelyn's 'Sylva' of 1664 and Colbert's forest 'ordonnances' of 1669, intending to refill the chronically empty coffers of Luis XIV (Grober 2002). Economic and military concerns were thus the root causes for developing the concept of sustainable development as a strategy for risk minimisation.

## 2. Sustainability strategies

In any such situation of absolute scarcity, four strategies are theoretically feasible:

- The political sustainability option: reducing demand and thus increasing sustainability by efficiency increases (recommended by Carlowitz) and improved management (enforced by Colbert) as a political challenge, calling for adequate policy action towards substantial sustainability in defence of the public good. In the continental European tradition (as opposed to Anglo-Saxon thinking, The Economist 2002) the pursuit of public interests must be part of the public sphere and can not be handed over to private interests and the economic calculus. Authorities and (later) the 'citoyen' were considered key actors, rather than business and the consumer.
- The imperial option: increasing supply by seizing distant, so far unused resources, thus exporting local unsustainability by means of conquest, colonisation and 'plunder economies'. This included the systematic suppression of local industries (e.g. textile in India) and investments in man-made and human capital exclusively for export purposes.
- The liberal option: increasing supply by demanding and enforcing open markets and free trade (wood imports from Norway and the American colonies helped solving immediate English supply problem), or exporting the resource intensive production units to countries with abundant resources. For instance Evelyn recommended the dislocation of the ironworks from 'Old England' to the densely-wooded territories of 'New England', i.e. the American colonies (Grober 2003).
- The engineering option: overcoming shortage of supply by substitution, an option also taken into account by Carlowitz, and a rather obvious one as the substitution of coal for wood was already under way in late 17th, century Britain. Although well known in China in the 13th century (Polo 1298), it was massively exploited only with the beginning of the industrial revolution in England, against Evelyn's warnings against serious health and environmental impacts (Grober 2003)(not yet climate change, which was predicted as a result of fossil fuel consumption by the nobel price winning Danish chemist Arrhenius in the late 18th century).

In modern terms the first option of changing consumption and production patterns is called a strong sustainability approach. The second one of securing supply by geopolitical hegemony, the third one emphasising globalisation of trade and foreign direct investment and the fourth one of technological modernisation by market driven substitution processes are weak sustainability strategies. Now, about 300 years later, the first option is discussed again, from the Stockholm World Environment Conference 1972 via the 1992 Rio de Janeiro Conference on Environment and Development, to the 2002 Johannesburg World Summit on Sustainable Development. At the same time, the belief in technological fixes and the scientific-technological progress prevails, claiming that institutional reforms are unnecessary. Instead of structural reforms, problem solving by deregulated markets and global trade is promoted in the 'Washington Consensus', including foreign direct investment and multilateral agreements to secure it, plus geopolitical strategies to safeguard access to increasingly scarce resources. The option of developing technological substitutes is pursued simultaneously, as a complimentary element of the same strategy.

So the question is whether the Earth is really at crossroads (Bossel 1998) and in need of a fundamental paradigm change from an Empty World to a Full World paradigm (Daly HE 1996), or if the traditional escapes can work another time. Given the eminent role global trade and substitution are expected to play in overcoming the 20th century sustainability crisis in the 21st century, and the New World Order the USA is striving for, the historic functions of trade, geopolitics and the potentials for substitution deserve a closer look.

### 2.1 Global trade: The liberal option

Ancient trade suffered from high transport costs (making it economically attractive only for luxury products and those of extremely high added value), and a high risk of loss. Roman and medieval trade suffered from the lack of adequate trading goods from Europe suitable for the high civilisations of Asia; as a result, it was more shopping trips demanding scarce gold to obtain Asian luxury (Krämer 1971). Throughout the Arab Caliphates time, a similar pattern prevailed, despite intensive annual monsoon driven trade exchange.

Gems, pearls, luxury timber, perfumes, but in particular spices and silk were traded from East and Central Asia to the Roman empire (Cesar dressed in silk in his triumph parades, two centuries before Roman ambassadors reached India and China), in exchange for copper from Cyprus, tin from Britain and wine from the Mediterranean, plus significant amounts of payment in gold and silver were exchanged in a barter trade via the Monsoon powered sailing routes, by some hundred ships a year already in the 2nd century (Krämer 1971). Trade was mainly luxury trade of high value added products like porcelain, with high risks and significant profit margins for the intermediate Arab, Malaysian and Indian traders in the case of success. This exchange pattern resembles the one between developed and underdeveloped nations in the 20th and 21st century, comprising an exchange of raw materials against manufactured, high value added goods. It remained unchanged for centuries: when Vasco da Game signed a trade contract in India in 1498, the agreement was to deliver spices and gems in exchange for gold, silver and Mediterranean corrals. Other goods from the European empires were considered of minor quality, not suitable for the Asian courts.

