

学習者コーパスに基づく音声付き発信型電子教材の作成
に関する研究

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はしがき

この2年間の研究は3つの目的があった。第一に、中学生、高校生、大学生から英語圏での日常生活に必要な発話状況を想定し、発話状況別に口語データを含む発信データを収集し、学習者コーパスを作成することであった。第二に、Think-Aloud 法や学習者コーパスにより得られる発信頻度数をもとに、良く学習されているチャンク（定型表現、イディオム、連語など）を抽出することであった。第三に、学習者へのインプットとして最も重要な中学・高校の教科書を電子化し、教科書で最もよく教えられているチャンクと学習者が良く学習しているチャンクとを比較検討し、その上で、日常生活に必要なチャンクをどのように教示すれば、効果的かを各種の実験研究によって検討し、電子教材を作成していくことであった。

第一の目的である学習者コーパス作成(約13.7メガバイト)は、2年間という短期間ではあったが、完成した。口語データはすべて転写し、タグ付けを行いコーパス化した。口語データの他に、電子メール、インターネットを介しての対話 (computer-mediated communication 以下 CMC と略)、英文日記、英文にるエッセイ、感想文、絵を提示して発信させた英文などをすべてコーパス化した。また、ホームページ上に練習教材を提示し、Common Gateway Interface (CGI)により、数多くの中学、高校に呼びかけ、データを収集しようとしたが、英語教育にコンピュータを使用している学校がまれで、CGIによるデータ収集は1年度で断念せざるを得なかった。しかし、研究協力者の努力により、大規模な学習者コーパスが完成したことは特筆に値する。この学習者コーパスはCD-ROM化したので、要請に応じ、公開できる状況にある。今回のタグ付けは、品詞タグのみであるので、grammatical parsing による tree タグ、語用タグなどを追加し、学習者コーパスを充実させていく予定である。このような本格的なタグの付いた学習者コーパスは皆無であるので、わが国の英語教育の基礎研究に益するコーパスとして期待されるものである。また、日本の英語教育の最終到達目標が NHK などの講師として活躍された大学教員の英語運用能力を指すと仮定し、本研究にも関連があるので、『達人コーパス』(約8万語)も参考として作成し、学習者の英語との比較も試みた。

第二の目的は、学習者コーパスの頻度数と Think-Aloud 法などを用いてチャンクを抽出することであった。この研究でチャンクに注目したのは、次のような英語教育学の理論に基づくものであった。英語教育学では、英語学習者の持っている言語知識には2種類あるというのが定説である。言語の正確さを生み出

す文法知識などのような明示的知識(Explicit Knowledge)と言語コミュニケーションに必要なことばの流暢さの源泉となっている暗黙の知識(Implicit Knowledge)の2種類がある。学習者が暗黙の知識として記憶に蓄えているチャンクの認知的な証拠として、チャンクは発話速度が早いということは本研究でも実験的に検証できた。しかし、そうしたチャンクの多くは、'go to the shopping'のように、実験データではエラーとしてしか検出できなかった。学習者コーパスで抽出したチャンクは、教場で定型表現や慣用句の基本として繰り返し教えられているものの内、極めて限られたものであった。従って、表現のヴァリエーションを教示する電子教材を心がけた。

第三の目的は、学習者へのインプットとして最も重要な教科書を電子化し、教科書コーパスを作成し、教科書で教えられている発話行為に注目し、学習者が教示されたインプットをどの程度インテイクし、メッセージ発信に用いているのかを調査した。その結果、*thanking, apologizing, refusing, requesting, offering* などの日常生活に欠かせない発話行為の表現も十分マスターされていないことが判明した。また、自動詞、副詞(句)など表現にヴァリエーションをつけていく力がないこと、状況に適した表現の選択が十分できないことも判明した。音声面では、イントネーションによる意味の違いなども理解されていなかった。そこで、学習者の弱点を補う電子教材として、*thanking, apologizing, refusing, requesting, offering* の状況で、重要な定型表現や連語、慣用句がでてくる場面設定をとり、電子練習教材を作成した。アニメーションやアニメ教材、口語による教示、CGI による自己診断の機能をもたせ、極力マルチメディア化を心がけた。教材の一部は、<http://163.47.27.25/> にて公開している。今後も同じサイトで、電子教材の充実を図っていく。

本研究ではさらに最近の言語学で注目されている最適理論と学習者言語を関連づけようと当初提案していた。きわめて厳密な理論であるため、*be*-動詞の文法判断には理論的な関連が認められたが、研究協力者等が収集した学習者の英語全般には関連付けることができなかった。こうした最新の言語理論と言語習得は深層で関連しているという見方も出来るため、今後の課題として考察していきたい。

学習者コーパスと教科書コーパスの作成は、分担者と協力者全員が参加した。斎藤敏治は、電子教材の作成と品詞タグのためのプログラミングを担当した。その他の分担者と協力者は、品詞タグには CLAWS7、語彙解析には WordSmith、CMC データには CHILDES、統計分析には SPSS を使用した。また、実験デ

一夕の解析とコーパス分析は、20種のリサーチに分割し、分担者と協力者が複数の研究を分担した。

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学習者コーパスに基づく音声付き発信型電子教材の作成

| | | |
|--|----------------------------|----------|
| 目次 | | |
| はしがき | | i |
| 研究発表リスト | | iv |
| 田辺洋二 | 「口語英語教育とシラバス」 | 1 |
| 斎藤敏治 | 「語彙解析ツールの作成」 | 12 |
| 斎藤敏治 | 「インターネット上における英語教育教材の開発」 | 58 |
| 原田康也 | 「教科教育情報化の4段階推移過程：英語教育の情報化」 | 75 |
| 中野美知子・大和田和治 | 「チャンクに関する古典的先行研究のまとめ」 | 91 |
| CLAWS 7 による POS タグ付けの例 | | 102 |
| Kazuo Yukina, “A Need Analysis Focusing on Motivation: Establishing New Goals and Objectives” | | 104 |
| Norifumi Ueda, “Prototype Effects in Understanding Word Meaning” | | 113 |
| Naoko Saito, “The Learning Effects of Unknown Word Inference Strategy in Reading” | | 131 |
| Koichi Ano, “A Study of the Output Analysis: Cognitive Processes of Speaking a Foreign Language” | | 143 |
| Michiko Nakano and Kyung-Ja Park, “A Reanalysis of Grammaticality Judgements Test Concerning Dative Shifts among Korean, Japanese and Chinese Learners of English” | | 167 |
| Kyung-Ja Park and Michiko Nakano, “A Study of Pragmatic Functions of Apology Expressions among Japanese and Korean Learners of English” | | |

| | |
|--|-----|
| | 184 |
| Yoshiro Hamaoka, "Can Japanese Students Pass the entrance Examinations for Universities?" | 202 |
| Kazuo Yukina, "Technique, Exercises and Materials in New Phonics for Beginners" | 211 |
| Kazuharu Owada, "A Study of the Acquisition of Unaccusative Verbs break and fall by Japanese Learners of English" | 239 |
| Norifumi Ueda, Noki Miyasaka and Tae Yamazaki, "L2 Input and Output: Do L2 Textbooks Contain Enough Syntactic Information?" | 258 |
| Koichi Ano, "A Study of Listening and Speaking Processes in a Foreign Language: Dialogues between Japanese Senior High School Learners and Native Speakers of English" | 271 |
| Naoko Saito, "A Corpora-based Study of Discourse: Picture Card Elicitation" | 277 |
| Yoshiro Hamaoka, "A Study of Textbook Analyses (1): Readability Scores and Lexical Development" | 288 |
| Kazuharu Owada et al., "A Study of Textbook Analyses (2): 'Thanking,' 'Apologies,' 'Requests,' 'Offers,' in Japanese Junior High School Textbooks" | 300 |
| Koichi Ano, et al., "A Study of Textbook Analyses (3): 'Thanking,' 'Apologies,' 'Requests,' 'Offers,' in Japanese High School Textbooks" | 306 |
| Norifumi Ueda et al., "A Study of Textbook Analyses (4): The Frequency of Verb Patterns in Junior High School Textbooks" | 312 |
| Ryo Yoshimoto, "A Study of Analog/Digital Copying" | 319 |
| Ryo Yoshimoto, "A Study of Video-conferences" | 328 |

| | |
|--|-----|
| Katsura Ishikawa et al., “A Study of EFL Discourse Using Corpora (3): An Analysis of Written Data by Japanese Junior High School Students” | 336 |
| Kazuharu Owada, et al., “A Study of EFL Discourse Using Corpora (4): An Analysis of Written Data by Japanese High School Students” | 350 |
| Kazuharu Owada et al., “A Study of Textbook Analyses (5): The Frequency of Verb Patterns in High School Textbooks” | 362 |
| Michiko Nakano, et al., “A Study of EFL Discourse Using Corpora (6): An Analysis of Discourse Completion Tasks” | 368 |
| Michiko Nakano, et al., “A Study of EFL Discourse Using Corpora (7): An Analysis of E-mail Discourse and Variation of Expressions” | 386 |
| Norifumi Ueda, “ A Case Study of EFL Learning among Korean and Japanese Learners (4): Vocabulary Acquisition” | 398 |
| Kazuharu Owada, “Japanese Learners’ Conceptualization of Unaccusative Verbs: open and close” | 409 |

科研報告書論文

タイトル「口語英語教育とシラバス」

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1. はじめに：わが国の口語英語教育とその背景

「口語英語」とは Spoken English の訳語で「言語の中で音声で表現されるもの」をいい、話し言葉、口頭語ともいう。その対語は Written English。「文語で文字で書かれた言語」、書き言葉である(1)。口語英語は戦後の英語教育に一貫して取り入れられてきたが、日本の社会的特徴から、中学校でも、高等学校でも、大学においても、実際に真剣に取り上げられたことは少なかった。小学校においては、世界の事情とは異なり、少数の私立小学校で行われていたに過ぎず、一般的な意識はほとんどなかった。しかし、1984年、当時の中曽根康弘首相が設置した臨時教育審議会が発足し、その審議を通して英語教育環境は大きく変革した。3年後の1987年8月に答申があり、同年12月には教育課程審議会の改革の答申へと続き、1989年(平成元年)の現行の『文部省学習指導要領』へとつながった。

その結果、1984年、2000年に向けた外国人留学生10万人計画が始まり、3年後の1987年には Japan Exchange and Teaching Program(JET)が発足し、native speakers の Assistant English Teachers(AET)公立の中・高で一般化した。本格的な口語英語の導入であった。現在はフランス語、ドイツ語などにも広がり、Assistant Language Teachers(ALT)と呼び、ますます全国に広がっている。教育現場での口語英語の実質的な始まりであった。

この一連の動きの中で、臨時教育審議会は英語教育現場に対し「外国語教育の見直し」という今までにはない厳しい指示を出した。これが高等学校の新3科目「オーラル・コミュニケーションA、B、C」の導入となる。リスニングやディベートなどが高校教育で話題になったが、その矛先は高校に止まらなかった。大学に対しても1991年の大学設置基準の大綱化に進み、現在までに8割を越える大学がカリキュラム改革を実行している。これらもすべて「口語英語」を基底においた変革だったのである。

口語英語の重要性は「実践的なコミュニケーション能力の育成」というキーワードで第15期中央教育審議会の第一次答申(1996年)と第二次答申(1997年答申)に引き継がれた。その結果は1998年の教育課程審議会答申を通して新学習指導要領に具現されることになる。

「口語英語」の必要性は、(1)小学校3年生からの「総合的な学習の時間」での英語学習と、(2)中学校教育での英語必修化という新しい事態を生んだ。これは、私立の小学校のみならず、公立の小学校での英語教育の実質的な開始を意味する。正規の授業科目ではなく「時間」の扱いであるとはいえ、日本の英語教育では画期的な改変である。今後は、口語英語教育がどのようなシラバスによって行われるかが、日本の英語教育の将来を占う鍵となる。以下は、そのシラバスの若干のポイントを提案するものである。

2. 口語英語と発音

口語英語の構成要素としては、表現、語彙、文法、発音など言語学的な要素に加え、社会関係や人間関係などに関わる話し方や態度などの要素も関わる。本稿では、言語学的な要素のうち、発音に関わる部分のみを扱う。

2.1 母音と子音

英語の母音は音素として20種が示される(2)。この数はあくまでも弁別的な音素としての数であり、世界各地にある英語の型 varieties(「方言」 dialects)の問題ではない。ある一地区の母音の類型は、他の地区の類型を排除しつつ、己の地域の型を形成し特徴付ける。イギリス英語、アメリカ英語といった第1言語としての型が存在する一方で、第2言語としての英語にも、外国語としての英語にも同様の傾向があり、各地域の性格を維持しながら、体系化している。そして、その音素としての母音の種類は、どの地域にあっても20種前後であろう。しかし、物理的な音声としての数は限りなくある。外国語としての英語の学習者には、言語として有効な弁別的な20種前後の発音を身に付けることが必要であって、各地域の類型は、聞き取りの能力を身に付けることは必要であっても、その発音をすべて覚える必要はない。母音にはそのような特徴がある。

このことは、日本語の場合を想定し、確認ができる。平山輝男は、本土方言と琉球方言に分類し、本土方言だけでも八丈、東部、西部、九州の4方言、そしてその各方言はさらに細分されるとする(3)。これらの類型の中で、それぞれの地域の型を形成し特徴付けているのである。第一言語としての話者は己の類型によって発話をするが、他の類型については聞き取り能力さえあればよい。もし、他の類型を混ぜて発音したり、また他の類型で発話するのは特殊な事情の場合だけであろう。

それに引き替え、子音は英語や日本語などそれぞれに、言語別に共通する特徴がある。一例として破裂音をあげよう。英語にも日本語にも破裂音があり、それぞれ/p, t, k, b, d, g/がある。その点では両語に共通するのだが、音声的な特徴が異なる。音素的には日本語と英語には共通する破裂音であるが、音声的には全く異なる破裂音である。すなわち、英語の破裂音/p, t, k, b, d, g/には、帯気音の有無など、英語の全類型に共通した特徴がある。一方、日本語の破裂音には、英語ほどの帯気音の効果はない。ここに、口語英語の発音学習のポイントがある。要するに、日本語の音声特徴で発音した/p, t, k/は、英語の音声特徴を持たず、コミュニケーションに差し障る場合がでる。日本語を第一言語とする者が英語を習得しようとする場合、(1)母音の体系作りの方法と(2)英語の子音の特徴の学習の2点に絞られることになる(4)。

母音の種類について、日本語の母音の種類は英語の母音より少ないと言われるが、一概には言えない。日本語には5種類の基礎的な母音があるが、それに促音、撥音、長音の他、拗音化などの特徴が加わると英語と同じくらいの音素数に及ぶ。問題は、種類の数ではなく、質的な相違である。日本語の話者が英語の発音学習に苦勞すると同様に、英語話者は日本語の発音学習に同様の苦勞をする。結局、外国語の発音の巧拙には個人差がある。

英語の発音表記については、A. C. Gimson は Teaching the pronunciation of English について Appendix で、英語の発音の Simplified system(5)を提案していたが、これは A. Cruttenden 編の第5版にも引き継がれ、第13章となっている。この表記法は当然のことながら音素表

記であり、しかも、記号が従来とは異なり、RP ばかりでなくアメリカ標準語(General American: GA)にも極めて有効に適應できる表記である。

2.2 音節

英語の音節が CVC の閉音節構造を持つのに対し、日本語の音節が CV の開音節構造を持つことは定説である。榎垣実は「音韻の心臓部は音節」であるとし、日本語と英語の音節を詳細に分析した(6)。日本語の音節は50音図などから推測しても、「方言的なものを加えても110種」だが、英語の音節はおそらく「3000近くになるのではなかろうか」と述べる。その理由は一に母音で音節が終わる開音節構造と子音で音節が終わる閉音節構造音の違いにある。榎垣は英語音節の構造形式として V, VC, VCC, から始まり、CV, CCV, CCCV と続き、次いで、CVC, CCVC から CCCVCCC までの19種類を並べる。その数は別として、CVC と CVC が重なれば、CVCCVC という複合形が生まれ、子音の東が次々に生まれる。これが英語の音節を増やすと同時に、日本語にはない音連続を生み出す源である。A.C. Gimson は An Introduction to the Pronunciation of English の第4版に Tables of Word Initial and Final Phoneme Sequences として母音と子音の配列(Phonotactics)を示し、音節の構造を示している(7)。一例に、日本語の「クリスマス」と英語の "Christmas" を比較すれば、音節的には CVCVCVCVCV と CVCCVC の対比になり、数としては5対2になる。しかし、その構造には大きい相違を見せている。榎垣は同書の中で、音節構造を基本として英語と日本語の構造比較を次のように行う(p.167)。

| | (英語) | (日本語) |
|--------|---------|--------|
| 音節構造 | CVC 閉音節 | CV 開音節 |
| 音節形式 | 非常に多い | 非常に少ない |
| 子音独立性 | 強い | 弱い |
| 子音の比重 | 大きい | 小さい |
| 文字 | 単音文字 | 音節文字 |
| 単音節語 | 非常に多い | 非常に少ない |
| 音節の境界 | 不明瞭 | 明瞭 |
| 音節結合 | 波状線的 | 点連続的 |
| 語アクセント | 強弱関係 | 高低関係 |
| 文リズム | 等時強弱的 | 等時群化的 |

2.3 強弱アクセント

前項でも指摘されたように、日本語と英語では音節構造を始め、多くの特徴が対立的に異なる。アクセントにおいても同様である。歌曲で例を示せば、「ドはドーナツのド」と "Doe, a deer, a female deer" の相違であって、日本語が高低で語を分けようとするのに対し、英語では強弱で分けようとする。音楽の要素でいえば、前者が音階と拍の長さの差であるのに対し、後者は強拍と弱拍によるリズムの差である。この差は学習言語を発音するとき特徴的な error で現れる。Bill Clinton は Bill-Clin-ton のそれぞれに強弱の拍が現れるところだが、日本語になると「ビ↑ルクリン↓トン」と中高の発音となる。一方、英語話者が

日本語を発音すると「広島」は"Hir-o-shim-a"のように強弱拍になる傾向を持つ。

2.4 標準英語

口語英語を考察すると、かならず付随する問題は標準英語(Standard English)の問題である。標準語とは「いい言葉」で、口語とは「わるい言葉」を含むという一般概念があるからである。比較して考えるために再び日本語の例をあげれば、標準日本語(Standard Japanese)とは、どのような日本語であろうか。新聞紙上で使われる日本語が標準日本語であると言えるし、NHKのニュースの日本語がそれだとも言える。英語にも同様の問題がある。エディンバラ大学のD. Abercrombie教授は次のように言った(8)。

Standard English is easy enough to identify -- you are reading it now, for example.

