WHAT ARE THE TYPES AND PROPORTIONS OF 'MAJOR' SPELLING ERRORS MADE BY 'SHORT-STAY' JAPANESE UNIVERSITY STUDENTS ENROLLED FULL-TIME AT NEWCASTLE UNIVERSITY?

ABSTRACT

The availability of a plethora of articles focussing on the misspellings of 'L1UE' evidences the interest this topic has engendered amongst researchers. However, the misspellings of 'L2UE' have only received similar research attention over recent decades. As spellings are seldom perceived in terms other than correct or incorrect, gaining an understanding of the types and proportions of misspellings made by specific L2 groups will arguably help practitioners to develop an informed strategy to scaffold the learner. A 53 word spelling test (Okada, 1999) was modified and administered to n=15 Japanese students studying at NCLU. An adapted categorisation system devised by Cook (1999, 2004, p.140) was used to delineate the data. In addition to errors indistinguishable from those made by first language users of English, this categorisation revealed misspellings with characteristics specific to the participant's L1; they included vowel insertions, /l/ and /r/ substitutions as well as problems with words containing unstressed vowels and loanword inconsistency.

Keywords: Spelling/ Misspelling/ Teaching/ Japanese/ Second Language Users of English

INTRODUCTION

Regarded as an independent entity, with unique qualities that should not be considered a mirror image of speech (Mitton, 1996, p.31; Cook, 2004, p.52), the 'English Writing System' has been colourfully described as a "rag-bag of lawlessness" (Wister, 1907, p.35) and a "bugaboo" (Block, 1999, p.123). Davis (1941) decrying the "archaic anarchy, [and] Gothic gargoyles of our present set-up; whilst Weekley, is of the opinion that "[it] is, so far as its relation to the spoken word is concerned, quite crazy" (n.d. cited in Vallins, 1954, p.13).

Crystal suggests that this perception of lawlessness is in part due to the "400 or so irregular spellings [which] are largely among the most frequently used words in the language" (1992, p.214). Indeed, an aside attributed the spelling reformer 'George Bernard Shaw' that the word **FISH** could be written as **GHOTI**: the **GH** from rou**gh**, the **O** from w**o**men, and the **TI** from pala**ti**al is often cited as an example highlighting its unpredictable nature (Birch, 2007, p.88; Hatcher and Mallison, 2010 , p.X). It is generally accepted that English has 44 phonemes which are represented by the 26 letters of the alphabet (Van Berkel, 2005, p.109); and what this aside arguably demonstrates is that although alphabetic, English must be considered orthographically deep because the relationship between sound

and symbol are equivocal and phonemes may have more than one representation (Mitton, 1996, pp.23-25; Cook, 2004, pp.10-15).

Indeed, Hamilton notes that "the idea that there is one right way to combine the letters representing a certain sound or group of sounds, that is a word, and that all other ways are wrong and little short of shameful is a comparatively new idea among us" (1918, p.1). Although the quotation is dated, then as now, the ability to spell words according to standardised conventions is often perceived as evidence of literacy (Vallins, 1954, p.16); any departure from which can be open to condescension and ridicule or viewed as a "solecism that betrays carelessness or plebeian origins" (Cook, 1997).

In fact, as most 'first language users of English' (henceforth L1UE) can spell proficiently (Cook, 2004, p.54), one might say that it is misspelling and not the ability to spell that elicits the most fervent reactions. Utley plaintively asking "Can anyone remember a time when standards of spelling were lower?" (2011); a second journalist claiming that "standards of spelling among university students [are] now so bad that lecturers are being urged to turn a blind eye to mistakes" (Paton, 2008). Neither of these statements are appropriately supported, however, the regular appearance of sensationalistic headlines and articles bemoaning the spelling deterioration of L1UE does represent that this is a contentious issue. Conversely, the spelling of 'second language users of English' (henceforth L2UE) attracts notably less press attention, recent articles only noting L2UE spelling because the errors were instrumental in the identification of counterfeit imports (BBC, 2011).

Similarly, it is claimed that while L1UE spelling remains a focus of research encouraging debate and analysis, there has not been a similar level of research attention with regard L2UE and the topic of spelling (Ibrahim, 1978; James and Klein, 1994; Cook 1999, 2004, pp.138). Nevertheless, a literature review does reveal a limited range of papers providing important insights with regard spelling and specific L2UE groups (Ibrahim, 1978; Bebout, 1985; Brown, 1988; Haggan, 1993; Al-Shabbi, 1994; Nyamasyo, 1994; Fashola, et al., 1996; Barry and De Bastiani, 1997; Cook, 1997; Mark, 1998; Okada, 2002; Wang and Geva, 2003; Mourtaga, 2004). Indeed, Granger and Wynne who researched a multi-national 'EFL learner corpora' noted that "a mere glimpse at the respective lists [of spellings and misspellings] shows that each national group has its own specific problems" (2000, p.255).

As a teaching practitioner, the greater proportion of my practice and experience has been accrued in the Japanese setting; and for this reason I decided to focus on the spelling errors of Japanese L2UE in this study. Firstly, because as Haggan notes, misspellings made by L2UE are and remain an important area of investigation (1993); and secondly, outside of work by Okada (1999, 2002, 2004, 2005) and the more wide- ranging focus on L2 spelling discussed in papers by Cook (1997, 2004, p.138-148), research attention has been limited in this particular Asian context. Lastly, and more importantly, it provides an opportunity to collect data and apply the results to the author's future practice as a teaching professional, informing and providing a better understanding of the particular features that characterise the writings of Japanese L2UE.

THE RESEARCH DESIGN OF THE STUDY

Research Question

I endeavour to provide a broad overview of the research design and make use of pertinent and balanced data to illustrate points I wish to make. It is beyond the scope of this investigation to analyse the full range of issues pertaining to the spelling debate; and consequently, a single research question with a secondary focus was constructed for the present study:

(i). What are the types and proportions of 'major' spelling mistakes made by 'short-stay' Japanese University students enrolled full-time at Newcastle University?

a. Are features of participant L1 to some extent reflected in the data gathered?

Participants

The population chosen were Japanese nationals studying full-time within 'Newcastle University' (henceforth NCLU). All of the students used 'English for academic purposes' (henceforth EAP) in their studies, however, none of the sample were classmates or studying English as a principal subject. This ensured representativeness as English specialists who would arguably experience higher levels of both general and specific exposure to the language did not participate in the study. Participants could be classed as a 'short-stay group' (Cook, et al., 2006) as all had been resident in the U.K. for between six months and three years. Whilst recognising that a small sample may amplify the effects of individual variation, a minimum sample size of n=10 was adopted; although, the final participant figure was n=15.