In the Americas, trade developed along similar patterns, focussing on luxury goods exchange between the Yucatan Mayas via the Toltec and the Aztec empires to the irrigation agriculture areas of what is now New Mexico, and further to north-east to the migratory hunters of the Great Plains (Parker 1994). In Africa, the trade of the early Ghanaian and the Mali empires with other African kingdoms and the Arab world followed a similar pattern, with a focus on trading gold, salt (as valuable as gold that time), ivory and slaves. 12th century north-east European trade e.g. in Prague as a main trading spot consisted of silver, fur, amber, salt and slaves (Krämer 1971).

Only when transport became more reliable and cheaper, commodity goods became a significant trade item, from ivory, gold and slaves (so the names of coats districts in West Africa given by Europeans) to ores, wood and tropical fruit. Although trade ships in Asia had been transporting staple food like fish and rice as volume materials in addition to the value added goods since the turn of the first millennium, the physical volume of trade remained rather marginal. It was not before the 1850s, i.e. two generations after the industrial revolution's take off in the dominant trading nation, England, that a broad movement of middle class radicals, entrepreneurs and workers forced the parliament to overthrow the landlords' interest and to dismantle the massive trade barriers which had protected the British market so far. This represents the familiar pattern for many industrialising countries: starting with tariffs to shelter off their infant industries, and dismantling them when competitiveness or even supremacy has been reached (Senghaas, 1982). For business, this meant better export opportunities given a level of British economic and military supremacy never again reached by any later 'superpower', and for the working class it meant access to affordable food, cheaper than the domestic produce (Bee 1984).

Although unsustainable production patterns had overexploited the natural sources of wealth, England continued to pursue the same development pattern by combining the options two to four, opening new territories to the exploitative quest, and promoting technological progress (the Royal Academy had been founded only a few decades earlier). Throughout the late 18th and the 19th century land-locked countries or those too weak to claim foreign colonies had to make a choice whether to integrate in the world market dominated by Britain and find suitable niches like Belgium and Switzerland did (like in the 20th century Singapore), to become mere suppliers of resources and customers of industrial products as for instance Romania, Argentina or later Indonesia, or to temporarily shelter their emerging industries with tariffs (like France, Germany and -more recently- Korea) (Senghaas 1982). Only political heavyweights could resist massive pressure exerted on all trading partners to accept free trade and to open their markets for British products (most European states and even more vigorously the United States opposed the idea of free trade at that time) and thus pursue industrial strategies of their own, including developing different resource use patterns. However, such alternative models hardly materialised, and sustainable development remained restricted to the forestry sector. Here it was widely accepted to reduce consumption by improving efficiency through better management and by introducing substitutes (sustained yield in forestry and the shift to hard coal as primary energy source).

The commodities trade developing thereafter was physically dominated by British coal exports and biomass imports; minerals imports became relevant by the end of the century and began to dominate biomass imports no earlier than the 1980s, when manufactured products began to play a significant although minor role regarding their physical trade volume (Schandl, Schulz 2002). Today, the physical volume of European imports amounts to about 1,400 million tons, with exports of about 400 million tons, resulting in an import surplus or physical trade deficit of about 1 billion tons per year, a full sixth of the total direct material input in the EU. The financial balance looks rather different: it shows a small trade surplus with Third World countries and a small trade deficit with OECD partners (Giljum, Hubacek 2003). Together this illustrates the global production pattern that has emerged in the late 20th century: much of the raw material used in the global economy originates from the South, where mining and harvesting take place, plus some first steps of refining the products. Raw materials or semi-finished products are exported to the North where they refined, branded and packed and end up in domestic consumption or inner-OECD trade. In the production chain the most pollution and labour intensive but low value-adding steps are located in the South, while capital, technology and skills intensive steps with high value creating are predominantly located in the North.