明らかに、書かれたものについて標準を設定している。これは新聞に書かれた言葉が標準であるというのと同じ考え方に立つ。社会学者P. Trudgillは次のように言う(9)。

Standard English is that variety of English which is usually used in print, and which is normally taught in schools and to non-native speakers learning the language. It is also the variety which is normally spoken by educated people and used in news broadcasts and other similar situations. The difference between standard and non-standard, it should be noted, has nothing in principle to do with differences between formal and colloquial language, or with concepts such as 'bad language'. Standard English has colloquial as well as formal variants, and standard English speakers swear as much as other. (下線:筆者)

書かれた言葉と同時に教養のあるものが話す言葉とし、放送に使われが、公式。略式といった区別ではないとしている。下品な言葉も標準語であり得る。

アメリカ英語(GA)の標準語については、メディアの英語をNetwork Standardとして認める(10)。Marckwardtは次のように言う。

The "neutral" dialect concept of General American was replaced, especially in the research of certain psycholinguists, by that of Network Standard, the speech of television newscasters on the major networks and the kind of English which Americans clearly admired more than any other. (下線:筆者)

以上のように、標準英語の表示のもとで示されるモデルは、イギリス英語の場合は外国人に対する教育を含めた規範的モデルである。現実には"Estuary English" (a middle-class pronunciation typical of the Thames estuary: Cruttenden & Gimson, p.86) と称するテムズ川沿いに広がり、RPが変容してきていることが話題になっているが、それでもRPというモデルはいまも健在である。アメリカ英語の場合は、規範というより、社会での認容性を重視したモデルと言えよう。

口語英語を教えるとき、どのモデルを用いるかは重要な問題である。とくに日常のコミュニケーションには特別に問題にならない日本での英語教育では、モデルの選択は重要な意味を持つ。このモデルの問題については、二つの対立する議論がある。その一つはBritish, American, Australian, South Africanといった大きい地域の型を一つのモデルとする主張(Cruttenden & Gimson: p.271)と、他の一つはKachru等のモデル拒否の主張である。前者はGimsonの次の主張から始まる。

When It is a question of teaching English as a second language, there is clearly much greater

adherence to one of the two main models. Most allegiances to one or the other tend to be traditional or geographical: thus, for instance, European countries continue on the whole to teach RP, whereas much of Asia and South America follow the American model.(Gimson, 4th Edition, p.91.) (下線：筆者)

これに対し、Kachru は Indian English, Nigerian English, Singaporean English など土着化した英語に視点を当て、現在地球上の英語はすべて英国から移転した英語(Tranplanted English)だという認識から、大きい地域の英語をモデルにすることに対して、真っ向から反対する (11)。

... In functional terms, then, the role of the Third World varieties has to be viewed with reference to the sociocultural network of a particular country. Generalizations from an American or British standpoint are dangerous, and to a large degree irrelevant. The uses have to be perceived from the consumer's vantage point, not that of the native speaker's linguistically secure perch. (下線：筆者)

日本の英語教育での口語英語教育を考えると、その標準語の選択に当たり、どちらの主張が有効であろうか。主義として正しいか正しくないかは別問題として、実利的に日本の歴史的事情、地理的事情、政治的事情、一般社会事情などを勘案し、世界の中に生きる日本人に対する英語標準語の教育を目的としてこの問題を考察するとき、そこには主義主張だけでは解決されぬ問題を孕む。結局は個人の選択になるが、基本的には、英語教育を他教科の教育や体育、芸術の教育などとの関連で考察することが必要であり、しかも、英語と日本との言語の構造の差に目配りした教育も考慮に入れなくてはならない。その底流にあるものは、将来の自由さを体得されるための一つの規範(prescription)の学習である。この規範とはモデルの提示を意味する。そのモデルは教師によって当然異なるが、それは問題ない。将来の自分のモデルづくりの基本的なシステムの学習だからである。将来の選択は本人の自由なのだが、将来、自分の型(システム)を持つ能力を開発するために、まずは基本を与えることが必要であろう。その基本とは英語のシステムの学習を意味する。自分の英語に intelligibility と acceptability を備えるための基準を学習することになる。この考え方は基準を許さぬ Kachru よりも基準を設定する Gimson の考え方に近い。この選択の理由は、英語と日本語との構造の相違が極めて大きいことにある。その差に気づくような学習シラバスを作成することが必要だからである。

2.5 英語学習の臨界期

口語英語と発音の関係を考察するとき、臨界期(Critical period)の学説を見過ごすわけにはいかない。もとは動物行動学(ethology)の理論からの援用で、人間の場合も第二言語学習で学習の限界期があると唱えたのが、アメリカの心理学者 Eric Lenneberg である。しかし、現在に至っても結論は確立しておらず、いまだに神経心理学と神経言語学での課題になっている。

もっとも一般的な臨界期説は、言語習得は2歳頃から始まり、思春期に終わるというもので、思春期に脳の成熟が完成することが原因であるとする。しかし、これに対して、言語機能は5歳以前に確立してしまうとか、言語使用に関する能力は10代から若い成人に至っても、意味論的、語用論学習はあるとも言われる (12)。要するに、議論百出の状態なのである。

しかし、その一方で、小学校3、4年生の頃の臨界期説は常識的にもかなり根強い。この年頃の知性の発達を、ほほえましさを交えて「ギャング・エイジ」と呼び、自分の持つ言語以外の型に反発を見せる「9歳の壁」を認識する教育者は多い(13)。この事実はけっして見逃せるものではなかろう。この臨界期に関する最近の研究では、Harley and Wangの「臨界期仮説(1997)」(14)があり、無藤隆氏の紹介がある。概略次のようなものである。

- (1)乳児期所期の誕生直後、遅くとも0歳半ばには音声言語の知覚・産出が始まる。
- (2)0歳終わりごろに音声知覚の敏感期。
- (3)母語は4歳を過ぎると不完全になるだろう。遅れば遅れるほど不完全になる。
- (4)第二言語に比べ、第一言語の獲得の遅れはうまくいかない可能性が高い。
- (5)第二言語の学習では、年齢の高い学習の方がはじめのうちは語彙や綴りについて進歩が早い。
- (6)第二言語の発音や綴りの達成度の遅れは、6歳ごろから始まる。大人の学習者では、開始の年齢と結果の低下の関連は、第二言語学習の口頭の面の熟達について最も強く現れている。
- (7)臨界期が思春期で終わるといふことの説得的な証拠は得られていない。大人の学習者でも上手な人がいるし、逆に、子どもの中には上手にならない者もいる。
- (8)バイリンガルの二つの言語の両方ともが単一の言葉しか話さない人のレベル並になれるというのは伝説にすぎない。
- (9)二つの言語をとともに高いレベルで維持することは、特にその言語を話す人が少ない場合、子どもにとっては難しい。

無藤は、早期の第二言語の習得は「その言葉を話す人との触れ合いとともに」が原則であろうと結論付けている。

臨界期説から考えても、英語教育、特に幼年期の英語教育には、どのような型の英語であれ、口頭の英語を聞かせることが第一の条件になる。聞かせる目的は日本語と英語の音声構造の相違に関わる知覚を促すことにある。音節とリズムの相違を早くから聞かせることが最重要課題であろう。

2.6 中学・高校の学習指導要領と音声教育

現行の中学校学習指導要領(平成元(1989)年3月)の外国語の目標は次の通りである(15)。この文言には口語英語教育への指針が明瞭に示されている。

「外国語を理解し、外国語で表現する基礎的な能力を養い、外国語で積極的にコミュニケーションを図ろうとする態度を育てるとともに、言語や文化に対する関心を深め、国際理解の基礎を培う。」

2002年から施行される中学校学習指導要領(平成10(1998)年12月)の目標は次のように変わった(16)。口語英語教育にいっそう前向きになったと言えよう。

「外国語を通じて、言語や文化に対する理解を深め、積極的にコミュニケーションを図ろうとする態度の育成を図り、聞くことや話すことなどの実践的コミュニケーション能力の基礎を養う。」(下線：筆者)

現行の高等学校学習指導要領(平成元(1989)年3月)の外国語の目標は、中学校の目標の最終部分「培う」が「深める」と変わっただけである。(17)。これはとりもなおさず、中学

校と高等学校には共通の目標があり、内容の段階の相違だけになっている。口語英語教育への指針は、中学校と同じように明瞭に示されている。

一方、2003年から施行される高等学校学習指導要領(平成11(1999)年3月)の外国語の目標は次のように変化を見せている(18)。口語英語の内容がより明確に示された。

「外国語を通じて、言語や文化に対する理解を深め、積極的にコミュニケーションを図ろうとする態度の育成を図り、情報や相手の意向などを理解したり自分の考えなどを表現したりする実践的コミュニケーション能力を養う。」(下線：筆者)

高等学校では、現行より新科目「オーラル・コミュニケーションA、B、C」が導入され新指導要領に引き継がれ、しかもA、B、CがI、IIに格上げされている。明らかに口語英語教育に重点を置いた改訂である。

口語英語の指導には音声指導が基本になるが、学習指導要領では次のような観点を示している。中学校から高等学校への入学試験ではその基準が問われ、高等学校から大学への入学試験でもその基準が問われるのであるが、その出題の実状については、必ずしも妥当なものではない。それは大学の実状もさることながら、学習指導要領の内容が確実に理解されていないこともあるものと思われる。

次に、文部省学習指導要領(1989,1999)に示された中学校と高等学校の音声指導に関する記述は次の通りである。

(1) 中学校学習指導要領(平成元(1989)年3月)(pp.100,101)には、別表1「言語材料」に次のように示されている。

ア 音声

- (ア) 現代の標準的な発音
- (イ) 語のアクセント
- (ウ) 文の基本的な音調
- (エ) 文における基本的な区切り
- (オ) 文における基本的な強勢

高等学校入学試験で音声問題の在り方がこの記述に関係があることは否定できない。しかし、もっとも注意を引くのは「現代の標準的な発音」という表現である。上記の「標準語」の定義を考え、また、モデルの選択や world Englishes の概念を考えると、その内容をどのように扱うかは、今後の議論が必要である。

(2) 次に、中学校学習指導要領(平成10(1998)年12月)(p.91)の表現は、(3)「言語材料」に次のように改訂されている。

(1)の言語活動は、以下に示す言語材料のうちから、1の目標を達成するのにふさわしいものを適宜用いて行わせる。

ア 音声

- (ア) 現代の標準的な発音
- (イ) 語と語の連結による音変化
- (ウ) 語、句、文における基本的な強勢
- (エ) 文における基本的なイントネーション
- (オ) 文における基本的な区切り

ここで注目すべきは、「現代の標準的な発音」はそのままに残し、「語と語の連結による音変化」と「語、句、文における基本的な強勢」と一歩突っ込んだ記述になったことである。前者は口語英語における子音の音声変化、後者は口語英語の音声と文法の間接関係を暗に示す機能性の高い記述との解釈も可能である。

(3) 高等学校学習指導要領(平成元(1989)年3月)(p.108)では、次の記述がある。

2 内容 (2) 言語材料

「ア (1)の言語の言語活動については、原則として、中学校の言語材料及び高等学校の言語材料のうちから1の目標を達成するのにふさわしいものを適宜用いて行わせる。なお、言語材料は、現代の標準的な英語によるものとする。」(下線：筆者)

ここで注目すべきは「現代の標準的な英語」という用語の使用である。ここで再び「標準英語」の解釈が必要になる。

(4) 高等学校学習指導要領(平成11年(1999)3月)(p.120)には、次の文言を示すが、「標準的な英語」という表現はそのまま継続されている。

2 内容 (3) 言語材料

「ア (1)の言語の言語活動については、原則として、中学校学習指導要領第2章第9節第2に示す言語材料及び「ライティング」の後に示す[英語言語材料](以下「中学校及び高等学校の言語材料」という。)のうちから、1の目標を達成するのにふさわしいものを適宜用いて行わせる。」

「その際、次の事項に配慮するものとする。」

「(ア) 言語材料は、原則として現代の標準的な英語によること。ただし、様々な英語が国際的に広くコミュニケーションの手段として使われている実態にも配慮すること。」(下線：筆者)

「(イ) 言語材料の分析や説明は必要最小限にとどめ、実際の場面でどのように使われるかを理解し、実際に活用することを重視すること。」

以上に概観したように、文部省学習指導要領では中学校と高等学校との連携を保ちながら、口頭英語教育の観点を高い見地から明瞭に示している。そこに欠けることは、この文言をどのように解釈し、誰がどのように実践に移すかの問題でなのである。

3. 口語英語のためにシラバスの要因

以上に、口語英語教育に関して、断片的であるが、音声学的見地、日英比較語学的見地、社会言語学的見地、心理言語学的見地、学習指導要領に示される告示などを通して、現状の検討を行った。これらを総合的に学習の視野に入れ、その教育を実地に移すシラバス作成には、少なくとも次の諸点を考慮する必要がある。

3.1 発音は子音を重視する。

前述の『「NHK中学生英語スキット・コンテスト」応募作品の分析』(1994)では、音声指導について、(a)正しい発音で、内容を意識した朗読をするよう指導する、(b)初期段階からリズム単位を重視した読み方の指導をする、(c)問答に現れる文アクセントをイントネーションの型として指導する、(d)発話の気持ちや感情の動きを伝えるイントネーションを指

導する、(e)発話の内容をキーワードで伝える指導をする、(f)子音を正確に発音できるように指導する、の6点の提言を行っている(p.154)。特に、子音の発音については次の5点をあげ、注意を喚起しているが、シラバスに生かされるべきであろう。

- (1)一般的には子音は長めに発音させる。
- (2)語頭の/p, t, k/に続く母音は遅れて発音させる。
- (3)破裂の聞こえない/p, t, k/は、頭の中で発音をさせる。
- (4)/s, sh/を強く、長めに発音させる。
- (5)/n/はつねに歯茎で調音させる。
- (6)/tr/を1個の音として発音させる。

3.2 子音の重複による音声変化と、音節の相違を着眼する。

子音の束(consonant clusters)の重要性は、上記の通り、新学習指導要領に「語と語の連結による音変化」として特に取り上げられることになった。これと同時に、日本語と英語の音節の相違に気づかせることが明快な英語の発音を作ることに繋がる。例えば、「クリスマス」はCVが5個重なる5音節だが、英語のChristmasはCVC・CVCの2音節である。英語のChristmasの発音には、母音を正確に発音することより、子音を明快に2音節で発音することの方が重要で、それ以外の音節ができる発音では英語としては不明瞭である。

3.3 発音表記は混合表記が可能になる。

発音記号の問題も口語英語教育では大きい課題になる。最近カタカナを利用した表記が現れてきたが、その利用には注意が必要である。その注意とは、語尾の子音に用いられるカタカナ記号は、必ず英語の子音として発音することが必須だからである。その理由は上に縷々述べてきたように、英語は語尾が子音になることが特徴だからである。

筆者は、カタカナ記号に子音の特徴を持たせるより、子音とカタカナの混合表記を勧めたい。例えば、white paper[ホワイ(t)ペーパー]に見られるように、この(t)は頭の中で発音することで、日本語にはない英語の子音を的確に発音することができる(19)。

3.4 モデルの設定でシステム作りをする。

International Phonetic Association(IPA)の発音記号で母音の発音を示す場合には、物理的に近似な音声を示すことが可能であるが、辞書などでの表記では、音素的な扱いにならざるを得ない。実は、これは一つの利点であって、地球上に存在する多くの型の英語を1組の記号で集約することが可能になる。その例が、上記2,1で述べたGimsonの第5版に記載のある母音の簡易体系図(Fig. 49. Monophthongs: simplified system, と Fig.50: Diphthongs: simplified system)(p.285)である。上記の通り、英語には20種の母音があり(Gimson,第5版、p.88)、この20種は、それぞれの型(変種、方言)によって、独自のシステムの音を持つ。したがって、その独自のシステムはGimsonの簡易体系図によって十分に表現できる。一方、子音は/t/などに多少の地域的な特徴があるものの、基本となる/p, t, k, b, d, g, l, m, n/など、大方の子音の特徴は全ての型に共通であるといっている。

したがって、モデルの設定を行い、システム作りをし、一つの型の中で矛盾のない体系を持ったシステムを作りあげることによって、口語英語の体系づくりができる。

3.5 低学年からの耳慣らしをする。

平成10(1998)年7月に教育課程審議会は答申を行い、「各学校段階・各教科等を通じる主な課題に関する基本的考え方」として「横断的・総合的な学習、教科課程の基準の大綱化・弾力化」をあげ、次のように述べた(20)。

また、小学校、中学校、高等学校、盲学校、聾学校及び養護学校に「総合的な学習の時間」を創設し、各学校が創意工夫を生かした特色ある教育活動を一層展開できるようにするとともに、国際理解・外国語会話、情報、環境、福祉・健康などの課題について横断的・総合的な学習ができるような仕組みを整えることとする。

これによって、小学校でも英語を用いた活動ができるようになった。2002年より全小学校で始まるが、経過措置的に、2000年4月から始める小学校も多いことであろう。小学校指導要領では具体的に次のように記載している(21)。

国際理解に関する学習の一環としての外国語会話等を行うときは、学校の実態等に応じ、児童が外国語に触れたり、外国の生活や文化などに慣れ親しんだりするなど小学校段階にすさわしい体験的な学習を行われるようにすること。

ここで言う、「横断的」とは cross-curricular の意味で、小学校全科目が関わるような状態をいう。したがって英語といった特定の科目に設定することなく行われる。また、「総合的」とは integrated の意味で、全科目が総合的に関わることを意味する。この状態を理解するには、平面的に科目を並べるのではなく、立体的な次元で捉えることが必要になる。従来の殻を破ったシラバスづくりが要求される。例えば、2000年4月からNHK教育テレビで開始される小学生中学年向けの英語番組『えいごリアン』が好例である。その中で「おうちの方へ」として指導法が提示されているが、この方向こそ、総合的な学習の時間のシラバスの中に生かされなくてはならないポイントであると言えよう(22)。そのポイントは、できるだけ英語だけを聞かせ、意味を伴った音声に自然に慣れさせるようにすることで、小学校英語教育での教授法の基本は、これにつきるのである。

3.6 自分の音声システムを持たせるシラバスを作成する。

英語のシラバスは世界に通じる英語を身に付けさせるような授業計画でなくてはならない。前述の通り、世界に通じる口語英語である場合、発音を身に付けることが一つの基本的な作業になる。その基本理念について Cruttenden and Gimson(p.276-287)は2点の最低条件を掲げる。その一つは、広く受け入れられる英語(High Acceptability)であり、他の一つは最小限度の分かりやすさ(Minimum General Intelligibility)である。この2点を身に付けさせるために、上記のような具体的なシラバス作りが必要になる。

これに加えて、World Englishes を唱道する Kachru は、Gimson らの用語を援用しつつ、“acceptability, appropriateness, and intelligibility in the context of culture”(p.122)のように記述する。Gimson のモデルでは不足で、「広く受け入れられ、分かりやすさを持つ」上に、「それぞれの文化のなかで適切であること」が必要だとする。インドやナイジェリアでは当然のことであるが、この考え方は、日本ではどのように生かされるべきか、検討の価値がある問題である。

日本人学習者のために、さらにシラバス作成のポイントを1点加えるならば、それは変

種に惑わされない自分のシステムをもった型を作る作業をいれることであろう。このシラバス作りには、音声学の知識をもった教師の工夫が必要になるであろう。

(2000年3月)

