

Violence on the Natural Environment

Przemoc na środowisku naturalnym

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Abstract

In the article, on the basis of a review of literature and personal considerations, the problem of violence was presented, especially in relation to violence in the natural environment. The expected impact of the introduction of the term *violence on the natural environment* in relation to the economic, social and environmental area has been presented; three pillars of sustainable development. Man is currently influencing the Earth in many ways. These harmful activities must be reduced immediately to prevent further violence in the natural environment.

Key words: education, sustainable development, *violence on natural environment*

Streszczenie

W artykule, na podstawie przeglądu literatury i rozważań własnych zaprezentowano problem przemocy, szczególnie w odniesieniu do przemocy w środowisku przyrodniczym. Przedstawiono oczekiwany wpływ wprowadzenia terminu *przemoc na środowisku przyrodniczym* w odniesieniu do obszaru gospodarczego, społecznego i środowiskowego; trzech filarów zrównoważonego rozwoju. Człowiek wywiera obecnie wpływ na Ziemię na wiele sposobów. Te szkodliwe działania muszą zostać natychmiast ograniczone, aby zapobiec dalszej przemocy w środowisku przyrodniczym.

Słowa kluczowe: edukacja, rozwój zrównoważony, *przemoc na środowisku przyrodniczym*

Introduction

Technological development brings comfort, but also puts people into a multi-dimensional threat. We live in the anthropocene period wreaking havoc on the natural environment. Currently, as never before, much on our planet is influenced by *Homo sapiens* – our attitudes, actions and relationships with other living organisms. Gawor (2017) rightly disseminates the view that the current situation is forcing Man to radically change his approach to nature, if human civilization is to survive. Diagnoses of the natural and social environment alert and clearly indicate that the anthropocentric vision of a human place on Earth should be revised and replaced with an ecocentric perspective in which Man occupies an undefined position among other elements of nature. Thanks to bi-

ological diversity, ecosystems provide priceless services to human and other organisms. According to the Millennium Ecosystem Assessment (MEA, 2015) *ecosystem services* are a set of benefits that the environment provides to society and the economy. Recognition of mutual dependencies and mechanisms between individual ecosystem services may improve the ability to manage natural resources and landscapes to preserve the biodiversity of ecosystems (Cavender-Bares et al., 2015). According to the calculations carried out at the initiative of the EU Commission for the G8 summit, estimated costs of losing global ecosystem services were put at 50 billion euros per year. It has also been estimated that by 2050, such financial losses may amount to around 7% of global consumption (Braat and Ten Brink, 2007; TEEB 2011). Rockström et al. (2009) defined

nine global processes for which it is necessary to set boundaries for safe human function on Earth. According to the authors' claims, these limits have now been exceeded in three of these processes. In addition to climate change and the nitrogen cycle impinging on human security, these authors highlight the current rate of biodiversity loss.

Counteracting this last phenomenon is one of the main goals of contemporary authorities in the field of environmental and nature protection. Idealistically, Edward O. Wilson (2016) postulated that half of the Earth ought to be allocated as strict nature reserves and claimed that this could help to save biological diversity. Acceptance of such a view would mean the retardation of ecosystem degradation (Kostecka, 2013), but also limit current economic development. If Wilson's ideas were followed, a total economic re-think would be necessary.

Implementation of conduct in accordance with the principle of sustainable (intelligent, responsible) development is now a priority task for all of mankind. This is important because the basis of this concept is the protection of natural resources while preserving intergenerational justice within ecological, economic and social spheres. Particularly noteworthy here is the use of non-renewable resources, lost irretrievably when utilized. The prudent use of potentially renewable resources is also important, because about 60% of ecosystem services provided by biodiversity are currently degraded or do not function according to the principle of sustainable development (MEA, 2015). The variety of human activities at many levels, causes the necessity for constant research on progress in this field and implementation in the education sector (Kras, 2015). In the search for new educational resources and elements of social organization, an introduction to and dissemination of the concept of *violence on the natural environment* (Absher, 2012; Chapple, 1990) is worthwhile.

The aim of this paper is to consider the subject of violence, the concept of which was extended to violence on the natural environment. The literature has been reviewed in the field of perception of violence. The current understanding of the term has been developed, to propose an understanding of the term *ecological violence* with *violence on the natural environment* also evaluated. Using a SWOT (strengths, weaknesses, opportunities and threats) analysis, the predicted impact of adaptation and application of the concept of *violence on the natural environment* was taken on the implementation of sustainable development.

