## Corpus Study of Loanwords Collocation in Modern Japanese Case Study: Loan Color Terms

## Category: cognitive/functional syntax/semantics, discourse/pragmatics/sociolinguistics

Words borrowed from English and other European languages into Japanese (Gairaigo) have been a topic of various studies for a long time. Some researchers were more interested in the assimilation processes of loanwords (Kay, 1995; Irwin, 2011); other linguists focused on semantic changes (Daulton, 2008), still others mainly studied sociolinguistic aspects (Loveday, 1986, 1996). The active borrowing of English words in the 20ths century and their penetration into the basic vocabulary led to the occurrence of numerous near synonymic pairs: Wago/Kango (Japanese) words vs Gairaigo loanwords. However to date there has been no rule found to differentiate usage and collocation of such near synonyms.

Near synonyms in Modern Japanese refer to the same phenomenon (object, event, etc.) of either Western or Japanese origin. For instance, take a phenomenon of 'a movable structure used to open and close off an entrance', which is a door. Regarding this phenomenon, Loveday (1996) gives such examples as  $t\bar{o}/sh\bar{o}ji$  (= sliding door) vs doa ('door'). Another example is futon (= quilted bedding) vs beddo ('bed'), which refers to 'commodity used for sleeping' phenomenon (Loveday, 1996).

Recently, Loveday (1996) has suggested Hypothesis of Foreign vs Native Dichotomy (HNFD) at the semantic level. According to this hypothesis, Gairaigo is "a word referring to a Western phenomenon" (Loveday, 1996), while Wago/Kango word is "referring to a related version of the phenomenon belonging to native culture" (Loveday, 1996).

However, Loveday's hypothesis is easily applicable only to concrete nouns. In contrast, there are near synonyms, which refer to the basic native phenomena or concepts. An example of such concept is color, while Gairaigo and Wago/Kango referring to same colors (e.g. *shiroi* and *howaito*) are the example of such near synonyms. Thus, Loveday's hypothesis could not explain differences in the application of such near synonyms. Therefore, a reason to borrow color terms for existing colors is an open question.

Most recently, Bordilovskaya (2012) has suggested Extended HFND (eHFND). According to eHFND, Gairaigo adjectivals are borrowed in order to describe attributes and qualities of Gairaigo nouns. For 'adjectival-noun' collocations the strong bias towards having adjectivals and nouns of the same origin has been shown. In other words, same-origin pairs (Gairaigo adjectival + Gairaigo noun) and (Wago/Kango adjectival + Wago/Kango noun) are hypothesized to be used more often than other possible combinations. This study was conducted by means of corpus data analysis. The on-line version of KOTONOHA Balanced Contemporary Written (BCCWJ: Corpus of Japanese http://www.kotonoha.gr.jp/shonagon/) has been used. This corpus is developed by National Institute for Japanese Language and Linguistics and is considered to be a well-balanced corpus of Modern Japanese, because it includes both printed sources (newspapers, magazines and literature) and web resources (Yahoo blogs and Yahoo answers). A group of eight near synonymic pairs for basic colors was selected for the analysis. These pairs are shiroi - howaito (WHITE), kuroi - burakku (BLACK), akai - reddo (RED), kiiro - iero: (YELLOW), haiiro - gure:/grei (GREY), chairo - buraun (BROWN), momoiro pinku (PINK), murasakiiro - pa:puru (PURPLE). KOTONOHA corpus was searched to compare the frequencies for four following collocation patterns: (1) Gairaigo adjectival + NO<sup>1</sup> + Gairaigo noun; (2) Gairaigo adjectival + NO + Wago/Kango noun; (3) Wago/Kango adjective + (NO) + Gairaigo noun; (4) Wago/Kango adjective + (NO) + Wago/Kango noun. The statistical analysis indicated sufficient evidence of the tendency for Gairaigo adjectivals being used in collocations with Gairaigo nouns more often than with Wago/Kango nouns. There is also evidence that Wago/Kango adjectives are more often found in collocations with Wago/Kango nouns rather than with Gairaigo nouns. Therefore, the results of analysis

In present study, we extend an analysis of Foreign vs. Native dichotomy by considering nouns found in collocations with adjectivals in the light of the objects they refer to. We divided all nouns found in collocations into three types: 1) native – nouns, referring to the objects existing only in Japanese culture: e.g. *kimono*, *zabuton*, *uchiwa* etc; 2) foreign – nouns, referring to the objects that originate from or belong to a foreign culture: e.g. *ko:hi:*, *kashimia*, *masukara*, *ro:su roisu* etc; 3) neutral - nouns referring to the objects that do not have any particular cultural belonging (e.g. *konturasuto* etc).

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<sup>&</sup>lt;sup>1</sup> Some of the WAGO/KANGO in attributive position do not require NO-case marker.

We have performed an analysis of the noun types on the basis of collocations collected by Bordilovskaya (2012). Table 1 shows the results for objects differentiation for case study loanwords. It contains binary values, where 1 and 0 represent the presence or absence of collocations, respectively.

Table 1. Objects Differentiation Data for Case Study GAIRAIGO

Color term	Foreign objects	Neutral objects	Native objects
HOWAITO	1	1	0
BURAKKU	1	1	0
REDDO	1	1	0
IERO:	1	1	0
BURAUN	1	1	0
PA:PURU	1	1	1
<b>GURE:/GUREI</b>	1	1	0
PINKU	1	1	1

According to Table 1, most of Gairaigo adjectivals tend to collocate with non-Japanese nouns or Wago/Kango nouns referring to foreign or neutral objects, but not native ones. This clearly illustrates the relation between the origin of the color term (Wago/Kango vs. Garaigo) and the origin of the phenomena the nouns refer to (Native vs. Foreign/Neutral). We consider that such relationship is inherent motivation for the preference of one near synonymic color term over another.

On the other hand, *pinku* and *pa:puru* exhibit exceptional behavior by demonstrating collocations with nouns of all three types. Thus, *pinku* and *pa:puru* are more similar in their usage with native color terms. These results are in coherence with Stanlaw's study (1997) on the differences in degree of saliency of loan color terms for native speakers.

For example, according to Stanlaw (1997) *pinku* is more salient in the minds of native speakers than *momoiro*. Thus, the differentiation of the nouns found in collocations with Gairaigo attributes show that loan color terms are in most cases used for describing foreign and neutral objects. However, there are some small deviations indicating the potential semantic change in the nature of some of Gairaigo color terms.

The problem of Native vs. Foreign Dichotomy existing in the Japanese language presents a much deeper issue then lexical differentiation between near synonyms. The given research demonstrates that this dichotomy is expressed at least at two levels: semantic and collocational. In this study, we have extended our previously proposed approach by means of analysis of the meaning of each noun. This allows of illustrating deeper intrinsic rules to distinguish usage of Gairaigo and Wago/Kango near synonymic color terms. Nevertheless, we expect that similar tendency can be found for Gairaigo adjectivals other than basic color term. In general, the discovery of evidence for Extended HFND at the levels of words and word combinations (collocations) has a potential of whole new perspective to understand the nature and functioning of loanwords in Modern Japanese.

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