



Terminological Analysis and Characteristic of Terminology Standardization (Comparative study of English and Mongolian)

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ABSTRACT

The purpose of this study was to identify concepts of terminology in science and technology field especially in renewable energy. There are almost no definitions of the term in Mongolian. According to data aggregated by the International Panel on Climate Change, life-cycle global warming emissions associated with renewable energy including manufacturing, installation, operation and maintenance, and dismantling and decommissioning are minimal. (IPCC, 2011, pp. 1075). Therefore, it is essential to develop renewable terminology to analyze its modern aspects. We need terminology standardization to express individual terms in single definitions and understandings of concepts throughout the world. But in most of our professional fields, there is no standard of term translated and interpreted. It is really important to have standards of education terms and determine the definitions in Mongolia. Formulating model of terminology standardization is the framework for this study. English data were collected from Canadian glossary of terminology and Mongolian data were collected from dictionaries. As for Mongolian terminology, almost 89% of 1300 were without any definition of concept and 99% were not standardized.

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Introduction

A terminology standard is a fundamental standard. The main purpose is to support the work of the other committees by providing them with the terminology to draft linguistically and conceptually consistent standards or documents. A feedback mechanism must therefore be established between the terminology committee and the committee(s) developing the (technical) standards or documents in a domain. Furthermore, the committees must work collaboratively. (Anja Drame, 2006, pp. 6)

International standards, especially terminology standards, are generally published in more than one language, while national standards tend to be monolingual. International Standard establishes the basic principles and methods for preparing and compiling terminologies both inside and outside the framework of standardization, and describes the links between objects, concepts, and their terminological representations. It also establishes general principles governing the formation of terms and appellations and the formulation of definitions. Full and complete understanding of these principles requires some background knowledge of terminology work. The principles are general in nature and this International Standard is applicable to terminology work in scientific, technological, industrial, administrative and other fields of knowledge. (ISO 704:2009)

Background to the study

In the early 90s, UNDP (United Nations Development Program) provided support to the country by evaluating and demonstrating renewable energy technologies including photovoltaic. In 1991, the Institute of Renewable Energy was established as a special research center specialized in research

and development on renewable energy technologies, including photovoltaic, wind, micro-hydro and biomass technologies. The Parliament of Mongolia has approved The National Renewable Energy Program in 2005 and The Renewable Energy Law in 2007, in order to facilitate wider use of renewable energy in Mongolia. But, there are no standardized concepts and definitions of renewable energy terminology as well as explanation of terms such as textbooks and recommendations are very concise and uncertain.

Terminology standardization is one of the most rigorous forms of linguistic prescription in subject communication. In English the expression "Standardization of language" occurred as early as 1907. (Richard A Strehlow, 1988, pp. 9). In Mongolia this expression occurred not early as English. That's why we should use International terminology principles and methods to standardize our technical terminology. Almost all technical terminology is not origin from Mongolia cause of we import almost all products and technologies from other countries instead of making and producing.

Statement of the problem

Terms should be containing specialized knowledge with a single scientific definition". (Bold, 2009, pp. 45) Only one term to express a single concept and it should not have the same definition and same concept. (Cluver, 1989, pp. 13). But the principle that one term has one concept eventually lost in Mongolian language and use different terms interchangeably. Concept of the term should be classified in detail, especially not coincide in the professional sector.

The coming together of a unique set of characteristics to make a concept is an everyday occurrence. The concept made up of this set of characteristics is represented by a designation

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(i.e. a term, appellation or symbol) . Since a designation is not attributed to an object but to a concept, the latter depicting one or more objects, terminological analysis is based upon a representation of the concept in the form of a designation or a definition. Therefore, the methodology used in the analysis of terminologies requires:

- Identifying the context or subject field;
- Identifying the properties attributed to objects in the subject field;
- Determining those properties which are abstracted into characteristics;
- Combining the characteristics to form a concept;
- Attributing a designation.

It should also be noted that the properties used to state properties that describe an object and the characteristics that make up a concept designate in themselves concepts, sometimes within the same specialized field, sometimes not. It may be useful to begin an analysis with those concepts corresponding to concrete objects, since the characteristics are more easily abstracted given that the properties of the objects can be physically observed or examined. (ISO 704:2009)

Example 1

Object 1 magnetic screen

Object 2 electromagnetic screen

Object 3 electro statistical screen

Concept: abstraction based on the set of all screen			
Designation (term): screen			
Properties of Object 1	Properties of Object 2	Properties of Object 3	Characteristics
Receive magnetic distribution, measuring instrument	Receive magnetic distribution, measuring instrument	Receive electric distribution, measuring instrument	Receiving electric and magnetic distribution and measuring instrument
Has a battery on its backside	Has a battery on its backside	Has a battery on its backside	Having a battery on its backside
Has four buttons	Has two buttons	Has six buttons	Having at least two buttons
3,2 inches	2,3 inches	3,7 inches	At least 2,3 inches
Black	Blue	Yellow	Having color

The example 1 is a preliminary analysis of the concept 'screen'. Concepts denoting non-physical objects, e.g. 'energy', shall be analyzed along the same lines.