For decades the Washington Institutions (IMF, World Bank, WTO) promoted this development pattern based on the assumption that environmental and social collateral damages have to be accepted, as in the long run the growth invoked by foreign direct investment and free trade will lead to more wealth, and this in turn will enhance social and environmental standards (the Kuznets hypothesis and its environmental corollary). This theory is appealing, and it has only two weaknesses: it is not in line with the empirical data (Spangenberg 2001b), and applying it undermines the proclaimed objective of increasing well being. Relocating industries to the 'overpopulated and underpolluted countries' of the South has been part of this strategy, but – while solving local problems in the North – this strategy does not reduce but spread and intensify the global environmental pressures, and relocates local damages to the South.

From a sustainable development perspective this pattern equals importing sustainability (or footprint area, Wackernagel, Giljum 2001) and exporting high entropy, importing physical wealth and exporting unemployment. Obviously, in a closed World a pattern where some countries permanently gain resources and money from others cannot be generalised: monetary and physical exchange are in the end zero sum games, and for every winner there must be a looser. This unequal exchange is accumulating social and ecological debt (Martinez-Alier 1998), if violations of the principle of fair sharing (Carley, Spapens 1998) are accounted for as debt.

Global trade means no 'sinks' are left to export unsustainability to: the global exports of local unsustainability accumulated to create the global problems from poverty and hunger to climate change and biodiversity loss we are now confronted with, a global state of unsustainability, a globalised social and environmental crisis (most often forgotten these days, globalisation has been the battle cry of the environmental movement in the 70s and early 80s, calling for global action against the emerging global problems; Spangenberg 1991). There is simply no new continent to explore, no new niches to find, no place to escape to in the long term: the environment is everywhere. So more trade and FDI is not the answer to the sustainability challenge, and free trade even less so: a better institutional regulation for international exchange is needed, reducing instead of accumulating the social and ecological debt burden (Döppe 2003).

### 2.2 The imperial option

Two of the most notorious examples are the plunder economies of the Mongolian empire of Dschingis Chan and the early Spanish *conquista* of South America. Already Christopher Columbus (Cristobal Colon) focussed his attention on fruit to reap, gold to trade and humans to baptise (Columbus 1492, 1989); robbing the gold and enslaving the humans became the dominant pattern soon after. Spain grew by plunder, but while relying on the American gold it neglected its domestic development, got locked in an imperial overstretch and for centuries fell back behind other European nations. The plunder economy was not sustainable, nor was it efficient.

The same hold true for the early Mongolian empire, which destroyed much of the occupied countries' wealth and culture, providing little more than a unified legal codex, a trade area based on the *pax mongolica* and a communication infrastructure (which was enough to make it superior to most rival forces for the time being). It fell in disarray to be sucked up and civilised by its former victims (Krämer 1971). Similar patterns can be found in the American history, where Aztecs and Incas built the 15th century fastest growing empires on the basis of exploiting the more peripheral peoples of their empires (a fact which contributed to their rather sudden collapse when attacked by the Spanish

invaders, Parker 1994), as much as the infectious diseases spread by the Europeans (by the way, a clear proof of the superiority of the Europeans' immune systems, testifying for a much better hygienic standard in the American indigenous empires, as in much of the world, in the early colonial period).

Besides the imperial overstretch resulting in declining power, and the social and economic cost of the Spanish empire's suppression regime, there was a economic reason why this kind of rule failed: it prevented economic modernisation, led to dependency on rent income and conserved unproductive structures, a fact Latin America is still suffering from. Instead economic dominance and benefits by unequal trade promised a higher and more durable income than simple plunder (the tax from the Spanish Netherlands generated more income in a more sustainable fashion than the plundering of South America; it was a fatal blow for the Spanish empire when the Netherlands broke away). Thus the Portuguese in establishing their (commercial and territorial) empire in the 16th century used military force to open trade routes in Asia (against Arabs, India and China) rather than occupying large scale territories. England developed a much more durable and efficient system of economic plundering by taxes and trade than Spain ever did, and Spain declined in economic, military and political importance for centuries, with a backwardish economy (and society). The English model of commercial exploitation combined a number of essential factors:

- a dominant role in trade, making *all* resources available to British manufacturers, based on
- a supply of superior goods from innovative business, thus for the first time permitting
- internal growth of wealth not limited by natural resource scarcity (the basis for the later Fordism), and
- a political, cultural, and military hegemony of the colonial empire (if necessary with a heavy hand and sufficient military forces around the world).

