28   Translating western terminology into Japanese; From Kanji terms to Katakana terms

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ABSTRACT

In Japan, two kinds of characters have been used for translating western academic terminologies; one is Kanji, that is Chinese characters, and the other is Katakana, Japanese characters used for the phonetic transcription of loan words. When the modernization was rapidly advanced in the Meiji era, a great deal of western terminologies was translated with Kanji. After WW2, however, Katakana has been increasingly used for the same purpose and raises various problems because they often lack semantic transparency. This article traces the historical change of the way of translating western terminologies into Japanese and elucidates the relationship between terminologies and translation in Japan.

Μεταφράζοντας τη δυτική ορολογία στην Ιαπωνική γλώσσα Από τα ιδεογράμματα στην Κατακάνα

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ΠΕΡΙΛΗΨΗ

Η μετάφραση της δυτικής ακαδημαϊκής ορολογίας στην Ιαπωνική γλώσσα πραγματοποιείται είτε μέσω ιδεογραμμάτων, με άλλα λόγια Κινεζικών χαρακτήρων, είτε μέσω της Κατακάνας, δηλαδή Ιαπωνικών χαρακτήρων που στόχο έχουν την φωνητική μεταγραφή των λέξεων-δανείων. Ο εκσυγχρονισμός της Ιαπωνίας κατά την περίδο Μέιτζι χαρακτηρίζεται στην πλειοψηφία του από τη μετάφραση πλήθους δυτικών όρων μέσω ιδεογραμμάτων. Αυτή η μεταφραστική μέθοδος θα αλλάξει μετά τον 2ο Παγκόσμιο Πόλεμο, όποτε και η εκτεταμένη χρήση της Κατακάνας θα προκαλέσει ποικίλα προβλήματα λόγω της αδυναμίας της να παράγει σημασιολογικά ισοδύναμα. Η παρούσα ανακοίνωση πραγματεύεται τη σχέση μεταξύ ορολογίας και μετάφρασης στην Ιαπωνική γλώσσα και γενικότερα στην Ιαπωνία, αναδομώντας τις ιστορικές αλλαγές αυτής καθαυτής της μεταφραστικής διαδικασίας δυτικών όρων.

0 Introduction: Terminology and translation in Japanese

In Japan the problem of terminologies can not be separated from the problem of translation. From the beginning of 17th century to the middle of the 19th century, Japan took the "national isolation" policy under the Tokugawa dominance, and cut off the relationship with foreign countries except the delegates from China and Holland at Nagasaki. For Japanese, not only the immigration abroad but also any contact with foreigners was severely forbidden. During the Tokugawa era few intellectuals and politicians were in the position to acquire the knowledge of the world outside Japan. This situation abruptly changed when the messengers from U.S.A. forcefully opened the gate of Japan towards western countries. This caused such radical change in political, economical, social and cultural domains that the Tokugawa government was to be broken down and was replaced by the Meiji government in 1868. This is called "the Meiji Restoration".

In the transition from the Tokugawa era to the Meiji era, Japan was faced with the problem of the rapid absorption of the western civilization with which they had not almost any contact at all. Concerning the problem of language, a great deal of translation was needed in order to implant the western civilization in the Japanese society.

It would be difficult for European people to imagine the situation in which Japan was placed at that time, because almost all the European concepts, however obvious they might look like, had been completely unknown to the Japanese culture. For example, take the concept of "society". At the beginning of the Meiji era it was very difficult for Japanese to understand what "society" meant because the Japanese language had no equivalent word to "society" until the Meiji era. For example, Fukuzawa Yukichi, one of the leading intellectuals in the Meiji era, regretted the absence of the concept of "society" in Japan and translated "society" with the expression "nin'gen kōsai" with much effort. "Nin'gen kōsai" literally means "human association"; "nin'gen" means "man, mankind", and "kōsai" means "association, relationship". That is to say it was impossible to find out the equivalents of western words and concepts in Japanese without semantic interpretation of those terms. But in spite of Fukuzawa's proposal, afterwards the word "shakai" was gradually established as Japanese equivalent to "society" and has been continuously used until today. Other examples are almost the same. In the pre-modern Japan there were no equivalent words that meant correctly occidental concepts such as "science",

"nature", "individual", "modern", "liberty", "right" and even "love". In other words, almost all the terminologies about the modern society and civilization have to be coined by translating European words into Japanese.