注：

- (1) 『新明解国語辞典』第3版、1981、三省堂。
- (2) Cruttenden A.(Revised) 1994. *Gimson's Pronunciation of English*. 5th Edition, Edward Arnold. p.88.
- (3) 平山輝男 1968. 『日本の方言』講談社現代新書 160. 講談社. p.75.
- (4) 田辺洋二(研究代表者)1994. 『「NHK中学生英語スキット・コンテスト」応募作品の分析』財団法人放送文化基金平成4年度人文社会部門女性・援助研究、研究成果報告書、放送文化基金スキット研究会、pp.52-71(湯舟英一)、pp.92(千葉敦)。
- (5) Cruttenden A.(Revised) 1994. p.285.
- (6) 榎垣実 1971 『日英比較語学入門』大修館書店、pp.132-167。
- (7) Gimson, A.C.1989 *An Introduction to the Pronunciation of English*, 4th Edition, Edward Arnold, pp.259.
- (8) Abercombie, D. 1956 *Problems and Principles in Language Study*, Longman, p.44.
- (9) Trudgill, P. 1974. *Sociolinguistics: An Introduction*, Penguin Books. p.17.
- (10) Marckwardt, A.H. Revised by Dillard, J.L. 1980. *American English*, Oxford, p.139.
- (11) Kachru, B.B.1990. *The Alchemy of English: The Spread, Functions, and Models of Non-native Englishes*, University of Illinois, p.122.
- (12) Crystal, D. 1997. *The Cambridge Encyclopedia of Language* (2nd Editin), Cambridge. p.265.
- (13) 久埜百合 1999. 『小学校英語』三省堂、p.14。
- (14) 無藤 隆 1998. 『早期教育を考える』NHKブックス 826、pp.131-3。
- (15) 『中学校学習指導要領』平成元年3月、文部省、p.96。
- (16) 『中学校学習指導要領』平成10年12月、文部省、p.88。
- (17) 『高等学校学習指導要領』平成元年3月、文部省、p.108。
- (18) 『高等学校学習指導要領』平成11年3月、文部省、p.119。
- (19) 田辺洋二 1999. 『60歳からの出直し英会話』研究社、pp.124-141。
- (20) 『幼稚園、小学校、中学校、高等学校、盲学校、聾学校及び養護学校の教育課程の基準の改善について』(答申)、教育課程審議会、p.14。
- (21) 『小学校学習指導要領』平成10年12月、文部省、p.3。
- (22) 『えいごリアン』1学期(4月11日～7月18日放送)、NHK出版、pp.77-73。

以上

語彙解析ツールの作成

齋藤 敏治

1 目的

インターネット上で公開されている教育教材はデータベース経由で学習者の回答を取り込んでいる。学習者の回答を分析する手法として語彙解析がある。特に状況を表現するとき、英語圏の人と非英語圏の人とでは表現方法の違いがあると考えられる。特に海外経験の少ない非英語圏の人間は受けた英語教育の影響が大きいと考えられる。英語による表現方法の違いを文章の構成や単語の位置付けから比較することを語彙解析という。本研究は語彙解析の初期段階として中学校の英語教材の解析を行い、中学校で行われている語彙数を7社の教科書で比較し、語彙解析を行う基礎データを作成するツールの開発を行うことである。

2 方法

語彙解析はプログラミングの観点から文字列操作により処理が行われる。処理体系は大きく処理ツールと解析ツールの2つに分けられる。処理ツールでは、英文テキストから単語と頻度からなるテキストを作るまでを行う。このテキストを語彙リストとする。作成した語彙リストから解析ツールで積集合や和集合、差集合、有効度、異語総語などを求める形で解析する。ツールの作成にはデータベースを用いる方法もあるが、処理の細部に渡り調整が可能な方法としてC言語を用いる事にした。以下に作成したプログラムの名称と内容、図1に処理ツールを用いるときの流れを示す。

作成した処理ツール

- (P 1) `piriod.c` 英文テキストから一文章区切りのテキストを作成。
- (P 2) `tangokugiri.c` 一文章区切りのテキストから単語区切りのテキストを作成。
- (P 3) `kigousakujyo.c` 単語区切りのテキストから記号を取り除いたテキストを作成。
- (P 4) `fontchange.c` 記号を取り除いたテキストから単語と頻度からなる語彙リストを作成。

作成した解析ツール

- (A 1) `sekisyugo.c` 2つの語彙リストから積集合を求めた語彙リストを作成。
- (A 2) `wasyugo.c` 2つ語彙リストから和集合を求めた語彙リストを作成。
- (A 3) `sasyugo.c` 2つの語彙リストから差集合を求めた語彙リストを作成。
- (A 4) `goihindo.c` 2つの語彙リストの積集合のうちリスト1での出現頻度がリスト2の出現頻度に対して指定した以上の単語の語彙リストを作成。
- (A 5) `igosougo.c` 語彙リストから異語数/総語数を求めて標準出力へ出力。
- (A 6) `youkodo.c` 2つの語彙リストの積集合を求めその頻度の合計が語彙リスト2の頻度の合計に対して占める割合(リスト1のリスト2に対する有効度)を求めて標準出力へ出力。

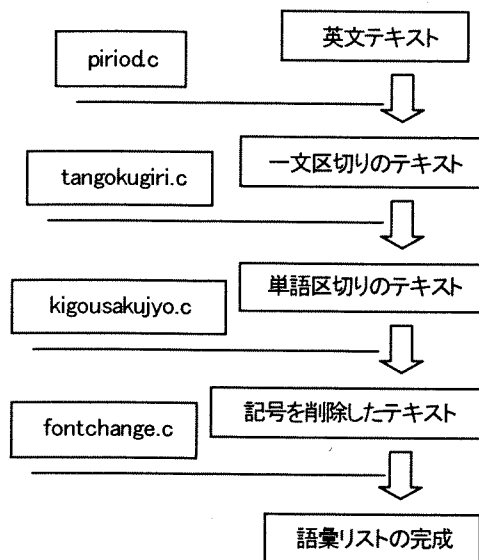


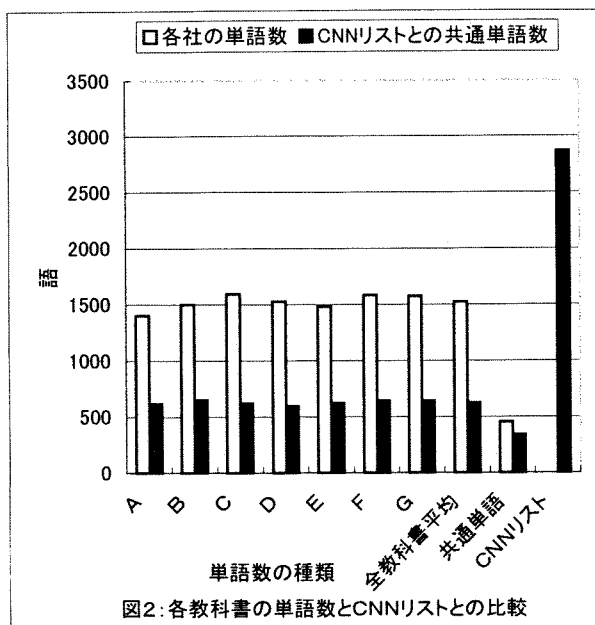
図1: 語彙リストが出来るまでの流れ

3 実験

実験として、処理ツールを用いて中学校1年～3年の英語教材7種類から作成した語彙リスト各々の比較と、現在使われている英語から作成した語彙リストの積集合と和集合及び単語数を求める。現在使われている英語としてインターネットで流れているCNNのニュースから無作為に取り出したものを用いた。求めた単語数より中学校の英語の各教材及び全教材が現在使われている英語に対しどのくらい共通しているかということ調べた。その結果を表1、図2に示す。

表1: 各教科書の単語数とCNNリストとの積

| 教科書 | 各社の異語数 | CNNリストとの積 |
|--------|--------|-----------|
| A | 1405 | 617 |
| B | 1501 | 622 |
| C | 1597 | 644 |
| D | 1528 | 534 |
| E | 1483 | 598 |
| F | 1583 | 650 |
| G | 1574 | 644 |
| 全教科書平均 | 1524 | 628 |
| 積集合 | 455 | 340 |



4 結果と考察

結果を見てみると、各教科書で出てくる総単語数は平均1500語程度、そのうち各教科書で共通して出てくる単語は455語である。この共通単語を求めたリストの中身を見てみると、the や a などの冠詞、in や on などの前置詞、that や this などの代名詞、あとは殆どが動詞であり、名詞は English や school など、いずれにしても英語の初期で学ぶ基本的な単語が主であった。このことから全教科書で扱っている単語数はほぼ同じであるということ、各教科書で共通している単語は中学校で教えねばならない150単語の3倍程度を網羅しているということがわかる。

CNN 2866語のリストとの比較を見てみると、全教科書共通の単語455語との積では、340語程度一致している。また、各教科書の総単語とでは600語程度が共通している。このことから、中学校で学ぶ単語というのはごく基本的なものであるということ。普通、中学生は1種類の教科書しか学ばない。したがってCNNニュースのうち20%程度しか理解できないことがわかる。つまり中学校で学ぶ単語ではCNNのニュースを理解するには不十分であるという事が考えられる。ちなみに全7種類の教科書を網羅したとしてもCNNニュースの40%程度しか理解できないこともわかった。

5 今後の展開

このように解析ツールを用いることで語彙解析の準備段階である基礎データの作成が行うことができた。

本研究では単語数という形でしか扱えなかったが、語彙解析をするためには重要な問題として、単語の品詞の分類が必要である。このことによってタグ付けによる解析というものが行える。様々なところでこのタグ付けというものは行われているが、イギリスのランカスター大学が開発したタグセットであるC7を用いた場合について説明すると、

I want to attend a graduation.

という文章があるとき、タグ付けをすると

| | | |
|----|------------|-------|
| 01 | I | PPIS1 |
| 02 | want | VV0 |
| 03 | to | TO |
| 04 | attend | VV1 |
| 05 | a | AT1 |
| 06 | graduation | NN1 |

ちなみに上記のタグは上から主格の一人称代名詞、動詞の原形、不定詞目印、不定詞、冠詞、一般名詞単数という意味である。このように品詞ごとに意味付けされたタグをつけることで、文章中の単語の配置や文章の構成を調べるという方法である。そのためには、単語がどんな変化形をして

いるかということや、どんな品詞なのかを区別する必要がある。今回の研究でこの前段階までは完成したと思うので、今後は上で挙げた例のような品詞についての分類ができれば、詳しい語彙解析を行っていきけるはずである。またNTT先端技術研究所などで、日本語の語彙についても解析が行われている。各国の語彙解析が進んでいけば、各言語の習得に役立っていくはずである。

参考文献

- 1) 高橋 秀夫：言語文化論叢
- 2) ランカスター大学
<http://www.comp.lancs.ac.uk/ucrel>
- 3) NTT先端技術総合研究所
<http://www.ntt.co.jp/RD/index.html>

語彙解析ツールの作成

プログラム リスト

(1)名前 `period.c`

機能 英文テキストをピリオドや、クエスチョンマーク、エクスクラメーションマークで改行し、一文区切りにしたものを出力ファイルに出力する。

実行ファイル `period`

使用例

```
period textA.txt textB.txt
```

この場合英文テキスト `textA` からを1文区切りにした `textB` が作られる。

(2)名前 `tangokugiri.c`

内容 (1)の出力ファイルをスペースごとに区切って改行し、単語区切りにしたものを出力ファイルに出力する。

実行ファイル `tangokugiri`

使用例

```
tangokugiri textA.txt textB.txt
```

この場合1文区切りの形の `textA` から単語区切りの形の `textB` が作られる。

(3)名前 `kigousakujuyo.c`

内容 (2)の出力ファイルのピリオド、カンマ、エクスクラメーションマーク、クエスチョンマーク等の記号を削除したものを出力ファイルに出力する。シングルコーテーションは、`I'm` や `Let's` 表現のために残しておく。

実行ファイル `kigousakujuyo`

使用例

```
kigousakujuyo textA.txt textB.txt
```

この場合単語区切りの形の `textA` から記号を削除した形の `textB` が作られる。

(4)名前 `fontchange.c`

内容 (3)の出力ファイルで同じ単語はまとめて、その単語と頻度を出力ファイルに出力する。そのファイルを語彙リストとする。このとき標準入力により、大文字が混じったままで処理するか小文字に直して処理するか選択する。

実行ファイル `fontchange`

使用例

```
fontchange textA.txt textB.txt
```

この場合単語区切りで、なおかつ記号を削除した形の `textA` から単語区切りで、記号削除し、頻度を表示した `textB`(語彙リスト)が作られる。

(5)名前 `sekitrue.c`

内容 (4)で得られた語彙リストを2つ使い積集合を求めて出力する。

実行ファイル sekitrue

使用例

sekitrue textA.txt textB.txt textC.txt

この場合語彙リスト textA と textB から積集合を求めた語彙リスト textC が作られる。

(6)名前 wasyugo.c

内容 (4)で得られた語彙リストを2つ使い和集合を求めて出力する。

実行ファイル wasyugo

使用例

wasyugo textA.txt textB.txt textC.txt

この場合語彙リスト textA と語彙リスト textB から和集合を求めた語彙リスト textC が作られる。

(7)名前 sasyugo.c

内容 (4)で得られた語彙リストを2つ使い差集合を求めて出力する。

実行ファイル sasyugo

使用例

sasyugo textA.txt textB.txt textC.txt

この場合語彙リストと語彙リストから差集合を求めた語彙リストが作られる。

(8)名前 goihindo.c

内容 (4)で得られた語彙リストを2つ使い、その2つから求めた積集合のうち語彙リスト1での出現頻度が語彙リスト2の出現頻度に比べて指定された以上のものを出力ファイルに出力。このとき、出現頻度の指定は、標準入力からパーセンテージにて行う。

実行ファイル goihindo

使用例

goihindo textA.txt textB.txt textC.txt

この場合語彙リストと語彙リストから指定されたパーセンテージ以上のものを集めた語彙リストが作成される。

(9)名前 igosougo.c

内容 語彙リストから異語数/総語数を求めて標準出力に出力。このとき大文字が混じったまま処理するか、小文字に直して処理するかを標準入力にて指定する。

実行ファイル igosougo

使用例

igosougo textA.txt

この場合語彙リストの異語総語数を標準出力に出力する。

(10)名前 youkodo.c

内容 語彙リスト 1 と語彙リスト 2 の積集合を求め、その頻度の合計が語彙リスト 2 の頻度の合計に対して占める割合(語彙リスト 1 の語彙リスト 2 に対する有効度)を求めて標準出力に出力。

実行ファイル youkodo

使用例

youkodo textA.txt textB.txt

この場合まず語彙リストとの積集合を求め、その頻度の合計が語彙リスト頻度の合計に対して占める割合を標準出力に出力。

英文を 1 文単位で切り出す。

プログラム名 period.c

```
#include<stdio.h>
```

```
#include<stdlib.h>
```

```
#define MAXLINE 100
```

```
main(int argc,char *argv[])
```

```
{
```

```
    FILE *fp1,*fp2;
```

```
    char a,pre;
```

```
    pre='a';
```

```
    fp1=fopen(argv[1],"r");
```

```
    fp2=fopen(argv[2],"w");
```

```
    printf("Commandname   :%s¥n",argv[0]);
```

```
    printf("FILENAME1     :%s¥n",argv[1]);
```

```
    printf("FILENAME2     :%s¥n",argv[2]);
```

```
    if(fp1!=NULL&&fp2!=NULL) /*入力部*/
```

```
    {
```

```
        while((a=getc(fp1))!=EOF)
```

```
        {
```

```
            if(a>=0x0030&&a<=0x0039 || a>=0x007f || a==0x0022){
```

```
                fprintf(fp2," ");
```

```
                continue;} 
```

```
            if(a!=' ' || pre!=' ')
```



```

        {
            if(a>=' '&&a<='~')
                {fprintf(fp2,"%c",a);
                 if(a=='.' || a=='!' || a=='?')
                     {fprintf(fp2,"¥n");}
                 }else{fprintf(fp2," ");}
        }
pre=a;
}}else{printf("File Not Open¥n");}
fclose(fp1);
fclose(fp2);
}

```

英文を単語区切りで切りだす。

プログラム名 tangokugiri.c

```
#include<stdio.h>
```

```
main(int argc,char *argv[]
```

```
{
```

```
FILE *fp1,*fp2;
```

```
char a,pre;
```

```
pre='a';
```

```
fp1=fopen(argv[1],"r");
```

```
fp2=fopen(argv[2],"w");
```

```
printf("Commandname   :%s¥n",argv[0]);
```

```
printf("FILENAME1     :%s¥n",argv[1]);
```

```
printf("FILENAME2     :%s¥n",argv[2]);
```

```
if(fp1!=NULL&&fp2!=NULL) /*入力部*/
```

```
{
```

```
while((a=getc(fp1))!=EOF)
```

```
{
```

```
if(a!=' ' || pre!=' ')
```

```
{
```

```
if(a==';' || a=='.' || a=='!' || a==''
```

```
' || a=='.' || a=='!' || a=='?' || a==0x007c)
```

```

        fprintf(fp2,"¥n");
        if(a==0x0027&&pre=='¥n' || a==0x0027&&pre==' ' || a=='
'&&pre==0x0027 || a=='¥n'&&pre==0x0027)
            continue;
        if(a>='~'&&a<='~'&&a!=';'&&a!='!'&&a!=''&&a!=''&&a!=''
'&&a!='.'&&a!='!&&a!='?')
            fprintf(fp2,"%c",a);
        /*if(a==' ' || a==':' || a=='.' || a==' ' || a=='.' || a=='!' || a=='?')
            fprintf(fp2,"¥n");*/
    }
    pre=a;
} else {printf("File Not Open¥n");}
fclose(fp1);
fclose(fp2);
}

```

解析に不要な記号を削除する。

プログラム名 kigousakujoyo.c

```
#include<stdio.h>
```

```
main(int argc,char *argv[]
```

```
{
```

```
    FILE *fp1,*fp2;
```

```
    char a,pre;
```

```
    pre='a';
```

```
    fp1=fopen(argv[1],"r");
```

```
    fp2=fopen(argv[2],"w");
```

```
    printf("Commandname   :%s¥n",argv[0]);
```

```
    printf("FILENAME1     :%s¥n",argv[1]);
```

```
    printf("FILENAME2     :%s¥n",argv[2]);
```

```
    if(fp1!=NULL&&fp2!=NULL)
```

```
        /*入力部*/
```

```
    {
```

```
        while((a=getc(fp1))!=EOF)
```

```
        {
```

```
            if(a!='¥n' || pre!='¥n')
```

```

        {
            if(a=='?' || a=='!')continue;
            if(a>='A'&&a<='Z' || a>='a'&&a<='z' || a=='¥n' || a==0x0027)
                {
                    if(a!='¥n'&&a!=' '&&a!=' ')
                        fprintf(fp2,"%c",a);
                    if(a=='¥n'&&a!=0x0040)
                        fprintf(fp2,"¥n");
                }
            if(a=='
' || a=='¥n'&&pre=='¥n' || a=='¥n'&&pre=='?')
                continue;
        }
    }
    pre=a;
    }else{printf("File Not Open¥n");}
fclose(fp1);
fclose(fp2);
}

