# Fritjof Capra Sanity and the State of the World

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Fifty years ago, R.D. Laing famously said:

"Insanity — a perfectly rational adjustment to an insane world."

In *The Politics of Experience* he expanded on this radical idea. Let me just give you one quotation.

"The condition of alienation, of being asleep, of being unconscious, of being out of one's mind, is the condition of the normal man. Society highly values its normal man. It educates children to lose themselves and to become absurd, and thus to be normal. Normal men have killed perhaps 100 million of their fellow normal men in the last fifty years."

In this talk, I would like to reflect on the current state of the world and to discuss some of the characteristics of our modern society, which Laing, with great prescience, identified as symptoms of insanity half a century ago.

## Interconnectedness of world problems

When we look at the state of the world today, what is most evident is the fact that the major problems of our time — energy, environment, climate change, poverty — cannot be understood in isolation. They are systemic problems, which means that they are all interconnected and interdependent. As Pope Francis puts it in his remarkable encyclical "Laudato Sì":

Our common home is falling into serious disrepair... [This is] evident in large-scale natural disasters as well as social and even financial crises, for the world's problems cannot be analyzed or explained in isolation... It cannot be emphasized enough how everything is interconnected.

Unfortunately, this realization has not yet dawned on most of our political and corporate leaders who are unable to "connect the dots," to use a popular phrase. Instead of taking into account the interconnectedness of our major problems, their so-called "solutions" tend to focus on a single issue, thereby simply shifting the problem to another part of the system — for example, by producing more energy at the expense of biodiversity, public health, or climate stability.

From a psychiatric point of view this failure to see things in context is seen as a neurotic state, and is described with terms like dissociation, isolation, or compartmentalization. It is, indeed a very general symptom of insanity. Moreover, our leaders refuse to recognize how their piecemeal solutions affect future generations. They may refer to "sustainable development," which in itself is a problematic term, but they lack any inter-generational responsibility. So we have dissociation from the wider context of today's problems, if you wish, in space and in time.

The lack of concern about the future, fueled by materialism and greed, is a typical symptom of a manic state. The Greeks called it "hubris" and illustrated it with the legend of the "Midas touch," in which King Midas turns everything he touches into gold at his own detriment.

# The illusion of perpetual growth

The fundamental dilemma underlying our major global problems seems to be the illusion that unlimited growth is possible on a finite planet. This irrational belief in perpetual economic growth amounts to a clash between linear thinking and the nonlinear patterns in our biosphere — the ecological networks and cycles that constitute the web of life. This highly nonlinear global network contains countless feedback loops through which the planet balances and regulates itself. Our current economic system, by contrast, does not seem to recognize any limits.

It's not only that corporate CEOs, like those of the big oil companies, or the big pharmaceutical companies, prefer short-term profits to facing the long-term consequences. That itself is immoral. But the situation is worse, because this irrational belief in perpetual growth on a finite planet is shared by virtually all academic and corporate economists, who have integrated it into their so-called "scientific" economic models.

In psychiatric terms, we are dealing here with a severe case of delusion, a symptom of serious mental illness. Combined with the manic desire for ever more money and power, it often results in a persistent denial of reality. Let me give you an example. Today we know the amount of carbon dioxide that we can still emit into the atmosphere by mid-century while staying below the limit beyond which climate change is likely to spin out of control. It is a very large number, 565 gigatons! But it is only 20 percent of the proven coal and oil reserves of the fossil fuel companies and oil producing states. In other words, in order to avoid total climate collapse, the energy corporations need to leave 80 percent of their reserves in the ground.

Rather than doing that, these companies plan to extract and burn all of their reserves and, in fact, they continually explore for new oil reserves. In other words,

wrecking the planet is an integral part of their business plans. To justify their actions, they systematically deny the science of climate change. In fact, they finance sophisticated disinformation campaigns to mislead the public about the nature and severity of the climate crisis. All this adds up to a pathological denial of reality.

## Global capitalism

Economic and corporate growth are the driving forces of global capitalism, the dominant economic system today. In this global economy, capital works in real time, moving rapidly through global financial networks. From these networks it is invested in all kinds of economic activity, and most of what is extracted as profit is channeled back into the meta-network of financial flows. Sophisticated information and communication technologies enable financial capital to move rapidly from one option to another in a relentless global search for investment opportunities.

The dual role of computers as tools for rapid processing of information and for sophisticated mathematical modeling has led to the virtual replacement of gold and paper money by ever more abstract financial products — "future options," "hedge funds," "derivatives," and so on. The end result of all these technological and financial innovations has been the transformation of the global economy into a giant, electronically operated casino. Accordingly, the operations of these new financial markets have become known as "casino finance."

At the existential human level, the most alarming feature of the new economy may be that it is shaped in very fundamental ways by machines. The so-called "global market," strictly speaking, is not a market at all but a network of machines programmed according to a single value — money-making for the sake of making money — to the exclusion of all other values. In other words, the global economy has been designed in such a way that all ethical dimensions are excluded.

