

Japanese Expressions that Include English Expressions ^{*}

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Abstract: We extracted English expressions that appear in Japanese sentences in newspaper articles and on the Internet. The results obtained from the newspaper articles showed that the preposition “in” has been regularly used for more than ten years, and it is still regularly used now. The results obtained from the Internet articles showed there were many kinds of English expressions from various parts of speech. We extracted some interesting expressions that included English prepositions and verb phrases. These were interesting because they had different word orders to the normal order in Japanese expressions. Comparing the extracted English and katakana expressions, we found that the expressions that are commonly used in Japanese are often written in the katakana syllabary and that the expressions that are not so often used in Japanese, such as prepositions, are hardly ever written in the katakana syllabary.

Keyword: English expression, katakana expression, newspaper article, Internet

1. Introduction

We often see English expressions inserted in Japanese sentences, such as “コンサート in 東京” (“コンサート”=concert, “東京”=Tokyo). We extracted such expressions that were written in kanji, katakana, hiragana, and Roman alphabet characters or combinations of these characters from articles in the Mainichi Shinbun (a major daily Japanese language newspaper) and on the Internet. From the same sources, we also extracted expressions that used katakana characters instead of English characters, such as “博覧会イン京都” (“博覧会”= exposition, “イン”=in, “京都”=Kyoto). The study of such expressions is useful for linguists studying the development process of languages (Ito (2001), Daulton (2003), and Murata et al. (2004)).

2. Automatic extraction of English and Katakana expressions

We used computers to extract candidate expressions in Japanese that included English expressions from Mainichi Shinbun articles published between 1991 and 2005 and from about 2 GB of Internet articles. We then checked the candidate expressions by hand to select the actual expressions we would use in our research.

We initially extracted expressions from Mainichi Shinbun articles. We took only the expressions that contained brackets. This is because expressions that include English

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expressions in Japanese sentences often appear in brackets. We automatically extracted expressions that satisfied the following conditions: i) included both Japanese characters in hiragana, katakana, and kanji and characters in the Roman alphabet, ii) the adjacent characters to English expressions are Japanese characters, or English expressions appear at the beginning of the expressions or the end of the expressions, iii) the second to last characters of the English expression were not capitalized, and iv) English expressions that consisted of more than one character. The condition ii) is used because there were many cases where the expressions were just replaced with Japanese expressions such as “過労死 (karoushi) 病” (“過労死”=“overwork death”, “karoushi” is the reading of “過労死”, “病”=disease), and we excluded such expressions. The condition iii) is used because there were many cases where expressions consisted of capitalized characters that were probably abbreviations, such as “OPEC” and “ASEAN”, and we excluded such expressions. We used only the cases where an English expression inserted into a Japanese sentence consisted of one word. This is because English expressions that consist of multiple words are often quotations of English phrases or sentences and are not expressions where the Japanese and English languages merge. We extracted expressions that did not contain appropriate spaces, such as “Welcometo”. We did not use expressions where the English expression was a noun, a proper noun, a symbol, or adjective that was modified by adding the Japanese suffixes “na” (for an adjective) and “suru” (for a verb). This is because the deleted expressions are popular in the conventional Japanese language. (In this study, we extracted “de”, although it is not English but French. This is because its frequency is high and it is also an interesting expression.)

We arranged the final list of expressions in order of frequency (see Table 1). “V”, “AJ”, “AV”, “PP”, “CJ”, “AR”, “PO”, and “PH” (in the table below) indicate verbs, adjectives, adverbs, prepositions, conjunctions, articles, possessive pronouns, and phrases, respectively.

Next, we extracted expressions from articles on the Internet. We used the same conditions as above and one additional condition: the first character of an English expression at the beginning of the sentence had to be capitalized. The results are shown in Table 2. Here, the extracted results are arranged by parts of speech. The table shows the English expression, its frequency, and some examples for each expression. In the example, the corresponding part of the English expression is marked with a *. Table 2 shows the results in descending order of frequency. The table only contains expressions that appeared more than 10 times.

Finally, we extracted from Mainichi Shinbun and Internet articles Japanese expressions that contained katakana expressions. We next constructed a list of the English expressions written in katakana characters. Using only katakana expressions, we compiled a list of expressions in order of frequency (Tables 3 and 4).

We plotted graphs showing the average (we call it *average value*) of the average, mode, and median years when the extracted expressions appeared (Figures 1 and 2). In the figures, each expression is displayed in ascending order of the average value. We added the total number of expression and the average value to each expression in the figures. Therefore, expressions that appeared in the earlier years are displayed higher on the graph, while expressions that appeared in the later years are displayed lower.

3. Discussion

Table 1 shows that English prepositions have been used for more than 10 years. The use of the expression “in” rapidly increased in 1994. After that, it appeared more than 10 times each year. “Let’s” has also been used for more than 10 years; however, it stopped appearing in 2000. The prepositions “at”, “of”, “with”, “from”, “by”, “of”, “with”, “from”, “by”, and “to” have been also used for a relatively long time.