Together these factors constituted a more modern, more cost-effective and more wealth creating pattern of expansionism, growth and exploitation than the World had ever experienced before. The cultural and technological dominance of the model is obvious in the spread of the English language, in the global dominance of a specific pattern of industrial development, considered so self evident that Truman's notion of "underdeveloped countries" to characterise all those not *yet* in line with this model is still the dominant perception of the North-South divide, even among representatives of the South.

Whereas the age of military-based empires seemed to be over in the 1960s, the current US policy seems to imitate the British imperial strategy of combining hegemonial politics based on military supremacy with economic interests (*national* economic interests in a globalised economy!). Access to foreign resources has been officially declared to be of "vital national interest" already in the 1990s. Consequently, permanent military installations are mushrooming in former Yugoslavia, Panama, Central Asia, Afghanistan, Western Africa, Somalia, Saudi Arabia, Kuwait, Oman, and soon in Iraq, safeguarding oil and other resources as well as their transport pipelines. On the other hand, troops are withdrawn from Europe. However, an imperial overstretch is already in the making, as the case of North Korea has illustrated (Korea is a special case rather unlinked to resources and trade routes). Finally, the war-proven credibility of the imperial attitude will not stop economic and political competitors: China and India, Russia and the European Union cannot be brought in line with military means, while the cost of the military expansion has driven the US budget deep into debt. A country, however, which can win military conflicts, but neither political nor economic ones will not be able to hold on to its imperial role: the strategy is bound to fail, unfortunately at a high cost to the victims as to the Americans themselves. Unilateral use of weapons of mass destruction, as threatened by the new US strategy may seem to be a cost cutting means of dominance, but would be a terminal blow to the legitimacy of the US empire, accelerating its collapse.

The hope for a new "Lebensraum" in space or in the deep sea has vanished, and the perspectives for resource security through military dominance are bleak – let alone the fact that the most scarce resources today are not the physical ones, but knowledge, human skills and the environmental sinks which as a global common good can be over utilised but not occupied. The imperial option could only work regarding the environmental limits if it explicitly aimed at keeping the World majority poor in order for the emperor to stay rich and maintain her wasteful lifestyle which – according to the famous statement of president Bush sen. In Rio de Janeiro 1992 - "is not up to negotiation". This however would inevitable lead to a social eruption the empire could not survive.

### 2.3 The engineering option: technological progress and substitution

The engineering option relies on the hope that for any problem the modern industrial society produced it will as well provide a solution (ironically this centrepiece of soviet mantra became dominant in the

West, and in particular in the USA *after* the collapse of the empire which so heavily leaned on it). In principle, three complementary options can be distinguished: reducing resource demand and environmental impact by increasing resource productivity (a substantial sustainability strategy), substituting abundant resources for scarce ones by developing new production processes (the coal-for-wood-option), thus modifying the pattern of environmental impact, and technologies to avoid environmental damages, or to manage and mediate them. However, the latter strategy of end-of-the – pipe damage management requires additional resources, relocating but increasing the overall environmental pressure, while reducing the economic efficiency of the production process. As far as resource scarcity refers to the availability of material inputs for the economy, substitution is a traditionally successful strategy, and also applicable to shortages in local environmental services (waste water treatment to substitute for the biological potential of lakes and rivers). For instance, proposals for de-carbonising the energy system by introducing a hydrogen-fuelled economy are abundant. Although it is questionable whether such a transformation of the World energy system will be achieved in due time before the global oil production begins to decrease in the next few decades, it could buy time and help smoothening the transition. Although effective against many 'traditional' scarcities, substitution faces limits when applied to global sustainability problems, i.e. to scarcity of global commons. Thus for the most pressing resource scarcity, the limited absorption capacities of the Earth's natural systems, no substitution strategy can be designed: there is no substitute for the dynamic balance of ecosystems, the carbon fixing potential of nature or the UV-B protection by the ozone layer. The only way out is to cultivate and protect the eco-systems while reducing the human pressure on them, i.e. a substantial sustainability strategy.

Furthermore, none of the technology options is able to simultaneously deal with the social sustainability problems, thus further limiting the problem solving capabilities and making an integrated, multidimensional sustainability strategy even more important.

