Effective Chinese/Japanese/English Pedagogy Based on TUFS International Multilingual Learner Error Corpora[1]

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1. Introduction

This paper aims to explore effective language pedagogy based on TUFS International Multilingual Learner Error Corpora of Chinese, Japanese and English. We will focus on learners' errors and native language interference from a cross linguistic perspective.

First, we will examine error types in the prepositions "in/on/at/of" in TUFS International Learners' Corpus of English. The overuse of "of" is more frequently observed among Japanese learners of English, than among Chinese learners of English at Shanghai International Studies University. This is due to the flexible function of the Japanese genitive marker*" -no の "* which can form the construction [Modifier Noun Phrase + "-no" + Head Noun] with various semantic relations. In contrast, the English prepositions "in/on/at/for/from" are classified according to "spatial images". The contrast between spatial "unboundedness" in Japanese and spatial "boundedness" in English triggers the difficulty for Japanese learners in learning English prepositions.

Second, "Unboundedness" in the Japanese lexicon is also suggested through errors in the Chinese construction "One + Classifier *yi-ge一个*" before a Noun Phrase which has a function of individualizing an entity and event. It is observed that there is an underuse of "One + Classifier *yi-ge一个*" before a Noun Phrase in the Japanese learners' corpus of Chinese while there is a significant overuse of "One + Classifier" in the English-native-speakers' corpus of Chinese. This contrast suggests that "Unboundedness" in the Japanese lexicon causes the difficulty for Japanese learners in learning "individualization" such as definite/indefinite particles "a/an, the" and Chinese "One + Classifier".

Third, "Unboundedness" in the Japanese Verbal Lexicon is also suggested through underuse of both "Resultative Compound Verbs" and the Perfective Aspectual Marker "*-le 了*" in the Japanese learner's corpus of Chinese. While Japanese has a rich system of Aspectual Compound Verbs (e.g.*" -dasu 出す , -kakeru かける , -tsuzukeru 続ける "," -ageru/agaru あ*

げる／あがる ”,“ -komu こむ ”,“ -kiru 切る ”,“ -nuku 抜く ” and so on) which cover both atelic and telic events, Chinese has no “atelic Aspectual Compound Verbs” since Aspectual Boundedness or “Telicity” is crucial in Chinese. This contrast also causes the difficulty for both Chinese and Japanese learners in learning their respective aspectual compound verb systems.

2. Error Types in Prepositions in “TUFS Online Dictionary of Misused English”

We will examine error types in the prepositions “in/on/at/of” in TUFS International Learners’ Corpus of English, “TUFS Online Dictionary of Misused English ”(henceforth, TUFS ODME), available on-line at the following URL: http://sano.tufs.ac.jp/lcshare/

2. 1 Overuse of “in” by Japanese learners of English

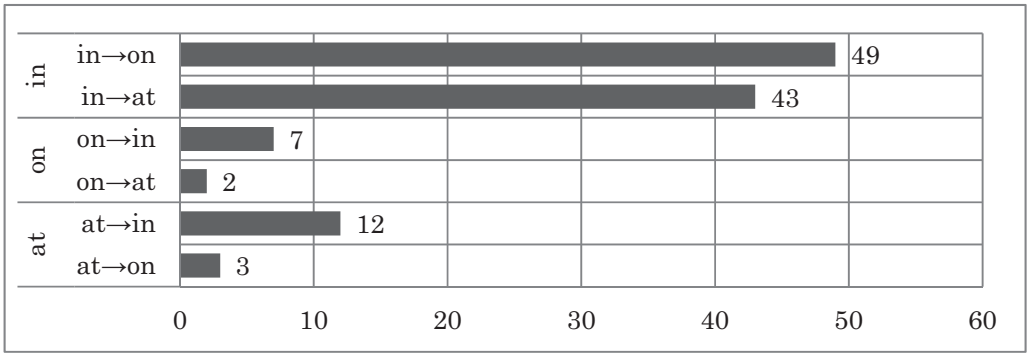
The following Table1 suggests that the spatial prepositions ‘in/on/at’ are difficult to differentiate between native speakers of Japanese.

