

**HIGHLIGHTS ON THE CONTRIBUTION OF SEMANTICS TO ANALYZING
TERMINOLOGY SPECIFIC TO ENVIRONMENT**

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Abstract

In recent years, modern man and modern society, with its development of science and technology, have affected the natural evolution of nature. Extreme weather and manifestations of nature have called for dedicated attention on the part of governments and decision makers. Linguistics can help meet interest for identification and proper use of specialized meaning of specific terms of the environment area by ordinary speakers and devise methods to address it. The scientific approach, specific to linguistics, involves a staged process which would enrich and facilitate use of specialized terms and render more meaning and meanings to the meta-language.

Keywords: specific terminology, environmental degradation, environmental protection

1. INTRODUCTION

Environment is an area that has intrigued experts especially in recent years, through major changes that have occurred globally. Social developments, demographic explosion, the development of science and technology have all brought changes in the natural evolution of nature.

Modern man, in an effort to create a more comfortable living, neglected the impact of its actions on the environment. He considered the environment an inexhaustible well, an endless supply of resources. But the brutal manifestations of nature represented an alarm for the current society.

Long ignored in terms of potential impact on security, climate changes, energy sources and environmental security have become a priority for policy makers, given the many ways that could adversely affect the lifestyle of their own citizens.

Given a world population expected to increase by two billion people by 2050, access to relatively safe energy sources and management of water and food supplies will gain more importance for a growing number of states.

According to some analysts, the security of the environment is one of the newest and most serious problems caused by globalization.

In 2007, the *United Nations Security Council* held its first debate on climate change and its implications on national security. The European Council also drew attention to the impact of climate change in June 2007.

According to forecasts of the *UN Intergovernmental Panel on Climate Change*, failure of the international community to reduce greenhouse gas emissions in the atmosphere will cause severe damage to the planet by the end of this century. According to one of the scenarios developed by the forum, an increase of four degrees of global temperature would lead to the disappearance of up to 30% of plant and animal species, decreased crop yields, increasing intensity of tropical cyclones etc.

In a speech to the UN General Assembly plenary session, in early 2011, U.S. President Barack Obama said that "*the threat of climate change is serious, urgent and growing... Security and stability of each nation and all people - prosperity, health and our safety - are endangered. And the time we have to keep things under control is ticking away.*"

Addressing the subject of EU involvement in issues of environmental security is based on careful study of globalization – security, which shows a long neglect of the environmental security element, motivated by economic implications and responsibilities arising from damaging the environment and, hence, the individual and whole communities by the vast globalization process.

2. MATERIALS AND METHODS

The EU environmental policy targets the following objectives: preserving, protecting and improving environmental quality; protection of human health; prudent and rational utilization of natural resources; promoting measures at international level to address regional environmental issues.

In this social context, scientists have tried to explain, to investigate and seek solutions to stop environmental harm caused by a too industrialized society. Thus, increasingly popularized terms pertaining to environment started to appear, particularly in the press, but also in national public information campaigns. Environment has thus become an open field also to non-specialists.

Linguistics can help meet interest for identification and proper use of specialized meaning of specific terms of the environment area by ordinary speakers. Description of the linguistic characteristics - methods of expression (simple terms and compound terms), the content expressed, and semantic relations between terms - is the preserve of specialists in linguistics.

Such an approach, the scientific approach, specific to linguistics, involves a staged process which includes:

- a) Identification of the specific semantic features of the field, of conceptual-semantic classes and areas that would identify key concepts;

Among the conceptual-semantic classes described in the literature are included: the *ecosystem*, *environmental degradation* and *environmental protection*.

Each conceptual-semantic class is subsumed a range of conceptual-semantic spheres. Thus, the ecosystem includes as conceptual-semantic spheres the following: *biocenosis*, *biotype*, *interactions*; environmental degradation has the semantic conceptual-semantic spheres: *causes* and *changes* (land, climate, etc.) and in the environmental protection class actions can be found *areas* and *effects*.

- b) Analysis of semantic relations aims at determining how semantic relations facilitate, or, on the contrary, impedes transmission of specialized meaning;

Polysemy is avoided / rejected in specialized terminology since it induces elements of ambiguity and plurivocity.

Synonymy is important for facilitating access to specialized meaning both for specialists and especially for non-specialists.

