

CONTRADICTIONS IN PRINCIPLES OF ETHICS AND CONTEMPORARY TECHNOLOGY

Katalin G. Havas, Budapest, Hungary

The study of methods to resolve contradictions is one of the main interests of contemporary philosophy of logic. However, some logicians do not recognize the differences between contradictions which are the result of failures in the cognition process and the contradictions of real life.

In this paper I would like to draw attention to some contradictions in the domain of ethics and contemporary technology. Some of them are—contrary to classical logical contradictions—unresolvable, and about some of them we have to be patient and tolerant.

In the process of analyzing some of these contradictions, I rely basically on the work of Albert Szent-Györgyi in *The Crazy Ape* (1970). It seems to me that it is important to learn from his arguments, to understand how it might be possible "to survive the machinations of present-day men who often appear to act more like crazy apes than sane human beings" (p. 9).

1. REVERENCE FOR LIFE

The first contradiction that I mention is connected with an ethical principle formulated by Albert Schweitzer. According to him, the fundamental and universal conception of the ethical is "reverence for life" (*Ehrfurcht vor dem Leben*). Schweitzer wrote: "The most immediate fact of man's consciousness is the assertion: 'I am life which wills to live, in the midst of life which wills to live'" (p. 130). He wrote that contrary to the usual ethical principles which deal only with the relations of man to man, "A man is ethical only when life, as such, is sacred to him, that of plants and animals as much as that of his fellow-men; and when he devotes himself helpfully to all life that is in need of help" (p. 131). Here we have the main contradiction inherent in the reverence for life: "Without killing and stealing nature would collapse" (Szent-Györgyi, 1970, p. 27). Being ethical, people strive to revere other lives; however, they cannot completely implement this intention, since they must live at the expense of other lives and

incur again and again the guilt of destroying and injuring life. This is a contradiction that can not be resolved.

2. TO RULE IN THE WORLD

Another contradiction lies in human beings' ability to exert their dominion over the world in which the development of technology has an important role.

For a long time in the course of European history, it was a dominant view that humanity has a mandate to assume dominion over other creatures. This is also evidenced in the Judaeo-Christian Bible, where we read: "And God said, let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over the earth, and over every creeping thing that creepeth upon the earth" (Genesis 1:26).

According to this view, although a man is not as strong as a lion, has no claws like the tiger, his eyes are not as keen as the eagle's, still he is able to subjugate these and other forces of nature.

A man's means for implementing his dominion are in a great part the products of technology. As is well known, technology plays an important role not only in the development of human interrelations, but also in the way humans relate to the universe, and, within this context, to all living things.

But, is it really true that humanity, due to the power of technology, is able to rule the world?

My view is that the power associated with technology does not imply dictatorship over nature.

Cognitive man is continually creating new objects. While, recognizing and utilizing the laws of nature, something new is created, the things thus created assume a life of their own. Things created through the instrumentality of the mind have their own internal laws or peculiarities, and some of these are beyond what their creator had thought of. The new objects created by humans are also waiting for cognition in the future. Thus the creator of something new is always forced to change his role from creator to seeker of the secrets of his creation.

It is a remarkable imperfection of the human mind that it is not able to foresee all of the consequences of its creations. The side effects of the introduction of a new factor remain unrecognized, sometimes for a long time, and thus remain uncontrolled.

This leads to the conclusion that scientific inventions and technological progress provide only a limited possibility of power over nature; and the same is the case with the dominion of humanity over the world. There is a counteracting tendency of nature that limits the power of humans. The fact that things, brought about by humans, assume a life of their own ought to teach the lesson that humanity does not rule over nature as it pleases. One cannot dictate the laws of nature. On the contrary, humanity must learn, for its own sake, to respect the laws of nature. All we may do is to try, by recognizing nature's laws, to use them to our own advantage. We have to recognize that, in as much as we wish to learn something about the world around us, we must ask modest questions of nature, instead of sitting in judgment on it.

3. THE UTILIZATION OF TECHNOLOGICAL PROGRESS

The third contradiction which I would like to mention is connected with the methods of utilization of the material goods and technologies created by humans.

Technological advances are used for ends other than reverence of life. Rather, they are used for the intentional—or unintended but unnecessary—destruction of other lives. This contradictory character of technological progress might be what appears already in Greek mythology. When Prometheus stole fire, which is the symbol of technology, he consulted with Athena, the goddess of wisdom and also of technology. It was this cooperation between Prometheus and Athena that brought technology to humankind; whereas Hephaestus, the god of fire, who tried to force his attentions on Athena, ended up as the father of Erichthonius, a monster. A possible interpretation of this story is that the monster was born because an important principle of ethics was not followed: "Use the results of technology only in ways consistent with reverence for life."

The bad side of the development of technology also appears, for example, in Jonathan Swift's works in the early eighteenth century.