### 2.4 Substantial sustainability strategies: an antagonistic option

Substantial sustainability integrates social, environmental, economic and institutional aspects, and extends the scope of planning to distant regions and future generations, based on the principles of respecting the Earth's carrying capacity while safeguarding inter- and intragenerational justice. This requires a new policy for fair distribution and to cultivate and protect the eco-systems while reducing the human pressure on them. This pressure in its specific form is mainly dependent on the kinds of products consumed and the production processes applied; its total volume however depends on the physical size of the economies, their throughput (Daly 1991) in terms of energy consumption, material flows and land use (the environmental space use, (Spangenberg 2002a). As the resource consumption of the industrialised economies and sectors is driving the global demand, a heavy responsibility rests on the OECD countries. It is them who have the technological, financial and human capacities to develop another, less resource intensive lifestyle by decoupling resource consumption and economic value production: if technological progress enhances the resource productivity faster than the economy grows, it decreases demand and contributes to sustainable development (Spangenberg 2002b). Although first steps towards this direction have been taken (OECD 2001), the OECD countries – and most importantly the US – are still far away from establishing a new model of "wealth light". And it is them as well who command the means to modify the current trade system to provide better opportunities to Southern nations, narrowing the economic North-South divide (thus changing the past trend: the share of the World population poorest 1/5 in the global income declined from 2.3% 1960 to 1.1% 1998, while the share of the richest 1/5 increased from 70% to 86%, Heimann 2003).

How such a solution might look like in detail is still under dispute (and so it must be: sustainability is a multifaceted concept, not providing an ideological blueprint of any 'ideal society'), but some conclusions can be drawn from our previous analysis:

- As sustainability enforcement by imperial powers cannot work, the concept needs collaboration in partnership.
- As free trade is enhancing rather than solving the problems, trade needs an institutional framework for social and environmental sustainability. As a market has no direction, this must be provided by defining the legal and institutional framework, with the market still the most effective allocation system, but corrected for its environmental and social blindness.
- As foreign direct investment is not necessarily supporting technology transfer, economic growth and cleaner production, international standards are needed to make full use of its positive potential, and corporate liability conventions to keep the challenges in check.

- As technology can solve many scarcity problems, any successful sustainability strategy must include a technology promotion element, however not just any technology: public funding should be focussed on problem solving technologies, promoting resource productivity increases.
- As an incentive to private R&D, the price system should reflect social and environmental priorities, e.g. by taxing the 'bads' (resource consumption) and not the 'goods' (goods, services, labour).

These conclusions are recommendations for necessary elements of a substantial sustainability strategy, using elements of the other options but in a rather different framework. Which role they play in international strategy development will be decisive for global sustainability. So it is of utmost importance to see which options dominate in the results of the Johannesburg World Summit on Sustainable Development WSSD.

### 2.5 Which options do apply?

Regarding sustainable development, the expansionist option offers no solutions in a full world, as no place to export unsustainability to is left, in particular as the overall size of the economy has become the main environmental problem. Technological fixes are helpful to buy time, but tend to shift problems instead of solving them, as the total generation of entropy is hardly reduced. Focussing exclusively on deregulating the global market to enhance economic efficiency neglects the need to respect social and environmental effectiveness as a precondition for long term economic viability (Bossel 2000). The market driven strategy will probably turn out to provide the most economically efficient way to overload the carrying capacity of the institutional, social and environmental system by squeezing their resources most efficiently, thus maximising the problem by postponing it. The dominance of the economic logic tends to ignore the existential needs of other systems as long as they cannot be expressed in economic terms (Spangenberg 2001a), making sustainable development a competing strategy (and probably the only one available) to geopolitics and imperial attitudes.

## 3. After Neoliberalism: the chance for sustainability and the role of Europe

Neoliberalism is here understood as a specific political ideology, based on neo-classical economics, libertarian politics, anti-etatism, and an emphasis on individual freedom at the expense of societal solidarity. Four characteristics are frequently mentioned to distinguish neoliberalism from other ideologies:

1. the *primacy of the market* over politics, and of economic interest over national interest, as a basic conviction: the market is good, and politics in all its form is bad (except for those which strengthen the market, like anti-monopoly interventions and the protection of private property).
2. the conviction, that a free, i.e. deregulated market will solve all kinds of problems autonomously in the most efficient way, or, vice versa, that all kinds of societal problems, from unemployment to the environment, have emerged because the market mechanisms have been distorted by political intervention,
3. the key means to bring about these benefits is unlimited competition, not disturbed by social, environmental or any other politically set limitations. In the end, social and environmental problems will best be dealt with by an unfettered market.
4. globalisation in its current for is good for competition, for consumers and companies, and should neither be limited nor modified. National governments have lost their room for manoeuvring, as they are all bound into the rules of the global market. It is beneficial that its driving forces are multinational corporations (TNCs), which are not bound to "un-economic" national interests.