It often occurs that a special committee or institution is settled in the process of nation-building in order to propose and diffuse new coined terminology, as seen in Israel or Indonesia. But, remarkably enough, Japan had no official organization charged with the task of making terminologies. The coinage of terminologies was done by individual intellectuals' effort. The reason such a great task was possible is that Japanese intellectuals had the profound knowledge of classical Chinese language and literature.

In order to express European concepts, they used the expressive potentialities of Chinese characters as much as possible; in some cases they searched for nearly equivalent characters or words that have similar meaning to the western words in classical Chinese, and in other cases they coined new idioms by combining Chinese characters. For example, "shakai", cited above, as equivalent to "society", is composed of the elements of two Chinese characters "sha" and "kai". "Sha" means "human group" and "kai" means "gathering, meeting". Through the combination of these two characters, a new word "shakai" which never appeared in classical Chinese literature, was born with the meaning of "society". In this way many terminologies were created in Japan of the Meiji era, and afterwards exported to China and Korea. In this sense we could call them "Chinese words made in Japan".

1 Chinese characters and Katakana; semantic interpretation and phonetic transcription

As seen above, for translating western terminologies, intellectuals could rely upon expressive potentialities of Chinese characters. In pre-modern Japan the education was based on the learning of the classical Chinese, and all the intellectuals adopted the Chinese-like style in their writings, because only the knowledge of the classical Chinese guaranteed their social and intellectual prestige. It could be said that such wealth of the Chinese language made the coinage of terminologies possible and easier. And through terminologies that were translated and coined in this way, Japan could achieve the high level of modernization very rapidly.

Today, in contrast, it is not Kanji but Katakana that is preferred for translating western terminologies. Katakana was said to be created in about the 9th century. It began as simplified

forms of Chinese characters and gradually became independent notation system. Originally Katakana was used as auxiliary notation when decoding and translating classical Chinese texts. Later, it came to be also used for phonetic transcription of foreign words. And another notation system "Hiragana", which was also created from Chinese characters almost at the same time of "Katakana", is used for the transcription of Japanese indigenous words. That is to say there are three writing systems for Japanese and each character is used according to the different kinds of vocabulary; namely, Hiragana is for indigenous words, Katakana for loan words and Kanji for words of Chinese origin. It is not rare at all that one sentence, however short it might be, is composed of these three kind of characters. And in the context of this paper, it should be noted that historically Kanji terms have been assimilated into Japanese as taking role of terminologies.

Here we would like to show the example of the difference between Kanji terms and Katakana terms. In Japan the word "denshi keisanki" was used as an equivalent of "computer" until a few decades ago. "Denshi keisanki" is a Kanji term consisted of five Chinese characters. "Den-shi" means "electronic" and "kei-san-ki" means "calculator" (seen more in detail, "keisan" means "calculation" and "ki" means "machine"). So, put literally, "denshi keisanki" means "electronic calculator". But, presently the word "denshi keisanki" is out of date. Instead "con'pyūta" is used in general. This "con'pyūta" is a Katakana term. As seen easily, this is a phonetic transcription of "computer", though following phonological rule of Japanese. From this example it becomes clear that in the case of Kanji terms the semantic interpretation is necessary, but in the case of Katakana terms only phonetic transcription is sufficient.

After WW2 more and more Katakana terms have been created and used as equivalent of western terminologies. There are some reasons in the background.

First, Japanese modernization, as far as it means westernization, leads to the abandon, or at least negligence, of the Chinese civilization as a result. As seen above, in order to create new Kanji terms profound knowledge of classical Chinese is necessary, but this cultural wealth itself was gradually undermined as the modernization of Japan advanced. Consequently, the knowledge of Chinese characters can not serve as a basis for new terminologies.

Second, it should be put in emphasis that there are two layers in the vocabulary of Japanese; one is the layer of indigenous words (yamato kotoba; "yamato" means "indigenous Japan" and "kotoba" means "word" or "language"), and the other is the layer of Chinese words adapted to Japanese (kan'go; "kan" means "China" and "go" means "word"). The former is of everyday use,

intimate, and familiar, while the latter is academic, distant from ordinary sense, used in the formal and prestigious style. In fact, if one uses too many kan'go words in speech and writing, the expression sounds boasting and pompous, and on certain occasions it even becomes hard to understand correctly its meaning.