Table 1. Errors of Prepositions in TUFS ODME[2]

Preposition	1. Frequency of Occurrence	2 Misuse	3 Nonuse	4 Correct Use	5 Ratio of Misuse/ Correct Use （%）	6 Ratio of Nonuse/ Correct Use （%）
in	5419	279	110	5140	**5.4280156**	2.1400778
on	1408	37	199	1371	2.69876	**14.514953**
at	776	36	67	740	**4.8648649**	**9.0540541**
of	6607	162	82	6445	2.5135764	1.2723041
for	2312	46	73	2266	2.0300088	3.2215357
to	2255	47	50	2208	2.1286232	2.2644928
from	1195	17	19	1178	1.4431239	1.6129032

The following Table 2 shows that there is characteristic overuse of ‘in’ where “on” or “at” should be used.

Table 2. Error Types in Spatial Prepositions 'in/on/at'



(1) Example of Error Type 'IN→ON'

The safety in (→on) Japanese trains is also one of the reasons why people feel relaxed enough to sleep. (TUFS_2012_29)

(2) Examples of Error Type 'IN→AT'

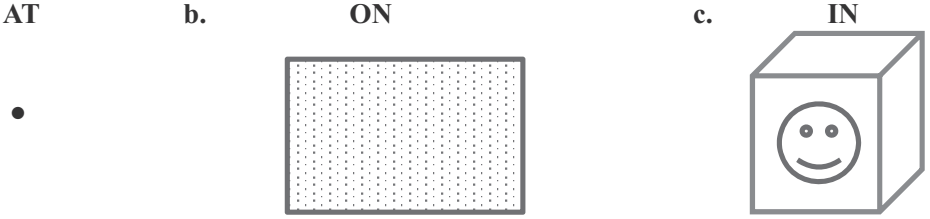
a. There are a lot of food and drinks stalls in (→at) the university run by students. (TUFS_2011_63)

b. In (→at) the school, I studied English diligently in order to enter TUFS, Tokyo University of Foreign Studies. (TUFS_2012_15)

English prepositions "in/on/at" are classified according to "spatial images" as follows:

(3) Image Schema of Spatial AT/ON/IN

a. AT **b. ON** **c. IN**



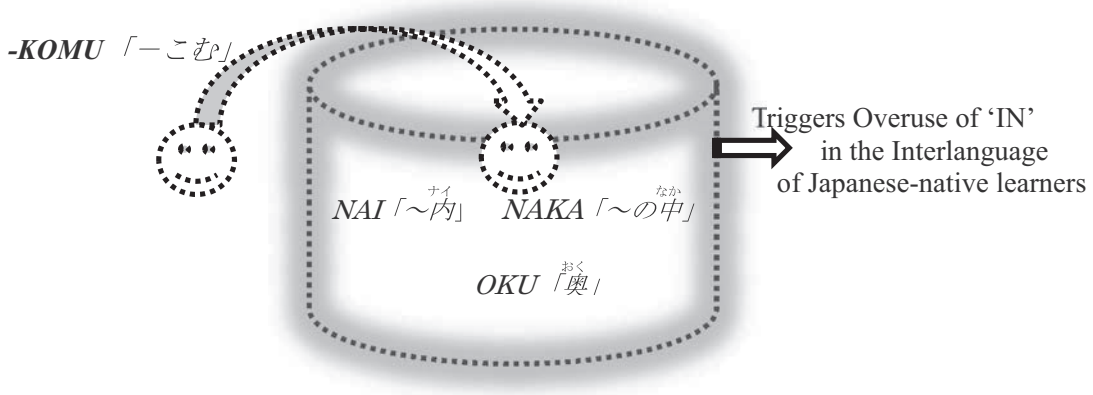
Individualization Flat Internal Structure