However, as of today, none of these criteria is any longer fulfilled, and least of all countries in the USA. Strategic, geopolitical national interests dominate over market rules: the access to Iraqi oil, to Afghan gas pipelines, to Uzbekistani and other Central Asian resources is not secured through the market, but by military means. Domestically, massive subsidies for farmers, steel industry, armament producers, the textile industry, etc. violate all principles of free trade. The regulations of the WTO are not respected, and from Seattle to Doha there is an impressive track record of unwillingness to compromise for the benefit of deregulation. In Iraq, most major contracts are handed out to US corporations close to the Bush regime, with the explicit purpose that US multinationals would secure the supply of the US economy, i.e. they are expected to value the national interest higher than price

and market considerations. The US government understands itself as above the market forces, and is ready to enforce this understanding by any means.

### 3.1 A Phyrric victory?

As a matter of fact, since more than five years the neoliberal paradigm is on the retreat, with Seattle and Doha, the failure of the MAI and the decline of the Free Trade Area of the Americas only some cases in point. To a certain degree, this is a success of the anti-globalisation and international solidarity movements, but just as much it is driven by the domestic development in the USA. Thus the emerging gains in the battle against neoliberal globalisation might turn out to be a Phyrric victory, unless the strategic change of the Behemoth's is taken into due account.

The setback for neoliberalism has not resulted in improved outlooks for a globally sustainable development, for a kind of equitable and just international integration for the benefit of the poor and the suppressed, for peace and the environment, rather the opposite. While the hegemony of the global markets is fading away, it gives place to revitalised concepts of hegemony based on geopolitical strategies, neo-colonialism or neo-imperialism, with the USA understanding itself as the heartland of the empire and its new 'colonies' under the control of US educated handymen backed by US military forces. The spheres of influence are longer defined as superior competitiveness on global markets, but in military terms of occupied territories. War has become a means of politics again, and most frightening so even the use of nuclear weapons is perceived as a normal military option (with strategists in Russia and France already following suit). Strategic national interest, not economic thinking is the driving force (although the emerging opportunities are used economically): in this sense, the Iraq invasion was no war for oil, but it secured oil for future wars.

Domestically this development corresponds to an undermining of civil liberties (which have never survived long in a military-dominated policy environment), and in a similar perception of top-down authority to the transformation of a welfare state based on rights into one based on grace. Redefining citizens' rights into citizens' obligations plus consumer rights undermines any freedom of self-expression and self-realisation except if done through consumption (which an increasing group of society is no longer able to do due to increasing levels of poverty). Social security is no longer perceived as an individual right and a public obligation, but – falling back behind the late 19$^{th}$ century – as a gratitude the public can grant if the private duty (e.g. to do what ever job is available, regardless of salary and qualification) has been fulfilled. The definition of detailed duties as a precondition for social transfers, however, is not effective without a significant level of control: the state must control its subjects to find out if they are worth the support. Thus a *New European Social Model* is emerging in many countries, neither already established nor homogenous all over the continent, but progressing rapidly: the *Repressive Welfare State*.

### 3.2 The new challenge

As a consequence, politically unrestricted economic globalisation is no longer the main danger: not even the USA is pursuing this option. But the politics which is accepted as having primacy over economic interests is one which needs as much resistance as globalisation did in the past. And the answer to both, economic globalisation and neo-imperial policies is rather similar: there is no alternative to strengthening the rule of law on a global scale, in particular through the United Nations. Until today, human rights and environmental conventions have no means of enforcement, they need sanction mechanisms to counteract violations, and in particular measures against those who do not sign up to them. Why not have import taxes on all products from countries which have not signed the Kyoto protocol? Amongst the undersigning parties, energy is going to become more costly, so why grant a benefit to those who refuse to contribute to the global future? And as bad as the regulation of agricultural trade by the WTO is – does anyone believe the poor countries will make a better deal when forced to negotiate with the USA (and for that, the EU) bilaterally? Water should not be privatised, and public-private-partnerships are no solution for those not owning any purchasing power – but still investment is needed, and where should it come from if not from international institutions? World Bank conditionalities are against the dignity of Third World countries – but what if they are set to reduce military expenditure and enhance education and sanitary conditions? The IMF adjustment programs are a nightmare for billions of people, depriving the of access to education, jobs and social security – but exposed to the neoliberal market and neo-imperial politics, what other option would those countries have?