We extracted various English expressions that form various parts of speech from articles on the Internet (Table 2). Prepositions appear the most frequently, followed by conjunctions. Adjectives are third. After that, in descending order of frequency, come phrases, adverbs,

Table 1: English expressions in Mainichi Shinbun articles

1991			1992			1993			1994			1995		
in	PP	2	in	PP	4	Let s	PH	1	in	PP	12	in	PP	21
Let s	PH	1	The	AR	1	in	PP	1	the	AR	1	and	CJ	1
at	PP	1	Handy	AJ	1	vs	PP	1	m y	PO	1	From	PP	1
de	PP	1	New	AJ	1	w ith	PP	1	by	PP	1	by	PP	1
vs	PP	1	of	PP	1				de	PP	1	from	PP	1
									to	PP	1	to	PP	1
												w ith	PP	1
1996			1997			1998			1999			2000		
in	PP	15	in	PP	28	in	PP	21	in	PP	22	in	PP	19
Dear	AJ	3	W ith	PP	2	de	PP	6	de	PP	3	de	PP	9
That s	PH	2	Dear	AJ	1	The	AR	3	M y	PO	2	at	PP	2
New	AJ	2	J r	AJ	1	Let s	PH	1	vs	PP	2	from	PP	2
Let s	PH	1	for	PP	1	ing	CJ	1	lt s	PH	1	w ith	PP	2
de	PP	1	vs	PP	1	By	PP	1	New	AJ	1	and	CJ	1
to	PP	1	w ith	PP	1	for	PP	1	ing	CJ	1	by	PP	1
vs	PP	1	Forever	AD	1	to	PP	1	or	CJ	1	to	PP	1
w ith	PP	1				w ith	PP	1	from	PP	1			
Be	V	1												
2001			2002			2003			2004			2005		
in	PP	32	in	PP	13	in	PP	17	in	PP	12	in	PP	12
de	PP	6	de	PP	7	de	PP	5	de	PP	6	w ith	PP	3
New	AJ	2	New	AJ	2	by	PP	4	of	PP	2	Good	AJ	1
from	PP	2	and	CJ	1	J r	AJ	1	From	PP	1	New	AJ	1
to	PP	2	from	PP	1	The	AR	1	J r	AJ	1	The	AR	1
the	AR	1	w ith	PP	1				New	AJ	1	m y	PO	1
That s	PH	1							to	PP	1	the	AR	1
What s	PH	1												
D igital	AJ	1												
can	AX	1												
De	PP	1												
W ith	PP	1												
for	PP	1												
vs	PP	1												
aga in	AD	1												

Table 2: English expressions on the Internet

<u>Prepositions (34 types, 16352 tokens in total)</u>		with	533	[PERSON] * オーケストラ ([PERSON] * orchestra)
in	4852	for	461	デー タ * ピアノ・レッスン (data * piano lesson)
	キャンペーン * 渋谷 (campaign * Shibuya)	to	360	固定電話 * 固定電話 (fixed-line phone * fixed-line phone)
by	2504	from	354	文部科学省の働き * [PERSON] (activities of Ministry of Education, Culture, Sports, Science and Technology * [PERSON])
	現地レポート * [PERSON] (on-site report * [PERSON])			
vs	1894			
	[PERSON] * [PERSON]			
de	1290			
	メール * ゲット! (mail * get!)			
in	1276			
	ジャズトリオ * 神戸 (jazz trio * Kobe)			
vs	888			
	山形市民 * 天童市民 (Yamagata citizens * Tendo citizens)			

Table 2: English expressions on the Internet (cont.)