```

プログラム名 fontchage.c

```

#include<stdio.h>
#include<stdlib.h>
#include<string.h>
#define MAXLINE 10000
main(int argc,char *argv[])
{
    FILE *fp1,*fp2;
    int i=0,j=0,e[MAXLINE],f,g[MAXLINE],h[MAXLINE],syori,mask=0x0020;
    char c,a[MAXLINE][30],b[MAXLINE][30];
    int s=0,t=0,k=0,jmax,l=0,m=0;
    fp1=fopen(argv[1],"r");
    fp2=fopen(argv[2],"w");
}

```

```

printf("Commandname   :%s\n",argv[0]);
printf("FILENAME1     :%s\n",argv[1]);
printf("FILENAME2     :%s\n",argv[2]);
printf("大文字のまま処理の場合は 0 を小文字に直す場合は 1 を入力してください。
\n");
scanf("%d",&syori);
if(fp1!=NULL&&fp2!=NULL) /*入力部*/
{
if(syori==0){
while((c=getc(fp1))!=EOF)
{
h[i]=0;
e[i]=1;
a[i][j]=c;
if(c=='\n'){ /*次の単語へ*/
i++;
if(j>=jmax){
jmax=j;}
j=0;
continue;}
j++;
} /*入力部の終わり*/

fclose(fp1);
f=i; /*行数保存*/
i=0;
j=0;
t=0;

/*単語と頻度の出力部分*/
printf("ファイル 1 の文字配列 a[i][j]出現頻度 e[i]配列の最大値 f ファイル 2 の
文字配列 p[s][t]頻度 n[s]配列の最大値 y*/
for(i=0;i<=f;i++){
if(h[i]!=0){
continue;}

```

```

for(s=i+1;s<=f;s++){
    if(h[i]!=0){
        continue;}
    if(a[i][j]==a[s][t]){ /*同じ頭文字だったら*/
        while(a[i][j]==a[s][t]){ /*同じ文字の
間*/
            j++;
            t++;
            if(a[i][j]!=a[s][t]){/*途中までしか同
じでないから*/
                j=0; /*繰り返
し抜ける*/
                t=0;
                break;}
            if(a[i][j]=='¥0'&&a[s][t]=='¥0'){ /*
ヌルまで同じだったら*/
                e[i]+=1; /*出現頻
度を足す*/
                h[s]=s;
                m++;
                j=0;
                t=0;
                break;}
            }
        }
    }
}

for(i=0;i<=f;i++){
    if(h[i]==0){
        for(k=0;k<=jmax;k++){
            if(a[i][k]=='¥0')break;
            b[l][k]=a[i][k];
            g[l]=e[i];
            l++;}}
for(i=0;i<=(f-m);i++){

```

```

        if(b[i][1]>=0x0061&&b[i][1]<=0x0079 || ( b[i][0]=='a' ||
b[i][0]=='i' || b[i][0]=='A' || b[i][0]=='I')){
        for(j=0;j<=jmax;j++){
            if(b[i][j]!='¥n'&&b[i][j]!='¥0'){
                putchar(b[i][j],fp2);}
            if(b[i][j]=='¥n'&&j!=0){
                fprintf(fp2," %d¥n",g[i]);
                j=0;
                break;}
        }}}

        fclose(fp2);}
if(syori==1){ /*小文字の場合*/
    while((c=getc(fp1))!=EOF)
        {
            h[i]=0;
            e[i]=1;

if(c>='A'&&c<=0x005a | c>='a'&&c<='z' | c=='¥n' | c==0x0027)
        {

                if(c>=0x0041&&c<0x005a){
                    c=c|0x0020;}

        }
        a[i][j]=c;
        if(c=='¥n'){ /*次の単語へ*/
            i++;
            if(j>=jmax){
                jmax=j;}
            j=0;
            continue;}
        j++;
    } /*入力部の終わり*/
}

```

```

fclose(fp1);
f=i;    /*行数保存*/
i=0;
j=0;
t=0;

/*単語と頻度の出力部分*/
/*ファイル1の文字配列 a[i][j]出現頻度 e[i]配列の最大値 fファイル2の
文字配列 p[s][t]頻度 n[s]配列の最大値 y*/
for(i=0;i<=f;i++){
    if(h[i]!=0){
        continue;}
    for(s=i+1;s<=f;s++){
        if(h[i]!=0){
            continue;}
        if(a[i][j]==a[s][t]){          /*同じ頭文字だったら*/
            while(a[i][j]==a[s][t]){    /*同じ文字の
間*/
                j++;
                t++;
                if(a[i][j]!=a[s][t]){/*途中までしか同
じでないから*/
                    j=0;                /*繰り返
し抜ける*/
                    t=0;
                    break;}
                if(a[i][j]=='\0'&& a[s][t]!='\0'){ /*
ヌルまで同じだったら*/
                    e[i]+=1;            /*出現頻
度を足す*/
                    h[s]=s;
                    m++;
                    j=0;
                    t=0;
                    break;}

```

```

    }
    }
}

for(i=0;i<=f;i++){ /*配列 a から配列 b、配列 e から配列 g への入れ換え部
分*/

    if(h[i]==0){
        for(k=0;k<=jmax;k++){
            if(a[i][k]=='\0')break;
            b[l][k]=a[i][k];
            g[l]=e[i];
            l++;}
        for(i=0;i<=(f-m);i++){
            if(b[i][l]>=0x0061&&b[i][l]<=0x0079  || ( b[i][0]=='a'  ||
b[i][0]=='i')){

                for(j=0;j<=jmax;j++){
                    if(b[i][j]!='\n'&&b[i][j]!='\0'){
                       putc(b[i][j],fp2);}
                    if(b[i][j]=='\n'&&j!=0){
                        fprintf(fp2," %d\n",g[i]);
                        j=0;
                        break;}
                }}}

            fclose(fp2);}
        }else{printf("Not Open\n");}
    }
}

```

```

プログラム名  sekitrue.c
#include<stdio.h>
#include<stdlib.h>
#define MAXLINE 10000

```



```

main(int argc,char *argv[])
{

    FILE *fp1,*fp2,*fp3;
    int i=0,j=0,e[MAXLINE],f,g,h,l[MAXLINE],k;
    char a[MAXLINE][30],b[MAXLINE][30],c,z[MAXLINE];
    int s=0,t=0,n[MAXLINE],y,u,v,o[MAXLINE],w,r;
    char p[MAXLINE][30],q[MAXLINE][30],m,x[MAXLINE];
    fp1=fopen(argv[1],"r");
    fp2=fopen(argv[2],"r");
    fp3=fopen(argv[3],"w");
    printf("Commandname   :%s\n",argv[0]);
    printf("FILENAME1       :%s\n",argv[1]);
    printf("FILENAME2       :%s\n",argv[2]);
    printf("FILENAME3       :%s\n",argv[3]);
    if(fp1!=NULL&&fp2!=NULL&&fp3!=NULL)                /*入力部
*/
    {
        while((c=getc(fp1))!=EOF)
        {
            e[i]=0;
            l[i]=0;
            if(c>=0x0030&&c<=0x0039){                /*数字のフィルター*/
                b[i][g]=c;
                g++;
            }
            a[i][j]=c;
            if(c=='\n'){                /*次の単語へ*/
                if(a[i][j-1]>='0'&&a[i][j-1]<='9'){
                    i++;
                    g=0;
                    j=0;}else{i--;
                                j=0;    }
                continue;}
            j++;
        }
        /*入力部の終わり*/
    }
}

```

```

fclose(fp1);
f=i;    /*行数保存*/
i=0;
j=0;
while(i<=f){
    while(b[i][j]!='\0'){
        j++;
        l[i]+=1;}
    j=0;
    i++;}
i=0;
j=0;
while(i<=f){/*文字から整数の変換部 Z に b の内容をためて A T O I で
変換し E の配列に格納*/
    while(b[i][j]!='\0'){
        z[j]=b[i][j];

        h=0;
        l[i]-=1;
        j++;}

    h=atoi(z);
    e[i]=h;
    for(k=0;k<=j;k++){
        z[k]=0;}
    j=0;
    i++;}
i=0;
j=0;    /*変換部の最後*/
if(fp1!=NULL&&fp2!=NULL&&fp3!=NULL)
/*入力部*/
{
while((m=getc(fp2))!=EOF)
{
    n[s]=0;

```

```

o[s]=0;
if(m>=0x0030&& m<=0x0039){ /*数字のフィルター*/
    q[s][u]=m;
    u++;
}
p[s][t]=m;
if(m=='\n'){ /*次の単語へ*/
    s++;
    u=0;
    t=0;
    continue;}
t++;
} /*入力部の終わり*/
fclose(fp2);
y=s; /*行数保存*/
s=0;
t=0;
while(s<=y){
    while(q[s][t]!='\0'){
        t++;
        o[s]+=1;}
    t=0;
    s++;}
s=0;
t=0;
for(r=0;r<=y;r++){
x[r]=0;} /*xの初期化*/
while(s<=y){ /*文字から整数の変換部 Z にbの内容をためてA T O Iで
変換し E の配列に格納*/
    while(q[s][t]!='\0'){
        x[t]=q[s][t];
        t++;
    }
    v=0;
    o[s]-=1;
}

```

```

        t++;}

v=atoi(x);
n[s]=v;
    for(w=0;w<=t;w++){
        x[w]=0;}
t=0;
s++;}
/*変換部の最後*/

t=0;
j=0;
i=0;
s=0;
/*積集合の作成部*/
/*ファイル 1 の文字配列 a[i][j]出現頻度 e[i]配列の最大値 f ファイル 2 の文字配列
p[s][t]頻度 n[s]配列の最大値 y*/
for(i=0;i<=f;i++){
    for(s=0;s<=y;s++){
        if(a[i][j]==p[s][t]){ /*同じ頭文字だったら*/
            while(a[i][j]==p[s][t]){ /*同じ文字の間*/
                j++;
                t++;
                if(a[i][j]!=p[s][t]){/*途中までしか同じでない
から*/
                    j=0; /*繰り返し抜ける
*/
                    t=0;
                    break;}
                if(a[i][j]==' '&& p[s][t]==' '){ /*スペ
ースまで同じだったら*/
                    e[i]=e[i]+n[s];
                    j=0;
                    while(j!=MAXLINE){
/*出力部*/

```

```

if(a[i][j]==0x0027 || a[i][j]>0x0039){*数字のフィルタ*/

putc(a[i][j],fp3);}

if(a[i][j]==' '){

    if(e[i]!=0){

        fprintf(fp3," %d¥n",e[i]);

j=0;

t=0;

s++;

break;}

                                j++;
                                }
                                }
                                }
                                }
                                }

fclose(fp3);
    }else{printf("Not Open¥n");}

}
}

```

```

プログラム名 wasyugo.c
#include<stdio.h>
#include<stdlib.h>
#define MAXLINE 10000
main(int argc,char *argv[])
{

    FILE *fp1,*fp2,*fp3;
    int i=0,j=0,e[MAXLINE],f,g,h,l[MAXLINE],k;
    char a[MAXLINE][30],b[MAXLINE][30],c,z[MAXLINE];
    int s=0,t=0,n[MAXLINE],y,u,v,o[MAXLINE],w,r;
    char p[MAXLINE][30],q[MAXLINE][30],m,x[MAXLINE];
    int jadge1[MAXLINE],jadge2[MAXLINE];
    char max1,max2;
    fp1=fopen(argv[1],"r");
    fp2=fopen(argv[2],"r");
    fp3=fopen(argv[3],"w");
    printf("Commandname   :%s¥n",argv[0]);
    printf("FILENAME1      :%s¥n",argv[1]);
    printf("FILENAME2      :%s¥n",argv[2]);
    printf("FILENAME3      :%s¥n",argv[3]);
    for(i=0;i<=MAXLINE;i++){
        jadge1[i]=0;
        jadge2[i]=0;
    }
    i=0;
    if(fp1!=NULL&&fp2!=NULL&&fp3!=NULL) /*入力部
*/
    {
        while((c=getc(fp1))!=EOF)
        {
            e[i]=0;
            l[i]=0;
            if(c>=0x0030&&c<=0x0039){ /*数字のフィルター*/
                b[i][g]=c;
                g++;
            }
        }
    }
}

```

```

    }

    a[i][j]=c;
    if(c=='\n'){
        /*次の単語へ*/
        if(max1<j){/*単語文字数の最大値*/
            max1=j;}
        if(a[i][j-1]>='0'&&a[i][j-1]<='9'){
            i++;
            g=0;
            j=0;}else{i--;
                j=0; }
            continue;}
        j++;
    } /*入力部の終わり*/
fclose(fp1);
f=i; /*行数保存*/
i=0;
j=0;
while(i<=f){
    while(b[i][j]!='\0'){

        j++;
        l[i]+=1;}

    j=0;
    i++;}

i=0;
j=0;
while(i<=f){/*文字から整数の変換部 Z に b の内容をためて A T O I で
変換し E の配列に格納*/

    while(b[i][j]!='\0'){
        z[j]=b[i][j];

        h=0;
        l[i]-=1;
        j++;}

```

```

h=atoi(z);
e[i]=h;
    for(k=0;k<=j;k++){
        z[k]=0;}
j=0;
i++;}
i=0;
j=0;    /*変換部の最後*/
if(fp1!=NULL&&fp2!=NULL&&fp3!=NULL)
/*入力部*/
{
while((m=getc(fp2))!=EOF)
    {
    n[s]=0;
    o[s]=0;
    if(m>=0x0030&&m<=0x0039){    /*数字のフィルター*/
        q[s][u]=m;
        u++;
    }
    p[s][t]=m;
    if(m=='\n'){                /*次の単語へ*/
        if(max2<t){
            max2=t;}
        s++;
        u=0;
        t=0;
        continue;}
    t++;
}    /*入力部の終わり*/
fclose(fp2);
y=s;    /*行数保存*/
s=0;
t=0;
while(s<=y){
    while(q[s][t]!='\0'){

```



```

        t++;
        o[s]+=1;}
    t=0;
    s++;}
s=0;
t=0;
for(r=0;r<=y;r++){
x[r]=0;}/*x の初期化*/
while(s<=y){/*文字から整数の変換部 Z に b の内容をためて A T O I で
変換し E の配列に格納*/
    while(q[s][t]!='\0'){

        x[t]=q[s][t];

        v=0;
        o[s]-=1;
        t++;}

v=atoi(x);
n[s]=v;
    for(w=0;w<=t;w++){
        x[w]=0;}
t=0;
s++;}
/*変換部の最後*/

t=0;
j=0;
i=0;
s=0;
/*積集合の作成部*/
/*ファイル 1 の文字配列 a[i][j] 出現頻度 e[i] 配列の最大値 f ファイル 2 の文字配列
p[s][t] 頻度 n[s] 配列の最大値 y*/
for(i=0;i<=f;i++){
    for(s=0;s<=y;s++){
        if(a[i][j]==p[s][t]){
            /*同じ頭文字だったら*/

```

```

while(a[i][j]==p[s][t]){          /*同じ文字の間*/
    j++;
    t++;
    if(a[i][j]!=p[s][t]){/*途中までしか同じでない
から*/
        j=0;          /*繰り返し抜ける
*/
        t=0;
        break;}
    if(a[i][j]=='&&p[s][t]==' ){ /*スペ
ースまで同じだったら*/
        e[i]=e[i]+n[s];
        /*出現頻度を足す*/
        jadge1[i]+=1;
        jadge2[s]+=1;
        j=0;
        while(j!=MAXLINE){
/*出力部*/
if(a[i][j]==0x0027 || a[i][j]>0x0039){/*数字のフィルタ*/
    putc(a[i][j],fp3);}
    if(a[i][j]==' '){
        if(e[i]!=0){
            fprintf(fp3," %d¥n",e[i]);}
        j=0;
        t=0;
        s++;

```

```

break;}

                                                j++;
                                                }
                                        }
                                }
        }
j=0;
for(i=0;i<=f;i++){
    if(judge1[i]==0){
        while(a[i][j]!='\0'){
            fprintf(fp3,"%c",a[i][j]);
            if(a[i][j]==' '){
                if(e[i]!=0){
                    fprintf(fp3," %d¥n",e[i]);
                    j=0;
                    break;
                }
            }
            j++;
        }
    }
}
t=0;
for(s=0;s<=y;s++){
    if(judge2[s]==0){
        while(p[s][t]!='\0'){
            fprintf(fp3,"%c",p[s][t]);
            if(p[s][t]==' '){
                if(n[s]!=0){
                    fprintf(fp3," %d¥n",n[s]);
                    t=0;
                    break;
                }
            }
        }
    }
}

```

```

        t++;}
    }
}

fclose(fp3);
    }else{printf("Not Open¥n");}

}
}

```

プログラム名 sasyugo.c

```

#include<stdio.h>
#include<stdlib.h>
#define MAXLINE 10000
main(int argc,char *argv[])
{

    FILE *fp1,*fp2,*fp3;
    int i=0,j=0,e[MAXLINE],f,g,h,l[MAXLINE],k;
    char a[MAXLINE][30],b[MAXLINE][30],c,z[MAXLINE];
    int s=0,t=0,n[MAXLINE],y,u,v,o[MAXLINE],w,r;
    char p[MAXLINE][30],q[MAXLINE][30],m,x[MAXLINE];
    int jadge1[MAXLINE],jadge2[MAXLINE];
    char max1,max2;
    fp1=fopen(argv[1],"r");
    fp2=fopen(argv[2],"r");
    fp3=fopen(argv[3],"w");
    printf("Commandname :%s¥n",argv[0]);
    printf("FILENAME1 :%s¥n",argv[1]);
    printf("FILENAME2 :%s¥n",argv[2]);
    printf("FILENAME3 :%s¥n",argv[3]);
    for(i=0;i<=MAXLINE;i++){
        jadge1[i]=0;

```

```

        judge2[i]=0;
    }
    i=0;
    if(fp 1!=NULL&&fp 2!=NULL&&fp 3!=NULL)                /*入力部
*/
    {
        while((c=getc(fp 1))!=EOF)
        {
            e[i]=0;
            l[i]=0;
            if(c>=0x0030&&c<=0x0039){                /*数字のフィルター*/
                b[i][g]=c;
                g++;
            }
            a[i][j]=c;
            if(c=='\n'){                /*次の単語へ*/
                if(max1<j){/*単語数の最大値*/
                    max1=j;}
                if(a[i][j-1]>='0'&&a[i][j-1]<='9'){
                    i++;
                    g=0;
                    j=0;}else{i--;
                        j=0;    }
                    continue;}
                j++;
            }                /*入力部の終わり*/
            fclose(fp 1);
            f=i;    /*行数保存*/
            i=0;
            j=0;
            while(i<=f){
                while(b[i][j]!='\0'){
                    j++;
                    l[i]+=1;}
                j=0;

