

Terms and Quasi-Terms Within Terminological Field of Closed-Loop Economy Based on Ellenmacarthurfoundation.com materials

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Abstract—The global issue of transition from a linear economy to a circular economy dictates the need for the development and structuring of the terminological system within the terminological field of the circular economy. The purpose of the current study is to analyze the formation of the conceptual apparatus and linguistic tools for the implementation of the principles of a circular economy in Russia and to structure the terminological system as the indispensable means for translation in the field of circular economy. The Dame Ellen MacArthur Foundation accelerates the transition to the closed loop economics/ In this work, the materials of the Ellenmacarthurfoundation.com site were analyzed that differ from each other in their subject referring to the type of the texts, the compositional structure is mostly formed by the cognitive component, which, in turn, contains terms and quasi-terms. The method of differential analysis was used to define terms, quasi-terms in the texts on Ellenmacarthurfoundation.com site. Their ratio can be judged on the formation of the conceptual approach, with the British standard BS 8001 "Guide for the implementation of the principles of a circular economy." (Approved by Christina Allen, lead program manager for sustainable development in February, 2019) for the detection of quasi-terms in the materials of the site, which indicates the development of the ideas of a circular economy, the involvement of new products in the manufacturing process of a closed loop economics, the inspiration of the generations to re-think and re-design of the ideas of the circular economy in modern society and the current process of the unification of terms in linguistics. The translation of terms of the circular economy also may be of interest in the field of linguistics.

Keywords—language, linguistics, terms, quasi-terms, terminological system, circular economy, closed loop economics

I. INTRODUCTION

The relevance of the economic policy of the Ellen MacArthur Foundation for Russia is difficult to overestimate, many production facilities in our country are durable and quite suitable for processing. This fact implies the presence of cyclic properties necessary for new sites to apply the closed-loop economics. The global nature of the issues and projects, in which it is planned to involve up to 30 countries by 2030, dictates the need to cooperate with the foreign partners, commercial organizations, as well as regulatory authorities, to develop and enhance the methods of waste management and optimize the schemes of the reuse and the waist disposal.

Foremost the governments of Scotland, Germany and Switzerland, the ROCKWOOL corporation, SABMiller and the Renault concern have joined the project. In the UK the author's programs of the Ellen MacArthur foundation, game techniques and information resources are used in the vast majority of British schools for students of all ages, and in 2012 year, the European Commission issued a manifesto in support of a circular economy. Ultimately the unification of large corporations, small innovative companies and regional government and a radical change is expected to occur in the waste management systems. The purpose of the Fund is to maximize the extraction of secondary resources from waste and their wide use in global industrial production with the support of the South Korean Green Development Strategy and the Japanese Society for the Optimal Material Cycle.

The major obstacle to Russia's adherence to the principles of a circular economy is not only the domination of pragmatic goals to the long-range claims, but also an imperfect terminological system within the terminological field of a circular economy. Even the absence of the uniform term for

this economic system confirms the insufficient dissemination of the ideas of the Ellenmacarthurfoundation.com

Circular economy is a closed-loop economics (the term “cirkulyarnaya ekonomika” from the English circular economy; “ciklichnaya ekonomika” from the English cyclic economy, “ekonomika zamknutogo cikla” - in a general sense, it is an economy based on the renewal of resources, an alternative to the traditional linear economy (creation, use, disposal of waste).

This is a revolutionary breakthrough and a completely new thinking, which is a consistent model of the possibilities of technological progress for the global implementation of a circular economy as a regenerative system in which resource costs and waste, emissions and energy losses are minimized due to the slowdown, narrowing and closure of energy and material flows. This can be achieved by the refurbishment, renovation, the use of remanufacturing, design modernization and relocation of resources.

This complex process requires diagnostics, guidance and unification of terminology to transform the macro concept of a circular economy into the utilitarian decisions. In this case, a common language is not just a linguistic resource, but also uniform economic rules that will help the organizations to determine the shared objectives of the circular economy and to correct for possible risks. To solve the problem of the unification of terms, the Foundation, with the involvement of the business experts, the government and the scientific community, developed and approved the standards that transform best practices into practical recommendations for enterprises. Basing on British Standard BS 8001 Guidelines for the Implementation of Circular Economy Principles (February 2019, Christina Allen, Lead Sustainability Program Leader) and several articles and documents on the site, we reviewed the vocabulary of the site Ellenmacarthurfoundation.com, whose mission is to introduce people to the topic of green economics and circular economy.

II. MATERIALS AND METHODS

To get to first base easy and concise forms of the terms, should be found which would reflect the main classification features of the concepts they designate. A clear cut distinction between the conceptual content of quasi-terms and pseudo-terms is difficult today, but it can be contrasted with the definition of the term in the texts of articles on the site.

