DISCOURSE FEATURES OF ENGLISH ARTICLES WARNING ABOUT THE RISK OF NATURAL RESOURCES EXHAUSTION
ĐẶC ĐIỂM DIỄN NGÔN CỦA CÁC BÀI BÁO TIẾNG ANH CẢNH BÁO NGUY CƠ CẠN KIỆT TÀI NGUYÊN THIÊN NHIÊN

Nguyen Thi Quynh Hoa[1], Nguyen Thi Phuong Thao[2]

[1]*University of Foreign Language Studies - The University of Da Nang; ntqhoa@ufl.udn.vn*
[2]*Master Student Course 30 (2014-2016), English Language Major; thaonguyen6290@gmail.com*

Abstract - This study presents an investigation into *English Articles Warning about the Risks of Natural Resources Exhaustion* (EAWREs). There have been a good number of research works on discourse of environmental issues; however, it is found that there have been few studies on discourse analysis of natural resources warnings. Hence, this research focuses on the discourse features of articles about natural resources in terms of their layout features, syntactic features, lexical choices and stylistic devices based on an analysis of 45 samples of EAWREs gathered from the websites of two well-known electronic newspapers in the UK and US from 2008 to 2016. It is hoped that the results of the research will partly contribute to the teaching and learning of English as well as help learners of English get a better insight into the features of discourse related to environmental issues.

Key words - discourse analysis; English articles; risk; natural resources exhaustion; layout features, syntactic features; lexical choices; stylistic devices.

Tóm tắt – Nghiên cứu này trình bày việc khảo sát *các bài báo tiếng Anh cảnh báo rủi ro về cạn kiệt tài nguyên thiên nhiên* (EAWREs). Đã có khá nhiều bài nghiên cứu về diễn ngôn các vấn đề môi trường. Tuy nhiên, số bài nghiên cứu phân tích diễn ngôn về cảnh báo tài nguyên thiên nhiên vẫn còn ít ỏi. Do vậy, trên cơ sở phân tích 45 bài báo được thu thập từ 2 trang báo điện tử nổi tiếng ở Anh và Mỹ trong giai đoạn 2008-2016, nghiên cứu này tập trung vào các đặc điểm diễn ngôn của các bài báo về tài nguyên thiên nhiên về các phương diện: đặc điểm bố cục, đặc điểm cú pháp, lựa chọn từ vựng và biện pháp tu từ. Hy vọng rằng kết quả của nghiên cứu này sẽ đóng góp phần nào vào quá trình dạy học tiếng Anh và giúp cho người học tiếng Anh hiểu thấu đáo hơn các đặc điểm của diễn ngôn liên quan đến các vấn đề môi trường.

Từ khóa - phân tích diễn ngôn; báo tiếng Anh; nguy cơ; cạn kiệt tài nguyên thiên nhiên; đặc điểm bố cục; đặc điểm cú pháp; lựa chọn từ vựng; biện pháp tu từ.

1. Rationale

It is true that the increasing development of economies and human demand is contributing to the serious overexploitation of natural resources. The utilization of natural resources causes negative impacts on environmental quality in several ways. For that reason, the issues of natural resources exhaustion must be necessarily put on the alert for the risks of environmental damages. It is crucial to pay attention to the worldwide natural resources crisis. However, writing newspaper articles of environmental topics is not an effortless task because it requires the authors to be highly qualified. Accordingly, skilled writers make effective use of writing techniques to create their own texts as well as to organize and develop the ideas reasonably. Thus, I decided to conduct a study with the topic "**A Discourse Analysis of English Articles Warning about the Risks of Natural Resources Exhaustion**". Hopefully, the research results will partly make a contribution to practical knowledge of discourse features in EAWREs as well as the teaching and learning of English, especially for those who are interested in this field.

2. Previous related studies

According to McCarthy [6], *discourse analysis* "is concerned with the study of the relationship between language and the contexts in which it is used". Similarly, Johnstone [5] mentions that discourse analysis is not simply an independent discipline, but a "systematic, rigorous way of suggesting answers to research questions posed in and across disciplines throughout the humanities and social sciences and beyond".