```

```

        i++;}
    i=0;
    j=0;
    while(i<=f){/*文字から整数の変換部 Z にbの内容をためてATOIで
変換し E の配列に格納*/
        while(b[i][j]!='\0'){
            z[j]=b[i][j];

            h=0;
            l[i]=1;
            j++;}

        h=atoi(z);
        e[i]=h;
        for(k=0;k<=j;k++){
            z[k]=0;}
        j=0;
        i++;}
    i=0;
    j=0;    /*変換部の最後*/
    if(fp1!=NULL&&fp2!=NULL&&fp3!=NULL)
/*入力部*/
    {
        while((m=getc(fp2))!=EOF)
            {
                n[s]=0;
                o[s]=0;
                if(m>=0x0030&&m<=0x0039){    /*数字のフィルター*/
                    q[s][u]=m;
                    u++;
                }
                p[s][t]=m;
                if(m=='\n'){                    /*次の単語へ*/
                    if(max2<t){
                        max2=t;}
                    s++;
                }
            }
    }

```

```

                                u=0;
                                t=0;
                                continue;}
                                t++;
                                } /*入力部の終わり*/
                                fclose(fp2);
                                y=s; /*行数保存*/
                                s=0;
                                t=0;
                                while(s<=y){
                                    while(q[s][t]!='¥0'){
                                        t++;
                                        o[s]+=1;}
                                    t=0;
                                    s++;}
                                s=0;
                                t=0;
                                for(r=0;r<=y;r++){
                                    x[r]=0;}/*xの初期化*/
                                while(s<=y){/*文字から整数の変換部 Z にbの内容をためてATOIで
変換し E の配列に格納*/
                                    while(q[s][t]!='¥0'){
                                        x[t]=q[s][t];
                                        v=0;
                                        o[s]-=1;
                                        t++;}
                                v=atoi(x);
                                n[s]=v;
                                for(w=0;w<=t;w++){
                                    x[w]=0;}
                                t=0;

```

```

s++;}
/*変換部の最後*/
t=0;
j=0;
i=0;
s=0;
/*積集合の作成部*/
/*ファイル 1 の文字配列 a[i][j]出現頻度 e[i]配列の最大値 f ファイル 2 の文字配列
p[s][t]頻度 n[s]配列の最大値 y*/
for(i=0;i<=f;i++){
for(s=0;s<=y;s++){
if(a[i][j]==p[s][t]){ /*同じ頭文字だったら*/
while(a[i][j]==p[s][t]){ /*同じ文字の間*/
j++;
t++;
if(a[i][j]!=p[s][t]){/*途中までしか同じでない
から*/
j=0; /*繰り返し抜ける
*/
t=0;
break;}
if(a[i][j]==' '&&p[s][t]==' '){ /*スペ
ースまで同じだったら*/
e[i]=e[i]-n[s];
/*出現頻度を足す*/
e[i]=abs(e[i]);
jadge1[i]+=1;
jadge2[s]+=1;
j=0;
while(j!=MAXLINE){
/*出力部*/
if(a[i][j]==0x0027 || a[i][j]>0x0039){/*数字のフィルタ*/
if(e[i]!=0){

```



```
putc(a[i][j],fp3);}}
```

```
if(a[i][j]==' '){
```

```
    if(e[i]!=0){
```

```
        fprintf(fp3," %d¥n",e[i]);
```

```
    j=0;
```

```
    t=0;
```

```
    s++;
```

```
    break;}
```

```
        j++;
```

```
    }
```

```
    }
```

```
    }
```

```
    }
```

```
    }
```

```
}
```

```
j=0;
```

```
for(i=0;i<=f;i++){
```

```
    if(jadge1[i]==0){
```

```
        while(a[i][j]!='¥0'){
```

```
            if(jadge1[i]==0){
```

```
                fprintf(fp3,"%c",a[i][j]);
```

```
                if(a[i][j]==' '){
```

```
                    if(e[i]!=0){
```

```
                        fprintf(fp3," %d¥n",e[i]);
```

```
                    j=0;
```

```
                    break;
```

```
                }
```

```
            } }
```

```

        j++;}
    }
}
t=0;
for(s=0;s<=y;s++){
    if(jadge2[s]==0){
        while(p[s][t]!='¥0'){
            if(jadge2[s]==0){
                fprintf(fp3,"%c",p[s][t]);
                if(p[s][t]==' '){
                    if(n[s]!=0){
                        fprintf(fp3," %d¥n",n[s]);
                        t=0;
                        break;
                    }
                }
            }
            t++;}
        }
    }
}

fclose(fp3);
}else{printf("Not Open¥n");}

}
}

```

プログラム名 goihindo.c

```
#include<stdio.h>
```

```
#include<stdlib.h>
```

```
#define MAXLINE 10000
```

```
main(int argc,char *argv[])
```

```
{
```

```
FILE *fp1,*fp2,*fp3;
```

```
int i=0,j=0,e[MAXLINE],f,g,h,l[MAXLINE],k,f1ritu[MAXLINE];
```

```

float hiritu,sekiritu[MAXLINE];
char a[MAXLINE][30],b[MAXLINE][30],c,z[MAXLINE];
int s=0,t=0,n[MAXLINE],y,u,v,o[MAXLINE],w,r;
char p[MAXLINE][30],q[MAXLINE][30],m,x[MAXLINE];
fp1=fopen(argv[1],"r");
fp2=fopen(argv[2],"r");
fp3=fopen(argv[3],"w");
printf("Commandname   :%s¥n",argv[0]);
printf("FILENAME1     :%s¥n",argv[1]);
printf("FILENAME2     :%s¥n",argv[2]);
printf("FILENAME3     :%s¥n",argv[3]);
printf("ファイル 1 のファイル 2 に対する出現頻度の比率は何パーセント? ¥n");
scanf("%f",&hiritu);
if(fp1!=NULL&&fp2!=NULL&&fp3!=NULL)                               /*入力部
*/
{
while((c=getc(fp1))!=EOF)
{
e[i]=0;
l[i]=0;
if(c>=0x0030&&c<=0x0039){          /*数字のフィルター*/
b[i][g]=c;
g++;
}
a[i][j]=c;
if(c=='¥n'){          /*次の単語へ*/
if(a[i][j-1]>='0'&&a[i][j-1]<='9'){
i++;
g=0;
j=0;}else{i--;
j=0;    }
continue;}
j++;
}
/*入力部の終わり*/
fclose(fp1);
f=i;    /*行数保存*/

```

```

i=0;
j=0;
while(i<=f){
    while(b[i][j]!='\0'){
        j++;
        l[i]+=1;}
    j=0;
    i++;}
i=0;
j=0;
while(i<=f){/*文字から整数の変換部 Z に b の内容をためて A T O I で
変換し E の配列に格納*/
    while(b[i][j]!='\0'){
        z[j]=b[i][j];

        h=0;
        l[i]=1;
        j++;}

    h=atoi(z);
    e[i]=h;
    for(k=0;k<=j;k++){
        z[k]=0;}
    j=0;
    i++;}
i=0;
j=0; /*変換部の最後*/
if(fp1!=NULL&&fp2!=NULL&&fp3!=NULL)
/*入力部*/
{
while((m=getc(fp2))!=EOF)
{
    n[s]=0;
    o[s]=0;
    if(m>=0x0030&&m<=0x0039){ /*数字のフィルター*/

```

```

        q[s][u]=m;
        u++;
    }
    p[s][t]=m;
    if(m=='\n'){          /*次の単語へ*/
        s++;
        u=0;
        t=0;
        continue;}
    t++;
}          /*入力部の終わり*/
fclose(fp2);
y=s;      /*行数保存*/
s=0;
t=0;
while(s<=y){
    while(q[s][t]!='\0'){
        t++;
        o[s]+=1;}
    t=0;
    s++;}
s=0;
t=0;
for(r=0;r<=y;r++){
x[r]=0;}/*xの初期化*/
while(s<=y){/*文字から整数の変換部 Z にbの内容をためてATOIで
変換し E の配列に格納*/
    while(q[s][t]!='\0'){
        x[t]=q[s][t];
        v=0;
        o[s]-=1;
        t++;}

```

```

v=atoi(x);
n[s]=v;
    for(w=0;w<=t;w++){
        x[w]=0;}
t=0;
s++;}
/*変換部の最後*/
t=0;
j=0;
i=0;
s=0;
/*積集合の作成部*/
/*ファイル 1 の文字配列 a[i][j]出現頻度 e[i]配列の最大値 f ファイル 2 の文字配列
p[s][t]頻度 n[s]配列の最大値 y*/
for(i=0;i<=f;i++){
    for(s=0;s<=y;s++){
        if(a[i][j]==p[s][t]){
            while(a[i][j]==p[s][t]){
                j++;
                t++;
                if(a[i][j]!=p[s][t]){/*途中までしか同じでない
から*/
j=0; /*繰り返し抜ける
*/
t=0;
break;}
if(a[i][j]=='&&p[s][t]==' ){ /*スペ
ースまで同じだったら*/
flritu[i]=e[i];
/*ファイル 1 の頻度を保存*/
e[i]=e[i]+n[s];
/*出現頻度を足す*/
j=0;
sekiritu[i]=((float)flritu[i]/(float)n[s])*100;

```

```

while(j!=MAXLINE){
/*出力部*/

if(a[i][j]==0x0027 || a[i][j]>0x0039&&sekiritu[i]>=hiritu){/*数字のフィルタ*/

putc(a[i][j],fp3);}

if(a[i][j]==' '){

if(e[i]!=0&&sekiritu[i]>=hiritu){

printf("%dパーセント\n",e[i],sekiritu[i]);

fprintf(fp3," %d\n",e[i]);

j=0;

t=0;

s++;

break;}

j++;

}

}

}

fclose(fp3);

}else{printf("Not Open\n");}

}

}

```

```

プログラム名 igosougo.c
#include<stdio.h>
#include<stdlib.h>
#define MAXLINE 10000
main(int argc,char *argv[])
{
    FILE *fp1;
    int i=0,j=0,e[MAXLINE],f,g,h,l[MAXLINE],k;
    char a[MAXLINE][30],b[MAXLINE][30],c,z[MAXLINE];
    int s=0,t=0,n[MAXLINE],y,u,v,o[MAXLINE],w,r;
    char p[MAXLINE][30],q[MAXLINE][30],m,x[MAXLINE];
    int jadge1[MAXLINE],jadge2[MAXLINE];
    char max1,max2;
    fp1=fopen(argv[1],"r");

    printf("Commandname  :%s\n",argv[0]);
    printf("FILENAME1     :%s\n",argv[1]);

    i=0;
    if(fp1!=NULL)                /*入力部*/
    {
        while((c=getc(fp1))!=EOF)
        {
            e[i]=0;
            l[i]=0;
            if(c>=0x0030&&c<=0x0039){        /*数字のフィルター*/
                b[i][g]=c;
                g++;
            }

            a[i][j]=c;
            if(c=='\n'){                /*次の単語へ*/
                if(a[i][j-1]>='0'&&a[i][j-1]<='9'){

```



```

        i++;
        g=0;
        j=0;}else{i--;
                j=0; }
        continue;}
    j++;
} /*入力部の終わり*/
fclose(fp1);
f=i; /*行数保存*/
i=0;
j=0;
while(i<=f){
    while(b[i][j]!='\0'){

        j++;
        l[i]+=1;}
    j=0;
    i++;}
i=0;
j=0;
while(i<=f){/*文字から整数の変換部 Z に b の内容をためて A T O I で
変換し E の配列に格納*/
    while(b[i][j]!='\0'){
        z[j]=b[i][j];

        h=0;
        l[i]-=1;
        j++;}

    h=atoi(z);
    e[i]=h;
    for(k=0;k<=j;k++){
        z[k]=0;}

    j=0;
    i++;}
i=0;

```

```

        j=0;    /*変換部の最後*/
        for(i=0;i<=f;i++){
            j+=e[i];
        }

        printf("異語は %d 総語は %d です。¥n",f-1,j);
        }else{printf("Not Open¥n");}

    }

```

プログラム名 youkodo.c

```
#include<stdio.h>
```

```
#include<stdlib.h>
```

```
#define MAXLINE 10000
```

```
main(int argc,char *argv[])
```

```
{
```

```
    FILE *fp1,*fp2,*fp3;
```

```
    int i=0,j=0,e[MAXLINE],f,g,h,l[MAXLINE],k;
```

```
    int sum=0,f2sum=0;
```

```
    float youkodo=0.00;
```

```
    char a[MAXLINE][30],b[MAXLINE][30],c,z[MAXLINE];
```

```
    int s=0,t=0,n[MAXLINE],y,u,v,o[MAXLINE],w,r;
```

```
    char p[MAXLINE][30],q[MAXLINE][30],m,x[MAXLINE];
```

```
    fp1=fopen(argv[1],"r");
```

```
    fp2=fopen(argv[2],"r");
```

```
    fp3=fopen(argv[3],"w");
```

```
    printf("Commandname   :%s¥n",argv[0]);
```

```
    printf("FILENAME1      :%s¥n",argv[1]);
```

```
    printf("FILENAME2      :%s¥n",argv[2]);
```

```
    printf("FILENAME3      :%s¥n",argv[3]);
```

```
    if(fp1!=NULL&&fp2!=NULL&&fp3!=NULL)
```

/*入力部

```
*/
```

```
{
```

```
    while((c=getc(fp1))!=EOF)
```

```

    {
    e[i]=0;
    l[i]=0;
    if(c>=0x0030&& c<=0x0039){      /*数字のフィルター*/
        b[i][g]=c;
        g++;
    }
    a[i][j]=c;
    if(c=='\n'){                    /*次の単語へ*/
        if(a[i][j-1]>='0'&&a[i][j-1]<='9'){
            i++;
            g=0;
            j=0;}else{i--;
                j=0;    }
            continue;}
        j++;
    }      /*入力部の終わり*/
fclose(fp1);
f=i;      /*行数保存*/
i=0;
j=0;
while(i<=f){
    while(b[i][j]!='\0'){

        j++;
        l[i]+=1;}
    j=0;
    i++;}
i=0;
j=0;
while(i<=f){/*文字から整数の変換部 Z に b の内容をためて A T O I で
変換し E の配列に格納*/
    while(b[i][j]!='\0'){
        z[j]=b[i][j];

        h=0;

```

```

        l[i]-=1;
        j++;}

h=atoi(z);
e[i]=h;
        for(k=0;k<=j;k++){
            z[k]=0;}

j=0;
i++;}
i=0;
j=0;    /*変換部の最後*/
if(fp1!=NULL&&fp2!=NULL&&fp3!=NULL)
/*入力部*/
{
while((m=getc(fp2))!=EOF)
    {
        n[s]=0;
        o[s]=0;
        if(m>=0x0030&&m<=0x0039){    /*数字のフィルター*/
            q[s][u]=m;
            u++;
        }
        p[s][t]=m;
        if(m=='\n'){                /*次の単語へ*/
            s++;
            u=0;
            t=0;
            continue;}
        t++;
    }
    /*入力部の終わり*/
fclose(fp2);
y=s;    /*行数保存*/
s=0;
t=0;
while(s<=y){
    while(q[s][t]!='\0'){

```

```

        t++;
        o[s]+=1;}
    t=0;
    s++;}
s=0;
t=0;
for(r=0;r<=y;r++){
x[r]=0; /*xの初期化*/
while(s<=y) /*文字から整数の変換部 xにqの内容をためてATOIで
変換しnの配列に格納*/
    while(q[s][t]!='\0'){

        x[t]=q[s][t];

        v=0;
        o[s]=1;
        t++;}

v=atoi(x);
n[s]=v;
    for(w=0;w<=t;w++){
        x[w]=0;}
t=0;
s++;}
/*変換部の最後*/
t=0;
j=0;
i=0;
s=0;
    for(s=0;s<=y;s++){ /*ファイル2の頻度合計*/
        f2sum+=n[s];}
/*積集合の作成部*/
/*ファイル1の文字配列 a[i][j]出現頻度 e[i]配列の最大値 fファイル2の文字配列
p[s][t]頻度 n[s]配列の最大値 y*/

```

```

for(i=0;i<=f;i++){
    for(s=0;s<=y;s++){
        if(a[i][j]==p[s][t]){
            while(a[i][j]==p[s][t]){
                j++;
                t++;
                if(a[i][j]!=p[s][t]){/*途中までしか同じでない
から*/
                    j=0;
                    /*繰り返し抜ける*/
                    t=0;
                    break;}
                if(a[i][j]=='&&p[s][t]==' ){ /*スペースまで同じだったら*/
                    e[i]=e[i]+n[s];
                    /*出現頻度を足す*/
                    j=0;
                    /*出力部*/
                    while(j!=MAXLINE){
if(a[i][j]==0x0027||a[i][j]>0x0039){/*数字のフィルタ*/
putc(a[i][j],fp3);}
if(a[i][j]==' '){
if(e[i]!=0){
fprintf(fp3,"%d¥n",e[i]);
sum+=e[i];
j=0;

```

```

t=0;

s++;

break;}

j++;
}
}
}

}
}

youkodo=((float)sum/(float)f2sum)*100;
printf("ファイル 2 の頻度合計%d 積集合の頻度合計%d 有効
度%f%%¥n",f2sum,sum,youkodo);
fclose(fp3);
}else{printf("Not Open¥n");}

}
}

```

インターネット上における英語教育教材の開発

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1. 目的

WWW(World Wide Web)とDBMS(Data Base Management System)を用いた教育教材の有益性を検討するため、英語教育教材を試作し評価を行った。現在、教育教材としては本、ビデオ、テレビ放送等が主流であるが、これらの教材は学習者への一方通行な教材であり、その反応を制作者が得るのはハガキや教育現場の調査によりかなり時間がかかる。さらに、得られた反応も膨大な量になり、必要な情報を得ることにかなりの手間と時間を要してしまう欠点がある。これらの解決策の一つとして、インターネット上に教育教材を公開し多くの学習者からの回答や反応をリアルタイムにDBMSを利用して蓄積し、蓄積されたデータを解析することにより教材開発を行うことを目的とする。

2. 序論

WWW上でDBMSを用いた教材の場合、たとえば教材に設問を設け、その解答を記入してもらえば学習の達成度をリアルタイムに得ることができる。あらかじめData Base(DB)に設問の解答を用意しておけば、正解、不正解などにより学習者にも達成度を示すこともできる。さらに得られた解答をグラフ等にすれば学習者の得意、不得意などの傾向も客観的に分析でき、その結果は教材のみならず授業等にも生かすことが可能となる。WWWの特徴の1つにマルチメディアを容易に扱えることがある。教育教材を考えた場合これまでの文字ベースの教材のほかにWWW上では静止画、動画、音声も文字と同等に扱えることにより多種、多様な教材を提供できる。WWWを用いることにより学習者と制作者のリアルタイムで双方向なやりとりが行え、さらにDBを用いることで蓄積された学習者のデータを生かしたよりよい教材を開発していくことができ、ひいては教育の現場にもその結果をフィードバックしていくことが可能であると考えられる。さらに近年のコンピュータやインターネットの発達により教材としてマルチメディア教材が提供できるだけでなく学習者からの回答を音声や画像として受け取ることも可能となっている。