Reflections on violence

Various definitions of violence can be found in psychological and pedagogical literature. Colloquially, it is replaced by the terms: cruelty, oppressiveness, brutality, aggression and crime. We use violence to overcome or stop resistance (Zybertowicz, 1995).

Understood as a spontaneous or premeditated procedure, significantly threatening another person or group of people. It can cause damage, harm, physical suffering, but also moral suffering, meaning the use of violence to force the adoption of certain attitudes and behaviours inconsistent with someone's will.

Hanausek (2009) conceives violence as an influence of physical means on a certain object, forcing his functioning under the influence of the will of the subject exerting pressure. Sometimes the perpetrator using violence wants to influence not only his victim, but also social awareness. Violence, however, can also impose its point of view, ideology or religion (Mańkowska, 2004). The perpetrator is always responsible for violence. It is also possible to recognize numerous other forms of violence: social and political, revolutionary and non-revolutionary, state and anti-state, internal and external, stabilizing and destabilizing, mental and physical, individual and group, direct and indirect, partial and comprehensive, every day and occasional, substitute and fundamental and even just and unjust (Tokarczyk, 2004). Violence and aggression can also be directed towards plants, animals and even inanimate objects. Often, people mindlessly or deliberately destroy public lawns, break trees, demolish interiors of trains, buildings, destroy park benches, turn over waste bins (Wolicki, 2013). The result of violence may also be environmental damage – the result of a crime determined by law (regarding damage caused to protected species, natural habitats, water and soil ecosystems, it can also be interpreted as any pollution that negatively affects the natural environment). A specific form of violence may also be *ecoterrorism*, i.e. the use of threat or violence to exert pressure on private or public entities in the sphere of activities related to the natural environment (Tomasiewicz, 2006).

As an example, Polish law on preventing environmental damage and its repair (Act of 13 April, 2007), defined the concept of environmental damage as a measurable, negative change in the function or state of natural elements, assessed on the initial state, which was directly or indirectly caused by the entity's activity (entrepreneur, unit organizational, physical person) using the environment. It seems that the concept of damage is very narrow here due to the simple and unambiguous definition of the scope of the subject and elements of the environment (species and protected habitats, water and land surface). This may lead to the conclusion that not every interference with the environment will be a disadvantage; interference is after all the essence of human development. However, the concept of damage should clearly highlight the problem of abuse and irreversibility of the negative effects of the anticipated damage. According to Mering (2012), the Act covers only major changes that have a very negative impact on a large scale, meanwhile, in the current reality of reduced availability of resources and the destruction

of more than 60% of ecosystems globally, the concept of environmental damage should be a key category of crime, as the possibility of its occurrence violates the requirements of environmental safety for people and may also affect the criminalization of many behaviours. The situation in English law is very similar to that in Poland, as both countries are currently a part of the European Union. However, post-Brexit, the UK will need to ensure legal measures are enacted to continue such protection.

Within modern criminology, a new dynamic field of science called *Green criminology* is developing (White, 2014), which could be added to the issue of *ecological crime*. It is controversial and has an unconventional approach to contemporary ecological threats, looking for new pathological phenomena that arise in the natural environment. Numerous studies conducted by biologists, inspired criminologists to seek answers, as to how the local community co-exists with the natural environment, and what processes accompany these relationships. Ecologists strive to protect the quality of life at every level, even indicating cases of appropriation of green urban spaces by construction companies and industrial consortia, taking into account glaring violations of construction law by developers, causing pollution of the air or drinking water intakes.

It seems that in criminology literature, rarely does the term *Green criminology* appear. This may be due to a very slow development of provisions on criminal law of environmental protection, and above all from the low environmental awareness of citizens even blocking those restrictions that arise from existing law. Due to such attitudes present in other nations, despite numerous international initiatives, the resources of the Earth are being intensively exploited. This is also the result of the phenomenon of globalization, which on one hand may be a chance to solve numerous economic problems, but on the other becomes a cause of serious ecological problems at local and larger scales.