In studies of discourse analysis in Vietnamese. Trần Ngọc Thêm [9] introduced a systematic explanation on cohesive devices in Vietnamese texts. Besides, the analysis of grammatical, lexical and logical means of cohesion was conducted by Nguyễn Hòa [7]. Diep Quang Ban [2] drew attention to text and utterance, especially the ones above the sentence level.

3. Theoretical background

3.1. English Articles Warning about the Risks of Natural Resources Exhaustion

In this article, EAWREs are defined as pieces of writing which specifically refer to the depletion and loss of the Earth's resources by the overconsumption of humans. They also provide evidence concerning numerous consequences of natural resources depletion such as food shortage, degraded land productivity, fishery collapse or carbon dioxide emissions which cannot be ignored. This article is aimed at raising human awareness and responsibility to preserve and protect the Earth's resource supplies.

3.2. Layout Features

Nguyễn Hòa [7] presented a structure of a news discourse with the regard to the organization of ideas in a news discourse. It consists of two basic sub-categories, namely the *Summary (Headline and Topic Sentence)* and the *Development (Background, Elaboration, Comment and Result)*.

3.3. Syntactic Features

According to Chomsky [1], *syntax* is defined as the study of the principles and processes by which sentences are constructed in particular languages.

3.4. Lexical Choices

Halliday et al. [4] stated that "lexicology is the study of content words or lexical items". Lexicology studies various lexical units: morphemes, words, variable word groups and phraseological units.

3.5. Stylistic Devices

According to Galperin [3], stylistics deals with the result of the act of communication. It means that rhetoric takes into consideration the "output of the act of communication".

In summary, the study focuses on the discourse features of EAWREs in terms of their layout features, syntactic features, lexical choices and stylistic features based on the viewpoints and theories of well-known scholars and linguists, especially Galperin [3], Halliday et al. [4], Nguyen Hoa [7].

4. Methodology

The aim of the study is to identify and clarify the nature of ARSEs in order to find out their linguistic features in terms of *their layout features, syntactic features, lexical choices and stylistic devices*. To achieve the main goal, the study made use of the descriptive method, resulting in both qualitative and quantitative information.

The data of the research is collected based on the following criteria: (1) the samples must be written texts warning about natural resources; (2) the sources of the samples must be reliable and official in the United States and the United Kingdom; (3) The samples range from 500 to 1,000 words in length in the period of 2008-2016.

5. Findings and discussion

5.1. Layout Features of EAWREs

On examining 45 EAWREs, there are three overall patterns of layout which are employed in EAWREs. The distinguishable feature between these patterns is the absence of factors namely *Result* and *Comments*.

- Pattern 1: Summary + Development with Result
- Pattern 2: Summary + Development without Result
- Pattern 3: Summary + Development without Comments

In fact, the layout of *Pattern 1* is full of elements which includes *Result* whereas in *Pattern 2* the writers close the articles by *a Comment* instead of giving *a Result*. The remaining pattern is like a summary or report in which *Comments* are totally absent.

Here is a table illustrating the distribution of layout patterns in EAWREs:

Table 1. *Distribution of Layout Patterns in EAWREs*

Patterns	Occurrence	Rate
Pattern 1	17	38 %
Pattern 2	26	58 %
Pattern 3	2	4 %
Total	**45**	**100 %**

Table 1 shows that Pattern 2 is the major pattern of EAWREs with the highest percentage (58%). The use of Pattern 2 accounts for 38% while the remaing pattern is hardly employed in EAWREs. There is a tendency that most EAWREs are closed without the *Result*. Most writers use the *Comments* to conclude the EAWREs rather than the *Result* which makes the conclusion open so that the readers can stand a chance to figure out their own results. This seems to be an effective way to raise people's awareness of the problems of natural resources exhaustion as well as imagining the consequences by themselves.

