Hyper English Word Study Dictionary with Indo-European Roots and Interim Transitional Words

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Abstract

Now, English lesson begins from junior high school in Japan. So, people argue that English education is not enough and it must begin from elementary school. It is said that English education will become more important in Japan. But the student's English level is not going up, even though the level of an English lesson is going up. The students who suffers in English lessons will increase steadily. Can educators help the students who suffer in English? This Hyper Dictionary is made for the purpose of helping the students.

The English-Japanese dictionary which is usually on the Internet is not different from paper dictionaries. Though the Internet is a good environment to study, there is almost nothing that is made in order to learn. Then, this Hyper Dictionary was invented several years ago. Not only English and Japanese but a language called Indo-European roots is contained in this Hyper Dictionary. Indo-European roots is the oldest English ancestor. It has only a few thousand words. With this language, this Hyper Dictionary has the function which specialized in the use of learning English. Because students memorizing little Indo-European roots, they can memorize a lot of English words derived from there.

Although various functions were added every year in order to teach English, Interim Transitional Words was added this year. Interim Transitional Words is the middle of Indo-European roots and English language. Thereby, changing from Indo-European roots to English became intelligible. Also with the English word which the spelling and meaning changed from Indo-European roots sharply does not resemble, it becomes easy to memorize.

1 Introduction

1.1 Background

The structure of a word is different in Japanese and English, the people who make Japanese the native language learn the English word very difficult, then observable Indo-European roots. Can study of an English word be performed using this? Since thought it, the project of this Hyper Dictionary started.[1]

1.2 What is a Hyper Dictionary?

1.2.1 The usage of Hyper Dictionary

Hyper Dictionaries and ordinary English-Japanese dictionaries carry out the same usage. But Hyper Dictionaries have special functions. By this functions, studying English becomes easier. The purpose of these dictionaries is to simplify the study of English words.

1.2.2 The special function of Hyper Dictionary

A special function is being able to search English words by their Indo-European roots. Moreover, the reverse operation is also possible. This function makes studying English words efficient.

1.3 What are the Indo-European roots?

1.3.1 The time background of Indo-European roots

Indo-European roots are the original source language of English. It was the language used between B.C. 3000 from B.C. 5000. It is the ancestor of not only English but many other languages. About 1350 Indo-European roots are contained in this Hyper Dictionary. Almost the sources is The American Heritage Dictionary.

1.3.2 What is The American Heritage Dictionary?

The American Heritage Dictionary (AHD) is edited by the authority of broad fields, cultural anthropology, construction, movie, law, military affairs, music, religion, and sport etc. AHD often becomes the source of the magazine, the newspaper, and the Internet. There are various kinds of AHD, The American Heritage Dictionary of Indo-European Roots is a very important for this Hyper Dictionary.[2]

1.3.3 The merit of learning English words using Indo-European roots

Using Indo-European roots is better than studying English words individually. Although there are only Indo-European roots and there are a hundred thousand English words. It follows, since Indo-European roots are English ancestors, some English words derive from Indo-European roots. For example, searching Indo-European roots 'os-', found six English words. Students memorize six English words relate one Indo-European roots, studying English words will become easier. (Refer to the following figure 1.)

figure 1 : Example of Indo-European roots 'as-'

1.4 Purpose

1.4.1 The function of the Hyper Dictionaries established last year

Last year students established the following functions (Refer to the following figure 2.)[3]

- Indo-European roots
- Prefix
- Stem
- Synonym

figure 2 : The top page of Hyper Dictionary 2002 editions

1.4.2 How is this dictionaries made to develop this year?

This year, students will establish the following functions (Refer to the following figure 3.)[4]

- Example sentences
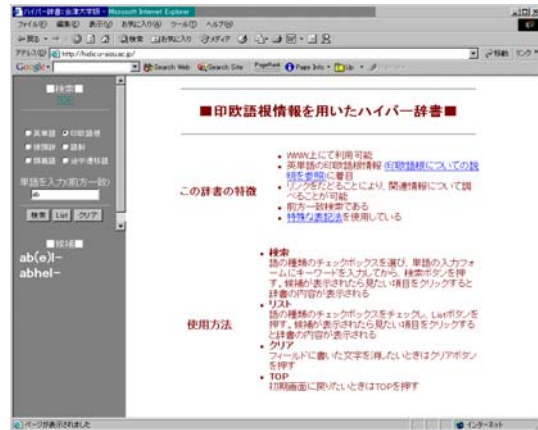- Application for study
- Interim Transitional Words

figure 3 : The top page of Hyper Dictionary 2003 editions

Although the upgrade of this Hyper Dictionary is performed by three research students, I took charge of the portion of Interim Transitional Words.