<u>Prepositions (34 types, 16352 tokens in total) (cont.)</u>		new	72 * アルバム (* album)
by	269 医療施設 * [ORGANIZATION] (medical facility * [ORGANIZATION])	Online	67 * 作文教室 (* writing class)
at	254 忘年会 * 難波 (year-end party * Namba)	back	65 * ナンバー (* number)
vs.	254 湘南 * 新潟 (Shonan * Niigata)	Free	52 * 座談室 (* round-table meeting room)
de	240 ねっと * しょっぷ (net * shop)	New	74 * ステッカー (* sticker)
on	189 奥津 * メディア (Okutsu * media)	all	50 * ほっかいどう (* Hokkaido)
From	145 * こうち (* Kochi)	more	47 * レッドハットニュース (* Red Hat news)
of	77 編集部 * 速報ニュース (editorial office * breaking news)	free	45 * 素材 (* material)
By	75 * [PERSON]	public	42 * 参加 (* entry)
to	60 ドア * ドア (door * door)	next	41 個展 * 開催 (personal exhibition * holding)
For	44 * ビギナーズ (* beginners)	Open	40 * フォーラム (* forum)
To	42 * 軽井沢 (* Karuizawa)	Weekly	39 * レポート (* report)
with	42 [PERSON] * [PERSON]	active	35 * 手段 (* measures)
By	27 * 監督 (* director)	close	34 全て * です (be all *)
About	26 * 文学部 (* literature department)	good	34 * ウェイキ (* wake)
about	25 * 海洋堂 (* Kaiyodo)	Dear	33 * [PERSON]
for	25 コンサート * [ORGANIZATION] (concert * [ORGANIZATION])	Special	29 * キャンペーン (* campaign)
on	24 アンケート集計 * ネット (summary of questionnaire * network)	Digital	27 * 出力 (* output)
Vs.	21 * [ORGANIZATION]	cool	27 * ブランド (* brand)
since	20 * 平成11年9月27日 (* September 27, 1999)	official	26 * サイト (* site)
at	20 コンテスト * [LOCATION] (contest * [LOCATION])	Personal	25 * モデル (* model)
With	17 * [PERSON]	Cool	24 * サイト (* site)
from	17 独り言 * [PERSON] (soliloquy * [PERSON])	Jr.	24 * 選手権 (* championship)
by.	14 * [PERSON]	Back	23 * モデル (* model)
In	13 * [LOCATION]	Next	23 * シーズン (* season)
<u>Conjunctions (4 types, 3458 tokens in total)</u>		virtual	23 * 体験 (* experience)
or	2236 交換 * 差し上げます (exchange * give)	weekly	22 * パッケージ (* package)
and	641 [PERSON] * [PERSON]	Happy	21 * 懸賞らいふ! (* days with prize)
or	541 おかゆ * ご飯 (porridge * rice)	digital	20 * 回路 (* circuit)
and	40 パスタ * ワイン (pasta * wine)	mobile	20 * 端末 (* terminal)
<u>Adjectives (59 types, 3066 tokens in total)</u>		special	20 * 企画 (* enterprise)
new	582 * おまかせプラン (* prepared plan)	Best	19 * 記録 (* record)
New	399 * ぐるりん阿蘇 (* touring Aso)	happy	18 * ハート (* heart)
main	158 * 作品 (* work)	Mobile	17 * 端末 (* terminal)
open	133 * 会議 (* conference)	closed	16 * 会議 (* meeting)
online	130 * 雑誌 (* magazine)	Jr	16 * フルーツ教室 (* flute class)
good	111 * 性能バランス (* performance balance)	Virtual	15 * ゼミ訪問 (* visit to seminar)
No	72 * 残業DAY (* overtime working day)	inline	15 * 画像 (* image)
Super	72 * アモルファス (* amorphous)	personal	15 * ホームページサーバ (* homepage server)
		Good	14 * リフォーム (* reform)
		Hot	14 * リスト (* list)
		Monthly	14 * セミナー (* seminar)
		short	14 * ブーツ (* boots)
		Big	13 * プレゼント (* present)
		Easy	13 * 登録 (* registration)
		Global	13 * 企業 (* company)
		offline	13 * 状態 (* status)
		Hyper	12 * 和紙 (* Japanese paper)

Table 2: English expressions on the Internet (cont.)

<u>Adjectives (59 types, 3066 tokens in total) (cont.)</u>		only	63 土日 * (Saturdays and Sundays *)
super	12 * 特急 (* limited express)	all	50 同業者 * (* peer)
Daily	11 * ランキング (* ranking)	off	30 500円 * (500 yen *)
High	11 * レベル (* level)	only	16 英語 * (English *)
<u>Phrases (23 types, 909 tokens in total)</u>		<u>Articles (3 types, 364 tokens in total)</u>	
Welcometo	294 * 腕時計資料室 (* wrist watch archives)	The	201 * 沖縄 (* Okinawa)
What's	114 * けいば (* horse race)	the	115 * 古書 (* old book)
Let's	75 * スタート! (* start!)	The	48 * 日本列島 (* Japanese archipelago)
Presentedby	34 * 関東バス (* Kanto Bus)	<u>Possessive pronouns (4 types, 357 tokens in total)</u>	
writtenby	32 * [PERSON]	My	181 * コレクション (* collection)
Let's	31 * テニス! (* play tennis!)	My	77 * ページ (* page)
Howto	29 * アクセス (* access)	my	69 * テーマ (* theme)
Producedby	29 * [ORGANIZATION]	my	30 * ページ (* page)
Writtenby	28 * [PERSON]	<u>Verbs (9 types, 246 tokens in total)</u>	
producedby	27 * [ORGANIZATION]	start	56 * インターネット (* Internet)
photoby	25 * [ORGANIZATION]	Welcome	48 * えひめ (* Ehime)
welcometo	24 * 情報科学部 (* information science department)	Do	29 * 中国茶 (* Chinese tea)
Poweredby	23 * [PERSON]	welcome	28 * [ORGANIZATION]病院 (* [ORGANIZATION] hospital)
Backto	22 * 広島大HP (* Hiroshima Prefecture University homepage)	Get	25 * 懸賞 (* prize)
It's	18 * オススメ!! (* recommended!!)	love	22 * 熊本電波 (* Kumamoto radio wave)
postedby	17 * [PERSON]	enjoy	16 * 講座 (* course)
foryou	15 メッセージ * (* message)	Welcome	12 * [ORGANIZATION]ホームページ (* [ORGANIZATION] homepage)
presentedby	14 * [ORGANIZATION]	Love	10 * みやざき (* Miyazaki)
Textby	12 * [PERSON]	<u>Suffixes (2 types, 202 tokens in total)</u>	
what's	12 * ろうきん? (* Labour Bank?)	ing	148 俳句 * (haiku *)
Whats	12 * ろうきん (* Labour Bank)	ing	54 職 * 全国版求人情報 (work * job information for all regions)
That's	11 * インタビュー (* interview)	<u>Interrogative pronouns (1 type, 10 tokens in total)</u>	
howto	11 * 物 (* related things)	What	10 * 共栄会 (* Kyoueikai)
<u>Adverbs (7 types, 593 tokens in total)</u>			
up	208 9,000円 * (9,000 yen *)		
off	131 10パーセント * (10 percent *)		
not	95 * オススメ (* recommended)		