Japanese nationals studying at NCLU were selected for a number of reasons. Firstly, as this study was not undertaken longitudinally, time constraints meant that it was not possible to recruit a larger cohort from amongst the wider population of Tyne and Wear. Secondly, the sample would be homogeneous because the focus was on a group of educated 'first language users of Japanese' (henceforth L1UJ) who had all participated in a minimum of six years formal English instruction at school in Japan and furthermore attained an IELTS score of at least 6.5 required for NCLU admission (NCLU, 2011).Thirdly, as a member of the NCLU 'Anglo-Japanese Society', the author had developed contacts within this community and therefore initial participants could be easily approached. These contacts were used in other words as a non-probability chain referral method to generate a snowball sample and recruit as large a cohort as possible.

Research Instrument

Altruistically, Okada made his 'SAMANTHA' error corpus freely available to other researchers by uploading his research instrument and data to the internet in 1999. This corpora lists the misspellings of 333 Japanese L2UE, which in conjunction with other data sources have been used to investigate errors occurring in word-initial and word-final positions (Okada, 2005) as well as improve spellchecker performance for this L2UE group (Mitton and Okada, 2007). A decision was made to utilise the Okada research instrument in order to replicate the data gathering method.

Although not specifically looking at the Okada data in this study, undertaking data collection utilising the same method allows for future data analysis and comparison; moreover, result format can be made uniform.

The original instrument consists of two parts, namely: a 'background information sheet' and a 53 question spelling test. Although the spelling test was utilised without adaptation [APPENDIX B], the author decided to rework the 'background information sheet' [APPENDIX A] because the original captured variables superfluous to this study.

While the 'SAMANTHA' error corpus and instrument are freely available without restriction, it is best practice if replicating the work or using an instrument designed by another to contact the original researcher. Professor Okada was contacted through an intermediary and kindly replied to an initial email (personal communication, 16 April 2011).

Limitations Of The Instrument: General

There is a view that the selection of words by a researcher for a spelling test may presuppose "a hypothesis about why these words would be difficult" (Haggan, 1993). Test vocabulary is often derived by adapting graded lists or chosen from collections of misspellings previously gathered by a researcher. In this case, it is not known how the vocabulary was selected by Okada (1999), however, Perin (1983) and Mitton (1996, pp.54-76) may be partial sources as a number of words are duplicated in the research undertaken by these authors. Additionally, spelling tests require participants to attempt words they infrequently use or are unknown to them (ibid); and who must therefore rely on phonological cues in a dictated test or as in this research instrument designed for a specific context, a written Japanese[1] cue [see SECTION 2.3.2]. Bebout (1985) and Haggan (1993) purposively avoid the use of both 'traditional spelling test' and the 'free writing' of students to collect misspellings; instead they rely on an elicitation approach which falls somewhere between these methods. Arguably, this combines the strengths of each instrument and moderates the limitations. However, while somewhat contrived, spelling tests do have value as they generate data sourced from multiple attempts by different participants at the same word.

Limitations Of The Instrument: Specific

There are limitations to any research instrument and this is not an exception to the rule. Okada states that the instrument requires his sample to spell out "English words whose meanings are

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[1] The Japanese writing system is described as orthographically deep because the relationship between characters and the spoken word are remote, although, the syllabic scripts are considered shallow (Cook, 2004, pp. 10-12). Japan has four different writing scripts, namely: Kanji, Hiragana, Katakana and Romaji which are often used together in a piece of writing. Kanji can be considered logographs because they show a unit of meaning, for example 「車」 means car. Whereas, Hiragana and Katakana are syllabic and represent the sounds of Japanese, usually a consonant and a vowel mora. In addition to script formation, Katakana differs from Hiragana in usage as it is almost always used for foreign loanwords; which is also the case in this research instrument (Okada, 1999). Romaji on the other hand allows for the transliteration of Japanese mora into a roman alphabetic representation. Take for example my family name in Japan, the Kanji representation is 「波多江」, the Hiragana 「はたえ」, the Katakana 「ハタエ」 and the Romaji 「hatae」; all of which could represented as /hætaɪe/ using the international phonetic alphabet (henceforth IPA).

explained with rough Japanese equivalents" (1999). However, that is not entirely the case as it is not meaning which is provided but the target English word, albeit written in a Katakana form phonetically representing a possible Romaji spelling [APPENDIX C]. A 'possible spelling' is emphasised, because whilst a number of words on the test may be used interchangeably in Japan by L1UJ for example 'USAGI' 「兎」 and 'RABITTO' 「ラビット」 both meaning 'RABBIT'. Words like 'KASA' 「傘」 and 'ANBURERA' 「アンブレラ」 meaning UMBRELLA are arguably not; the Japanese word 'KASA' 「傘」 is used almost exclusively. It would therefore appear that the English words have been transliterated creating novel spellings that are not always used within Japan; and furthermore that the participants/ readers are unlikely to be familiar with.

FIGURE 1 shows question '46' and '47' of the instrument with an English translation.

ORIGINAL QUESTIONS			
46.	「友人」という意味の "フレンド"	47.	「do」の過去分詞形 "ダン"
TRANSLATIONS			
46.	The meaning of 「friend」 "FURENDO"	47.	The past participle of 「do」 "DAN"

FIGURE 1

FIGURE 2 shows how a spelling test designed in the same manner might look in English

SIMULATED TEST			
Q1.	Please provide the spelling of 「2」 /tuː/	Q2.	Please provide the spelling of the past participle of 「do」 /dʌn/
Q3.	Please provide the spelling of the present participle of 「learn」 /ˈləːnɪŋ/	Q4.	Please provide the spelling of 「$」 /ˈdɒl.ər/

FIGURE 2

Obviously FIGURE 2 is artificial, as one cannot count on IPA symbols being known by the target group. However, it does clearly represent the particular drawback of this instrument as test subjects approaching the spelling of words they do not know may rely on the phonetic prompt. As a result of this encoding process it would not be unsurprising to see TWO/TO/TOO/TU as possible attempts at Q1 [FIGURE 2], in the same way that Q46 [FIGURE 1] might result in FURENDO/FULENDO rather than the target English word. It is thought likely that the instrument was designed in this manner because with a large sample of 333 L2UE a dictation test is difficult to manage, however, this design limitation will have an arguable impact on the results.