本報告書では WWW と DBMS の接続方法と試作した英語教材について述べ、今後の発展性について議論する。

3. WWW からの DB へのアクセスの仕組み

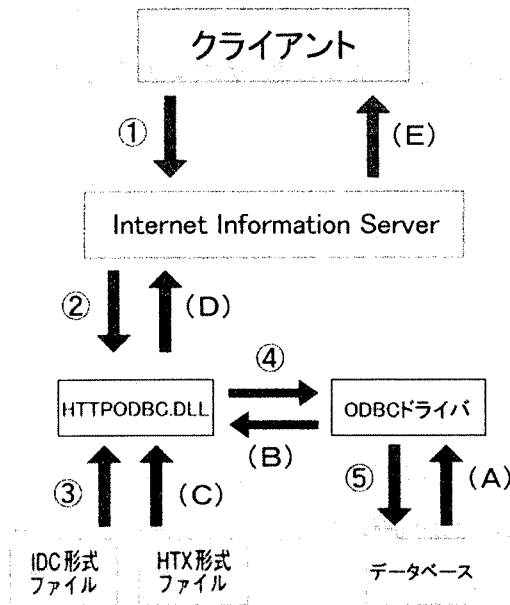


図1 DBへの操作手順

WWW と DB との接続にはいくつかの方法が考えられる。これまで WWW サーバとして多く用いられていた UNIX (オペレーションソフトウェア) 用 WWW サーバでは DBMS との接続には CGI (Common Gateway Interface) を用いて行われている。開発用教育教材の試作では研究協力者に得られた学習者の反応を配布し、評価していただくためには従来の UNIX による WWW サーバと CGI の組み合わせでは UNIX 計算機になれていない研究協力が解析できない状況が考えられた。従って、研究メンバーが扱える形でのデータ取得が必要であったことから Windows NT Server の IIS(Internet Information Server)を用いた Web サーバと IDC(Internet Database Connector)とデータベースソフト Access97、Access2000 を用いたシステムで教材の作成を行った。IDC は IDC 形式ファイルと HTX 形式ファイルという 2 種類のファイルを用いて、DB にアクセスを行う。IDC 形式ファイルは、どの DB をどのように操作するかを記述しておくファイルで、HTX 形式ファイルは HTML 形式のテンプレートファイルで、DB の結果を表示するためのファイルである。

以下に、IIS が DB に対して操作を行う場合の手順を示す。

- ① : IDC 形式ファイルの呼び出す

- ② :HTTPODBC.DLL を実行
- ③ :IDC 形式ファイルを読み込む
- ④ :指定されたDBへ操作命令を下す
- ⑤ :DB操作を行う

もし、IDC形式ファイルにDBで行った操作の結果をクライアントに戻すように書かれていたならば、

- (A):操作結果の出力
- (B):結果を戻す
- (C):HTX形式ファイルを読み込む
- (D):結果をHTX形式ファイルに流し込み、HTML形式に変換
- (E):クライアントに結果が戻る

以上のようにして比較的容易にWWW上の教材とDBを接続することが可能になる。

4. 制作した英語教育教材について

4.1 会話形式の問題

制作した英語教育教材は名前、年齢、英語の学習期間等のアンケートページと中学生、高校生、大学生、社会人と学力に応じた4つの問題集で構成されている。アンケートページは学習者がどのような英語取得度があるのかを今後の参考にするために設けた。教材を使用した場合、アンケートページで得られた学習者のIDをキーワードとして回答結果と関連付けを行っている。付属資料1にアンケートページを示す。

教材は同一内容で2種類作成した。1つは従来の文字ベースの教材であり、もう1つはWWW上での利点を生かし音声付教材を作成した。高校生レベルの問題集を中心に説明する。

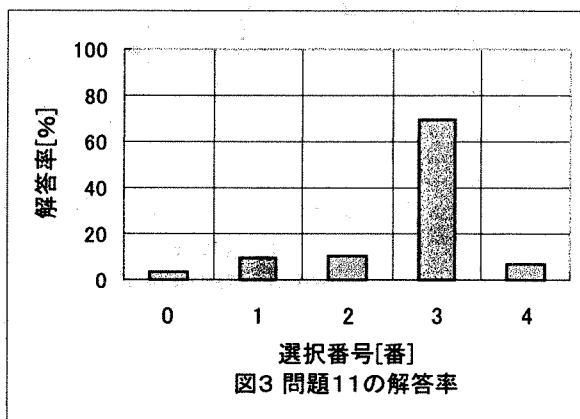
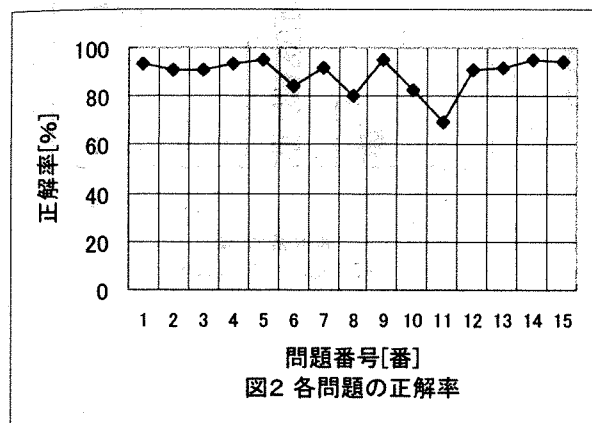
問題は感謝、謝罪、頼み事など日常生活に用いる項目に分かれおり、会話形式で書かれた全15問で作られている。文字ベースの教材の場合、解答方法は4択で、解答はすべてDBに蓄積され、問題の正解、不正解は瞬時に表示されるようになっている。

音声付教材の場合、解答方法は文字ベースの教材と同じであるが、問題と選択の解答例はマウスでボタンを押すと問題文がスピーカ、もしくはヘッドホンから流れるようになっている。学習者は解答例の音声を聞き答えだと思われるボタンを押すことにより解答がDBに蓄積される仕組みになっている。

付属資料2に会話形式問題の一部を示す。URL： 163.47.27.25/test/を参照していただきたい。

会話形式問題の実験と結果

早稲田大学本庄高校の学生の協力を得て実際に問題の解答を行ってもらった(実験1)。その結果を図2に示す。又、一番正解率の低かった問題11の結果を図3に示す。



さらに学習者の Reading 能力と Listening 能力の比較を行うため、テキストと同内容の問題を、音声データを用いて作成、2つの問題を東京都立航空工業高等専門学校電子工学科の5年生に同様に行ってもらった(実験2)。その結果を図4に示す。又、文字と音声で結果に大きく違いがあった問題7の結果を図5に示す。

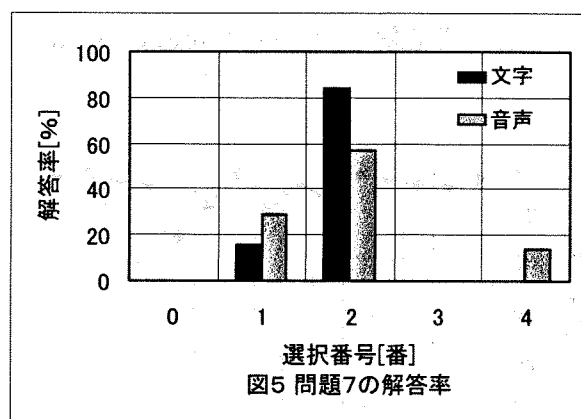
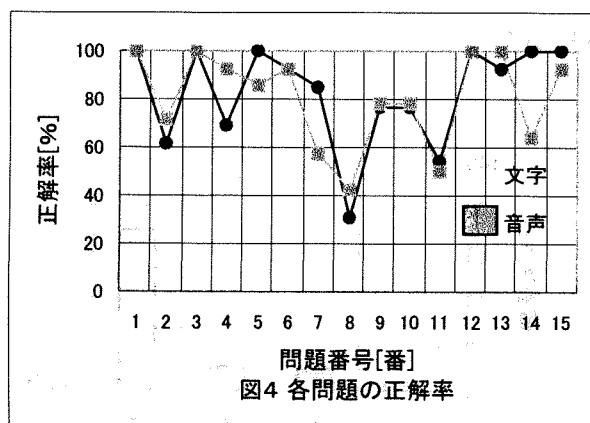
図3で示した結果の問題11はエレベータで先生と同じ階で降りることになり、先生に先に降りてもらうように言う、という場面である。正解率が一番低い理由として考えられることは、こういった場面では言葉ではなく態度で示す事が多いため、日常生活において不慣れな言葉を英語にする力が弱いという事である。

図5で示した結果の問題7は「コーヒーと紅茶どちらにしますか?」という場面です。解答の選択肢は

1. Will you like coffee or tea?
2. Would you like coffee or tea?
3. Can you like coffee or tea?
4. Could you like coffee or tea?

の4つです。結果から、文字の正解率に対して音声の正解率が低いことから、「Will you」と「Would you」が正しく聞き取れていないという事が考えられる。

このように、DB に蓄えられたデータから、以上のような結果が得られた。これより、現状における学習者の学習の達成度が把握でき、さらに多くのデータを蓄えていけば、個人、クラス、学科、学校別のデータの比較や昔と現在のデータを比較することも可能である。



4.2 文法問題

35 大学、学部の入試問題を参考にして各入試問題から問題を抽出して問題を作成した。基本的には選択問題とし学習者が解答を選ぶことによりデータを収集する方法は前述の会話形式の文字ベース教材と仕組みは同じである。現在、この教材は非公開となっている。問題を大学別ではなく文法問題として整理するために整理を行っている。公開していた時には学生の力ためしによるアクセスが多くあった。今後、大学入試問題だけでなく、他の入試問題を整理することにより文法問題とは異なる利用が考えられる。実際電子メールにより高校、高専、大学編入問題についての問い合わせがあった。

付属資料3に作成した教材の一部を示す。URL:163.47.27.25/exam/を参照していただきたい。

4.3 動画問題

WWWで扱えるコンテンツとして特徴的なものとしてマルチメディア コンテンツがある。今回は試作として日常的な生活の一部をアニメーションにより製作し、教材として利用する試みを行った。これは問題をアニメーションとして表示するだけで学習者の解答方法や解答のDBへの蓄積方法は会話形式問題や文法問題と同じである。状況を文字や音声でなく動画という形式で提示できることは語学用教材として非常に利用価値の高い手法であると考えられる。

7. 反省 及び まとめ

今回作成した教育教材は独立教材としての側面からは自習システムと位置づけることができる。さらに、教材と複数の人が動画や音声などを用いてインタラクティブな通信が行えるビデオ会議システムとの併用も考えられる。例えば、指導者と学習者が離れた場所での授業でも、このような教材を用いて演習を行えば、その結果は瞬時に得る事ができる。よって、指導者はそれを基に注意点等をリアルタイムに講義していくことも可能となる。したがって、補助教材としての側面からは遠隔地教育への応用も考えられる。

このように、WWW を用いることによりリアルタイムによる学習者の意見を取り入れた教材の提供ができ、さらに DB を用いることにより蓄積されたデータに対して様々な処理が行うことができる。それによって得られる学習者の学習傾向や達成度などを知ることにより、教材および教育の現場へのフィードバックが可能となる。反省点として特にマルチメディア コンテンツの扱い経験が乏しく、初期に作成した音声データの質があまり良くなく学習者にとって若干聞きにくい点が上げられる。また、WWW 上の教材を作成しているのは英語教育に携わっていない者が作成したことにより、問題の一貫性に欠けた気がしている。今後は英語教育に携わっている教員、研究者の方と密な連絡をとり、今回習得した技術を利用し、より有益な教材作成を行いたい。本研究は 1998 年より開始されたが、過去 2 年間ににより計算機技術は大きく発展し、インターネットも発達してきた。計算機の発達とインターネットの発展は WWW 上での教材提供にとって常に新しい手法を考える必要性を感じさせている。前述の音声の扱いも現在ではノイズの少ない高音質の音声データを手軽に供給できるようになった。現在では本研究の発展形として大規模記憶容量を接続した WWW サーバの開発を考えている。大規模記憶容量を備えることによりさらに多種、多様なマルチメディア コンテンツの扱いが可能となり、学習者の解答もこれまでの記号選択や、英文の入力以外に映像、音声によるデータ収集も可能となる。特に音声データは英語の発音問題も WWW 上の教材として使用可能となる。

8. 参考文献

1. 大沢文孝 著：Windows NT 4.0 Web アプリケーションの構築ガイド ソフトバンク 1997
2. 高井茅広 著：Access97 パーフェクトマスター 東和システム 1997
3. 岡崎桂子 他 著：詳細 HTML & JavaScript 辞典 秀和システム 1997

[トップページへ戻る](#)

WELCOME 英語教材の受付

以下のアンケートに 入力または 選択をお願いします。

注) 名前と年齢は必ず入力してください。(正常に動作しません)

| | |
|----------|---------------------------------------|
| 名前: | <input type="text"/> |
| メールアドレス: | <input type="text"/> |
| 年齢: | <input type="text"/> |
| 学校名: | <input type="text"/> |
| 学年: | 中学1年 <input type="button" value="v"/> |
| 英語の学習期間: | 1年未満 <input type="button" value="v"/> |

次は 海外生活の経験ある人への質問です。

注) 経験ない人は次の質問へどうぞ

海外生活の時期: 12歳以前 12歳以後 ありません

海外生活の期間:

[次の質問へ](#)

どのレベルの問題に挑戦しますか？

注)中学生問題は未作成です。

| レベル | 内容 |
|------|---------------------|
| 高校生1 | : Reading |
| 高校生2 | : Listening |
| 大学生 | : Writing |
| 社会人 | : Reading & Writing |

アンケートありがとうございました。
では、入力ボタンを押して、問題にチャレンジしてください。

以下の文章を読んで、適切な応答をしているものを音声聞いて、選んでください。

Thanking

1. あなたの誕生日に、友人がプレゼントを用意していました。友人がプレゼントを差し出して、あなたに次のように言います。あなたはお礼の気持ちを伝えます。何と言いますか。

Your friend: PUSH ←クリックすると音声がかかります。

You: PUSH



1.PUSH 2.PUSH

3.PUSH 4.PUSH

2. 英語の授業中です。あなたはわからない単語の意味を辞書で確認しようと思いましたが、あいにく手元に辞書がありません。隣の席のAさんに辞書を貸してくれるように頼んだところ、Aさんが差し出してくれました。あなたは何と言いますか。

A: PUSH

You: PUSH



1.PUSH 2.PUSH

3.PUSH 4.PUSH

Apologies

1. 満員電車で、あなたはよろけて隣の人の足を踏んでしまいました。その人は痛がっています。あなたは謝ろうと思います。何と言いますか。

Someone: PUSH

You: PUSH



1.PUSH 2.PUSH

3.PUSH 4.PUSH

2. あなたは英検の2次試験(Speaking test)を受けています。面接官の言った英語(「〇〇さん、あなたは週末にたいして何をしますか。」)がよく聞き取れませんでした。あなたは何と言って聞き直しますか。

Examiner: PUSH

You: PUSH



1.PUSH 2.PUSH

3.PUSH 4.PUSH

3. あなたは修学旅行で北海道にいます。今日は班別自由行動で札幌の市内見物をしています。慣れない街のため、札幌の駅の場所がわからなくなりました。班のリーダーであるあなたは、通りすがりの人に駅へ行く道を尋ねようとします。まず、何と言って話し始めますか。

You: PUSH



1.PUSH 2.PUSH

3.PUSH 4.PUSH

Passenger: PUSH

Requests

1. 英語の授業にイギリス人のマリー先生がやってきました。あなたは、マリー先生が日本語を話せるかどうか聞いてみたいと思っています。どのように聞きますか。

You: PUSH



1.PUSH 2.PUSH

3.PUSH 4.PUSH

Marie: PUSH

2. 先週の日に、あなたの家にいとこの伯母さんが訪ねてきました。あなたのお母さんとおしゃべりを始めています。あなたは挨拶をした後、伯母さんに、コーヒーと紅茶のどちらがよいか尋ねたいと思いました。どのように聞きますか。

You: PUSH



1.PUSH 2.PUSH

3.PUSH 4.PUSH

Aunt: PUSH

3. 今日はとてもムシムシしています。あなたは、教室の窓を開けてほしいと思い、窓際の友人に窓を開けてもらってもいいか尋ねようとしています。何と言いますか。

You: PUSH



1.PUSH 2.PUSH

3.PUSH 4.PUSH

Friend: PUSH

4. 昼休みです。担任の先生から、至急自宅に電話をかけるようにと言われました。あいにく、学校に設置してある電話は故障中です。友人にPHSを貸してもらおうと思いつきました。何と言いますか。

You: PUSH



1.PUSH 2.PUSH

3.PUSH 4.PUSH

Friend: PUSH

5. あなたは友人の健太に電話をしました。始めに健太君のお母さんが電話に出ました。健太君のお母さん

は、あなたに何と言って、電話をつなげると思いますか。

You: PUSH

Kenta's mother: PUSH



1.PUSH 2.PUSH

3.PUSH 4.PUSH

Offers

1. エレベーターで、先生と一緒にになりました。同じ階で降りることになり、先生から降りてもらおうと思いましたが、どのように言いますか。

You: PUSH



1.PUSH 2.PUSH

3.PUSH 4.PUSH

Teacher: PUSH

Greeting

1. あなたは朝、友達に会った時、何と言いますか。

You: PUSH



1.PUSH 2.PUSH

3.PUSH 4.PUSH

2. あなたは英語の授業でマリー先生に「元気ですか。」と声をかけられました。あなたはとても元気です。何と返事をしますか。

Marie: PUSH

You: PUSH



1.PUSH 2.PUSH

3.PUSH 4.PUSH

Compliments

1. 友人の綾子がショートカットにしてきました。あなたはとても似合っていると思いました。綾子さんに何と言って誉めてあげますか。

You: PUSH



1.PUSH 2.PUSH

3.PUSH 4.PUSH

Aya: PUSH

Assertion

1. あなたにお姉さんがいるとします。今月はあなたの誕生日です。お姉さんはあなたに何か買ってくれるようです。新しい靴がほしいことを伝えるには何と言いますか。

Your sister: **PUSH**

You: **PUSH**



1.PUSH 2.PUSH

3.PUSH 4.PUSH

回答する

以下の文章を読んで、英語でお答えください。

例題1

あなたは友人の結婚式でスピーチを頼まれましたが、スピーチをするのは嫌いなので丁寧に断ろうと思いません。何と言えばいいでしょうか。

例題2

友人が「宝くじで10万円当たった」と言いました。何と答えますか。

例題3

アメリカでアメリカの友人にMajor Leagueの野球の試合に招待されました。観戦後、丁寧にお礼を言いたいです。

例題4

友人がクラス代表のスピーチコンテストに出場し、立派にやり終えました。満足の意を表わしてあげましょう。

例題5

父親の3回忌の法事のため、英語の授業を来週休みたいのですが、ネイティブの先生に何といたらいいでしょう。

例題6

同じクラスの友人が交通事故で昨日亡くなったと別の友人から聞きました。あなたなら何と答えますか。

例題7

街角で突然、外国人に英語で話しかけられましたが、よく意味が分かりません。あなたなら何と言いますか。

例題8

友人たちと喫茶店でお茶を飲んでいます。トイレに行きたくなりました。なんと言いますか。

例題9

あなたは先生から借りたMD playerを自分の過失(責任)により壊してしまいました。何といますか。

例題10

あなたは先生から借りたMD playerを通常の方法で操作を行ったにもかかわらず、分けも分からず動かなくなってしまいました。何といますか。

例題11

あなたと友人たちはパーティーのために準備をしています。あなたはテーブルをまず片付ける係です。テーブルを片付け終わったと言いましょ。

回答する

全回答を削除する

| | | | |
|----------|------------------------------|-------------------|-----------------|
| 平成 7年 | [東洋大]経済1部 | [桃山学院大]文、経営(推薦) | [桃山学院大]文、経営(推薦) |
| | [桃山学院大]社会(推薦) | [関東学院大]文 | [東京電機大]前工(1部) |
| | [関西大]工(AOOO) | [関西大]文(AOOO) | [早稲田大]政経 |
| | [富山大]外国語 | [立教大]理 | [追手門学院大]経営(B日程) |
| | [追手門学院大]人間(B日程) | [追手門学院大]経済(推薦) | [追手門学院大]文(A日程) |
| | [東京理科大]理工(B方式) | [東京理科大]工(1部)(B方式) | [立教大]社会 |
| | [立教大]文(A) | [立教大]文(B) | [立教大]経済 |
| | [立教大]経済 | [立教大]法 | [関西大]経済(A日程) |
| | [関西大]総合(情報、文、社会、商、経済、法)(S日程) | [関西大]商(A日程) | [関西大]法(A日程) |
| | [関西学院大]理 | [関西学院大]総合政策 | [関西学院大]法 |
| | [関西学院大]社会 | [京都橘女子大]文(A方式) | [京都橘女子大]文(B方式) |
| | [京都橘女子大]文(推薦) | [東北学院大]文(1部) | |

V-i To complete the English version of this Japanese sentence, answer the question below.