A comparative analysis of terms and quasi-terms was conducted in the texts of the articles “City and industry in collaboration to save clothes from landfill” (Ellenmacarthurfoundation.com, October 2019 (Appendix 1)), “Cities and Circular Economy for Food” (Ellenmacarthurfoundation.com, January 2019) (Appendix 2), articles of incorporation and general introductory text about the organization of the Ellenmacarthurfoundation.com

Guided by the degree of the importance of the terminology system and taking into account the peculiarities of the use of terms, the authors of the site have developed a codification of the terminology system, or standards of terms, to prevent the terms from the unambiguous use when it is unacceptable (for

instance, in production). The methods of differential analysis and text analysis were applied as well as the descriptive method.

III. RESULTS

At the present time two opposing opinions coexist on the formation of a terminological system. Some linguists point to natural paths, that is, spontaneously forming terminologies that can be characterized as logically loose, incomplete, consisting of nomens, quasi-terms, preterms, pseudo-terms, which are gradually being structured. The others hold to an opinion that the terminological system is conventional and artificially formed. Terminological systems consist of terms that name abstract and concrete objects of study - from electrodes in electronics and pliers in mechanical engineering to philosophical and general scientific categories such as system, method, time and space. These lexical units joined for denoting general concepts of a special nature are opposed to proper nouns, which denote individual concepts. In addition to terms, there are lexical units outside the terminological system, which until now do not have a common name (“means of subsistence” in economics, “heat” in physics). They can be called quasi-terms.

A quasi-term is a lexical unit that does not satisfy the concept of a term and replaces the term in its absence, for the name of ambiguously understood concepts that do not have clear boundaries and hence definitions.

In a number of cases, the quasi-term is a former pre-term. Its replacement by a lexical unit that is more consistent with terminological requirements is delayed in the field of fixation to content or form, but in the absence of a more suitable quasi-term it is used as a substitute for the term and, being fixed in special vocabulary, remains sustainable.

The texts belong to the feature materials and is replete with social and political terms.

Departments (the term is translated as “vedomstvo” in the text; the translation of such a term is used in its dictionary definition, no additional information is required to understand it in the context). Usage in the text: “The vision was to create a building that would enable better connections between different city departments, and show consideration for the health of workers, visitors, and the surrounding environment.

Land filling – “sbros othodov s posleduyushchej gruntovoj zasypkoj”, waste disposal.

environmental improvements - “uluchshenie sostoyaniya okruzhayushchej sredy”- a quasi-term, by the word improvement the authors of the project can mean the measures that need to be taken

edible food waste - a quasi-term, pishchevye ot hody kotorye mozno est' is practically an oxymoron, therefore, comments and explanations are needed who will use this type of waste and after what pre-treatment.

food by-products is a fairly common term that is used to refer to food waste - pishchevye othody. In the text this term is contrasted with the quasi-term edible food waste and

illustrates the transition from the general to the particular, i.e. to such a category of food waste that can be recycled and fit for food.

Surrounding environment (a two-component term in which the first word in translation can be omitted; here we observe redundancy of technical texts: “surrounding” in the context of the sentence “The vision was to create a building that would enable better connections between different city departments, and show consideration for the health of workers, visitors, and the surrounding environment”; gives weight to the term “environment”, emphasizes the localization of the environment.

Reutilization (the term, in the context of the sentence "C2C design allows for continuous material recovery and reutilization in a technical or biological system means “povtornoje ispol'zovanie”; extra knowledge in the field of ecology is required to understand the term.

Manufacturers (from the following context: “... as materials can be sold back to manufacturers through a 'buy and buy-back' scheme” . The term is translated by the word "proizvoditeli"; to understand the meaning, we do not need additional information; the translation corresponds to the dictionary definition of the term).

Disassembly (quasi-term, in the article “Through healthy material choices and design for disassembly ...”, it is used in the meaning of “razborka”; this word is not an unambiguous term, and the dictionary meaning “rasshahtovka” will be inappropriate in the context of ecological economics; in a circular economy model, the choice of materials for recycling is primarily about choosing the right method that a company uses to effectively achieve the goals of a circular economy, which is why the word “razborka” is more preferable.

Ellenmacarthurfoundation.com's official Twitter page @circulatenews has current world news that directly relates to the circular economy. The ratio of terms and quasi-terms of an excerpt from the publication (see Appendix 4) was analyzed, which allows us to judge the methodological and theoretical basis in the development of a closed-loop economics.

Front runner (quasi-term, dictionary definition “kandidat, pretendent”, but in the context of the sentence “China ... as a frontrunner in circular economy ...” the meaning “candidate” will be, if not erroneous, then at least not the only one and the history of the emergence and development of the cyclic economy indicates the meaning of “leader”, this is also confirmed by the example of the use in the text: “The adoption of the Circular Economy Promotion Law in 2008 marked China out as a frontrunner in circular economy legislation.”

Green consumption can be attributed to quasi-terms, may denote low energy consumption “ekonomichnoje energopotreblenie” or environmentally friendly consumption “ekologicheskij bezopasnoje energopotreblenie”, this overlap in meaning can at the same time break the consecution in the production algorithm

circular values - a quasi-term denoting the loyalty of society to the idea of a cyclical economy or the value of a circular economy. “znachimost' ekonomiki zamknutogo

cikla”. Today there is no consensus on the definition of the meaning of this phrase

symbiotic relationships - mutually beneficial relationships “vzaimovyygodnye otnosheniya”, quasi-term, since combinatorial type interaction presupposes a variety of cooperation models. Accordingly, only the context can determine the type of these relations and the way of translating this two-component term.