A good example of crime in the field of eco-crime, would be conducting illegal activities strongly interfering with environmental resources in naturally valuable areas. Many sectors of world economic trade (for example, tropical timber, rare protected species), deal with the production of modified plant species, contribute to the exploitation of valuable minerals, and trade waste and land important for environmental protection. Often, valuable areas for development are growing illegally. In such case, do deeds in the Earth's resources meet with an adequate legal and citizen protection? A radical change in attitudes and judgments is necessary here (Plywaczewski and Chorbot, 2011). This also applies to education and law enforcement of tourists, whose irresponsible behaviours and deeds may be another example of *ecological violence* (Chackiewicz and Kostecka, 2017).

As an example, Polish and English students who were training in an environmental subject, were aware of threats to the environment. They were able to suggest numerous examples of *ecological violence*, including loss of biodiversity, habitat destruction and pollution (terrestrial and marine). In addition, they mention over-hunting and over-fishing and specifically hunting of endangered species. Exploitation of minerals was also mentioned with a focus on short term gains without thought for the long term. Unsustainable practices in society were mentioned such as rubbish tipping and burning. On a larger scale, deforestation for production of cattle (meat) was mentioned as was other economic violence in general that might impact upon ecosystems. However, little consideration was given to the soil system and the consequences on food production if such a universal resource is lost or severely degraded (Butt and Kostecka, 2019; Kostecka et al., 2019).

We believe that the discussed concept is worthy of further analysis because there currently seems to be a need. The issue of accepting and promoting a specific appellation appears as a secondary matter: it is not the most important aspect. Despite this, the term *violence on the natural environment* was seen by English students to be a slightly worst form of expression than the term *ecological violence* (although as many students were non-committal and some even felt that *violence* itself was not a term to connect with the natural environment) (Butt and Kostecka, 2019). We believe that the first term (violence on the natural environment) appears broader and allows for more multifaceted considerations.

Expected impact of the concept *violence on the natural environment* on sustainable development

The heuristic SWOT analysis technique is one of the basic methods of organizing information, alongside, for example, the method of decision-making based on numerous sustainability scenarios (Kostecka and Butt, in prep.) allows the most appropriate actions in complicated situations. As seen from the figure and table below (fig. 1, table 1), the impact of the *violence on the natural environment* concept on functioning of sustainable development has a chance to be positive at the natural, social and economic level.

Discussion

Given the different sources of violence, three basic criteria can be noted: type of behaviour, intentions and effects. An important role in the assessment and perception of behaviour is played by norms and patterns: the perpetrator committing a specific act may do so to achieve a certain goal or satisfaction or to discharge anger and cause suffering to the other person. Analyzing the criterion of intent, one can distinguish intentional behaviour, or one that is the result of recognizing vio-

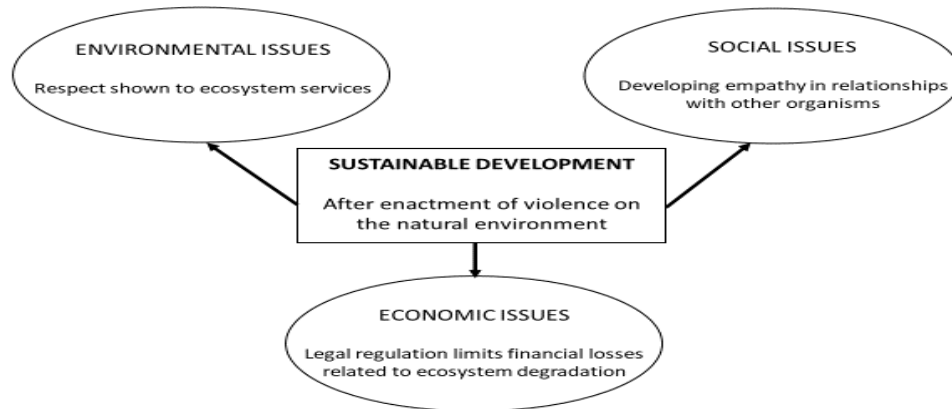


Figure 1. Effects expected after enactment of the term *violence on the natural environment*, source: authors own

Table 1. The impact of *violence on the natural environment* concept with divisions into areas important for building sustainable development, source: authors own