Table 3: Katakana expressions in Mainichi Shinbun

1991			1992			1993		
アップ (up)	AD	11	デジタル (digital)	AJ	11	アップ (up)	AD	21
ニュー (new)	AJ	7	スーパー (super)	AJ	7	スーパー (super)	AJ	8
グローバル (global)	AJ	5	ニュー (new)	AJ	7	デジタル (digital)	AJ	6
スーパー (super)	AJ	3	アップ (up)	AD	7	ジュニア (junior)	AJ	4
デジタル (digital)	AJ	3	パーソナル (personal)	AJ	6	ニュー (new)	AJ	4
ジュニア (junior)	AJ	2	オール (all)	AJ	3	ザ (the)	AR	3
パーソナル (personal)	AJ	2	ジュニア (junior)	AJ	3	オール (all)	AJ	3
ベスト (best)	AJ	2	ノー (no)	AJ	3	オンライン (online)	AJ	2
ザ (the)	AR	1	ベスト (best)	AJ	3	グローバル (global)	AJ	2
ハウツー (how to)	PH	1	オープン (open)	AJ	2	ザッツ (that's)	PH	1
オープン (open)	AJ	1	グローバル (global)	AJ	2	オープン (open)	AJ	1
オール (all)	AJ	1	スペシャル (special)	AJ	2	ハンディー (handy)	AJ	1
ノー (no)	AJ	1	ハイパー (hyper)	AJ	2	バーチャル (virtual)	AJ	1
ウエルカム (welcome)	V	1	ハウツー (how to)	PH	1	フリー (free)	AJ	1
			アンド (and)	CJ	1	ベスト (best)	AJ	1
			ウエルカム (welcome)	V	1	イン (in)	PP	1
						オンリー (only)	AD	1

Table 3: Katakana expressions in Mainichi Shinbun (cont.)