あまり人生経験を持たない作家たちが書いた20世紀中葉のSFが、より多くの経験を積んだ教育ある人々に、真実ではないように見えたというのは興味深いことである。

It is interesting that science fiction of the middle of the twentieth century, _____, seemed untrue to more experienced and educated people.

Complete the underlined part. Write your version on your written answer sheet. Your version must not exceed ten words.

V-ii Read this dialogue, and answer the question below.

Girl: What's that book you're reading?

Boy: It's a science fiction novel. Planet of the Orange Daun. It's one of the best I've ever read?

Girl: Have you read a lot?

Boy: Oh, hundreds. Maybe thousand.

Girl: So you're science fiction fan, then?

Boy: Yes. _____.

Girl: For so long? I know you're 19 now, so that means you must have been four when you read the first one. Are you sure you aren't exaggerating?

Boy: Well maybe. But it's at least years.

To complete the underlined part, write one sentence in English on your written answer sheet. You must write a complete sentence. and it must contain between eight and twelve words.

提出

[Ⅲ]A. 次の日本文と英文を読んで、設問に答えなさい。

我々のこの流動的な社会では、友情は親密で堅固で強く、寛大なものであっても、状況が変われば短期間で薄れていくこともありうる。どちらの側もこのことによって心が傷つけられることはないだろう。1年か2年の間は、双方がクリスマスカードをかわすし、しばらくの間は2,3度手紙もかわすかもしれないが、それだけで終わってしまう。もし同じ二人が偶然に再び、それも何年も後に出会ったなら、彼らは途切れていたところから友情を回復してうれしく思うだろう。このこは、友情がもっとゆっくり花開くが、その後は相互に恩義を感じて、しばしば深く双方の家族にまで及ぶ生涯つづきずなとなる国々からやってきた人びとを当惑させることになるだろう。

アメリカ合衆国では、あなたは人々の家を自由に訪れ、休日ともに過ごし、子供たちその生活をともに楽しんで、永続的な恩義を受けたと心配したりしないですむ。あなたが返せないからといって、親切なもてなしを快く受けることをためらってはならない。誰もあなたがそうしてくれることを期待しないだろう。なぜならあなたが故郷から遠く離れていることを彼らは知っているから。アメリカ人はあなたを歓迎することを楽しむだろうし、もしあなたが彼らのもてなしを素直に受け入れればうれしく思うことだろう。

In this mobile society of ours, friendships can be close, constant, intense and generous, yet fade away in a short time if circumstances shift. Neither side will (a). Both may exchange Christmas cards for a year or two, perhaps a few letters for a while—then no more. If the same two people meet again by chance, even years later, they pick up the friendship (1)(2)(3)(4) and are delighted. This can be perplexing to those from countries where friendships flower more slowly but then become lifelong attachments, with mutual obligations, extending sometimes deeply into both families.

In the United States you can feel free to visit in people's homes, share their holidays, enjoy their children and their lives without fear that you are taking on a lasting obligation (1)(2)(3)(4)(5)(6) because you cannot offer it in return. No one will (b) for they know you are far from home. Americans will enjoy welcoming you and be pleased if you accept their hospitality easily.

- ① 下線部①の空所(1)～(4)に、日本文の意味になるように次のア～オから適当なものを一つずつ選び、その記号をマークしなさい。ただし、余分なものが一つ含まれている。

ア.left イ.where ウ.them エ.it
オ.off

(1): (2): (3): (4):

- ② 下線部②の空所(1)～(6)に、日本文の意味になるように次のア～カから適当なものを一つずつ選び、その記号をマークしなさい。ただし、文頭にくるものも小文字で示してある。

ア.accept イ.not ウ.do エ.hesitate
オ.to カ.hospitality

(1): (2): (3): (4):

(5): (6):

- ③ 日本文の意味に相当する英文になるように、空所(a)(b)にそれぞれ適当な英語を入れ、それを解答欄に記入しなさい。

a:

b:

提出

「教科教育情報化の4段階推移過程：英語教育の情報化」

原田康也：早稲田大学メディアネットワークセンター教務担当教務主任（法学部教授）

1. 「教育の情報化」

インターネットの家庭への普及、商取引の電子化をはじめとする情報化社会の進展に伴い、児童・生徒に高度情報通信社会の中で主体的に生きぬいていく力(生きる力)を身につけさせるという必要性が第15期中央教育審議会第一次答申で示され、「情報化の進展に対応した初等中等教育における情報教育の推進等に関する調査研究協力者会議」(以下、「協力者会議」)が設置された。

この報告をふまえ1998年12月に小・中学校学習指導要領の改訂が、1999年3月に高等学校学習指導要領の改訂が行われ、小・中学校は2002年から、高等学校は2003年から施行される。情報化対応に関連して、以下の点があげられている。

- 各教科及び「総合的な学習の時間」で体験的な学習，問題解決的な学習の充実。
- 各教科等で知的好奇心や探究心，論理的な思考力や表現力の育成を重視。
- コンピュータ等の情報手段の活用を一層推進。中学校技術・家庭科で情報に関する内容を必修化，高等学校で教科「情報」を必修化 など。

2. 「情報（科）の教育」と「教科教育の情報化」

広く教育の情報化を意味する広義の“情報教育”は、教科「情報」の教育内容を中心とする狭義の“情報教育”と既存教科の情報対応を中心とする“教科教育の情報化”の大きく2つに分類できる。

2.1 狭義の「情報教育」

狭義の「情報教育」は、「協力者会議」の最終報告『情報化の進展に対応した教育環境の実現に向けて』において「情報教育の目標」という形で次のように規定されている。初等中等教育において「情報教育」という言葉は、この「情報活用の実践力」、「情報の科学的な理解」、「情報社会に参画する態度」の3つを意味することとなる。(ただし「情報教育」という言葉を一般にこの意味で使おうとすることは、「情報教育」に関わる多くの活動が「教科教育の情報化」を中心に展開されている現状ではもはや不可能であろう)

- (1) 課題や目的に応じて情報手段を適切に活用することを含めて、必要な情報を主体的に収集・判断・表現・処理・創造し、受け手の状況などを踏まえて発信・伝達できる能力
(情報活用の実践力)

(2) 情報活用の基礎となる情報手段の特性の理解と、情報を適切に扱ったり、自らの情報活用を評価・改善するための基礎的な理論や方法の理解

(情報の科学的な理解)

(3) 社会生活の中で情報や情報技術が果たしている役割や及ぼしている影響を理解し、情報モラルの必要性や情報に対する責任について考え、望ましい情報社会の創造に参画しようとする態度

(情報社会に参画する態度)

2.2 「教科教育情報化」の推移過程 4 段階

狭義の“情報教育”と対比して「教科教育の情報化」というとき、現状では既存の教科においてネットワークやコンピュータ等を活用することによってその教授方法ないし授業実践が情報化されることを意味する場合が多いと思われる。しかし、「教科教育の情報化」について議論する際には、所与の教科・所与の教育内容を暗黙の前提とした上で教育方法における情報対応を考える「教科教育方法の情報化」(以下の(1)-(3)に相当)を意味するのか、情報社会の進展に則して教科の内容の見直しと教育課程の現代化を考える「教科の内容・教育課程の情報化」(以下の(3)-(4)に相当)を意味するのかを明確に意識して区別する必要がある。現在では段階(1)への対応が議論の中心となりがちだが、「教育の情報化」としては(2)-(4)が本質的に重要である。

(1) 『既存の教科の教育内容を前提として、学習過程を変えることなく既存の紙・黒板・視聴覚機器がマルチメディア化される。』

情報化がもたらすマルチメディア教材は、既存の内容・課程を前提とした教育の体系においても効果的に機能し、既存のメディアとの置き換えですむ部分も大きいので、この「教科教育方法の情報化」は情報化過程の初期段階において典型的に見られるものと思われる。

(2) 『マルチメディアのもたらすインタラクティブ性により、学生を主体とする学習観に変化する。』

旧来の視聴覚メディア利用教育においては、教員が授業の中心であり、生徒は受身の観客として位置付けられ、メディアは提示装置的として使われる傾向があったが、情報ネットワークとコンピュータの出現は、生徒が直接参加・関与することができるという点で本質的に異なっている。例えば英語の授業でネットワークを利用すると、生徒は教室にいながらにして、文字あるいは音声を通じて、教員や他の生徒だけでなく、教室外の間人とも直接的に英語によるコミュニケーションを行うことが可能となる。外国語以外の授業にお

いても、生徒を中心とした学習活動を実現する上で、メディアの果たす可能性は大きい。

(3) 『上記がもたらす結果として、重要視されるべき内容が変わる。』

社会における情報化の進展とメディアの進歩にあわせて授業形態の変化が教育の見なおしから教育の前提となる社会的価値観をも変える可能性がある。たとえば学問的にあまり本質的でない事項でも、これまでは正確に記憶しているかどうか重要になることがままあった。しかし、情報化に伴う知識情報のデータベース構築と、随時ネットワークに接続できる携帯端末の実現、自然言語処理や、強力なエンジンによる高速検索という手段を容易に用いられるようになると、これらの記憶はもはや無価値なものになりかねない。また、従来の学校教育では出席が重視されてきたが、講義を配信するオンデマンド映像配信技術の発達と低価格常時接続の高速ネットワークの普及により、いつでも受講できるようになれば、一方通行的な講義型の授業では教室に足を運ぶ必要すらなくなる。質問をやりとりするための双方向型の意志疎通システムも容易に実現できる。これらが普及すると、記憶型テストも出席も成績評価に使うことはできず、学習評価の判断基準の再検討すら必要になってくる。すなわちこれまで定説とされてきた「メディアいかにかわらず学習課程・結果は変化しない」という法則は、「教科教育方法の情報化対応」により成立しなくなる可能性がある。

(4) 「教育内容・教科課程の情報化」

学校を含む社会において、情報社会の進展に伴って知識や記憶に対する価値判断が変わるにつれ、各教科の教育内容・教育方法の大幅な再検討が余儀なくされることになり、その結果「教科の内容・教育課程の情報対応」が進むことが想定される。例えば、従来は p という事実を記憶することが重要であったかもしれないが、これからは p という事実にたどり着くにはどのような情報探索の経路があるかというメタな知識が重要となるかもしれない。あるいは q という一つの結果を得る能力ではなく、 q という結果に至るプロセスを複数備えていることが求められるかもしれない。「教育内容・教育課程の情報化」としては、情報社会における認知発達課程のあり方から再検討を迫られる事項も多いものと思われる。また、具体的な事項としては、情報通信ネットワークの進展にともない、従来以上に外国語を含めた言語コミュニケーション能力が求められるようになるであろうという予想も立てられる。

上記 4 段階はあくまでも理念形の提示であって、実際の情報化が必ずこのような時系列的な段階を経て進行するという主張ではない。この 4 段階が時系列的な関係を構成するのではないのと同様に、線形の関係にもなく、ある種のフィードバックループを構成するも

のと考えられるが、ここでは詳細に立ち入る余裕がない。

3. 「英語教育の情報化」

上に述べた教科教育情報化 4 段階推移過程を英語教育の情報化に当てはめて具体的に考えてみよう。「英語教育の情報化」というとき、一般には従来の英語の教授体系・教授方法を前提として、それをより有効・効率的に実現する手段としてネットワークやコンピュータ等を授業に活用することから議論が始まることが多い。しかしながら、「英語教育の情報化」について議論する際には、従来の教育内容を前提として教育方法における情報対応を考える「教科教育方法の情報化」(以下の(1)-(3)に相当)だけではなく、情報社会の進展に則して英語教育の教育内容の見直しと教育課程の現代化を考える「教科の内容・教育課程の情報化」(以下の(3)-(4)に相当)をも意識する必要がある。議論を具体的にするために、ここでは早稲田大学法学部において英語を担当する筆者が試みてきた授業実践から大部分の例を取ることにする。

(1) 『既存の教科の教育内容を前提として、学習過程を変えることなく既存の紙・黒板・視聴覚機器がマルチメディア化される。』

英語教育は LL も含めて視聴覚メディアを利用した教育方法について比較的積極的な取り組みを示してきた教科であると思われるが、情報化がもたらすマルチメディア教材は、既存の内容・課程を前提とした教育の体系においても効果的に機能し、既存のメディアとの置き換えですむ部分も大きいので、この「英語教育方法の情報化」は情報化過程の初期段階において一般的に生じるものと思われる。単純な例としては、ビデオ（ないしプロジェクタ）のある教室や自習室で、新たな「再生装置」として PC を接続して新たな「メディア」として CD-ROM や DVD やインターネット上の web site を提示するという利用方法も、英語教育の情報化として十分な意味を持つ。従来の LL 教室に PC を一台だけ導入し、教員用のコンソールに接続してマルチメディア教室と呼ぶ例も見られるが、そのことを過小評価すべきではない。教材提示装置としての PC では、従来の授業観・学習観に大きな変更を加えることなく利用が可能であるので、教員の心理的抵抗も少ない。一人 1 台のパソコンを一般の授業でどう有効活用するか、必ずしも明確な答えがあるわけではないが、PC とプロジェクタがあれば、教員の教材提示や学生の発表に際しての資料提示に有効に利用できる。

その発展形として、LL 教室で英語の授業を行ってきた場合には、そこに一人 1 台の PC を設置し、教室内の LAN を組み、インターネットに接続するということも考えられるが、一つの教室において生徒・児童の数だけ PC を用意するとすると、予算・スペース・保守などさまざまな派生的課題解決に多大の努力を要し、一方そうした授業環境を有効に活用するための教育手法・評価方法を検討する必要性が生じるのみならず、授業で利用するための

ソフトウェアならびにコンテンツの調査・購入ないし制作・改定など、個人または少数のグループでは解決不能の課題に多数直面することになる。一方、PCを教材提示装置として捉えたと、テレビが設置されている教室であれば、安価なスキャンコンバータを経由することにより、比較的簡単にCD-ROMなどの内容を提示することが可能となる。視聴覚教室やLL教室などであれば、ビデオやオーディオテープなどの入力装置の一つとして捉えればよい。インターネット上の情報であっても、事前にハードディスクやMOなどの媒体に収めるなどの手間をかければそのまま提示可能となる。かりに学校がインターネットに接続されたとしても、当初は回線状況も不十分であろうし、教員も生徒・児童もネットワークの利用に十分習熟していないとすれば、いずれにせよ事前に必要な情報をローカルディスクに収めることは、限られた授業時間を有効活用する上で不可欠な努力である。ビデオを授業に利用するとなれば、提示したい部分を再編集したり、少なくとも頭出しするなどの手間をかけるはずであるから、こうした手間は余計なコストとはいえない。

筆者が英語を教えている早稲田大学法学部では、1990年度夏にLL教室の機器更新を行ったが、その際にプロジェクタをPC対応の解像度の機種とし、当時主流であった国産PCのコンパチ機を教員用コンソール上に設置し、学内デジタル電話回線を通じて別キャンパスにあったUnix環境に接続した。そののち、プロジェクタでは表示が暗く、室内の蛍光灯を消さざるを得ず、手元で見られないため学生の作業結果との照合がやりにくいという声が大きくなってきたため、安価なスキャンコンバータを用意し、NTSC信号に変換した後、学生用ブースモニタに提示するようになった。これは、蛍光灯を消さなくてよい、見やすい、手元で比較ができるということで、学生からは好評となった。さらに、1995年度にPCをWindows対応の機種に変更し、学内ネットワークを経由してインターネットに接続し、webやCD-ROMの内容を提示することが可能となった。

当初は板書のかわりにPC上ないしUnix上のエディタに文字入力をして表示させていたが、まったくの板書の代替として考えても、授業を進めるにつれてPCを利用することに板書にはないいくつかの効能があることがわかった。一つは容易に記録が残せる点である。板書を記録に残すためには別途作業が必要となるが、PC上でエディタやワープロを起動して文字を入力して表示させると、そのままファイルとして記録を残すことが容易にできる。このことは、前回までの文字提示の内容をその次の授業でも瞬時に繰り返すことが可能となることを意味するが、LL機器の操作など毎週同じ説明を繰り返す場合、口頭だとすでに了解している学生にはうっとおしくなるところも同じ説明を画面から見せるだけだと比較的スマートであり、戸惑っている学生にはそれなりのヒントともなる。また、板書ではスペースがなくなると消して次の板書を行わざるを得ないために授業時間内に提示できる文字の量に限界があるが、PCでは簡単にスクロールなどして戻ることができる。このためもあって、板書の時と比べて、学生に対して提示する単語やテキストの量が圧倒的に増えた。具体的な比較は、板書時の提示文字量を記録に残していないので難しいが、Windows機となって表示が見やすくなるなどの変化も含めて、少なくとも3倍から5倍ぐらいの増加と

なっているものと思われる。このことは、板書をノートに転記する前提で考えると受講者の負担増につながるが、web などを利用して授業外の時間にも同じ情報に接することを可能とすれば、さらに新たな可能性が広がる。