In the case of measurement device , one might observe that place of manufacture is a characteristic which need not be considered.

Significance of the paper

Since Mongolian transition to a market economy, each branch accessed the new concept to use foreign words with no translation that are chaotic. This is a manifestation of a lack of standard terms. Thus, the term arranged and aligned, should be standardized. Therefore we discussed and offered model of terminology standardization. Characteristics shall be used in the analysis of concepts, the modeling of concept systems, and in the formulation of definitions and, where appropriate, should have a bearing on the selection and formation of designations.

Discussion

Terminology is not special word. It is concept with special duty. For instance non-professional people cannot fully understand all meaning and concept of the term 'Fuel'

Since 1960s, many dictionaries of terms were published in Mongolia. However, recently published dictionary of terms that have no concept interpreted.

Terms served in various scientific disciplines of human knowledge and it can be used in a different concept of the term. For example: "Fuel" follows 6 types of concepts and disciplines below::

1. Aromatic Hydrocarbons
Crude Oil and Petroleum Products
2. Combustion and Fuels (Fireplaces)
3. Heating
Black Products (Petroleum)
4. Gas and Oil Heating
International Bodies and Committees
5. Air Transport Personnel and Services
Spacecraft
6. Shipbuilding

These terms are collected from Canadian electronic glossary of terms and each term has its own concept and definition. Most of it's have a standardized. But in Mongolia, there are no standardized concepts and definitions such as mass flow of water, power voltage regulation etc.,

As well as explanation of terms on textbooks and recommendations are very concise and uncertain. We offered model of terminology standardization below.

Table 1. Electrical consumption structure- Цахилгаан хэрэглээний бүтэц

Mongolian	English
Салбар: • Цахилгаан Цахилгаан хэрэглээний бүтэц Тодорхойлолт – Цахилгааны нийт хэрэглээг хэрэглэгчийн төрлөөр салгаж, хэрэглээний хувь хэмжээгээр ангилах үйл явц, буюу зарчим. Тухайлбал: аж үйлдвэрийн, худалдааны, төсвийн байгууллагын, ахуйн зориулалттай гэх мэт Эх сурвалж: 1 MNS 2919: 2003	Subject Field(s) • Environmental Law • Federal Laws and Legal Documents • Electrical Wiring (Building Elements) Electrical consumption structure CONT – Fixed structure means the electrical, heating, fire-prevention, plumbing or security structure of an existing building, but does not include a structure that is intended to produce goods or energy Source 1 The Canada Gazette. Part II = La Gazette du Canada. Partie II. Canada. Laws, etc. Ottawa : Queen's Printer for Canada = Imprimeur de la Reine pour le Canada.

Myagmarsuren. O (2015), Glossary of terminology file
The following items should be made in terms of the concept:

- Definition: Definition of the basic concepts to specify semantic attributes, as well as other distinguished concept provides.
- Context: The text shows that the definition cited. Definition or explanation the text of the concepts will be responsible for providing information related to the entire main and auxiliary character reference text may not occur.
- Examples and phrases: Examples of concepts are used in additional information and shows how it is used to.

•Notes and comments: notes and comments from a live communication environment provide additional information on all the terms.

•Reference: The term of reference specify the sources of evidence and other writings. (Bold. D, 2009, pp 45)

Conclusion

Mongolian government have supported renewable energy sector since 1990. For us, it's really new sector and has its own new technology and terminology. In Mongolia, standardized terminology can be modified at any time by the relevant technical committees and inspected every five years and should be deleted from the unmodified or confirmed. But almost five years after, it does not amendment. Glossary of Canada's standard terms includes its scientific and technical total number of sector with each concept. The biggest differences are added source, examples and definitions to standardized electronic database as well as adding more than 4,000 new terms and modifications comments are included. Terminologies should be standardized and formulated in Mongolia's renewable energy sector, as well as other areas of science and technology. Professional sector within the concept of the term should not duplicate and it should be detailed classified.

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Myagmarsuren Orosoo graduated from Foreign Language School, Mongolian University of Science and Technology in 2008, in English and Korean translation. In 2010, got MA in Linguistics. In 2011, enrolled for the doctoral programme of the University. Her research interest is Applied Linguistics especially language policy and terminology work. In 2013, she worked as an intern at Karunya University, India under the supervision of Dr. J. Sundarsingh, Professor of English, Karunya University. Currently, she works as a lecturer at Mongolian National University of Education.