1994			1995			1996		
アップ (up)	AD	22	オール (all)	AJ	20	アップ (up)	AD	20
デジタル (digital)	AJ	14	デジタル (digital)	AJ	12	デジタル (digital)	AJ	19
スーパー (super)	AJ	12	アップ (up)	AD	12	グローバル (global)	AJ	10
オール (all)	AJ	4	スーパー (super)	AJ	9	スーパー (super)	AJ	8
オンライン (online)	AJ	3	グローバル (global)	AJ	5	オール (all)	AJ	6
グローバル (global)	AJ	3	オンライン (online)	AJ	4	バーチャル (virtual)	AJ	5
ジュニア (junior/Jr.)	AJ	3	オープン (open)	AJ	3	ニュー (new)	AJ	4
オープン (open)	AJ	1	ニュー (new)	AJ	3	オープン (open)	AJ	2
オフライン (offline)	AJ	1	イン (in)	PP	2	オンライン (online)	AJ	2
ニュー (new)	AJ	1	イツツ (it's)	PH	1	ジュニア (junior)	AJ	2
ノー (no)	AJ	1	ハウツー (how to)	PH	1	ビッグ (big)	AJ	2
バーチャル (virtual)	AJ	1	レッツ (let's)	PH	1	ベスト (best)	AJ	2
パーソナル (personal)	AJ	1	キッズ (kids)	AJ	1	イン (in)	PP	2
ベスト (best)	AJ	1	ジュニア (junior)	AJ	1	ザ (the)	AR	1
ウエルカム (welcome)	V	1	スペシャル (special)	AJ	1	アクティブ (active)	AJ	1
エンジョイ (enjoy)	V	1	ビッグ (big)	AJ	1	クローズ (close)	AJ	1
アゲイン (again)	AD	1	ベスト (best)	AJ	1	スペシャル (special)	AJ	1
			イング (ing)	CJ	1	ハイパー (hyper)	AJ	1
			ウエルカム (welcome)	V	1	マイ (my)	PO	1
			サポート (support)	V	1			
1997			1998			1999		
デジタル (digital)	AJ	42	デジタル (digital)	AJ	27	デジタル (digital)	AJ	39
アップ (up)	AD	22	グローバル (global)	AJ	15	グローバル (global)	AJ	31
グローバル (global)	AJ	18	アップ (up)	AD	10	スーパー (super)	AJ	10
スーパー (super)	AJ	14	スーパー (super)	AJ	9	アップ (up)	AD	10
オール (all)	AJ	11	オール (all)	AJ	8	オール (all)	AJ	9
バーチャル (virtual)	AJ	8	ニュー (new)	AJ	6	オンライン (online)	AJ	8
ニュー (new)	AJ	5	バーチャル (virtual)	AJ	3	ジュニア (junior)	AJ	6
オープン (open)	AJ	2	モバイル (mobile)	AJ	3	バーチャル (virtual)	AJ	3
オンライン (online)	AJ	2	オンライン (online)	AJ	2	キッズ (kids)	AJ	2
ビッグ (big)	AJ	2	キッズ (kids)	AJ	2	ネクスト (next)	AJ	2
スペシャル (special)	AJ	1	ジュニア (junior)	AJ	2	マンスリー (monthly)	AJ	2
ノー (no)	AJ	1	ノー (no)	AJ	2	モバイル (mobile)	AJ	2
メイン (main)	AJ	1	アクティブ (active)	AJ	1	ニュー (new)	AJ	1
モバイル (mobile)	AJ	1	デジタル (digital)	AJ	1	ノー (no)	AJ	1
イン (in)	PP	1	ナイス (nice)	AJ	1	ハッピー (happy)	AJ	1
			ベスト (best)	AJ	1	ベスト (best)	AJ	1
			マンスリー (monthly)	AJ	1	エンジョイ (enjoy)	V	1
			イン (in)	PP	1			
			フォーエヴァー (forever)	AD	1			
2000			2001			2002		
デジタル (digital)	AJ	46	グローバル (global)	AJ	24	グローバル (global)	AJ	18
グローバル (global)	AJ	23	デジタル (digital)	AJ	17	デジタル (digital)	AJ	17
スーパー (super)	AJ	17	スーパー (super)	AJ	12	ジュニア (junior)	AJ	8
オール (all)	AJ	10	アップ (up)	AD	12	アップ (up)	AD	8
アップ (up)	AD	8	ベスト (best)	AJ	5	スーパー (super)	AJ	7
モバイル (mobile)	AJ	7	ジュニア (junior)	AJ	4	ニュー (new)	AJ	7
オンライン (online)	AJ	5	オール (all)	AJ	3	オンライン (online)	AJ	5
バーチャル (virtual)	AJ	4	オンライン (online)	AJ	3	スペシャル (special)	AJ	3
ジュニア (junior)	AJ	3	バーチャル (virtual)	AJ	3	モバイル (mobile)	AJ	3
ニュー (new)	AJ	3	モバイル (mobile)	AJ	3	オール (all)	AJ	2
ハイパー (hyper)	AJ	3	イン (in)	PP	3	キッズ (kids)	AJ	2
キッズ (kids)	AJ	2	アクティブ (active)	AJ	2	ノー (no)	AJ	2
アクティブ (active)	AJ	1	キッズ (kids)	AJ	2	バーチャル (virtual)	AJ	2
ノー (no)	AJ	1	ザ (the)	AR	1	イン (in)	PP	2
マンスリー (monthly)	AJ	1	クローズド (closed)	AJ	1	フォーエヴァー (forever)	AD	2
イン (in)	PP	1	ハンディー (handy)	AJ	1	アクティブ (active)	AJ	1
オンリー (only)	AD	1	フリー (free)	AJ	1	ビッグ (big)	AJ	1
			マイ (my)	PO	1	ベスト (best)	AJ	1
			アゲイン (again)	AD	1	ウエルカム (welcome)	V	1
			オンリー (only)	AD	1			

Table 3: Katakana expressions in Mainichi Shinbun (cont.)

2003			2004			2005		
デジタル (digital)	AJ	30	スーパー (super)	AJ	33	スーパー (super)	AJ	28
ベスト(best)	AJ	30	ベスト(best)	AJ	29	ベスト(best)	AJ	28
スーパー (super)	AJ	28	デジタル (digital)	AJ	24	デジタル (digital)	AJ	22
グローバル (global)	AJ	10	グローバル (global)	AJ	13	グローバル (global)	AJ	14
ジュニア (junior)	AJ	7	オール (all)	AJ	7	オール (all)	AJ	13
ニュー (new)	AJ	6	バーチャル (virtual)	AJ	4	ノー (no)	AJ	11
オンライン (online)	AJ	4	モバイル (mobile)	AJ	3	ジュニア (junior)	AJ	5
バーチャル (virtual)	AJ	3	アンド (and)	CJ	1	マイ (my)	PO	5
イン (in)	PP	2	デジタル (digital)	AJ	1	オンライン (online)	AJ	3
オール (all)	AJ	2	ニュー (new)	AJ	1	モバイル (mobile)	AJ	3
マイ (my)	PO	2	ビッグ (big)	AJ	1	バーチャル (virtual)	AJ	2
フロム (from)	PP	1	マイ (my)	PO	1	バイ (by)	PP	1
モバイル (mobile)	AJ	1						