2 Discussion

2.1 What are Interim Transitional Words?

As mentioned, the Indo-European roots were used between B.C. 3000 from B.C. 5000.

Of course, English was not necessarily established immediately after that. Various developments and declines were accomplished and the present English was established. Intermediate language is called Interim Transitional Words. (Refer to the following figure 4.)
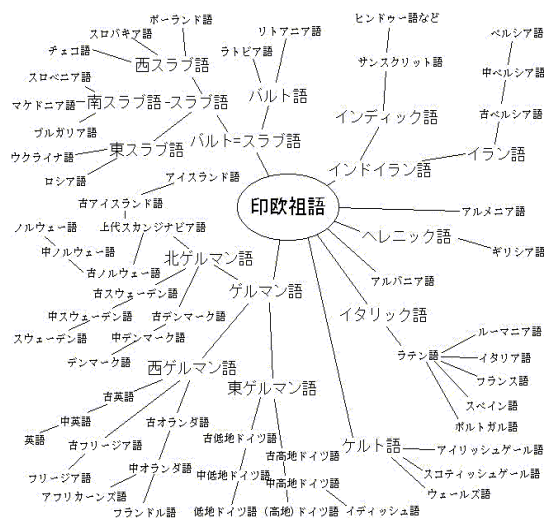

figure 4 : The list of typical Interim Transitional Words

2.2 The source of Interim Transitional Words

The American Heritage Dictionary of The English Language and KENKYUSHA'S NEW ENGLISH-JAPANESE DICTIONARY are made references. Both of the dictionaries carry Interim Transitional Words in detail, and very useful.[5][6]

2.3 Notational cautions of a Interim Transitional Words.

The character which is not the alphabet is contained in this Hyper Dictionary. When searching, you have to replace them, as shown in a lower figure. This figure is linked from the top page, no necessary to memorize them. (Refer to the following figure 5.)[7]

figure 5 : Notation of characters other than the alphabet

2.4 In addition, technology used in server relation.

Using some technology, in order to realized Hyper Dictionary on Web. (Refer to the following table.)

OS	RedHat7.3
Web Server	Apache1.3.27
Java	J2SDK1.4.1-01
Servlet Container	Tomcat4.0.6
RDB Server	MySQL3.23.49
JDBC Driver	mm.mysql

2.4.1 Easy explanation of a technology term

- Apache

  Apache is free Web HTTP server software based on NCSA httpd Ver.1.3 developed by The National Center for Supercomputing Applications (NCSA). It operates in almost the environment, Linax, UNIX, Windows, and Mac. Incidentally, it originates in "a patchy".

- Tomcat

  Tomcat is required to operate Servlet and Java Server Pages.

- MySQL

  MySQL is the open source, multiuser and multithread database most famous all over the world. It uses General Public License (GPL). Incidentally, SQL is the abbreviation for Structured Query Language.

- JDBC Driver

  JDBC Driver is connects MySQL with Servlet by kind of API for the databases for Sun Microsystems companies developed. Incidentally, JDBC is the abbreviation for Java Database Connectivity.

- Servlet

  Servlet is a Java program which operates on a server.

- JSP

  JSP is the Java version of Active Sever Pages (ASP) used by Internet Information Service (IIS) of Microsoft Corp. It is one of the mechanisms for realizing the website which displays the page generated dynamically.

- JAVA Beans

  Java Beans is one of the classes used that easily can call from other Java programs. Thereby, the interface between dynamic objects is realized.

[8][9][10][11]

3 Conclusion

3.1 The display of Interim Transitional Words

For example, searching an English word 'usher', Interim Transitional Words is outputted as follows. (Refer to the following figure 6.)

figure 6 : Interim Transitional Words

Interim Transitional Words are No.2, No.3 and No.4 in above figure. This location in order of the time which changed. Therefore although it is somewhat unclear visually, it is said that the word changed from Indo-European roots of No.1 to English No.5 in order of the number. Spelling changed in order of "os-", "ostium", "ustiarium", "ussier" and "usher". And meaning changed in order of "mouth", "door", "doorkeeper", "gatekeeper" and "receptionist". Related attachment deepened rather than being only Indo-European roots and English words.

3.2 The merit of learning English words using Interim Transitional Words

Interim Transitional Words can be considered that memorizing increases apparently and it becomes the hindrance of word study. Sure, It is not helpful to memorize many English words to once. However, when students has to memorize a little word, or a long term study plan is formed, it is very effective to also memorize Interim Transitional Words simultaneously. Spelling and meaning of Indo-European roots and an English word has plentifully the case where it is not alike, as this example. Even when it forgets the relation with Indo-European roots and the English word for the moment, students will be able to take good point to remember Interim Transitional Words.

Acknowledgments

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