PILOT STUDY

Cognisant of De Vaus (2002, p.52) who states "Do not take the risk. Pilot test first" and aware that the research instrument to be used was designed for another context, the author resolved to undertake a pilot study. Firstly, in order to investigate the reliability of the instrument and secondly for the 'trying out' of the instrument allowing for the adjustment of procedures and timings.

Pilot Study: Reliability Of Instrument

The author recognises the significant limitations of using a small number of participants to test-retest the instrument for reliability, however, it is arguable that it better to test with a limited sample than failing to test at all. The adapted spelling test was undertaken twice over a period of two weeks by a group of 3 Japanese students studying English at NCLU; and as their major involved English they were precluded from participating in the later research. A two week period was chosen because it was felt that intervening factors would be limited and ability levels not greatly improved; additionally, as the participants were not given an answer sheet until after the second test and bearing in mind the large number of questions, it would have been challenging for them to remember their previous answers. A correlation was calculated giving a figure of 0.8 which the author accepted as demonstrating reliability.

Pilot Study: Timings

Procedural timings were measured on the first test occasion by the author and rounded up to the nearest minute. This provided an expected duration for various parts of the tests which are reflected in TABLE 1.

	EXPLANATION AND CONSENT CHECK	COMPLETION OF RESEARCH INSTRUMENT 1	COMPLETION OF RESEARCH INSTRUMENT 2	COLLECTION OF HANDOUT	DEBRIEFING AND POST-TEST CONSENT CHECK	ANCILLIARY QUESTIONS	TOTAL
S1	5	2	28	1	4	5	45
S2	4	5	30	1	4	3	48
S3	6	4	27	1	5	10	53
Mean	5	3.7	28.3	1	4.3	6	48.3

TABLE 1

The procedural stages were relatively consistent, however, there was a wide variation in the ancillary questions stage with the number of questions asked by the participants reflecting the duration. It was therefore decided to inform potential participants that they would be required for approximately 50 minutes.

PROCEDURE

Dornyei (2007, pp.113-144) suggests that the management of a procedure can be an influencing factor affecting participant responses; and therefore the author collected the data to ensure consistency. The data collection was undertaken in NCLU between April 19th and June 17$^{\text{th}}$ 2011. Furthermore, McDonough and McDonough (1997, pp.67-68) note that ethics are a vital component in management of procedures and in research; certainly, the potential sample should know why and that they are being requested to involve themselves in this research. Consequently, it was explained to participants that the author was conducting a 'spelling test' as part of research for a small English spelling study, although, it was not explained at this point that the author was specifically looking at the types and proportions of misspellings Japanese L2UE make. Each participant gave verbal permission for data collected to be used for this purpose.

Because participants had varying schedules and studied in numerous buildings across campus, the test location in each case was chosen with participant convenience in mind; which might be termed a limitation of the research design since the conditions differed. However, on each of the 15 occasions the test was undertaken, the location was quiet and private; and the order of collection and debriefing was standardised. Based on the pilot study results, the author explained to participants that they would be required for approximately 50 minutes. Furthermore, the management of the procedure was accomplished using Japanese as it was considered likely that this occurred when Okada (1999) used this instrument to collect data for the 'SAMANTHA' error corpus. Following completion of the test, it was explained to each participant the underlying purpose for the spelling test and consent for their data to be used was re-checked verbally. Lastly, an answer sheet with correct spellings was provided to each participant, however, they were not permitted to check this against the answers they had submitted. The results from instrument one and two were then collated.

RESULTS & DISCUSSION

Research Instrument 1

Various extraneous variables were controlled by capturing background data related to:

1. AGE RANGE

2. GENDER

3. ACADEMIC DISCIPLINE

4. FULL TIME/ PART TIME STUDENT

5. DURATION OF RESIDENCE IN

    THE UNITED KINGDOM (MONTHS)

6. ISLAND OF BIRTH

7. FIRST LANGUAGE

The data captured by 'Research Instrument 1' was used primarily to ensure homogeneity of sample in this n=15 cohort. However, it is arguable that some of these background variables have the potential to influence the spelling test results gathered in 'Research Instrument 2', namely: age range, gender, period of residence in the U.K and L1. Nevertheless, as the research question concentrates on types and proportions of 'major' spelling errors not background variables I provide only a brief discussion here:

- Age

Marinova-Todd, et al., (2000) states that age is often considered the most important variable affecting L2 acquisition and ability; and this has relevance to this study as spelling is obviously one of a number of the component skills of L2 acquisition. However, research has shown that the age related and measured decline in L2 attainment is steepest before age 20 before it levels out (Bialystok and Hakuta, 1994, p.72). Furthermore, Wang notes that "beyond the critical or sensitive period, age ceases to have a systematic effect on L2 acquisition. Instead there is great variability and a lack of linearity in L2 attainment among adult learners"(1999). As my sample are cognitively mature adult L2UE already literate in Japanese and every member was over 20 years old, it was therefore not expected that misspellings would be unduly influenced by this variable.

- Gender

Oxford (1993, p.54) notes that research findings have demonstrated that boys and men spell less accurately than girls and women; and as the sample comprised of n=13 female and n=2 male the type and proportion of major spelling mistakes may have been skewed by this gender distribution. However, research by Rios (2000) demonstrated that while adult females achieve better scores in spelling tests, these differences are not statistically significant. Additionally, more recently Fagerberg (2006, p.21) in her paper on Swedish student misspellings did not identify a gender bias in her results. It was as a consequence expected that any misspellings would not be unduly influenced by this variable.

- Length Of Stay

Sasaki (2007) in her research demonstrates that Japanese L2UE who spent between four and nine months in a ESL rather than EFL context show improvements in L2 writing skills. Indeed, aware that exposure to English might bias his results, Yashima (2002) in earlier research precludes any participants who had spent more than three months in an English speaking environment. It is not known to what extent this may have affected the misspelling results of this study, however, as the sample mean for length of stay in the U.K. was 11.6 months it was accepted that this variable is an influencing factor.