Table 4: Katakana expressions in articles from the Internet

<u>Adjectives (40 types, 64867 tokens in total)</u>		ウイークリー (weekly)	20 * 検索 (* retrieval)
デジタル (digital)	15319 * 処理 (* treatment)	スーパー (super)	19 * 熱分析システム (* heat analysis system)
オンライン (online)	12223 * 写真集 (* photo collection)	アクティブ (active)	10 * 発想 (* idea)
メイン (main)	7982 * 曲選出 (* music selection)	<u>Adverbs (5 types, 23258 tokens in total)</u>	
フリー (free)	3953 * 素材 (* material)	アップ (up)	19615 何点 * (how many points *)
ベスト(best)	3543 * 盤 (* album)	オフ (off)	3373 日本語入力 * (Japanese-language input *)
モバイル (mobile)	3230 * 端末 (* terminal)	オンリー (only)	243 読み物 * (reading *)
デジタル (digital)	2241 * 画像 (* image)	アゲイン (again)	26 長野 * (Nagano *)
スペシャル (special)	1677 * 料金 (* fee)	オンリー (only)	1 [PERSON] * ([PERSON] *)
グローバル (global)	1636 * 企業 (* company)	<u>Prepositions (6 types, 1816 tokens in total)</u>	
ホット(hot)	1578 * 情報 (* information)	イン (in)	1214 探検隊 * [LOCATION] (expedition * [LOCATION])
アクティブ (active)	1442 * 商社 (* trading company)	デ (de)	129 ネット * わーく (net * work)
スーパー (super)	1395 * 不況 (* depression)	アバウト (about)	66 * 八日市 (* Yokaichi)
ジュニア (junior)	1247 * 選手権 (* championship)	フロム (from)	24 * 沖縄推進機構 (* Okinawa Initiative)
オフライン (offline)	769 * 質問フォーム (* questionnaire form)	オブ (of)	良品 * 京都 (good item * Kyoto)
クール (cool)	754 * 解説 (* comment)	トウ (to)	フロム市長 * 職員 (from the Mayor * officers)
ハンディ (handy)	574 * 機 (* machine)	<u>Verbs (3 types, 741 tokens in total)</u>	
バーチャル (virtual)	569 * 博物館 (* museum)	エンジョイ (enjoy)	611 * ふくい (* Fukui)
ビッグ (big)	517 * 当選 (* win)	ウエルカム (welcome)	73 * へいあん (* Heian)
ハッピー (happy)	499 * [ORGANIZATION]	ウエルカム (welcome)	57 * 東久留米 (* Higashikurume)
ニュー (new)	481 * 軽量骨材 (* lightweight aggregate)	<u>Possessive pronouns (1 type, 270 tokens in total)</u>	
オフィシャル (official)	384 * 応援歌 (* fight song)	マイ (my)	270 * 切手 (* stamp)
インライン (inline)	343 * 入力 (* input)	<u>Articles (1 type, 178 tokens in total)</u>	
パーソナル (personal)	287 * 感覚 (* sense)	ザ (the)	178 なるほど * 信州 (I see. * Shinshu)
オール (all)	269 * 専任教師 (* full-time teacher)		
ショート(short)	269 * 丈 (* length)		
クローズ (close)	264 * 状態 (* status)		
グッド(good)	260 * ぐんまの新鮮野菜 (* fresh vegetables in Gumma)		
パブリック (public)	236 * 空間 (* space)		
ハイパー (hyper)	186 * 調査隊 (* expedition)		
ノー (no)	178 * 試験 (* examination)		
デイリー (daily)	160 * 情報 (* information)		
マンスリー (monthly)	91 * 壁紙 (* wallpaper)		
ネクスト(next)	81 * 牌 (* tile)		
ハンディー (handy)	73 * 機器 (* device)		
クローズド(closed)	57 * 期間 (* period)		
イージー (easy)	30 * 操作 (* operation)		
エクストラ (extra)	21 * 告知ページ (* information page)		

Table 4: Katakana expressions in articles from the Internet (cont.)

Phrases (3 types, 83 tokens in total)		Suffixes (1 type, 28 tokens in total)	
レッツ (let's)	73 * 不動産 (* real estate)	イング (ing)	28 遊 * (play *)
ザッツ (that's)	8 * 下町考 (* thinking about downtown)		
ウェルカムトゥ (welcome to)	2 * お台場ラジオ会館		