What we see in this global capitalism is a flight from the real world into an extreme level of abstraction. Politics today is largely shaped by economics, and in particular by Goldman Sachs and the other big investment banks on Wall Street. Their economists are mesmerized by blips of numbers on Wall Street's electronic tickers; and the so-called "health" of these gigantic banks is more important to the world's politicians than the well-being of actual individuals and communities. The current tragic events in Greece are a poignant example.

So, again, we have a loss of contact with reality and endless permutations of multiple levels of abstraction, which is typical, for example, in the writings of schizophrenics.

#### Self-destruction

To repeat, at the center of the global economy we find a network of financial flows, which has been designed without any ethical framework. In fact, social inequality and social exclusion are inherent features of economic globalization, widening the gap between the rich and the poor and increasing world poverty.

In this economic system, perpetual growth is pursued relentlessly by promoting excessive consumption and a throw-away economy that is energy and resource intensive, generating waste and pollution, and depleting the Earth's natural resources. Moreover, these environmental problems are exacerbated by global climate change, caused by our energy-intensive and fossil-fuel-based technologies, and threatening the very survival of human civilization.

Today, we are the only species that is destroying its own habitat, and in doing so causes mass extinctions of countless other species. Indeed, violence against ourselves and against others is an outstanding characteristic of our society, especially in the United States where we can witness an epidemic of economic, military, and police violence. And violence, against oneself and others, is, of course one of the primary symptoms of insanity. A collective, albeit unconscious, suicidal tendency has also been suggested.

#### Qualitative growth

So, what are we to do? How can we restore sanity? It seems that our key challenge is how to shift from an economic system based on the notion of unlimited growth to one that is both ecologically sustainable and socially just. "No growth" is not the answer. Growth is a central characteristic of all life; but growth in nature is not linear, and neither is it unlimited. While certain parts of organisms, or ecosystems, grow, others decline, releasing and recycling their components which become resources for new growth.

This kind of balanced, multi-faceted growth is well known to biologists and ecologists. I call it "qualitative growth" to contrast it with the concept of quantitative growth, measured in terms of the undifferentiated index of the Gross Domestic Product, the GDP, used by today's economists. In fact, most of what is called "growth" today is waste, which means that we have an economics of largely waste and destruction.

Qualitative growth, by contrast, is growth that enhances the quality of life through generation and regeneration. In living organisms, ecosystems and societies, qualitative growth includes an increase of complexity, sophistication, and maturity.

Instead of assessing the state of the economy in terms of the crude quantitative measure of GDP, we need to qualify growth, i.e. we need to distinguish between "good" growth and "bad" growth and then increase the former at the expense of the latter.

From the ecological point of view, the distinction between "good" and "bad" economic growth is obvious. Bad growth is growth of production processes and services that externalize social and environmental costs, are based on fossil fuels, involve toxic substances, deplete our natural resources, and degrade the Earth's ecosystems. Good growth is growth of more efficient production processes and services that involve renewable energies, zero emissions, continual recycling of natural resources, and restoration of the Earth's ecosystems.

#### Systemic solutions

Qualitative growth means growth of a living system, not at the expense of other living systems, but within the context of their own qualitative growth. In other words, qualitative growth naturally involves systemic solutions — solutions of problems within the context of other problems.

Over the last few decades, the research institutes and centers of learning of the global civil society have developed and proposed hundreds of such systemic solutions all over the world.

Let me give you just one example of a typical systemic solution in the area of agriculture. If we changed from our chemical, large-scale industrial agriculture to organic, community-oriented, sustainable farming, this would contribute significantly to solving three of our biggest problems. (1) It would greatly reduce our energy dependence, because we are now using one fifth of our fossil fuels to grow and process food. (2) The healthy, organically grown food would have a huge positive effect on public health, because many chronic diseases — heart disease, stroke, diabetes, and so on — are linked to our diet. And (3), organic farming would contribute significantly to fighting climate change, because an organic soil is a carbon-rich soil, which means that

it draws  $CO_2$  from the atmosphere and locks it up in organic matter. It is worth noting that today, carbon sequestration in soil and plants is the only known and proven strategy that can remove carbon from the atmosphere and, over time, reduce the atmospheric concentration of  $CO_2$ .

In my textbook, coauthored with Pier Luigi Luisi, we review a wide variety of such systemic solutions in detail. They include proposals to reshape economic globalization and restructure corporations; new forms of ownership that are not extractive but generative; a wide variety of systemic solutions to the interlinked problems of energy, food security, poverty, and climate change; and finally the large number of systemic design solutions known collectively as ecodesign.

Together, these systemic solutions provide compelling evidence that today we have the knowledge and the technologies to build a sustainable future. What we need is political will and leadership. In other words, the core problem is not conceptual nor technical. It is a problem of ethics.

As the Czech playwright and statesman Václav Havel famously put it, what we need most urgently to solve our global problems is a "moral compass." This is also the message that R. D. Laing tried to convey again and again. I well remember a conversation about science and consciousness Laing and I had in 1980, during which he told me:

"The new science, the new epistemology, has got to be predicated upon a change of heart, upon a complete turning around; from the intent to dominate and control nature to the idea of, for example, Francis of Assisi, that the whole creation is our companion, if not our mother. That is part of your turning point. Only then can we address ourselves to alternative perceptions that will come into view."