On the other hand, the image schema distinguishing spatial AT/ON/IN is not prominent in the Japanese Lexicon. Japanese has locative case markers "*-ni* に" and "*-de* で" as corresponding functional constituents to spatial AT/ON/IN. The distinction between the locative case markers "*-ni* に" or "*-de* で" is determined by a syntactic factor: whether the Noun Phrase with "*-ni* に" or "*-de* で"is an obligatory argument or optional argument for a verb, not by the spatial image schema in (3).

In addition, the spatial concept INSIDE is represented as "-nai - 内 " "-no naka – の 中 " "oku 奥 ", and movement toward INSIDE is represented as "-komu - こむ "(one of the most frequently appearing compound verbs in Japanese) and these display the following "Unbounded" INSIDE schema as (4) shows.

(4) Unboundedness in the Japanese Lexicon: No Spatial Distinction like AT/ON/IN

INSIDE '*-NAI*「～内(ナイ)」' '*-NO NAKA*「～の中(なか)」' '*OKU*「奥(おく)」' '*-KOMU*「～こむ」'



2. 2 Overuse of "of " by Japanese learners of English

In addition to the overuse of IN, the overuse of OF is also prominent among Japanese learners. This is assumed to be due to the 'NP_1 _ *No の* - NP_2' structure in Japanese, i.e. the overgeneralization that the Genitive marker '*-NO の* ' corresponds to OF in English.

(5) a. Performers and visitors of (→at) this party are all students in my high school and performers dance or sing. (*of/at* error pair)

b. Kono paatii no sanka-sha
このパーティーの 参加者

(6) a. The same things are true to the system of (→in) Japan. (*of/in* error pair)

b. Nihon no seido
日本 の 制度

(7) a. Though the food prices are higher in urban areas, wages of (→for)part time job is good. (*of/for* error pair)

b. Arubaito no jikyuu
アルバイト の 時給

(8) a.* Inspiration of Japan (Airline ANA's Logo, does it mean **'Inspiration from JAPAN**'?)

b. Nihon no insupireishion

3. " Yi (one) +Classifier" in "Bounded Event Structure"

Our learners' corpora of Chinese display a significant contrast in the misuse of "Yi (one) +Classifier" by speakers of English and Japanese: the overuse of " Yi (one) +Classifier" is very apparent in the learner's corpus of English native speakers while it always appears to be lacking in the learner's corpus of Japanese native speakers as Table 3 and examples of misused (9) and (10) show.

Table 3: The pattern of misuse of " Yi (one) +Classifier" in the Chinese Learner's Corpus

Ratio of error pattern(%)	Underuse	Overuse	Othee	Total
Japanese native speakers	184	3	1	188
	97.87	1.60	0.53	100.00
English native speakers	50	30	7	87
	57.47	34.48	8.05	100.00

(9) Underuse of " Yi (one) +Classifier" by Japanese native speaker

Wo renwei zhe shi ***(yi-zhong)** youyi de aihao. (TUFS_CH_027)[3]
I think this is (one-classifier) worthwile hobby
我认为这是 一种 有益的爱好。
I think that this is a worthwhile hobby.

(10) Overuse of " Yi (one) +Classifier" by English native speaker

* Ni kai **yi-ge** qingzhuhui de shihou, wo bu neng canjia shi yinwei wo zai guowai
you have one party DE when I not can attend BE because I abroad
你开一个庆祝会的时候 我不能参加是因为我在国外做工作。
zuo gongzuo. (E-A2-0001)[4]
do work
I won't be able to attend <u>the</u> party, because I will be abroad on work.

According to Shen(1995), " Yi (one) +Classifier" is necessary in a bounded telic situation whereas it is not allowed to occur in an unbounded atelic situation.