Research Instrument 2

There are a number of methods that have been utilised by researchers to categorise misspellings and which analyse words at different levels. Lecours (1966, p.221) makes use of four simple categories, namely: addition, deletion, substitution and inversion. Ibrahim (1978) highlights amongst other errors, a category of L2UE misspelling which reflects interference from the L1

phonology which are unlikely to occur in L1UE misspellings. Spache (1981) in his 'spelling errors test' makes use of 12 error categories, whilst, Bebout (1985) created a detailed error classification system with eight primary categories and levels of sub-categorisation. However, for the purposes of the study I adapt work by Cook (1999, 2004, p.140) to generate categories to assess the proportions of 'major' spelling mistakes. namely: insertion, omission, insertion and omission, substitution, transposition, grapheme substitution and other [TABLE 2]. There is a limitation with this method as word study to a category is on occasion a subjective choice made by the author.

'MAJOR' SPELLING MISTAKE CATEGORIES (EXAMPLES FROM RESULTS DATA)				
1.	Insertion	I	Example: b u s s i n e s s	Target Word: **business**
2.	Omission	O	Example: a c c o m o d a t i o n	Target Word: **accommodation**
3.	Insertion and Omission	IO	Example: h i g h t s	Target Word: **height**
4.	Substitution	S	Example: g a l l a r y	Target Word: **gallery**
5.	Transposition	T	Example: s e n c e	Target Word: **scene**
6.	Grapheme Substitution	GS	Example: e n i	Target Word: **any**
7.	Other	OTH	Example: s h a i r	Target Word: **sure**

TABLE 2

n=15 participants undertook a spelling test with 53 questions. Post-test all data was collated and entered onto a spreadsheet in a similar manner to the original Okada 'SAMANTHA' corpus. Figure 3 shows a screenshot of two columns from the spreadsheet.

Questions 1-13				
TARGET WORD	**h e i g h t**	**CODE**	**b u s i n e s s**	**CODE**
PARTICIPANT A	@		@	
PARTICIPANT B	@		buisiness	INS
PARTICIPANT C	hight	OM	bisness	GS
PARTICIPANT D	hight	OM	@	
PARTICIPANT E	@		@	
PARTICIPANT F	@		@	
PARTICIPANT G	@		bussiness	INS
PARTICIPANT H	@		@	
PARTICIPANT I	@		@	
PARTICIPANT J	@		@	
PARTICIPANT K	@		@	
PARTICIPANT L	@		@	
PARTICIPANT M	@		@	
PARTICIPANT N	hights	IO	@	
PARTICIPANT O	hight	OM	@	
CORRECT (W)	11		12	
% CORRECT	73.33		80.00	

FIGURE 3

Of the total 795 words analysed in this study, 569 were spelled correctly; in other words only 28.5% of the total were misspellings. The misspellings were then error coded using the categories defined in TABLE 3. The types and proportions of spelling mistakes are represented in FIGURE 4.
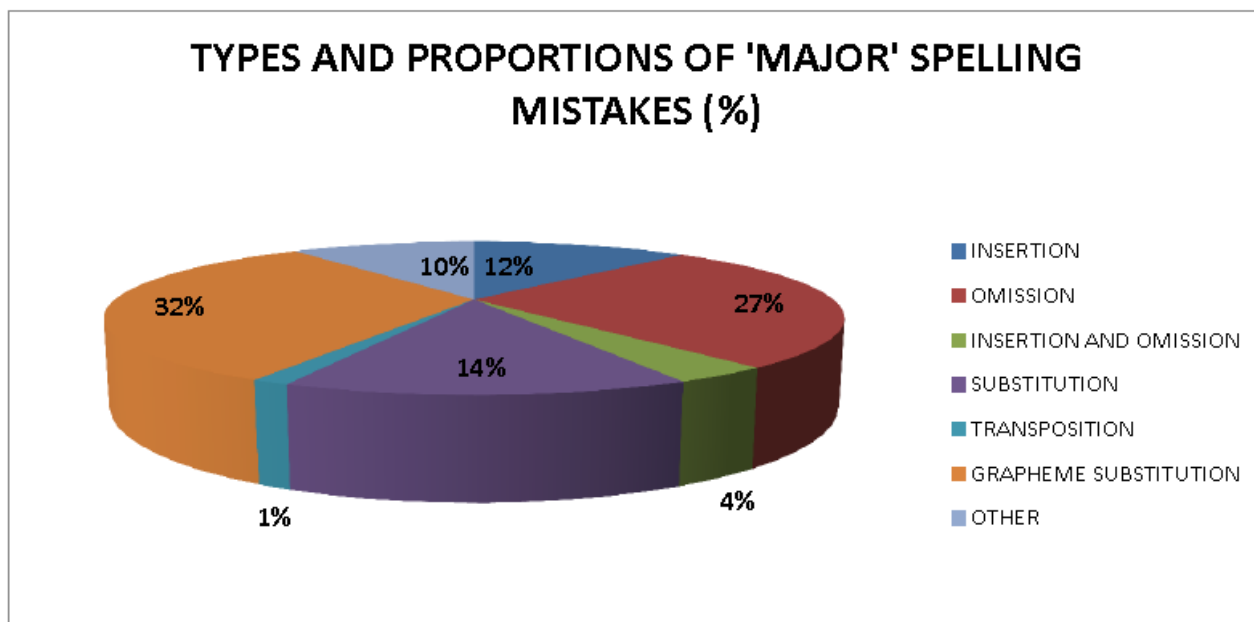

FIGURE 4

FIGURE 4 illustrates that the category where most mistakes occur in my sample were 'GRAPHEME SUBSTITUTION' such as 「extaxi」 (ecstasy) or 「pronaunceasion」 (pronunciation). In second position was 'OMISSION' which included 「defnite」 (definite) and 「hight」 (height). This was followed by 'SUBSTITUTION' like 「separate」 (separate) and 「negrect」 (neglect). 'INSERTIONS' was placed fourth and spellings included 「habbit」 (habit) and 「scincerely」 (sincerely). The category 'OTHER' was reflected through attempts such as 「embalance」 (embarrass) or 「arubatrous」 (albatross). The final two categories were respectively 'INSERTIONS AND OMISSIONS' 「pronouciation」 (pronunciation) and 'TRANSPOSITIONS' 「hadnkerchief」 (handkerchief). The percentage and actual number of misspellings in each category are ranked below in TABLE 3.