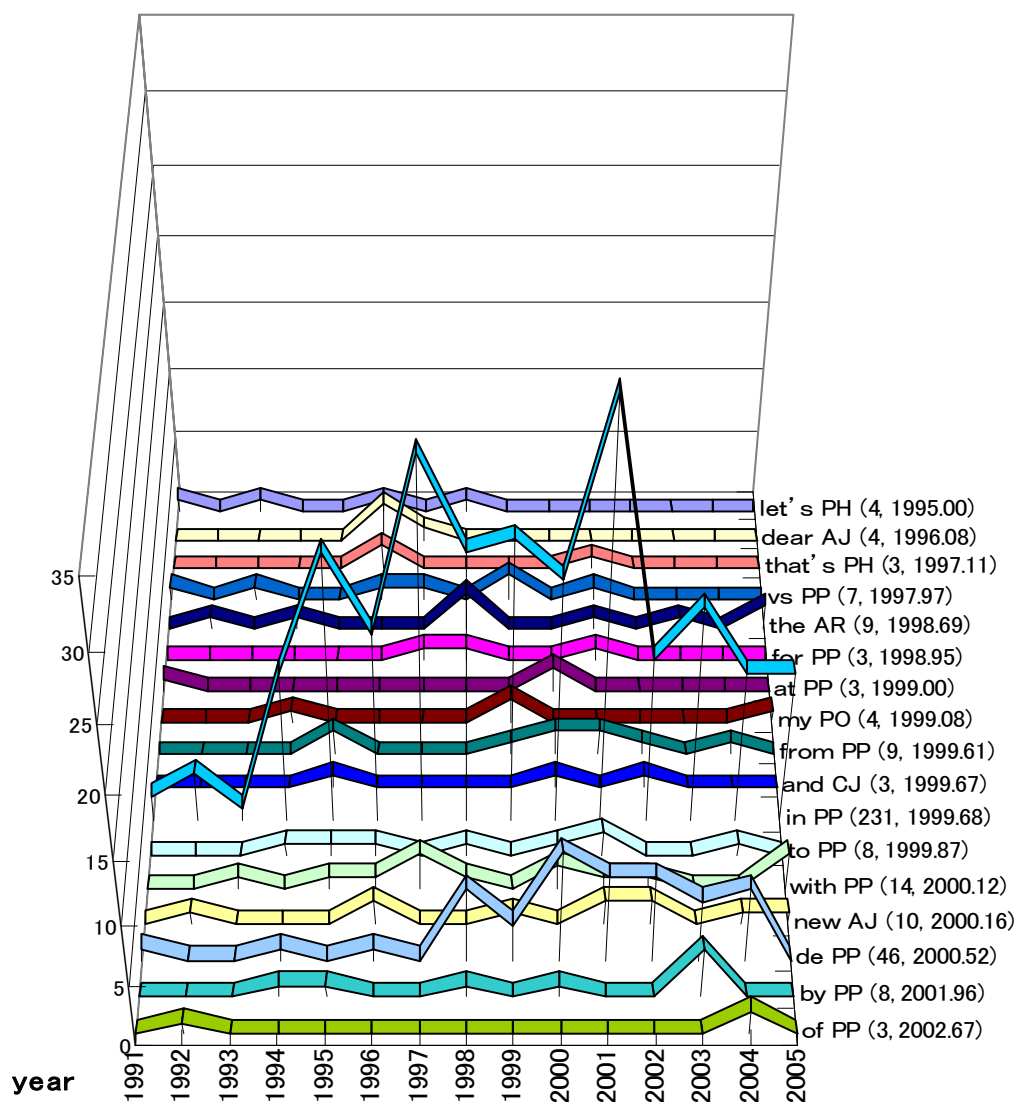


Figure 1: Change in the number of English expressions in Mainichi Shinbun (The two numbers in the parentheses indicate the total number of expressions and the average value of appeared years.)

articles, possessive pronouns, suffixes, verbs, and interrogative pronouns.

The expressions using prepositions, phrases, and verbs from articles on the Internet (Table 2) have a word order that is different from the usual Japanese language word order. For example, “キャンペーン in 渋谷” (“キャンペーン”=campaign, “渋谷”=Shibuya (location name)), “What's けいば” (“けいば”=“horse race”), and “Welcome えひめ” (“えひめ”=Ehime (location