In contrast, Katakana terms are made easily from western terminologies, because there is no need for semantic interpretations at all. In addition, they look like more modern and fashionable than Kanji terms. Today, most Katakana terms come from English and, in a sense they also become symbols of the trend of globalization. In fact, the world of advertising and venture business is full of Katakana terms. But, as far as it is nothing more than phonetic transcription, Katakana terms are semantically opaque and it often happens that one must have the knowledge of English in order to understand correctly what they mean. These defects of Katakana terms cause many linguistic problems in the contemporary Japanese society.

2 The National Institute for Japanese Language

In Japan, an institution named the National Institute for Japanese Language deals with various problems concerning language; for example, the orthography of Japanese, the limitation of the number of Chinese characters, the "bon usage" of vocabulary and style including loan words and terminologies, and so on. This institute was established in 1948 under the name of the National Language Research Institute in order to carry scientific researches on the Japanese Language. After WWII the demand for reform in the written language due to social changes resulted in the fact that some of the Institute's earliest projects were concentrated in literacy and written language providing data on which language reforms were based. The Institute was responsible for developing techniques in handling linguistic and statistical data and until today maintains comprehensive data on all linguistic research done on Japanese. As an organization, the Institute is under the jurisdiction of the Ministry of Education, Science and Culture, but at the same time remains an autonomous organization whose projects are adopted by its own Research Planning Committee. Since April 2001 the Institute became an Independent Administrative Cooperation and changed its name to The National Institute for Japanese Language.

3 A proposal of the Institute for plain terminologies

Among the projects carried out by the Institute is the "The guidance for paraphrasing loan words plainly" ("Gairaigo iikae tebiki"), a survey of foreign words adapted in the Japanese vocabulary published in 2006. Broadly speaking, Japanese language's vocabulary consists in the "wago" (words of Japanese origin), "kan'go" (words of Chinese origin), and "gairaigo" (words of foreign origin). During the last 50 years, with the increasing influence of English, Japanese society has been flooded with many such foreign words written with Katakana as to cause semantic misunderstanding and confusions, particularly among aged persons living in rural areas, who have had almost no knowledge of English. In face of these situations, the aim of this survey was to provide a useful handbook which will help in the understanding of foreign words by all Japanese people irrespective of age and place of residence. More specifically, the frame of the research could be summarized in the following 6 points:

1. The accepted meaning of a word in Japan.
2. The original meaning of a word in English.
3. The relation between the foreign word and its paraphrased translation in Japanese.
4. The proposal of a device for the use of a term easier to understand according to the situation and the context.
5. The explanation of terminology's meaning in specific situations.
6. The proposal of explanations for notions of loan words already fixed in society.

The research was based on 4.500 people's interviews during the years 2003-2004 about 405 different foreign words but in the published edition only 176 examples were included. Every term is accompanied by specific examples, definitions and explanatory notes about its technical as well as everyday use and meaning depending on the context.

The process through which foreign words are absorbed into the language and acquire stable use in the vocabulary is very complex. Generally, it could be said that loan words are accepted as ones filling up the semantic gap in the vocabulary. For example, loan words are often necessary in order to express things and/or ideas that have not existed until then. But the semantic gap can be found not only in the denotation but also in the connotation. Only if they sound something new, it can be a good condition or pretext to introduce new loan words. Besides, from another point of view, it should be noted that loan words are to be adequately positioned in the semantic

field in the target language. When they enter into the network of the pre-existent words, in some cases loan words can acquire new meaning, and in other cases their range of meaning can be reduced unexpectedly.

For instance, the word "care" is more and more often translated with the word "ke'a", which is a transcribed form of "care" in Katakana. But "ke'a" does not cover all the semantic range "care" has in English. In Japanese it means only "care for old people or sick people" while the English term "care" has different meanings from "ke'a" as a medical (e.g. managed care), or sociology term (e.g. community care). In such cases these foreign words must and are usually paraphrased. For instance, as far as the word "care" is concerned, a terminologist may choose between the Japanese words "kan'go" (= nursing), "kaigo" (= care nursing), "te'ate" (= first aid) or "ke'a" depending on its meaning or context. Since, there is no mechanical way of doing so, terminologists must be aware of the term's specific meaning in changing contexts.