5.2. Syntactic Features in EAWREs

5.2.1. Conditional Sentences in EAWREs

In this article, it is found that two main types of conditional sentences are utilized in EAWREs, including *type 1* and *type 2*. The other types of conditional sentences do not appear in EAWREs. Here are some examples illustrating these two types of conditions.

(1) *This had led the report to predict that by 2030, if nothing changes, mankind would need two planets to sustain its lifestyle.* [10]

(2) *The planet has sufficient resources to sustain 9 billion, but we can only ensure a sustainable future for all if we address grossly unequal levels of consumption.* [11]

The above examples include type 1 conditional sentences which can be regarded as predictions about the future of mankind in relation to the consumption of resources.

The table below shows the distribution of conditional sentence types in 45 EAWREs collected.

Table 2. *Distribution of Conditional Sentence Types in EAWREs*

Type of conditional sentences	Occurrence	Rate
Type 1	51	93%
Type 2	4	7 %
Total	**55**	**100%**

As shown in Table 2, *type 1* conditional sentences are found in 51 occurrences, occuping a great majority (93%). In contrast, *type 2* is identified with only 4 occurrences, accounting for the remaining minority (7%). Obviously, *type 1* is usually used to talk about real and possible situations while *type 2* is employed to express unreal or impossible conditions and entailed results. Hence, EAWRE writers often use the first type of conditional sentences to imply realistic warnings. The risks of natural resources exhaustion are very likely to happen if humans make wrong use of natural resources.

5.2.2. Other structures for making warnings in EAWREs

There some noticeable structures for making warnings in EAWREs namely the structure "whether … or…", forms of comparison, structures using "(not) enough".

a. The structure "whether …or …"

This structure is utilized in EAWREs to suggest that it does not matter which of the two possibilities is true because the situation will happen or remain the same.

(3) "*The truth is that the deep sea affects us, **whether** we live on the coast **or** far from the ocean -- and its impact on the globe is pervasive*". [12]

Example (3) shows that the structure "whether … or

…" is used not only to introduce two opinions or alternatives but to emphasize a reality: no matter where we live, we cannot avoid the impact of the sea.

b. Comparison Structures

Among remarkable syntactic patterns used to convey warnings in EAWREs are those of comparison. In order to emphasize the warnings of natural resources exhaustion, the writers employed structures that express double comparison and multiple numbers comparison. Here are some examples:

(4) "*There's an element of resilience that's been built into our lives, the ability of our environment to withstand the shocks to which we expose it... **The more** we lose, **the less** resilience there is to these shocks, and therefore we increase the risk to society and risk to life and livelihoods and the economy*", *he added.* [13]

(5) *According to a report on oil shales and unconventional oil supplies prepared by the US office of petroleum reserves last year, "world oil reserves are being depleted **three times as fast as** they are being discovered".* [14]

Examples (4) and (5) include comparison structures which are aimed at placing emphasis on the degree of the loss resulting from what humans have done to the environment.

c. Structure with "enough"

(6) *According to standard economic thinking, rising prices should prompt more efficiency, but this has happened at a much slower rate than should have been the case. If price signals are not **enough** to change behaviour, then other methods such as government intervention may be needed* [15].

In the above example, the negative structure with *enough* also indicates a hypothesis related to rising prices.

5.3. Lexical choices in EAWREs

5.3.1. Evaluative Adjectives

Through the analysis of the data, evaluative adjectives found in EAWREs under study can be classified into the following types: (i) *size/ strength-related adjectives* which describe actions and entities in terms of intensity and scope; (ii) *importance-related adjectives* which indicate the significant role of a particular activity or a situation; (iii) *evaluation-based adjectives* which display special characteristics of actions or entities and make them more appealing to readers.