(a) Strengths		
Economic	Social	Ecological
The term <i>violence on the natural environment</i> can be a legal barrier to the uncontrolled use of natural resources, which will limit the costly recovery of ecosystems degraded without restrictions, thus not undermining the future income of local communities.	The term <i>violence on the natural environment</i> has a connection with human emotions. Its presence in the social consciousness will favour the organization of many human-nature relations, may even deepen the need for neatness, improve the appearance of the landscape and the surroundings.	An understanding of the term <i>violence on the natural environment</i> will allow more careful use of biodiversity.
Fear of punishment resulting from failure to comply with the law in which the consequence of <i>violence on the natural environment</i> will be included and will fall into the broadly understood treatment. The costs of environmental repair will be reduced.	Social acceptance of the concept will create positive conditions for the organization of a strategically justified model of social development in a positive relationship with ecosystem services. The renewed and widespread habits of civic respect for nature and the resistance to various manifestations of violence on the natural environment coincide with the concept of sustainable development and promote the pro-ecological attitude of local communities. It can also trigger the need to look for more effective ways to protect the natural environment.	Conditions will be created to protect the benefits of ecosystems, it will develop the prevention of environmental threats from waste, eutrophication, air pollution, soil degradation and other forms of anthropogenic stress.
Greater respect for nature can translate into economic savings in connection with the improvement of the quality of human health.	The use of pro-environmental activities in the avoidance of environmental violence can also contribute to improving the health of citizens, and therefore also the comfort of their lives.	Stimulating the emotional condemnation of violence on nature will help improve the quality and fertility of soils, strengthen ecosystem services, reduce environmental burdens.
Dissemination of the concept may stimulate the emergence of new business entities that guard broadly understood good relations with nature.	An attempt to disseminate the term by enthusiasts may favor a kind of fashion, an interesting hobby. It can bring new social groups (whole families) closer to nature. A perfect and multifaceted educational tool is created.	Positive relations with the natural environment are re-born.
(b) Threats		
Setting economic gains over not entirely quantifiable social and environmental profits and a long-term development strategy.	No emotional support for effective methods of pro-environmental education.	The threat of not using the chance to gradually relieve the natural environment from the pressure of an anthropocentrically-thinking Man.
Insufficient promotion of the term, lack of access to information and the exchange of experience of the application may cause further acts of violence on the natural environment, which will have to be repaired with the participation of financial expenditures.	With poor promotion, the energy and enthusiasm of the potential enthusiasts of the concept may be wasted.	Lack of support for unconventional methods of pro-environmental education.

lence as an effective technique (e.g. when raising or bypassing environmental law) then the perpetrator is not violence. As far as the criterion of effects is concerned, the example is the position of Kondziela (1974), according to which violence is: *exerting influence on people, in which their current level of spiritual and somatic development is smaller than the potential level of this development*. With ecological violence, it is easy to find an analogy – as a result of the use of violence in the ecosystem, the level of well-being of its inhabitants, including Man, deteriorates. As we expand our considerations to sustainable development, the deterioration can also be sought in the living conditions of local societies plundered against the Washington Convention on biodiversity (Chackiewicz and Kostecka, 2017).

When reviewing the given criteria, it can be stated that violence is defined not only as an action but also as a failure to act; violating the norms using the predominant force directly affecting the other person, which is not accidental and premeditated. The result of such an act is the creation of suffering, pain and harm, loss of values, change in behaviour, views or attitudes incompatible with his will (Walc, 2006). Currently, the world is changing very rapidly, with the number of people and the global economy increasing. It seems that we need more and more energy, water, wood and metals, food and a range of other resources. Meanwhile, the majority are non-renewable or potentially renewable resources. The amount of waste generated is increasing. There is a contraction of previously unadulterated areas and an increasingly rapid extinction of species (Popkiewicz, 2015). Taking forecasts into account, the world's population will increase to 8-9 billion within the next 50 years. When we do not change our way of thinking, we do not see the need for retardation in relation to various aspects of life (Kostecka, 2013), it should be assumed that the demand for resources and natural values will continue to grow. It means great challenges and the necessity to look for and research new variables, thanks to which it would be necessary to continuously monitor social attitudes towards environmental protection.

Rydzewski (2017) claims that attitudes towards protection of the natural environment, e.g. in contemporary American society, do not depend on the income and prestige of the profession of the respondents. These attitudes are determined by education, and above all age – these are the most important features that influence the strength of beliefs about the need to protect the natural environment. This fact means not only the necessity to undertake education on the principles of sustainability and sustainable development in all areas of life, but also the need to carefully look around and learn from leaders and learn from their experiences.