Due to all semantic problems, translators and more specifically terminologists tend to prefer the translation in Katakana (e.g. community → komyuniti). By following this practice, it is not necessary to be faced with the problem of semantic interpretations at all, but in this way loan words are always marked as alien elements because they are written in Katakana. On the other hand, the frequent usage of Katakana terms presupposes that readers have at least a fair knowledge of the target language and that they are capable of understanding the concerned words since they already know its meaning in the source language. But this is an unreasonable demand to the recipients of the message. It can not be denied that Katakana terms often cause semantic opacity. According to the research of the National Institute for Japanese Language, few words in Katakana are fully understood by the interviewers and in 77.7% of cases serious problems in understanding the exact meaning of Katakana words are found.

4 The Problem of Katakana Terms

In 1991, the Ministry of Education, Science and Culture issued a statement about the translation of foreign words, places or people's names in Katakana, confirming the fact that this tendency begun after the Meiji Era became an established method of translation after the WWII and is now more and more diffused. Undeniably, Katakana is a syllabary capable of representing any foreign word in the most equivalent possible way, though according to the phonological rule of Japanese. But, as we have shown earlier, Katakana terms made from the transcription of foreign

words are deprived from any intrinsic meaning in itself. On the other hand, while Hiragana syllables are written in a cursive and more beautiful way, Katakana syllables are written in an angular and more "repulsive" way which actually deprives them of the aesthetic beauty of the other Japanese letters. To illustrate potential problems of this translational method, let us consider three specific examples from the field of social sciences extracted from the "Guidance for Paraphrasing Loan Words".

Example 1: Community＝ Komyuniti (Katakana term); Chi'iki-shakai; Kyōdō-tai

   a. Kōreika no kyūsokuna shin'kō ya tenshutsusha no zōka nado ni yori, komyuniti no katsuryoku no teika ga kenen sareru jirei mo miukerareru.

   Because of the rapid advancement of aging and the decrease of the population, some cases are found that would bring about the fear of the decline of the community's vitality.

   b. Kan'kyō fuka no sukunai hatsuden ni san'dō suru hito no komyuniti ga dekita node…

   Because some communities approve of using power generation which would have less influences towards the natural environment,…

"Komyuniti" is a Katakana term corresponding to the English word "community". The Guidance of the National Institute proposes the use of "chi'iki-shakai" or "kyōdō-tai" instead. The former is a compound word which consists of "chi'iki" (meaning "area" or "region") and "shakai" (meaning "society"). This word has not taken root in the usage of Japanese yet because it is not familiar enough with the everyday use. In contrast, "kyōdō-tai" has been long used, but it belongs to the vocabulary of social science. Perhaps the word "kyōdō-tai" is a calque of the German word "Gemeinschaft"; "kyōdō" means "common" and the suffix "-tai" means "collectivity". Owing to this origin, "kyōdō-tai" represents the community that preexists as an inseparable whole beyond individual will and choice and tends to be associated with rural society. As a consequence it is difficult to refer to the social group living in the same district of a city and having interests in common as "kyōdō-tai". This is the reason why the Katakana term "komyuniti" is needed and welcomed in spite of the proposal of the National Institute. However, according to the research of the Institute, among people over 60 years old more than half do not understand correctly what "komyuniti" means. This is a dilemma that can be also found around most loan words in Japanese.

Example 2: Identity= Aiden'titi (Katakana term); Dokuji-sei, Jiko Nin'shiki

a. Azia shyakai no bunka ya rekishi o, seiji, keizai, hōritsu o, sono aiden'titi o son'cyō shitsutsu shin'shina taido de manabō to suru shisei ga ukagawareru.

Attitudes of learning the culture and history of Asian societies, their politics, economies and laws can be found whilst simultaneously respecting their identities....

b. Seishyōnen no aiden'titi no sōshitsu ni yoru omoi mo kakenu jiken no kazukazu...

A lot of unexpected incidences that are brought about by the loss of identities in the youth…

The word "identity" is one of the most difficult words to translate properly into Japanese. In fact, we can not find any Japanese words corresponding to the "identity" in every context. Among the proposed examples, "dokuji-sei" literally means "originality" or "individuality"; "dokuji" means "original", "peculiar" or "personal" and the suffix "-sei" means "characteristics". "Jiko nin'shiki" is composed of "jiko" meaning "self" and "nin'shiki" meaning "cognition" "perception". That is, "jiko nin'shiki" literally means "self-perception". Both words do not correspond correctly to the original meaning of "identity". Moreover they are Kanji terms which sound rather formal and academic. But, a demand for the concept of "identity" is increasing in the society because the issue of "identity crisis" is very urgent as a real problem. With this the use of the Katakana term "aiden'titi" is becoming more and more frequent. But, again, more than three quarters of people over sixty years do not understand the meaning of "aiden'titi".