Table 3. Types of Evaluative Adjectives in EAWREs

Types	Notions	Examples
Size/strength	the scale of actions and entities in terms of intensity and scope	*gross, vast, broad, large, lopsided, long, enormous, high, steep, deep, dense, minor, big, low, great*
Importance	the significant role of a particular activity or a situation	*major, main, primary, crucial, key, essential, certain, alarming, significant*
Evaluation	special characteristics of actions or entities	*successful, biodiverse, responsible, inaccessible, illegal, growing, populous, poor, polluted, leading, dire,*

| | | *unsustainable, beneficial, precarious, devastating* |

With a good number of evaluative adjectives, writers have more choices to convey ideas and highlight impressed points in order to arouse readers' interest in the risks of natural resources exhaustion.

The evaluative adjectives listed above have also been found in comparison forms, which are illustrated in the following table.

Table 4. Distribution of Adjective Forms in EAWREs

Evaluative adjectives	Occurrence	Rate
Base form	347	64%
Comparative	129	24%
Superlative	64	12%
Total	**540**	**100%**

Table 4 shows that out of 540 instances, base-form adjectives account for the highest proportion with 347 instances (64%) and almost doubles that of comparative forms (24%). Meanwhile, the superlative form of evaluative adjectives occupies the least frequency (12%).

5.3.2. Verbs Denoting Natural Resources Exhaustion

In the data under study in this article, it is recognized that a certain range of verbs have been used in order to precisely describe the overexploitation of natural resources. Here are some examples.

(7) *Humans **have exhausted** a year's supply of natural resources in less than eight months, according to an analysis of the demands the world's population are placing on the planet.* [16]

(8) *The problem is worsening, with the planet sliding into "ecological debt" earlier and earlier, so that the day on which the world has **used up** all the natural resources available for the year has shifted...* [17]

The following table presents a list of verbs used in expressing exhaustion of natural resources.

Table 5. List of Verbs Denoting Natural Resources Exhaustion

Verbs	Occurrences	Verbs	Occurrences
deplete	10	gnaw away	1
exhaust	13	drain	2
over-exploit	4	emit	4
consume	26	outstrip	11
extract	11	run up	22
degrade	11	remove	1
use up	25	dry up	1
shrink	2	gobble up	1

Table 5 includes both single-word verbs and phrasal verbs.

5.4. Stylistic Devices in EAWREs

There are two prominent stylistic devices used in the EAWREs: metonymy, hyperbole and metaphor. Table 6 presents the distribution of these stylistic devices.

From the above table, it can be seen that metonymy accounts for the highest proportion in comparison with metaphor and hyperbole. Most EAWRE writers tend to use

metonymy as a major stylistic device. Hyperbole is also a prominent device that appears in many EAWREs. In addtition, *metaphor* is also utilized to create impressions from warnings of the risks of natural resources exhaustion. Below are some examples for illustration.

Table 6. Distribution of Stylistic Devices in EAWREs

Type	Occurrence	Rate
Metonymy	123	50 %
Hyperbole	86	35 %
Metaphor	36	15 %
Total	**245**	**100 %**

5.4.1. Metonymy

(11) *China is shopping worldwide for natural resources. We're in the midst of a process of commodity accumulation by them.* [18]

The proper noun "China" was employed to represent the Chinese people. It indicates that China is one of the world's largest consumers of natural resources. This metonymy makes the writing more concise and fascinating.

5.4.2. Hyperbole

(13) *Earth's population **will be forced to colonise** two planets within 50 years if natural resources continue to be exploited at the current rate, according to a report out this week.* [19]

The hyperbole "**will be forced to colonise**" employed in the above example expresses some sensational effect. It is likely that humans must move to other planets in the future because the Earth no longer sustains if human over-consumption of natural resources continues the way it is.

(14) *Rich consumers are still voraciously **gobbling up** the world's resources, despite the worst recession in a generation, with their appetite pushing the planet into "ecological debt" from today, according to a report by think-tank the new economics foundation.* [20]

In the above examples, verbs play crucial roles in emphasizing the over-exploitation of the worlds' resources. They help to warn that humans are already living far beyond the planet's capacity to support them, which leads to the severe situation of "*ecological debt*". In such cases, the exaggeration expressed by hyperbole transfers a pessimistic prediction about the earth's supplies to raise readers' awareness urge as well as to take actions for the sake of natural conservation and sustainable development.