	NUMBER OF MISSPELLINGS	%
GRAPHEME SUBSTITUTION	72	32
OMISSION	61	27
SUBSTITUTION	32	14
INSERTIONS	27	12
OTHER	23	10
INSERTIONS AND OMISSIONS	8	4
TRANSPOSITIONS	3	1
	TOTAL: 226	TOTAL: 100

TABLE 3

As the type and proportion of 'major' spellings errors for the sample are now known, it is possible to briefly analyse the data to discover whether there are features characteristic of the L1 in the results. However, this task is complex because many of the misspellings a L1UE and L2UE make are indistinguishable from one another (Ibrahim, 1978). Consider for example the spelling of 'gallery', Mitton (1996, p.55) notes that his data reveals that the most popular L1UE misspelling is 'gallary' which also happens to be the most frequent misspelling appearing in the data collected for this study. Additionally, some words are difficult for both L1UE and L2UE, work by Kallom (1917) and Bebout (1985) identified consonant doubling as a cause of misspelling; and in fact, all 10 of the misspelled attempts at the word 'accommodation‟ in the data were characterised by this error.

Fortuitously, work by a number of researchers (Hendry and Green, 1993; Cook, 1999, 2004, p.142; Okada, 2005; Mitton and Okada, 2007) have identified a number of characteristics that aid analysis of the data, two are discussed below:

(i). Firstly, Japanese mora are in general formed by consonant+vowel (henceforth CV); and therefore Japanese L2UE may insert an extra vowel when they encounter English consonantal clusters, for example 'dr' might be attempted as dar/dir/dur/der/dor dependent on the target word. As all sentence final syllables cluster with a vowel, excepting the five vowel sounds and the character 「ん」 /ŋ/, there is also a tendency add an extra vowel to the end of an word, for example the word 'drink' might be spelled 'dorinku'. Neatly, representing this CV characteristic is the word 'albatross' in the data where misspellings include 'arubatross', 'arubatrous' and 'albatoros'.

(ii).Secondly, a well-known characteristic of Japanese is the lack of a /l/ and /r/ or /b/ and /v/ phoneme contrast; and this can cause selection difficulties when the target English word requires a choice, for example 'violin' might be spelled 'biolin'. If we look at just the /l/ and /r/ phonemes, an analysis of the data shows 9.8% of the total number of misspellings are characterised by this error type; as an example, the /l/ in the word 'neglect' is replaced by /r/ in five out of six misspellings. The results of the Okada (2004) corpus analysis of 'Japanese EFL Writers' identified similar substitution errors.

Interestingly, there is another characteristic which reflects a particular L1 feature in the data. The word 'spaghetti' is misspelled 11 times, the silent /h/ and consonant doubling the error type in the majority of cases. However, this particular word represents a peculiarly Japanese phenomenon, whereby some loanwords incorporated and used frequently have a multitude of Katakana spellings. Masuyama, et al., (2004) discovered six variants of the word 'spaghetti' in common use in their research analysing 300,556 Japanese internet documents; the Japanese dictionary on my computer lists three. So whilst writers may know how to spell the word 'spaghetti' in Katakana, the version they know may not help them to produce the target word in English even if it is relied upon; and therefore possibly leading to false 'errors of performance'.

Lastly, in this section, a further limitation of the instrument is discussed which has demonstrably skewed the results. Question 42 of the test required the participant to attempt the word 'threat'. Of the nine errors, seven were firstly categorised as 'SUBSTITUTION' where they spelled 'thread'. However, as there is a /p/ and /b/ phonemic contrast in Japanese it was considered strange that the sample would make such a consistent error. A re-reading of the actual instrument discovered that the problem lay in

the design. The spelling test makes use of quotation marks to enclose a Katakana word, for example "フレンド" [see FIGURE 1]; however, quotation marks closely resemble the marker used to denote a change from voiceless to voiced consonant, in this case 「 ト 」 /to/ appeared to be 「 ド 」 /do/ and the Katakana transliteration therefore appeared to be 'SUREDDO'. Ironically, identifying this limitation did demonstrate that participants were making use of the Katakana prompts when attempting the spellings of various words.

CONCLUSION

This study collected the misspellings of a specific group of L2UE making use of a spelling test designed by Okada (1999) to capture data from L1UJ; however, minor adaptations were made in order to capture specific background information. The instrument was comprised of relatively simple one syllable words as well as complex and arguably unknown vocabulary. Interestingly, of the 795 words collected 71.5% of these were spelled correctly, however, as University students we can assume the sample were as Haggen neatly states "long acquainted with the reality of the irregularity of English spelling" (1993). Additionally, this figure could potentially be ascribed to the general exposure to English in an ESL rather than EFL environment; indeed, the Okada (1999) sample in Japan only had an overall spelling accuracy rate of 55.6%. This data was analysed and coded by the author into seven categories in order to answer the overall research question which showed that 'grapheme substitution', 'omission' and 'substitution' accounted for more than two thirds of the misspelling types in the data. The least common error made by the sample were transpositions, with only three examples identified. The data also revealed that many of the misspellings were indistinguishable from those made by L1UE, for example 「gallary」 for the target 'gallery' which accords with data from previous studies (Nyamasyo, 1994; Mitton, 1996, p.55). The features of the spelling errors further demonstrated that characteristics of the L1 (Japanese) were identified across a number of these spelling categories, namely: vowel insertions, /l/ and /r/ substitutions as well as problems with words containing unstressed vowels and loanword inconsistency. In other words, in this small sample, there was evidence of an L2UE spelling accent. This was not unsurprising as Okada (2004) notes that the Japanese often resort to Romaji spelling when the target word is unknown, phonological cues are unavailable and the writer does not possess sufficient meta-linguistic knowledge.

Undertaking this study has led to a deeper understanding of L2UE in the Japanese context; and this has pedagogic value in one's own learning and teaching environment. The data gathered also adds to results generated by the growing number of papers focusing on L2UE spelling and misspelling in this field. Where previously the author and other practitioners may have viewed spelling errors in absolute terms where a word is either correct or incorrect (Milroy and Milroy, 1999), developing an awareness of the 'spelling accent' and specific L1 characteristics appearing in the L2UE writing allows one to develop methods of instruction that scaffold the learner spelling strategies; and this is important because "[l]eaving the teaching of spelling to haphazard correction cannot be in the students" best interests" (Cook, 1999) .

FURTHER WORK

- Repeat Study

It is arguable that when Okada (1999) created the 'SAMANTHA' error corpus, which contains the misspellings of n=333 Japanese L2UE, a large sample was recruited in order to enhance the reliability of the data. It would be useful to repeat this study in the U.K. with a larger sample to ensure that results can be generalised and utilise a L1UE control group for comparability.