Example 3: Literacy＝ Riterashii (Katakana term); Yomikaki Nōryoku, Katsuyō Nōryoku

a. Nihon wa moto moto riterashii no takai kuni.

Japan has always been a high literate country.

b. Tōshin wa, …. jyōhō riterashii o mi ni tsukeru koto ga jyūyō to teigen.

The report put forward the opinion that it was important to acquire information literacy.

Literacy's first meaning is the ability of individuals to read and write (e.g. a). The Japanese equivalent "yomikaki nōryoku" has the same meaning. "Yomikaki" consists of "yomi" and "kaki", which mean respectively "reading" and "writing" and "nōryoku" means "ability". Therefore, in the first example, if one changes "riterashii" into "yomikaki nōryoku", no problems both syntactically and semantically occur. In this sense they have the same value of significance, only except in the stylistic point of view. However, it is impossible to use the expression "information yomikaki

nōryoku" to designate the "information literacy", which is itself a relatively new idiom in English, because it does not have to do with "reading and "writing" in proper sense but with the ability to use computers. In fact, nowadays, literacy refers also to people's ability to extract information from the cyber-world and its application (e.g. b). Expressions such as "information literacy" "cyber literacy" etc. were born in this way. This is the world beyond "reading" and "writing".

To deal with such a case, the National Institute proposes the word "katsuyō nōryoku" which literally means "the ability to make the use of something". But this compound sounds really awkward and unnatural. In contrast, the Katakana term "riterashii" is easier to handle with because it coincides with the English word "literacy" in every context. But, also here, more than three quarters of people over sixty years do not understand the meaning of "riterasshii".

The case of "literacy" is interesting because the difficulty of its translation derives from the semantic change of the English word itself. That is, the Japanese term "yomikaki nōryoku", though it had been the adequate equivalent of "literacy", can not follow the semantic expansion of the English word "literacy" that now has also covered the domain of computer and internet.

5 Conclusion

We can draw the outline of the problem about terminology and translation in Japanese even from a few examples cited above. First, Japanese terminologies have been created as loan words; with Kanji until the Meiji era and with Katakana after the WWII. As a consequence, translation has been indispensable to understanding and using terminologies. Second, in Japanese, the problem of terminologies is associated with the usage of different characters, namely Kanji and Katakana; one has the background of classical language and learning, and the other is the instrument of phonetic transcription. These two problems apply not only to Japan but also, more or less, to other non-western countries which have long tradition of classical languages, for example Chinese, Sanskrit, Arabic, Pali etc.. It is desirable to pursue further study in this direction. We hope that the questions discussed in this article may cast a new light on the problem of terminologies.

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Glossary

auxiliary notation	βοηθητικός συμβολισμός
calque	έκτυπο, μεταφραστικό δάνειο
care nursing	νοσηλεία ασθενών, νοσηλευτική περίθαλψη
community	κοινότητα
community care	κοινοτική περίθαλψη, ιατρική φροντίδα κοινότητας
connotation	συνδήλωση
context	περικείμενο
denotation	δήλωση
equivalent	ισοδύναμο
first aid	πρώτες βοήθειες
identity	ταυτότητα
idiom	ιδιωματισμός
indigenous word	ενδογενής λέξη
literacy	γνώση ανάγνωσης και γραφής
loan word	λέξη-δάνειο, δάνεια λέξη
managed care	οργανωμένη περίθαλψη
nursing	περίθαλψη, νοσηλευτική
phonetic transcription	φωνητική μεταγραφή
semantic interpretation	σημασιολογική ερμηνεία
semantic opacity	σημασιολογική αδιαφάνεια
semantic transparency	σημασιολογική διαφάνεια
semantically opaque	σημασιολογικώς αδιαφανής
source language	γλώσσα-στόχος, γλώσσα υποδοχής
syllabary	συλλαβικό σύστημα
target language	γλώσσα-πηγή, γλώσσα αφετηρίας
term	όρος
terminology	ορολογία
terminologist	ορολόγος
translation	μετάφραση