5.4.3. Metaphor

(15) *As soil erosion has huge impacts on ecosystems, food production, drinking water, carbon stocks and biodiversity, the EU has called for quantitative assessments of soil rates at EU level, and put soil protection **at the heart of** its environmental agenda.* [21]

In the example (15), the writer made use of a metaphor via the phrase **at the heart of**, which helps to highlight the importance of the matter under discussion. Due to the negative effects of soil erosion on the environment, it is necessary to place a high priority on soil conservation.

6. Conclusion

This article is an attempt to identify and describe the layout features, syntactic features, lexical choices and stylistic devices of 45 chosen EAWREs. In terms of layout features, the EAWREs consist of two components namely *Summary* and *Development*. There are three overall layout patterns for EAWREs, which differ from each other in terms of the presence or absence of Result or Comments. In respect of syntactic features, *conditional sentences* and *other specific structures* have been found out in the data. With regard to the lexical choices, *evaluative adjectives* and *verbs denoting natural resource exhaustion* have been employed to convey warning messages and to draw readers' attention to the risks of natural resources exhaustion. Concerning stylistic features, the writers have a tendency to employ *metonymy, hyperbole* and *metaphor* whose effects are added to key contents of the texts. All these discourse features of EAWREs can be of some useful reference to learners of English, especially those who are interested in the production and interpretation of the discourse of EAWREs.

REFERENCES

[1] Chomsky, N., *Syntactic Structures*, The Hague: Mouton, 1957.

[2] Diệp Quang Ban, *Văn bản và liên kết trong tiếng Việt*, Nhà xuất bản Khoa học Giáo dục, 1989.

[3] Galperin I.R., *English Stylistics*, Moscow: Higher School Publishing House, 1977.

[4] Halliday, M.A.K. et al., *Lexicology and Corpus Linguistics*, Continuum, 2004.

[5] Johnstone, B., *Discourse Analysis*, Blackwell Publishing, 2008.

[6] McCarthy, M., *Discourse Analysis for Language Teachers*, Cambridge University Press, 1991.

[7] Nguyễn Hòa, *Phân tích diễn ngôn – Một số vấn đề lý luận và phương pháp*, Nhà xuất bản Đại học Quốc gia Hà Nội, 2008.

[8] Quirk, R. et al., *A Comprehensive Grammar of the English Language*, Longman, 1985.

[9] Trần Ngọc Thêm, *Hệ thống liên kết văn bản tiếng Việt*, Nhà xuất bản Giáo dục, 1999.

[10] https://www.theguardian.com/environment/2008/oct/29/climatechange-endangeredhabitats

[11] https://www.theguardian.com/environment/2012/apr/26/earth-population-consumption-disasters

[12] https://www.sciencedaily.com/releases/2014/07/140730094308.htm

[13] https://www.theguardian.com/environment/2010/may/21/biodiversity-un-report

[14] https://www.theguardian.com/science/2015/apr/21/oilandpetrol.news

[15] https://www.theguardian.com/environment/2012/jul/12/global-natural-resources-food-water

[16] https://www.theguardian.com/environment/2015/aug/12/humans-have-already-used-up-2015s-supply-of-earths-resources-analysis

[17] https://www.theguardian.com/environment/2014/aug/19/earth-ecological-debt-earlier

[18] https://www.theguardian.com/world/2013/mar/26/china-latin-america-resources-concern

[19] https://www.theguardian.com/uk/2012/jul/07/research.waste

[20] https://www.theguardian.com/environment/2009/sep/25/consumption-ecological-debt

[21] https://www.sciencedaily.com/releases/2015/09/150902091343.htm

[22] https://www.theguardian.com/environment/2010/may/21/biodiversity-un-report