- Further Analysis Of Error Corpus

In order to better represent the reality of the data, it was felt that the comprehensive Bebout (1985) 'error coding system' should have been implemented as an alternative to the category format implemented in this study. Additionally, applying error categories to the 'SAMANTHA' error corpus would enhance this publically available data allowing for a more detailed analysis and comparison with data from other contexts.

BIBLIOGRAPHY

Al-Shabbi, A., 1994. A Communicative Approach to Spelling for Arab Students of English. *Journal of King Saud University- Education, Science & Islamic Studies*, 6(2), pp.21-33.

Barry, C. and De Bastiani, P., 1997. Lexical priming of nonword spelling in the regular orthography of Italian. *Reading and Writing: An Interdisciplinary Journal*, 9, pp.499-517.

BBC, 2011. *Cardiff trading standards warn of counterfeit wine*. [online] (Last updated 04.43 PM on 03 April 2011) Available at: <http://www.bbc.co.uk/news/uk-wales-12952111>[Accessed 28 May 2011].

Bebout, L., 1985. An error analysis of misspellings by learners of English as a first and as a second language. *Journal of Psycholinguistic Research*, 14(6), pp.569-593.

Bialystok, E. and Hakuta, K., 1994. *In other words: The science and psychology of second language acquisition.* New York: Basic Books.

Birch, B., 2007. *English L2 Reading*. Mahwah: Lawrence Erlbaum Associates, Inc.

Block, G., 1999. Effective Legal Writing. 5th edition. Eagan: Foundation Press.

Brown, A. 1988. A Singaporean Corpus of Misspellings: Analysis and Implications. *Journal of the Simplified Spelling Society*, 3, pp.4-10.

Cook, V., 1997. L2 Users and English Spelling. *Journal of Multilingual and Multicultural Development*, 18(6), pp.474-488.

Cook, V., 1999. *Teaching Spelling*. [online] Available at:

<http://homepage.ntlworld.com/vivian.c/Writings/Papers/TeachingSpelling..htm> [Accessed 04 May 2011].

Cook, V., 2004. *The English Writing System*. London: Hodder Education.

Cook, V. et al., 2006. Do bilinguals have different concepts? The case of shape and material in Japanese L2 users of English. *International Journal of Bilingualism*, 10(2), pp.137-152.

Crystal, D., 1992. *THE CAMBRIDGE ENCYCLOPEDIA OF LANGUAGE*.Cambridge: Cambridge University Press.

Davis, E., 1941. English Spelling. *The Modern Language Journal*, 25(8), pp.628-632.

De Vaus, D., 2002. *SURVEYS IN SOCIAL RESEARCH*, 5th edition. London: Routledge.

Dornyei, Z., 2007. *Research methods in applied linguistics*. Oxford: Oxford University Press.

Fagerberg, I. 2006. *English Spelling in Swedish Secondary School.* Karlstad: Karlstads University Press.

Fashola, O. Drum, P. Mayer, R. and Kang, S., 1996. A Cognitive Theory of Orthographic Transitioning:

Predictable Errors in How Spanish-Speaking Children Spell English Words. *American Educational Research Journal*, 33(4), pp.825-843.

Granger, S. and Wynne, M., 2000. Optimising Measures of Lexical Variation in EFL Learner Corpora. In: J.M.Kirk, ed. 2000. *Corpora Galore*. Amsterdam: Rodopi. pp.249-258.

Haggan, M., 1993. Actual and Self-perceived Spelling Accuracy in Kuwaiti EFL Students: Some Practical and Theoretical Implications. *TESL CANADA JOURNAL*, 10(2), pp.55-70.

Hamilton, F., 1918. *DIVISION OF WORDS-RULES FOR THE DIVISION OF WORDS AT THE ENDS OF LINES, WITH REMARKS ON SPELLING, SYLLABICATION AND PRONUNCIATION*. [e-book] Chicago: United Typothetae of America. Available at: Project Gutenberg <http://www.gutenberg.org/ebooks/17016 > [Accessed 12 April 2011].

Hatcher, D. and Mallison, J., 2010. *WORDS YOU SHOULD KNOW HOW TO SPELL*. Avon: F+W Media, Inc.

Hendry, D. and Green, T., 1993. Spelling mistakes: how well do correctors perform?. In: S.Ashlund. K.Mullet. A.Henderson. E.Hollnagel. and T.White, eds. 1993. *INTERACT '93 and CHI '93 conference companion on Human factors in computing systems* (CHI '93). New York: ACM.

Ibrahim, M., 1978. Patterns in spelling errors. *ELT*, 32(3), pp.207-212.

James, C. and Klein, K., 1994. Foreign language learners; spelling and proof-reading strategies. *Contrastive Linguistics*, 29, pp.31-46.

Kallom, A., 1917. Some causes of misspellings. *Journal of Educational Psychology*, 8(7), pp.391-406.

Lecours, A., 1966. Serial order in writing - a study of misspelled words in "developmental dysgraphia". *Neuropsychologia*, 4, pp.221-241.

Mark, R., 1998. Spelling Accuracy in Japanese EFL Students: Some Practical and Theoretical Implications. *Studies in Humanities, Culture and Communication*, 32, pp.133-142.

Masuyama, T. Sekine, S. and Nakagawa, H., 2004. Automatic construction of Japanese KATAKANA variant list from large corpus. In: Association for Computational Linguistics, *Proceedings of the 20th international conference on Computational Linguistics*. Geneva: Switzerland.

Marinova-Todd, S. Marshall, D. and Snow, C., 2000. Three Misconceptions About Age and L2 Learning. *TESOL Quarterly*, 34(1), pp.9-34.

McDonough, J. and McDonough, S., 1997. *RESEARCH METHODS FOR ENGLISH LANGUAGE TEACHERS*. London: Hodder Education.

Milroy, J. and Milroy, L., 1999. Authority in Language. 3rd edition. London: Routledge.

Mitton, R., 1996. *English Spelling and the Computer*. London: Longman Group Limited.

Mitton, R. and Okada, T., 2007. *The adaptation of an English spellchecker for Japanese writers.* In: Symposium on Second Language Writing, 15-17 September 2007. Nagoya, Japan.

Mourtaga, K., 2004. *Investigating writing problems among Palestinian students: Studying English as a foreign language.* Bloomington: Author House.

NCLU (Newcastle University), 2011. *Japan: Entry & English Language Requirements*. [online] Available at: <http://www.ncl.ac.uk/international/country/asia/japan/entry.htm > [Accessed 27 June 2011].