The king of the country of the Houyhnhnms does not believe that wars are as dangerous as Gulliver had told him. He says: "Nature hath left you utterly incapable of doing much mischief. For, your mouths lying flat with your faces, you can hardly bite each other to any purpose. . . . Then as to the claws upon your feet before and behind, they are so short and tender that one of our Yahoos would drive a dozen of yours before him. And, therefore, in recounting the numbers of those who have been killed in battle, I cannot but think that you have said the thing which is not" (*Gulliver's Travels*, pp. 291-292).

Gulliver smiles a little at the ignorance of his master, and then gives him a description of cannons, muskets, carbines, pistols, bullets, powder, swords, bayonets. In other words, Gulliver explains that man's power in warfare, his potential to kill his fellow man, is provided by the technology created by him. Here we encounter one great contradiction lent to the power of man by technology.

4. THE NEW WORLD SITUATION

Countless essays have been written about the many good and bad consequences of the global changes in the technological environment around us. I would like to remind you what Albert Szent-Györgyi wrote about this. He analyzed the new world situation as a biologist, from the point of view of man as a biological species.

The survival of *Homo sapiens*, like that of any other species, was the consequence of the fact that it was able to adapt to the world into which it was born. Accordingly, humans had developed senses which enabled them to distinguish and eventually to dominate the basic units of the world.

Classical science was concerned with the world into which humans are born. This science endeavored, with more than a little success, to define with precision the concepts and knowledge evolved in the course of everyday human activity. In contradiction to this, as a consequence of the great scientific discoveries of the turn of the century (such as x-rays in 1885, radioactivity in 1886, and the theory of relativity in 1905), new aspects of the world had unfolded such as humans had never before surmised—a new world about which our senses could not provide any information at all. They not only did not inform us; our

senses specifically existed in a fashion not to provide such information. "If they had," wrote Szent-Györgyi, "they would have been useless and we would have had to die. If I perceived atoms or quanta instead of trucks, I would be run over; if my ancestors had seen electrons instead of bears, they would most likely have been eaten" (1970, p. 15).

Today we must adapt ourselves, to a large extent, to an environment that is different from that within which the human race evolved, and to which human senses have adapted. The world around us is different from that against which our ancestors struggled. With our technology, for the first time in human history a contradiction arose: that we are in a position to provide decent living conditions for all people on earth, but we are also in a position to destroy the living environment in an irreversible way for all of humankind, and perhaps for all life on our planet. Since technology itself does not possess any internal criteria of self-regulation, the need for ethical guidance in the utilization of technological development is greater today than it ever was in past ages.

Humans have been clever enough to create conditions in which cosmic forces can be released, but it is an open question whether we are sufficiently clever to comprehend them, to understand what they really mean. We have to realize that if we do not respect the laws of nature the contra-action to this new cosmic world might be quite different from those experienced in previous ages. Nature's reaction could have not only a local effect but could affect all life on earth. Today the survival of humanity basically no longer depends on man's adaptation to the environment within which we have existed for millennia and with which we have learned to coexist; rather, it depends on whether we can modify our ideas and thinking, our social and political organization, to adapt them to the world we ourselves have brought into existence.

5. CONTRADICTORY CHARACTERS OF HUMANS

Let me mention two other contradictions which are connected with the characters of humans.

One is called by Szent-Györgyi "the duality of morals." He writes: "Man is a predatory animal, differing from other predators in that he also preys on his own kind. He likes to have peace at home, but likes to go out on predatory

expeditions and dominate others. So he needs two moral codes, an individual and private one for use at home, and a collective and public one to be used on his expeditions. The two are diametrically opposite. What is shame in the one is glory in the other, and *vice versa*" (1970, pp. 27-28).

Another contradiction which is connected with the behavior of humans is described by Bertrand Russell (*Sceptical Essays*): "We have, in fact, two kinds of morality side by side: one which we preach but do not practice, and another which we practice but seldom preach."

If what these authors have written about the characteristics of man is right—and I think it is—then we have to ask the ultimate question which was formalized by Szent-Györgyi in the following way: "Will mankind be able to survive the machinations of present-day men who often appear to act more like crazy apes than sane human beings?"

Szent-Györgyi believed that the future of mankind depends on the education of the younger generation. He sees education as the programming of the brain at an early stage when it is still malleable. But the question is what are the ethical principles that the program should contain? Here I wish to mention only one. We have to realize that we are acting in a contradictory fashion. The reverence for life must be heeded, as well as patience with and the toleration of the contradictions of life. Otherwise, that is, if we ignore the opposite or negative side of things, the desired, positive consequences will also become unattainable.

REFERENCES

- Russell, Bertrand. 1934. *Sceptical Essays*. London: Allen & Unwin.
Schweitzer, Albert. 1998. *Out of My Life and Thought: An Autobiography*. Baltimore, MD: Johns Hopkins University Press.
Swift, Jonathan. 1965. *Gulliver's Travels*. London: Methuen.
Szent-Györgyi, Albert. 1970. *The Crazy Ape*. New York: Philosophical Library.