Legislation (a term, among the possible meanings of “legislation”, “zakonodatel'stvo”, “zakon”, “zakonoproekt”; as part of the multi-component term “... in circular economy legislation...” it can be translated as “zakonoproekt, kasayushchij'sya ekonomiki zamknutogo cikla”.

Renewable energy (term, meaning “vozobnovlyaemaya energiya”; is a vivid example of vocabulary on the topic of ecological economics. It is often used, there are no synonyms, does not require lexical and grammatical transformations in the translation process). An example of the use in the text: “... focusing on remanufacture and renewable energy”.

It should be mentioned that difficulties in the translation can arise already at the stage of differentiation of language means corresponding to the text material, not just the question of structuring speech, when the skills of translation abstracting can be used [Baklashova T.A., 2018], but objective problems with wide range of types of discourse on the site Ellenmacarthurfoundation.com: abstracts, messages, business letter, private letters of acknowledgements, scientific reports, papers, biography, etc. The task of operating with terms within a given terminological field of a circular economy is especially acute.

As an example, you can analyze the text published on the home page of the site. The title of the article is “Intro to the Circular economy”, the authors reveal the basic concept of the circular economy, acquaint readers with the basic principles of the company and formulate the ideas and goals of the fund. The compositional structure of the text consists chiefly of cognitive component, within the framework of our research, the terms and quasi-terms (see Appendix 5):

Natural systems (term, in the text retains the dictionary meaning of “prirodnye sistemy” “regenerate natural systems”;

Linear economy (“linejnaya ekonomika” is opposed to a cyclical economy, a type of economy with a single-turn use of industrial products (creation, use, disposal of waste). An example of its use in the text: “.. aimed at reducing the negative impacts of the linear economy”;

Reuse (the term “povtornoje ispol'zovanie”; included in the terminological system of the terminological field of cyclical economy). In the text, along with other terms, the components of this terminological field are found “... materials through strategies like reuse, repair, remanufacture or (in the last resort) recycling”.

circular economy (in the English version and in Russian, the quasi-term “ciklichnaya ekonomika” which has not entered the phase of the term “cirkulyarnaya ekonomika” is a cyclical or cyclical economy. Translation option (closed-loop economy “ekonomika zamknutogo cikla” can be considered a term

appealing to the theory of the conventional education terminological system.

long-term resilience refers to quasi-terms, the dictionary defines it as “uprugost’ , elastichnost’ i udarnaya vyazkost’” does not correspond to the logical meaning and can be translated as “dolgiy srok ekspluatsii” or “prodolzhitel'naya zhiznesposobnost'”.

Technical cycles - a term meaning "promyshlennye cikly"

'Re-Thinking Progress –refers to quasi-terms as there is no uniform knowledge, It may be understood as unanimous backing for the transition “edinoglasnaya podderzhka perekhoda k principam ekonomiki zamknutogo cikla.” But having regard to the study of the differences in communicative dominants and “in what situation communication takes place is significant as well as the form of the message” [Takhtarova, 2019] may form high-context culture and leads to variety of the interpretations.

IV. CONCLUSION

The analysis of the materials of the Ellenmacarthurfoundation.com site for the relationship in the terminological field of the cyclical economy of terms and quasi-terms, the unification of terms using methods of translation into Russian showed an obvious predominance of terms over quasi-terms, which, on the one hand, is explained by the introduction of the standards for production in the field of a circular economy, with on the other hand, the possibility of technological progress for the adoption of a circular economy, the spread of the Internet promotes the implementation of circular innovation. Reducing the cost of sensor technology allows you to join every element introduced into the production process. The data that can be made available through these connections capture the place of origin of a product, how it is produced and the amount of energy used. A large role is also given to the motivational component.

At the same time, there is a paradoxically low number of borrowings from the English language. According to the authors of the article “The influence of foreign borrowings in business and tourist vocabulary on student's LSP learning.” the closed-loop economics that is actively functioning in Europe encourages the growing cooperation to study the linguistic source. The neologisms - foreign words that would be in demand, despite the existing equivalent in Russian - should be implemented as a tool to categorize and introduce a terminological system within the terminological field to define the subject, object, stages of industrial production, as it

happened and is happening in the fields of business, tourism, advertising, etc. But in relation to the circular economy, even Russia's lag in the introduction of elements of a cyclical economy and the establishment of the mutual production schemes, a common communication terrain due to the development of the Internet, does not affect the independent formation of the terminological system.

Some quasi-terms represent pre-terms with true prospects of turning into terms. The number of quasi-terms approaches 20%, which may indicate the constant development of the terminology system within the analyzed terminological field. Materials of the site Ellenmacarthurfoundation.com. texts of various types consist of a significant (approximately 73%) number of terms that relate to environmental economics, the remaining 26% are quasi-terms and other types of terms that require further amplification.

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