Nyamasyo, E., 1994. An analysis of the spelling errors in the written English of Kenyan pre-university students. *Language, Culture and Curriculum*, 7(1), pp.79-92.

Okada, T., 1999. *Samantha Error Corpus.*[online] Available at: <http://www.intcul.tohoku.ac.jp/okada/corpora/Samantha/Samantha-top.html> [Accessed 3 March 2011].

Okada, T., 2002. Remarks on Japanese Poor Spellers of English. *Yamagata English Studies*, 7, pp.21-41.

Okada, T., 2004. A Corpus Analysis of Spelling Errors Made by Japanese EFL Writers. *Yamagata English Studies*, 9, pp.17-36.

Okada, T., 2005. A Corpus-based Study of Spelling Errors of Japanese EFL Writers with Reference to Errors Occurring in Word-initial and Word-final Positions. In: V.Cook and B.Bassetti, eds. 2005. *Second Language Writing Systems*. Clevedon: Multilingual Matters. pp.164-183.

Oxford, R., 1993. Gender Differences in Styles and Strategies for Language Learning: What Do They Mean? Should We Pay Attention? In: J.Alatis, ed. 1993. *Georgetown University Round Table on Languages and Linguistics (GURT) 1993: Strategic Interaction and Language Acquisition.* Washington: Georgetown University Press. Ch.39.

Paton, G., 2008. University students 'cannot spell'. *The Telegraph*, [online](Last updated 02.23 PM on 06th August 2008) Available at: <http://www.telegraph.co.uk/news/2510704/University-students-cannot- spell.html> [Accessed 21 May 2011].

Perin, D., 1983. Phonemic segmentation and spelling. *British Journal of Psychology*, 74, pp.129-144.

Rios, D., 2000. *Gender Differences in Spelling Achievement*. M.A. Kean University.[online] Available at: <http://www.eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_&ERICExtSearch_Searc hV alue_0=ED438563&ERICExtSearch_SearchType_0=no&accno=ED438563> [Accessed 10 June 2011].

Sasaki, M., 2007. Effects of Study-Abroad Experiences on EFL Writers: A Multiple-Data Analysis. *The Modern Language Journal*, 91(4), pp.602-620.

Spache, G., 1981. 2nd ed. *Diagnosing and correcting reading disabilities*. Boston : Allyn and Bacon.

Utley, T., 2011. The clatter of the keys, the ping of the bell, the glide of the carriage. Could anyone love a computer like I loved my clunky old typewriter? *The Daily Mail Online*, [online] (Last updated 08.01 AM on 29th April 2011) Available at: <http://www.dailymail.co.uk/debate/article-1381787/The-clatter-keys-ping-bell-glide-carriage-Could-love-like-I-loved-clunky-old-typewriter.html#ixzz1MuE1eeWq> [Accessed 21 May 2011].

Vallins, G.H., 1954. *Spelling*. Tonbridge: ANDRE DEUTSCH LIMITED.

Van Berkel, A., 2005. The Role of the Phonological Strategy in Learning to Spell in English as a Second

Language. In: V.Cook. and B.Bassetti, eds. 2005. *Second Language Writing Systems*. Clevedon: Multilingual Matters Ltd. pp.97-121.

Wang, W., 1999. Age and Second Language Acquisition in Adulthood: The Learning Experiences and Perceptions of Women Immigrants. *TESL Canada Journal,* 16(2), pp.1-19.

Wang, M. and Geva, E., 2003. Spelling performance of Chinese children using English as a second language: Lexical and visual-orthographic processes. *Applied Psycholinguistics*, 24(1), pp.1-25.

Wister, O., 1907. *How Doth the Simple Spelling Bee*. [e-book] Norwood: The Macmillan Company.Available at: Project Gutenberg <http://www.gutenberg.org/ebooks/23923> [Accessed 12 April 2011].

Yashima, T., 2002. Willingness to Communicate in a Second Language: The Japanese EFL Context. *The Modern Language Journal*, 86(i), pp.54-66.

APPENDIX A

英語スペリングに関する調査

AN INVESTIGATION INTO ENGLISH SPELLING

数字を〇で囲んで下さい。 **PLEASE CIRCLE THE NUMBER THAT APPLIES**

A.年齢 **AGE**

1. 20-30   2. 31-40   3. 41-50   4. 51-60

B.性別 **GENDER**

1. 女   2. 男

   FEMALE   **MALE**

C.参加者の専攻は英語ですか **IS YOUR SUBJECT MAJOR ENGLISH?**

1. はい   2. いいえ

   YES   **NO**

D.大学生タイプ **STUDENT TYPE**

1. フルタイム   2. パートタイム

   FULL TIME   **PART TIME**

E.イギリス住みはどのくらいですか **HOW LONG HAVE YOU LIVED IN THE UK?**

MONTH(S)

1. 半年以下   2. 6-12(月)   3. 13-18(月)   4. 19-24(月)

   LESS THAN ½ YEAR

5. 25-30(月)   6. 31-36(月)   7. 三年間以上 **MORE THAN 3 YEARS**

F.生地 **BIRTHPLACE**

1. 北海道   2. 本州   3. 四国   4. 九州

   HOKKAIDO   **HONSHU**   **SHIKOKU**   **KYUSHU**

5. 南西諸島

   RYUKYU ISLANDS INCLUDING

G.参加者の母国語は日本語ですか **IS JAPANESE YOUR MOTHERTONGUE?**

1.   はい   2.   いいえ

            YES   **NO**

APPENDIX B

RESEARCH INSTRUMENT ② SPELLING TEST
NOTE: THIS PORTION OF THE TEST IS <u>UNADAPTED</u>

(7) 英単語をつづって下さい。[知らない単語の場合、考え込まずに発音を頼りにつづって下さい]

1. 「高さ、標高、背丈」を表す "ハイト" — **HEIGHT**
2. 「職業、仕事、職務」などを表す "ビジネス" — **BUSINESS**
3. 「心から」という意味や、手紙のしめくくり 「敬具」の意味で使う"シンシアリー" — **SINCERELY**
4. 「必要な、なくてはならない」という意味の "ネセサリー" — **NECESSARY**
5. 「隔てる、分ける、引き離す」という意味の "セパレート" — **SEPARATE**
6. 「順応、調整、便宜、親切」という意味の "アコモデーション" — **ACCOMMODATION**
7. 「失望させる、妨げる」という意味の "ディサポイント" — **DISAPPOINT**
8. 「まごつかせる、困らせる」という意味の "エンバラス" — **EMBARRASS**