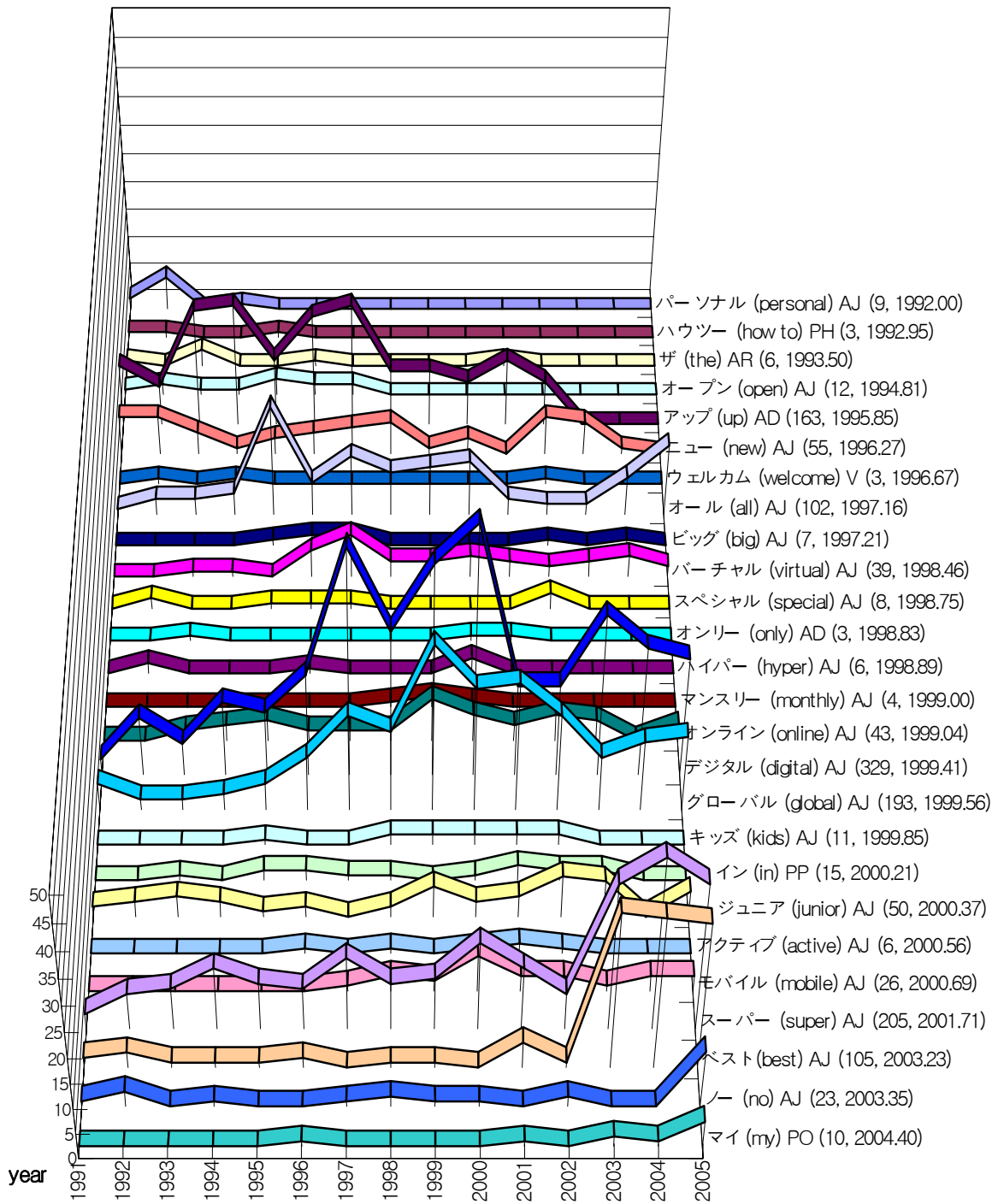


Figure 2: Change in the number of Katakana expressions in Mainichi Shinbun (The two numbers in the parentheses indicate the total number of expressions and the average value of appeared years.)

name)). The Japanese standard word order is “渋谷でのキャンペーン” (“渋谷”=Shibuya (location name)), “での”=in, “キャンペーン”=campaign), “けいばとは何” (“けいば”=“horse race”, “とは”=be, “何”=what), and “えひめへようこそ” (“えひめ”=Ehime(location name),

“へ”=to, “ようこそ”=welcome), respectively. The reason for the change in word order is because in English the important thing is usually at the beginning of a sentence, so it is convenient to construct compact expressions in this way.

This kind of the word order difference has already been seen in Japanese expressions of Chinese origin, such as “於東京” (“於”=in, “東京”=Tokyo), “必履修” (“必”=require, “履修”=“take a course”), and “対テロ” (“対”= against or to, “テロ”=terror). Expressions like “キャンペーン in 渋谷” are possibly due to the tolerant and flexible characteristic of Japanese language which permits expressions like “於東京”.

Table 3 shows the frequency with which katakana expressions appear in Mainichi Shinbun articles. Adjectives and adverbs have appeared with high frequencies for a long time. The table shows that katakana expressions containing adjectives and adverbs have been used more often than other parts of speech. The article “the” and the verb “welcome” have been used for a long time.

By comparing the frequency of English expressions with that of katakana expressions using the data in Tables 2 and 4, we found that adverbs and adjectives, such as “アップ” (up) and “デジタル” (digital), that are often used in Japanese are often expressed using katakana and that prepositions that are not used so often in Japanese are not often expressed using katakana. That is, we found a trend in which English expressions that have been used often in Japanese are likely to be expressed with katakana and English expressions that have not been used often in Japanese are likely to be expressed using the Roman alphabet.

We can see many English expressions in the parts of speech that are not adjectives and adverbs. These are prepositions, conjunctions, phrases, articles, possessive pronouns, suffixes, verbs, and interrogative pronouns. We think these expressions have not yet entered the Japanese language, and they are new expression styles. In terms of adjectives and adverbs, we can see many English expressions for the adjectives “new” and “old” and the adverbs “all” and “not”. Thus, the adjectives and adverbs may be special expressions.

4. Conclusions

We extracted Japanese expressions that included English expressions from Mainichi Shinbun articles that appeared over a 15-year period and from 2 GB of Internet articles. We found that the preposition “in” has been used often for more than ten years. We extracted from Internet articles many kinds of English expressions that contained various parts of speech. We also extracted interesting expressions that used English prepositions or verb phrases. These interesting expressions had different word orders to ordinary Japanese sentences. From comparing the extracted English and katakana expressions, we suggest that English expressions that are common in Japanese are likely to be written in katakana and that English expressions that are not common in Japanese are likely to be written in the Roman syllabary.

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