



## SCIENCE, HUMAN AWARENESS AND ENVIRONMENTAL ATTITUDES

**Boris Aberšek**

*University of Maribor, Slovenia*

The environment is a system, a complex system, which we are unable to comprehend, let alone truly understand, with the help of simplified models that we, humans, are able to process. Our human understanding of the complexity of a grain of sand simply isn't enough to construe and adapt the universe! This would require time and knowledge, which we do not have today, and which we will not have for a long time. So, everything is in interpretation. Let us start our stories with some basic truths. The main premise is, that man doesn't need an outside enemy, he's the greatest threat to himself. But he's not just a threat to himself, he's a threat also to everything around him. No living thing on earth destroys it more than it takes for its existence, except for human. And for that, he's willing to do anything, deceive, kill, to destroy and to justify what it does with a backlash and a lie (Aberšek, 2022).

There are only three major monopolies, three major human needs in the world:

- food,
- energy, and
- technologies.

Today, all three monopolies are closely related to technologies in one way or another. Technologies penetrate our everyday life; we cannot even begin to imagine modern agriculture without technology, and, needless to say, the production of energy today is also based on many different kinds of technologies. Since its very beginning, mankind has tried to make life easier by way of technology, to control and change nature by means of technology – of course, according to man's own desires and visions. Technology has made man's life easier; it became a tool for managing and mastering nature. At first, man was technology's humble assistant; later he became its master, only to now finally become its slave: we can no longer imagine our everyday life without all these different kinds of technologies that surround us in this day and age. Moreover, technology has not only enslaved man; rather, it has already reached a developmental stage of autonomy in which the role of man is becoming increasingly irrelevant and probably even unnecessary (Aberšek, 2013). Nevertheless, let us focus on just one of these three major monopolies today, the one that is crucial for the existence and growth of the other two – *energy*. Without energy, there is no technology, nor food production, as we know it today.

### *Energy Production and Environment*

To arrive from primary forms of energy (energy sources), to forms of energy that are useful to humans, we use a variety of technologies, mainly depending on the individual energy source (or product) in question. There are two elements, which are essential to these conversions:

- the first is *economic*: what kind of energy source (or product) are we using?
- the second aspect is *environmental*: how do the technological processes of energy conversion affect our environment? This is a universal societal issue, a problem that we do not perceive directly in the sense of costs (expenses paid for energy products), but only indirectly through the responses of our environment to our immediate life. Two options are possible here:



- either we acknowledge the changes affecting the environment (admitting that both individually and collectively we are contributing to this problem), or
- we deny these changes, hiding behind more or less logical explanations as to why these changes are occurring. The common denominator of such justifications (excuses) is that these changes are not our fault, but someone else's (Aberšek, 2021).

To solve such problem, we have two general solutions:

1. *to raise awareness* in the people who deny these changes; explain to them the issue in such a way so that more and more people will understand it and, in turn, become part of the solution and
2. to move towards *shifting* the entire society from the short-term goals of individuals and consequently cheap energy, to the long-term goal of preserving our environment for the next generations. In pursuing these goals, we need to consider this issue in a humane, systemic, comprehensive and, above all, long-term manner, i.e., in a sustainable way.

Environmental issues should (must) be observed through construal level theory (CLT) (Trope, Liberman, 2010) which suggests, the more distant an object is from the individual, the more abstractly it will be thought of, while the closer the object is, the more concretely it will be thought of. According to CLT, psychological distance affects the extent to which we think about an event, person, or idea:

- *High level construal is when people think abstractly.*
- *Low level construal is when people think more concretely and is associated with psychological proximity.*

The solutions to ecological problems (high level construal) must be long-term and need to be developed systematically and in the long run, especially by:

- developing critical thinking and critical decision-making in the entire society as early as possible (or at least a large part of it, as true believers can never be convinced by the power of arguments),
- distinguishing facts (logical argumentation, good science) from pseudo-facts (bad science), the problem of interpretation,
- a strategic separation of truth from potential lies (unverified or poorly verified facts) or lies (deception and manipulation) that are created using pseudo-scientific methods and through misleading use of various statistical explanations and shortcuts (Aberšek, 2021).

#### *Summing-up*

*No artificial way of producing energy is entirely environmentally friendly (green energy).  
Only nature knows how to create energy in a way unharmed to herself.*

We must focus mainly our attention today on medium-term goals (goals which we see as achievable by 2050), emphasizing in particular the things which we can and ought to do today for the day after tomorrow! Why now? A brief look at the statistics of our planet's environmental footprint, which reflects the rate of resource use and the amount of waste generated and compared it to how quickly nature can absorb waste and pollution, create new resources and remediate the consequences, reveals that we are spiraling inevitably toward doom. This is reflected in all segments of society, from problems in waste disposal and cleaning, to the unstoppable pollution of air, water, and land. Hence, the time to address these issues is now. So, if we want to address and solve the problem of energy production and consumption connected with the environment and at the same time, to reduce greenhouse gas resources and act green, there are only two diametrically opposed options:

- saving energy, or
- using green energy sources.

In between these two options, there is a range of intermediate, hybrid solutions, including more or less intense energy saving and the use of more or less environmentally friendly energy sources. Of course, modern technologies also play an important role in this respect, as they enable the reduction of greenhouse gas emissions through higher efficiency and cleaning of toxic gas emissions, which helps to partially neutralize their harmful impact on the environment. As mentioned, this can be achieved through a combination of general regulations at a global



level and raising the awareness of individuals. And we can conclude with our main premise that man doesn't need an outside enemy, he's the greatest threat to himself. The commentaries of young people across the world to "our" attitudes, or especially to the attitudes of the decision-makers towards the environment have clearly shown what they think: 'BLAH, BLAH, BLAH'. On behalf of these youngsters, Greta Thunberg criticized leaders over the climate crisis, saying:

*"They invite cherry-picked young people to meetings like this to pretend that they listen to us. But they clearly don't listen to us. Our emissions are still rising. The science doesn't lie".*

*"We can no longer let the people in power decide what is politically possible. We can no longer let the people in power decide what hope is. Hope is not passive. Hope is not blah, blah, blah. Hope is telling the truth. Hope is taking action. And hope always comes from the people."*

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### **Boris Aberšek**

PhD, Professor, University of Maribor, Faculty of Natural Sciences and Mathematics, Koroška cesta 160, 2000 Maribor, Slovenia.

E-mail: [boris.abersek@um.si](mailto:boris.abersek@um.si)

Website: <https://scholar.google.com/citations?user=aRid0w4AAAAJ&hl=en>

ORCID: <https://orcid.org/0000-0002-4198-4240>

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1 <https://www.theguardian.com/environment/2021/sep/28/blah-greta-thunberg-leaders-climate-crisis-co2-emissions>