9. 「しばしば、頻繁に」という意味の "オフン" — **OFTEN**
10. 「離す、離れる」などの意味の "オフ" — **OFF**
11. 「図表、図式」などの意味の "グラフ" — **GRAPH**
12. 「十分な、全く、すっかり」などの意味の "イナフ" — **ENOUGH**
13. 「(雨)傘」という意味の "アンブレラ" — **UMBRELLA**
14. 「触覚、空中線」などの意味の "アンテナ" — **ANTENNA**
15. 「喜劇の、漫画」などの意味の "コミック" — **COMIC**
16. 「固体の、密で堅い」という意味の "ソリッド" — **SOLID**
17. 「はつかだいこん」という意味の "ラディッシュ" — **RADISH**
18. 「習慣、癖」などの意味の "ハビット" — **HABIT**
19. 「交通、往来、運輸」などの意味の "トラフィック" — **TRAFFIC**
20. 「うさぎ」という意味の "ラビット" — **RABBIT**
21. 「アホウドリ」という意味の "アルバトロス" — **ALBATROSS**
22. 「画廊、見物人」などという意味の "ギャラリー" — **GALLERY**

ANSWERS HAVE BEEN PROVIDED TO SHOW THE TARGET WORD FROM EACH QUESTION.

23.	「はさみ」という意味の "シザーズ"	SCISSORS
24.	「展覧会、公開」などという意味の "エキジビション"	EXHIBITION
25.	「上出来の、繁栄している」という意味の "サクセスフル"	SUCCESSFUL
26.	「一定の、はっきりとした」という意味の "デフィニット"	DEFINITE
27.	「政治家」という意味の "ポリティシアン"	POLITICIAN
28.	「無我夢中、大喜び、恍惚」などという意味の "エクスタシー"	ECSTASY
29.	「無視する、軽んじる」という意味の "ニグレクト"	NEGLECT
30.	「訪問者、外来者」という意味の "ビジター"	VISITOR
31.	「ハンカチ」という意味の "ハンカチーフ"	HANDKERCHIEF
32.	「笑い」という意味の "ラフター"	LAUGHTER
33.	「来る(come)」の-ing 形 "カミング"	COMING
34.	「掘る(dig)」の-ing 形 "ディギング"	DIGGING
35.	「食事すること、正餐」という意味の "ダイニング"	DINING
36.	「赤ん坊(baby)」の複数形 "ベイビーズ"	BABIES
37.	「発音」という意味の "プロナンシィエーション"	PRONUNCIATION
38.	「緑」という意味の "グリーン"	GREEN
39.	「清潔な、汚れていない」という意味の "クリーン"	CLEAN
40.	「光景、眺め、場面」などの意味の "シーン"	SCENE
41.	「扱う、対応する」などの意味の "トリート"	TREAT
42.	「脅迫、脅し」などの意味の "スレット"	THREAT
43.	"スパゲッティ"	SPAGHETTI
44.	「目」という意味の "アイ"	EYE

45. 「戦い、けんか」などの意味の
"ファイト"　　　　FIGHT

46. 「友人」という意味の
"フレンド"　　　　FRIEND

47. 「do 」の過去分詞形
"ダン"　　　　DONE

48. 「何か、どれか」という意味の
"エニー"　　　　ANY

49. 「偉大な、ものすごい」などの意味の
"グレート"　　　　GREAT

50. 「確かな、確信して」などの意味の
"シュアー"　　　　SURE

51. 「女性」の複数形
"ウィメン"　　　　WOMEN

52. 「回答、答え」などの意味の
"アンサー"　　　　ANSWER

53. 「美しい」という意味の
"ビューティフル"　　　　BEAUTIFUL

＊ご協力、本当に有り難うございました。

APPENDIX C

RESEARCH INSTRUMENT ②

TARGET WORD 'ROMAJI' SPELLING EXAMPLES ARE WRITTEN BELOW

（7）英単語をつづって下さい。（知らない単語の場合、考え込まずに発音を頼りにつづって下さい）

1. 「高さ、標高、背丈」を表す
   "ハイト"　　　　　　　　　HAITO

2. 「職業、仕事、職務」などを表す
   "ビジネス"　　　　　　　　BIJINESU

3. 「心から」という意味や、手紙のしめくくり
   「敬具」の意味で使う"シンシアリー"　SHINSHIARI—

4. 「必要な、なくてはならない」という意味の
   "ネセサリー"　　　　　　　NESESARI —

5. 「隔てる、分ける、引き離す」という意味の
   "セパレート"　　　　　　　SEPARE—TO

6. 「順応、調整、便宜、親切」という意味の
   "アコモデーション"　　　　AKOMODE—SHON

7. 「失望させる、妨げる」という意味の
   "ディサポイント"　　　　　DISAPOINTO

8. 「まごつかせる、困らせる」という意味の
   "エンバラス"　　　　　　　ENBARASU

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9. 「しばしば、頻繁に」という意味の
   "オフン"　　　　　　　　　OFUN

10. 「離す、離れる」などの意味の
    "オフ"　　　　　　　　　　OFU

11. 「図表、図式」などの意味の
    "グラフ"　　　　　　　　　GURAFU

12. 「十分な、全く、すっかり」などの意味の
    "イナフ"　　　　　　　　　INAFU

13. 「(雨)傘」という意味の
    "アンブレラ"　　　　　　　ANRURERA

14. 「触覚、空中線」などの意味の
    "アンテナ"　　　　　　　　ANTENA

15. 「喜劇の、漫画」などの意味の
    "コミック"　　　　　　　　KOMIKKU

16. 「固体の、密で堅い」という意味の
    "ソリッド"　　　　　　　　SORIDDO

17. 「はつかだいこん」という意味の
    "ラディッシュ"　　　　　　RADISSHU

18. 「習慣、癖」などの意味の
    "ハビット"　　　　　　　　HABITTO

19. 「交通、往来、運輸」などの意味の
    "トラフィック"　　　　　　TORAFIKKU

20. 「うさぎ」という意味の
    "ラビット"　　　　　　　　RABITTO

21. 「アホウドリ」という意味の
    "アルバトロス"　　　　　　ARUBATOROSU

22. 「画廊、見物人」などという意味の
    "ギャラリー"　　　　　　　GYARARI—