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# What Will the 21st Century Be Like? – Prologue

## –Judging the Background to Energy and Nuclear Energy Problems–

Ever since the end of the Cold War and the breakup of the Soviet Union, free competition has reigned as the supreme principle in the world. However, I believe that this has resulted from a simplistic understanding – even a misunderstanding – that “capitalism beat socialism,” as well as the feeling of release stemming from mankind’s having avoided the nightmare of World War III, which very well might have brought about its demise. In addition, the economies of those nations that still profess socialism or communism have undergone substantial liberalization, not to mention the gradual liberalization of the capitalist countries. Some countries are witnessing the parallel process of democratization – both that of politics and the press – with bloodless revolutions having taken place in some cases. As a result, consumers in many countries can now buy high-quality goods and services at cheap prices, spurring remarkable economic growth and the expansion of trade.

As the scale of global trade expands, the economies of the world become increasingly intertwined. For better or worse, their growing mutual influence leads inevitably to severe consequences, making the development of proper rules of international trade the primary job of diplomacy. As a result, one of the most powerful currents in world affairs is the liberalization of investment and trade, under the auspices of such frameworks as the WTO. That tide is gradually sweeping away individual countries’ economic and social structures.

Liberalization, both domestic and international, does indeed revitalize individual nations’ economies and societies and thereby brings about reduced costs. In that respect, it is a completely rational choice as far as the benefits bestowed on the people are concerned. However, it also creates chaos and destruction in national and regional economies, owing to various factors, necessitating international means to deal with the problem. Differences in national backgrounds and cultures inevitably give rise to different ideas as to how to resolve such

crises, giving rise to great pressure and friction. In the end, however, the rescue plans that are cobbled together are generally grounded in the “international standard” of liberalization – usually led by the U.S. – often accompanied by measures that are to be adopted domestically. Depending on the way the situation unfolds, many of the people living in countries on the receiving end of such measures come to view them as the “imposition” of international standards. The drastic measures often end up triggering political unrest because of rapidly worsening unemployment and other reasons.

### Where Does Liberalization Lead?

As we stand on the verge of the 21st century, we are caught between the great benefits and the equally severe strains of global liberalization.

Limiting our focus to the commodity economy, we must admit that liberalization does revitalize national economies by making them more efficient, which raises living standards. The pain resulting from the process of liberalization has been viewed as the unavoidable price to be paid to ensure a “better future.” However, the situation is no longer so simple when the tide of liberalization reaches the field of international finance: it swallows up countries’ currencies, treating them as mere goods to be traded, and can even threaten national sovereignty and identity.

Several fundamental social systems that are deeply related to national security and sovereignty – communication and transportation especially come to mind – have already been swept up in the wave of liberalization. However, the liberalization of certain areas that lie at the core of daily life, such as food and energy (not to mention the previous example of currencies), cannot help but produce open conflict and friction between countries owing to differences in national culture.

In addition to the problem of national sovereignty, another

issue that cannot be resolved without a shared international consensus is that of responsibility toward the environment. Some people who brandish the principle of free trade criticize the environmental damage caused by such pollutants as SO<sub>x</sub> and NO<sub>x</sub>, calling it a non-tariff impediment (i.e., saying that the environmental costs are not reflected in the price). Furthermore, the emergence of the global warming problem – too big for any one country or its populace to solve – puts all mankind on trial.

The recent series of COP conferences being held at the end of the 20th century has typically been characterized by the traditional conflict between advanced and developing nations. Moreover, the only measures proposed are those aiming to improve the situation through the principle of competition, such as trading emissions rights for greenhouse gases. On the other hand, nothing is done at those conferences to give fair due to the merits of nuclear energy (which releases no greenhouse gas emissions), nor are the advantages and shortcomings of solar energy discussed.

At the heart of the opposition between advanced and developing nations is a disagreement concerning the perception of time; namely, some people believe that making up for the sins of the past is a job best left to God. The false belief that money and power can solve everything – that everything can be resolved or improved through the principles of economic competition – will inevitably wind up with people's souls eventually becoming the objects of commercial trade. That is probably happening already. I believe that such a development is the primary root cause of the "clash of civilizations," which was the title of Samuel P. Huntington's famous recent work.

### **The "Trilemma" Is Not Really a Trilemma After All**

To return the argument to energy, and to nuclear energy in particular, the source of the problem should be self-evident from the discussion so far. To be sure, the exhaustive introduction of the principle of competition helps streamline the energy industry – which tends to grow complacent and self-satisfied – and bestows clear benefits to consumers in the form of lower prices and rates (at least for a while). However, can the security of a single country or region be made to depend solely on the principle of competition? Can the protection of the regional or global environment be ensured solely through such a principle? Or can mankind prevent the depletion of resources (and the resulting wars) solely through the principle of competition?

In some cases, economic principles have "adjusted" such problems to a certain degree. For instance, the excessive consumption of petroleum and other resources once led to the fear of resource depletion, and with reduced supplies and rising prices, previously uneconomical reserves started to be explored again, with new oil fields being discovered. Moreover, in the United States, there have been several successful cases in which the restriction of pollutant emissions (such as SO<sub>x</sub>) has involved not only the traditional legal means, but also the trading of emission rights for pollutant gases, with capital investment and R&D encouraged so as to reduce pollution. All said, however, such examples have been limited to specific problems, meaning that they have only solved or alleviated the problem in a temporary and localized way. By no means can it serve as the approach to the fundamental problems facing mankind and the world.

Some people in the energy and nuclear energy industries have started to bandy about the word "trilemma," worrying about and discussing ways to resolve the three potentially contradictory issues of resources, the environment, and the stability of energy supply. But I believe the "potentially contradictory issues" in the future are not limited to those three items, as I have outlined above. Indeed, the 21st century will be an age in which mankind lives in a "multilemma" world.

In Zen Buddhism, disciples undergoing training are often posed a catechetical question when meditating, in which they are forced to interpret a sentence that seems meaningless on the surface. One such sentence is: "The unenlightened are not unenlightened." A successful interpretation of this sentence is, "The unenlightened find themselves in a certain situation that they cannot explain, merely by virtue of their being unenlightened." That is to say, since the unenlightened do not realize that they are unenlightened, they do not view themselves in that light.

That means that the key to the trilemma or multilemma facing us can only be found somewhere outside those problems. The extent of our current perception suggests that the key can only be found in the catchwords such as "Tensor" of civilizations or philosophy. In the coming century, mankind will hopefully use those concepts to arrive at a shared ideal of "Aufheben" (the coming together of mutually contradictory ideas) that will enable us to successfully deal with the issues facing us without experiencing severe chaos or the "final war." ■

**Editor in Chief**