Overuse example (2) suggests that even when expressing an "unbounded/atelic" situation English native speakers tend to attach*" yige"* to the noun because of an overgeneralization that *" yige =a"*. On the other hand, Japanese NP does not have a system like " One +Classifier", therefore there is a significant underuse of " Yi (one) +Classifier".

4. Underuse of Resultative Complements by Japanese Learners

In addition, Japanese native speakers display underuse of resultative complements while English native speakers use resultative compounds much more frequently as Table 4 shows:

Table 4: The frequency of Resultative Complements[5]

	Resultative Compound	Japanese native speaker	English native speaker	Chinese native speaker http://www.cncorpus.org/index.aspx
frequency	～到 –dao	338	464	25,070
	～成 -cheng	55	27	23,359
	～完 -wan	19	27	12,380
adjusted frequency per 10,000words	～到 -dao	1.0	138.5	12.5
	～成 -cheng	3.0	8.0	11.6
	～完 -wan	1.0	21.8	6.1

Although Japanese also has a rich system of compound verbs, aspectual boundedness "telicity" is not a crucial factor in Japanese compound verbs. The contrast in Table 2 suggests that "telicity" in Chinese VP is hard for Japanese native speakers while it is not hard for English native speakers.

5. Aspectual "Unboundedness" in Japanese VV compound verbs vs. "Boundedness" in Chinese VV compound verbs

We propose two pieces of evidence for unboundedness in Japanese in terms of the temporal and spatial lexicon.

First, from a temporal viewpoint, we discuss the fact that Japanese VV compound verbs

have no aspectual constraint while Chinese VV compound verbs have the following strong constraint (11).

(11) V2 in Chinese V_1V_2 compound verbs should be telic.

This claim can explain why Japanese learners of Chinese make frequent errors leaving out V2 in Chinese compound verbs and Chinese learners of Japanese have difficulty with atelic inchoative/durative V2 in Japanese like "-kakeru"(start to ~),"-tsuzukeru"(continue to~).

6. Difficulty in Acquiring"Boundedness"in Chinese

Based on the misuse pattern in the interlanguage of Japanese/English native speakers learning Chinese, we will discuss that English displays high "boundedness" whereas Japanese displays "unboundedness" in the comprehension of events.

Chinese appears to be located between English and Japanese, therefore acquiring Boundedness in Chinese is difficult for both Japanese and English native speakers.

From a spatial viewpoint, we discuss that spatial unboundedness is prominent in the Japanese lexicon compared with English and Chinese. This claim can explain why Japanese learners of English and Chinese have difficulty with "in/on/at" and " in /of "in English and "Noun+ 上 shang(on)" in Chinese. We exemplify these phenomena by offering examples of misuse in our TUFS Japanese learners' corpora of English/Chinese.

7. Language Typology and Interlanguage

(12) Cross-Linguistic Typology: Number, Classifier and Degree of Individualization

	① Grammatical Category Number	② Classifier	③ Grammatical Strategies for Individualization
English	+	−	+ + +
Chinese	−	+ + +	+ +
Japanese	−	+	−

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Online Resources

1. Corpus of Contemporary American English
http://corpus.byu.edu/coca/
2. Lancaster University Log Likelihood Calculator
http://ucrel.lancs.ac.uk/llwizard.html
3. Learners’ Error Corpora of English Searching Platform
http://ngc2068.tufs.ac.jp/corpus/
4. Online Dictionary of Misused English – Based on a Learners’ Corpus
http://sano.tufs.ac.jp/lcshare/htdocs/?action=pages_view_main&page_id=49
(Accessed 13/12/2015)

Notes

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3 Learner’s ID in the learner’s corpus by Japanese native speakers at Tokyo University of Foreign Studies.

4 Learner’s ID in the learner’s corpus by English native speakers offered by The Mandarin Training Center, National Taiwan Normal University.

5 Special thanks to Zhang Zheng for the error statistics.