In this respect, the role of 'old Europe' in the Iraq case has been encouraging, as long as governments did not bow to the political pressure from Washington: not join the imperial bandwagon, and insist on strengthening the role of the UN. Unfortunately, this alternative approach has crumbled

before it became fully effective, and many decision makers prefer to be US junior partners to playing an independent role (in Germany more than in France, let alone in Poland – despite all their peoples disagree with the temptation to reduce their countries to just a figure on the US chess board). More alarming still is the social policy in Europe, masterminded by the Anglo-Saxon theory of the 'Third Way', and indeed the repressive welfare state is no neoliberal one, but big government at its worst. Therefore, social struggles in Europe and the resistance against neo-imperial strategies are just two sides of one coin, and those who want a peaceful world, sustainable development, social solidarity and equal right must continue to join their forces. Together, we have a chance to bring about a change of course, but only if we update our strategies to the new challenges of neo-imperialism and domestic neo-authoritarianism. Citizens' rights are eroding all over Europe, and so is civic liberty.

### 3.3 Liberty against liberalism

The reappearance of sustainable development as a new development paradigm indicates that the concept is an attempt to moderate the social, economic and security risks emanating from scarcity in essential resources. As 300 years ago, the political concept of substantial sustainability through internal change is challenged by an alternative focussing on economic, military and technological expansion. The international political situation begins to reshape, and two new blocks are merging: the expansive imperial block, led by the Anglo-Saxon countries, and the 'sustainability-plus-technology camp' led by what has been called 'Old Europe'. The conflict is multi-dimensional: ideological and cultural, geopolitical and economic. Whereas the US led group emphasises military supremacy, their challengers point to economic strength and the overestimated political influence of their competitors.

What Europe needs now is a 'liberation movement' for shaking off the neoliberal preoccupation and the tradition to subdue to US policies, and the mental and political strength to develop its own way towards a sustainable future, based upon the best of European traditions and values, and against the dark shadows of a new imperial age. We have the choice between imperialism and militarism or partnership and equity, between economic liberalism and free trade or social responsibility and solidarity, between a perception of progress focussed exclusively on technological achievements, and one aimed at the empowerment of people and on enhancing their freedom. All this, plus safeguarding the environment as the common heritage of humankind, is summarised under the term sustainable development.

Based on the principle of cooperative agreements, the institutional structure for sustainable development (partnership, mutual support, integrating social and environmental objectives) is rather similar to what has been the receipt for success of the European Union so far, making it plausible and a matter of self interest for the Union to pursue this development path. Although as a result conflicts seem unavoidable, so far the only common ground for it seems to be the political stage: Europe cannot compete in military might, and the USA cannot dominate economically.

Ideologically, although both camps agree on some fundamental orientations like democracy and market economies, their understanding of these phrases is fundamentally different, due to significantly differing world views. The clash of cultures is emerging in a rather unexpected setting. One surprising commonality illustrates the differences: after decades of neo-liberal belief in unlimited growth, decision makers in both the USA and Europe seem to embark on the 'full world paradigm' (Daly 1991), unadmittedly but effectively so far. While e.g. the German chancellor at the Johannesburg summit called for a 'solar energy offensive' of like minded countries to reduce the dependency on fossil fuels, the Bush administration as well acknowledges the forthcoming scarcity of resources and the precautionary principle, but reacts differently: by securing claims for the USA by military means.

For sustainability politics, a new era seems to emerge: no longer dominates the necessity of neo-liberal hegemony to explain why politics is necessary at all, but to distinguish between fairness based substantial sustainability politics and hegemonial approaches. Sustainability needs leadership in partnership: the World has to find like minded actors for sustainability, and hope that the imperial camp will abandon the expansive strategy and join the quest for sustainable development without catastrophic natural or man-made disasters.

Such a sustainable development is no *mission impossible*, but a vision impossible to ignore. And it is not too late: we have time enough, but we have no time to lose.

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