Antonymy makes the distinction between meanings, promoting understanding of the terms.

Hyponymy offers the opportunity to explain the terms through their hyperonym. Hierarchy is an essential feature of hyponymy, through which terms can be framed into structures that facilitate their understanding.

c) Observation on how to update specific terms, both at a scientific level (specialized dictionaries, treaties, etc.) and at the usual communication level (press, Internet postings); in this way, we can highlight how specialized meaning is vulgarized.

Updating specific terms aims at observing how they appear in certain texts and contexts, but especially the meaning of the text's role in specifying the specialized meaning.

Updating at different levels of specialization aims at analyzing the specialized meaning depending on the degree of specialization of the text the terms belong to (specialized, teaching, popularization texts).

3. RESULTS AND DISCUSSION

Specific issues and terminologies corresponding to each *environmental sector*:

Horizontal legislation and regulations - impact assessment, strategic environmental assessment, environmental responsibility, public access to environmental information, environmental criminal law etc.;

Climate change - countering climate changes caused by emissions of greenhouse gases, reduction and storage of these emissions, adaptation to these changes etc.;

Air quality - air protection and pollutant emissions, integrated management of air quality, limit-values and emission limits, fuel quality and biofuels etc.;

Water quality - water quality management for specific purposes (drinking, bathing, natural environment for fish and so on), priority hazardous substances discharged into the aquatic environment, sustainable use of watercourses, marine environment, defense against floods and natural disasters, operation of dams, vulnerable areas, irrigations, coastal zone, integrated water management and so on;

Waste management - selective collection, recovery and recycling of packaging waste, waste disposal, waste incineration, toxic and hazardous waste transportation, different types of waste management - electrical and electronic equipment and associated hazardous substances, those from extractive industry or dismantling ships, waste oils, sludge treatment plants life vehicles etc.;

Dangerous substances - classification, packaging, labeling, and restricting their use;

Pollution control and risk management - integrated pollution prevention and control, large combustion plants, trans-frontier effects of industrial accidents of major risk, community scheme for granting the eco label, community management and audit scheme for environment etc.;

Protection of nature - biodiversity: protected natural areas, habitats, birds, wildlife and migratory species, natural cultural heritage, desertification - and biosecurity: genetically modified organisms genetically modified organisms, access to genetic information and benefit sharing etc.);

Environmental noise.

4. CONCLUSIONS

Because of the paraphernalia of existent data about all the environmental issues that modern society has to tackle as well as the need for a more significant and detailed understanding and definition of environment/environmental concepts and processes, linguistics has to meet the necessity of appropriate approach to identification and proper use of specialized meaning of specific terms of the environment area by every speaker. Description of the linguistic characteristics - methods of expression (simple terms and compound terms), the expressed content, and the semantic relationships between terms - is the preserve of specialists in linguistics. The scientific approach, specific to linguistics, involves a staged process which includes:

- a) Identification of the specific semantic features of the field, of conceptual-semantic classes and areas, that would identify key concepts. Each conceptual-semantic class is subsumed a range of conceptual-semantic spheres.
- b) Analysis of semantic relationship aims at determining how semantic relations

facilitate, or, on the contrary, impedes transmission of specialized meaning. Thus, **polysemy** is avoided / rejected as it can induce elements of ambiguity and plurivocity; **synonymy** can facilitate access to specialized meaning both for specialists and especially for non-specialists; **antonymy** makes the distinction between meanings, promoting understanding of the terms; **hyponymy** offers the opportunity to explain the terms through their hyperonym, with hierarchy as an essential feature of hyponymy, feature through which terms can be framed into structures that facilitate their understanding.

- c) Observation on how to update specific terms, both at a scientific level (specialized dictionaries, treaties, etc.) and at the usual communication level (press, Internet postings); in this way, we can highlight how specialized meaning is vulgarized. Specific issues and terminologies correspond to each *environmental sector*.

In this social context, it is the scientists' task to explain, to investigate and seek solutions to stop environmental harm caused by a too industrialized society. As increasingly popularized terms pertaining to environment continue to appear, particularly in the press, but also in national public information campaigns, environment has become an open field also to non-specialists.

It is, therefore, crucially important that linguistics/ semantics represent the fine tuning of the means of communication with this ever changing world.

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