The term sustainable development should be implemented in an increasing number of new contexts (technological, science development, environmental

protection, policy) and at various levels (global, regional, national, institutional, individual). It should also be correctly interpreted in the world of business, technology and politics. The diversity of human activities at various levels of the concept of sustainable development makes its implementation in the education sector a difficult task. Therefore, next to the term of ecosystem services (MEA, 2015) and retardation (Poskrobko and Kostecka, 2016), the concept of violence on the natural environment also fulfills its tasks and can be useful in arousing positive emotions and conviction about the need to change attitudes towards nature.

Education for sustainable development is not uniformly implemented in all institutions, including universities (Kostecka et al., 2019). Therefore, one should address the question of how to create a balance based on economic, social and natural development, if this issue is foreign to many citizens. In the results of the studies quoted, it is worth emphasizing the difference in the perception of the world between students in the field of Environmental Protection and non-environmental subjects. Their answers repeatedly differed in the level of understanding human relationships with ecosystems and accepting the importance of this. Most of the Polish students surveyed recognized violence in the environment and knew at least one or a few people who experienced it. The popularity of this phenomenon is also confirmed by the report by Miedzik (2014), according to which on average 30% of children and adolescents surveyed knew someone who had experienced various manifestations of domestic violence in their environment. Such people according to the respondents require re-socialization. Almost all Polish and English surveyed students had never heard of the term *violence on the natural environment*, but intuitively chose its definition. In earlier studies (Kostecka et al., 2012), which were carried out in Rzeszów, Poland for randomly selected adult citizens, the question *Is there a concept of ecological violence?*, 78% of respondents associated it with excessive consumption of resources. Most student responses (>70%) thought that the process of re-socialization should be undertaken by anyone who commits environmental violence (Kostecka et al., 2019; Butt and Kostecka 2019).

The quantity and quality of knowledge is the effect of diverse curricula, so not everyone has an opportunity to learn and consider the above problems. Most of the students of non-environmental subjects examined by Kostecka et. al (2019) (unlike students of environmental protection) did not recognize the need to act responsibly in the environment. It may be the result of a situation at a lower level of education. When interviewing students in selected junior high schools in the Lublin region, Poland, Samonek-Miciuk (2013) confirmed the average level of interest of the respondents in threats and environmental protection. This gives an unfavorable picture and may indicate that there is no future need for respondents to join in actively

solving environmental problems and may result in little involvement in activities for environmental protection. The fact that today's youth, through lifestyle, loses contact not only with nature, but also with nature vocabulary, which until recently was present in everyday life, also strengthens the negative situation. In the past, a sentence such as *They met under a linden tree, pansies were collected, a cow was milked, and the voices of various bird species were distinguished* was not uncommon. Currently, young people are mainly indoors, they contact each other through social media, so everyday vocabulary is dominated by terms such as, laptops, smartphones, bits, interfaces, selfie and Instagram. The bond with nature is emotionally broken. Therefore, the reintroduction of a strong and emotional relationship with nature seems very important. Education for sustainable development requires well-thought-out projects and effective actions to shape and recreate such bonds with nature.

Currently, commercial forestry, killing of rare animals, illicit trade in protected organisms, carefree mass ecotourism and other threats to ecosystems, are perceived as the most serious crimes in the field of eco-criminology by only a few. It is therefore necessary to question whether deeds interfering with the Earth's resources are met with an adequate legal response. How can we measure the harmfulness of such activities? What penalties should be given to perpetrators and how should we prevent this? The problems outlined indicate that it is not only worth introduction and dissemination of the concept of violence on the natural environment, but also creation and implementation of strategies to counteract ecological crime. Knowledge alone is not enough, it is necessary to radically change our habits, attitudes and judgments. Although a large proportion of surveyed students had difficulties in recognizing the issue of *violence on the environment*, the majority stated a need to rehabilitate people committing such violence. This confirms the need for continuous and adequate education. In search of effective education for broadly defined sustainable development, it is also worth presentation, examination and refinement of the concept of *violence on the natural environment*.

We use technology to clean up waste water through sewage treatment and to remove atmospheric contamination in emissions from industrial plants by use of scrubbers. However, as proposed by Skolimowski (1991a, b), in addition to cleansing of such environmental problems, there is also a need to clean our minds. Whatever happens, the environmental situation must change. If we do not seriously consider and act to prevent violence on the natural environment, then technological-Man will destroy the very ecosystem services that we rely upon, but too few recognize nor fully appreciate.

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