PC から文字入力するのであれば、事前に資料を用意して配布すればいいように思われるかもしれないが、教室内でその場で文字入力することにはいくつかの積極的効能がある。一つは、学生の反応・様子を見て柔軟に追加・変更できることである。上記の筆者の授業は英語のニュースの聞き取りを中心とした内容なので、単語としては比較的用意であっても、聞き取りが難しい、ないしアナウンサーの発音の癖が強いなどの事例がしばしば生じる。事前の準備では、こうした部分をすべて拾うことはむずかしく、また拾いすぎるとヒントとして過剰になる可能性も強い。その点、授業時に追加・変更できるということはPC を利用した教材提示として重要なポイントとなる。また、板書だと、多量の内容を提示した場合、どこに着目させるかそれなりの工夫が必要となるが、PC の場合、特定の部分に着目させたい場合は、他の部分を表示画面上から排除するなどの操作が比較的瞬時にその場で工夫できる。

(2) 『マルチメディアのもたらすインタラクティブ性により、学生を主体とする学習観に変化する。』

上記 (1) の説明においても、当初は単純な文字テキスト提示装置と考えていた PC を使う過程で、教員が学生の反応や応答に応じてその場で表示内容に追加・変更・修正を加えるインタラクティブ性が重要となってくるのが明らかになった。かりにそのようなインタラクティブ性を求めないのであれば、文字提示に PC を用いる必要性は見えなくなってしまふ。教材提示用の入力再生装置の一つとして PC を捉えたときにおいてすら、その即時性・応答性が重要な要素として浮き上がり、学生の反応に対応するためのインタラクティブ性の意義に気づかざるを得なくなるのである。この点をさらに強調して言いかえると、旧来の視聴覚メディア利用教育においては、あくまでも教員が授業の中心であり、生徒は受身の観客として位置付けられ、メディアは提示装置的として使われる傾向があったが、情報ネットワークとコンピュータの出現は、生徒が直接参加・関与することができるという点で本質的に異なっている。このことを端的に示すのは、英語の授業でネットワークに接続された PC を利用する場合である。筆者は 1990 年代に入る前後から英作文の指導においてコンピュータ教室を利用し、海外の学生との電子メールによる文通なども行ってきたが、その後教室環境が Windows などの GUI 主体に変わるにつれてワープロを利用した文章作成だけでなく、プレゼンテーションツールを利用した口頭発表、メーリングリストによる情報交換などを行ってきた。

古典的な「英作文」というと、文脈から独立した例文が文法事項などを中心としてまとめられた教科書を採用して、学生が宿題として用意してきた文を板書させ、その場で添削

するなどの図式が想像される。しかし、ここでいう英作文というのは、英語によって文章をつづり、文書を作成することをさしている点を強調しておきたい。本来 **composition** といえば文章、絵画、音楽を問わず、このような内容に言及するのが当然であるのだが、日本で「英作文」というと、基本文型を暗記するための練習としての和文英訳を指す傾向が強い。

レポートを書いたり、文章をまとめたりするという作業は、昔は密室で孤独に行うものと思われていた。しかし、作文というのは読み手と書き手との共同作業として存在している。アカデミックな分野では、論文を発表する場合、投稿した原稿を査読委員が評価し、必要に応じて修正した原稿をさらに編集委員が評価して、最終的に採録かどうかの結論に至るとというのが一般的で、こうしたいわば公式の原稿修正以前の段階でも、比較的身近な研究者仲間に草稿を配布してコメントを求め、それを参考にして修正を重ねるという手順を踏む場合も多い。アカデミックな分野以外でも、文章のテーマは多くの場合執筆者と編集者などの話し合いの過程の中で次第に明確化していくもので、原稿が印刷物になるまでには、編集や校正の段階で大幅な変更が加えられていくことがふつうである。読者を想定しない文章作成は基本的にナンセンスで、複数の人間が分担して、あるいは共同で文章をまとめる場合も含め、文章をまとめるという行為は多くの人間の共同作業として成り立っている。

筆者の英作文の授業においては、グループに分かれて英文によってある一つの主張を行うことを目標に、文章の論理的展開方法の基本について考え、これを英語においてどのように表現するか、実践を通して練習していくとともに、英作文を上のような意味での共同行為としてとらえ、これを効率よく実現していく手段として、さまざまな電子的入力編集手段の利用方法を実習していくという方針で望んだ。機械操作に関しては、キーボード初心者も多いことから、タッチタイプの練習から始めていた時期もあるが、ワープロソフトなどの扱い方を実習した上で、インターネット上で電子メールや WWW を利用して情報を収集したり発信したりする方法を学び、**peer evaluation/ peer revision** などを取り込んでグループで論文をまとめるといった作業に取り組むという目標を学生に示していた。参考となる文献資料の電子的な求め方、あるいは資料に対する言及方法の基礎的な事項についても触れる機会があり、レポート作成のために必要な基礎的方法論を考え直す機会となることを目指していたという意味で、1990年代初頭に大学教育の課題となっていた教養基礎演習などの一般教育のあり方の見なおしとつながる部分もある。

1994年度法学部設置の英語表現演習の授業を例にとると、前期は **paragraph writing** の実践練習と **WordPerfect** のきわめて基本的な使い方の練習に中心をおいた。ビデオなどを見たりできるように、LL教室や一般の語学用教室で毎回の授業を開始し、**paragraph writing** の基本に関する一般的な説明をしたり、句読点の使い方に関するビデオ教材を見たり、あるいは英作文の素材として英語の報道番組を見たりしてからコンピュータ教室に移動した。コンピュータ教室では PC の使い方、キーボードの使い方、**WordPerfect** の使い

方についての基礎的事項を練習しながら、あらかじめ用意した身近な話題に関するテーマに基づいて 200 語程度の作文を授業時間中に WordPerfect で書き上げてプリントアウトを提出し、添削して返却してはまた書き直し、次の週になると、あらたな作文とともに前回返却した作文を書き直したものをまた提出し、さらに添削して返却するという作業の繰り返しとなった。学生の方も学期の終わりには毎週 4、5 本の作文を書き直したり新たに書いたりして忙しかったが、添削する方も一人なので、時間との戦いになった。とはいえ、つづりの間違いなどは手書きの場合に比べて少なくなり、また見付けやすくなるし、なにより手書きに比べれば格段に読みやすい。また、学生の側も、ワープロでの修正なので何度も書き直させられてもそれほど不平を感じなかったようである。むしろ、せっかく書いたものを提出しても、忙しくてあまり赤を入れられなかったときなど非常に不満そうにしていた。これは、旧来の「英作文」なども含めて、小テストや宿題などの提出物の返却の時に見られるのとはまったく異なる態度である。

1996 年度と 1997 年度に担当した英語 C (表現演習) という法学部 3、4 年次配当の科目では、まず始めに 20 分ほど時間を取って、授業の出席を確認する意味も含めて、CNN などのニュース番組を見たうえで印象に残った話題について簡単に紹介し、感想をまとめたメールを提出した。この作業のポイントは、自分なりに英語で文章をつづるきっかけとしてビデオクリップを利用しているので、内容の言語的に厳密な理解や、英文としての適切性などについては柔軟に考える。このあとの 1 時間程度の授業時間を使ってグループによる調査結果を踏まえた文章の取りまとめを課題として、適宜 PowerPoint によるスライド作成も含めてグループでの進行状況の発表を繰り返しながら作業を進めた。毎回の作業は、上記のメールによる出欠確認は別として、基本的には Word で作業を行い、補助的に PowerPoint を利用しているが、授業の終わりに各自の FD または MO にファイルを保存するとともに、教室内 LAN を利用して課題提出用のディスクにコピーを置くことによって提出に代え、授業終了間際に筆者がそれを MO に保存している。したがって、ここ数年の授業の経過はすべてファイルとして残っていることになる。

ここに上げたのはあくまでも作文と添削と修正を中心とした課題であるが、この他にも一人 1 台のネットワークに接続された PC を利用できる環境を前提とすると、生徒は教室にいながらにして、文字あるいは音声を通じて、教員や他の生徒だけでなく、教室外の人間とも直接的に英語によるコミュニケーションを行うことが可能となる。筆者はいわゆる「インターネット」がマスコミなどの話題になる前の時期に、BITNET などを利用してアメリカで日本語を学習している大学生と自分が担当する学生の交流を試みた時期もあるが、学生同士の交流を促す効果的な授業計画を詳細に準備する余裕がなく、教室内での学生間の口頭発表やメーリングリストによる意見交換を中心に考えてきたが、2000 年度には韓国の大学と一つのクラスについてメールを利用した意見交換を試みてみたいと考えている。また、早稲田大学の中では、海外のクラスとネットワークで接続して、文字だけではなく画像も含めた交流を通じて意見交換を試みているクラスもある。

マルチメディアとネットワークを利用した教育・学習方法といっても、現在実施されている「ネットワーク型授業」の大部分はあくまでも教員を中心とした授業進行であり、またそこで利用されるマルチメディアも、教員の利用できるプレゼンテーション手段の拡張として捉えられる場合が多い。きわめて例外的に、一見講義型の授業に見えながら、そもそも学生による問いかけと学生による応答を中心にし、教員は司会進行に徹するという手法をもともと採用していた授業について、マルチメディア・ネットワークの利用が有効に機能しているというような場合が見られるが、「放送型の遠隔講義」の大部分は、ネットワーク利用のためのネットワークに墮しており、本来の学習・教育活動を促す有効な手法としてネットワークが利用されていることはまれである。

しかし、英語教育・英語学習についてはマルチメディア・ネットワークの有効活用についてさまざまな報告・研究が進められている。その一方、LL教室の機器更新にともなってPCが導入され、その、保守・運用・授業体制などの問題で途方にくれている例もさまざま見聞している。問題の解決のためには、教員の側における学習観の変化が必要であるが、そのためには実際に授業で使って試行錯誤する努力が求められている。

(3) 『上記がもたらす結果として、重要視されるべき内容が変わる。』

社会における情報化の進展とメディアの進歩にあわせて授業形態の変化が教育の見なおしから教育の前提となる社会的価値観をも変える可能性がある。英作文を教えるに際してPCとネットワークを使うようになると、スペルチェッカー、文法チェッカー、禁則処理、英和辞典、和英辞典などさまざまな電子的<文章作成支援>機能を利用する可能性が開ける。このことは、英語学習上のさまざまな到達段階において学生に何を利用させるべきか、何を利用させるべきでないか、それがどのような目標に対してどのような効果を持つか、実証的に検討すべき必要が生じていることを示している。算数・数学教育において、電卓の使用が計算能力の低下につながるのか、それとも従来計算を苦手とした生徒・児童にとっても算数・数学の基本的な概念が理解しやすくなる状況となったのか、授業中での電卓の使用を認めるかどうかに関連して議論が継続してきたが、実証的な研究成果報告が広く世の中に普及しているとは言いがたい。同様に、ワープロやPCでのかな漢字変換の多様が、漢字を正確に覚えなくなる風潮につながるのか、それとも正確に覚えていなくても正しく適切に使える状況をもたらしたのか、雑談ないし信仰告白はあっても、国語教育・外国語としての日本語教育の立場からその功罪を実証的に検討した研究報告については目にする機会が少ない。

学問的にあまり本質的でない事項でも、これまでは正確に記憶しているかどうかが重要になることがままあった。一方で、情報化に伴う知識情報のデータベース構築と、随時ネットワークに接続できる携帯端末の実現、自然言語処理や、強力なエンジンによる高速検索という手段を容易に用いられるようになると、これらの記憶はもはや無価値なものにな

りかねない。英語学習について考えた場合、一つ一つの単語を正確につづれることが絶対的に重要であるなら、スペルチェッカーなど一切利用できない環境を学習用に用意しなければならない。しかし、現実の社会ではむしろさまざまな文章作成支援機能を最大限利用しながら文書作成を行う方向に進展している以上、実社会において通用しない技能の訓練となる可能性が高い。従来も実社会においては辞書や関連資料を参照しながら文書作成を行うことが通例であるのに対して、学校という環境では、試験という場においてこのような資料の参照をゆるさず、そのため授業においても時間中の資料参照を禁じてきた過去を想起させる。しかし、学校という特殊な状況で有効な技能ではなく、現実社会で生活するために必要な技能を身に着けることが学校教育の目的であるならば、現実社会と同様の環境で文章作成をするための技能を身に着けるための教育のあり方を模索すべきである。

単語のつづりをまったく知らないと、如何に文章作成支援が向上しても利用できない可能性が高いが、あるレベルで知っている単語のつづりがそのとき思い出せないというような一時的な銘記の喪失に対しても、ただちに支援が働く。このことは、学習過程の中間段階にあるため完全に記憶できていない単語を表現に使用することを通じて学習を深化させるという従来難しかった学習過程の成立の可能性を格段に高め、語彙の獲得の動機付けにつながる可能性もある。また、文章作成支援がより高度化し、英語の表現として拙い部分をより自然な表現に置きかえる支援などの機能が実現すれば、実際にコミュニケーションのために言語を使用しながら、よりよい表現に接することを通じて、さらに高度の表現を獲得するという望ましい言語学習の形態が実現する可能性まではらんでいる。

このことは必ずしも学習の最初の段階からすべての文章作成支援機能を学習者に使用させるべきであるということをも主張するものではない。例えば、筆者が法学部で担当する授業尾中に LL 教室・マルチメディア教室を利用した総合英語があるが、読解、聴解、作文、口頭表現のいわゆる 4 技能を総合的に訓練するのが本来の趣旨であるが、学生の現状から考えて聞き取りに重点を置いて授業を進めている。具体的な作業としては、いまはテレビで放映されている英語のニュースを 5 分ほどビデオに撮って巻き戻したりしながら 3 回ぐらい見せ、その間にメモを取り、その後順次学生を指名して内容を確認する。一つのトピックは 30 秒から 50 秒ぐらいの内容だが、授業時間の最後の 30 分ぐらいで、LL の機能を使ってそれぞれの学生が自分のペースで再生しながら英語のまま書き起こすという作業に当てる。宿題として英文を提出させる際には、学年の始めにはメールでの提出を課している。

なぜメールで英文を提出させるかということ、PC あるいは電子メールの使い方に慣れさせて後期の授業に備えるという趣旨もあり、英文入力に慣れさせる意味もあるが、パラグラフの形式、段落のインデント、改行位置とか、句読点の処理などを強調する。ワープロで作業すると現状ではソフトが適当に整えてくれるが、大学で標準的に使っているメールソフトが英文に対応していないので、文章作成支援機能がなく、英語の文章の形式を強調するには、初期段階の学習者に対してよい効果があると考えている。

上に述べたような本来の意味での英作文の授業を進める上での最大の課題は、コンピュータやネットワークの利用ではなく、語学の習得に対する学生の考え方にある。多くの学生は、実際的な外国語運用能力を身につけたいと願っている。しかし、そのための努力を自ら行う必要があることをまったく理解していないことも多い。何かすばらしい授業を受けると、自分で何もしなくても、そこに座っているだけで魔法のように外国語が使えるようになるかと勘違いしている。その勘違いが、留学をすれば語学が身につくとか、海外生活をすれば語学が身につくという勘違いにつながっている。もう一つの点は、おそらくは受験対策を中心とした中学・高校生活に起因するのであろうが、あらかじめ正解のある問題について、選択肢の中から適当なものを選ぶという発想から抜け出せないことである。かならずしも正解のない問題について、悩みながら自分なりの結論を引き出し、それを他者に対して説明するという経験があまりにも欠けている。英作文の授業で、自分自身に着いて、自分の家族について、自分の通学経路について簡単に説明するという課題を示すだけで、非常に風変わりな授業だという感想を持つ学生が毎年あとをたたない。

総合英語の授業の書き起こし作業の結果は、前期にはメールでの提出を求めるが、後期になると原文そのものではなく、要約と感想を英語で書いて送ることを求めている。これは、メールに慣れるといろいろな省力化が行われる傾向が見られるため、個人ごとに回答が異ならざるを得ない課題を用意する必要が生じるためである。しかし、考え直してみると、そもそも最終的に同じ答えが返ってくるものを学生に課題として求めることがある意味で不毛であったことがわかってくる。英語を音声から理解する訓練の過程として書き起こし作業を行うことは重要であると思うが、どこまで書き起こしができるかは学生ごとに到達水準が異なってもおかしくない。正解を移すことは、どこを間違え、なぜ間違えたが理解するための過程としては意味があるかもしれないが、結果としてできあがるものはすでに教員が用意したものと同一となるため、学習過程の記録として意味がない。むしろ、自分の作業結果と教員が用意した回答との差分が得られるほうが望ましい。学校での授業過程の中で、教員あるいは教科書が用意した答えと同一である程度のみが重要であったとすると、これは学習の過程を無視していたことが明らかになる。むしろ、学習者の英語学習の到達度がことなる以上、一つの教室にいて一つの課題に取り組んでいても、それぞれことなる学習活動が成立しているはずであり、一人一人別々の学習過程が成立しているはずである。このような視点は、教室内 LAN などにより同一の内容の複写物を作成することが容易になると自然に思い至ることがらであるが、こうした学習環境においては記憶型テストも出席も成績評価に使うことが不自然に思われ、学習評価の判断基準の再検討が迫られることになる。これまで定説とされてきた「メディアいかにかわらず学習課程・結果は変化しない」という法則は、「英語教育方法の情報化」においては成立しない。

文章作成の基本練習であれ、口頭発表の練習であれ、一つの教室、あるいは複数の教室をネットワークで結んでも、このように学生が自ら表現することを授業の中心としていくと、その中での教員の役割というものの変化せざるを得ない。現在あちこちで報告が行わ

れているが、これまで情報の伝達者として授業の中心的存在であった教員が、学習者の学習を手助けする脇役へとその役割をかえようとしている。また、テストという特殊な状況での「学力」の向上を目指すのではなく、コミュニケーションの手段としての英語を使用する訓練に重点が置かれることになる。さらに、グループによる共同学習やグループ間の相互批評ということを重視すると、従来のように「個人の作業の結果」を評価するのではなく、「共同作業の過程における貢献度」を評価の対象として考えざるを得なくなる。このような変化は、理屈で理解するものではなく、実際に学生が情報伝達の手段としてのメディアを手にする教室の中で悪戦苦闘する中で自然と体得されるものであったが、今後は教師教育・教員養成の中で始めからそのような位置付けを示していくことが望ましいかもしれない。

(4) 「教育内容・教科課程の情報化」

学校を含む社会において、情報社会の進展に伴って知識や記憶に対する価値判断が変わるにつれ、英語科の教育内容・教育方法の大幅な再検討が余儀なくされることになり、その結果「英語科の教育内容・教育課程の情報対応」が進むことが想定される。さらに情報社会における認知発達課程のあり方から再検討を迫られる事項も多いものと思われる。また、具体的な事項としては、情報通信ネットワークの進展にともない、従来以上に外国語を含めた言語コミュニケーション能力が求められるようになるであろうという予想も立てられる。

例えば、従来の紙と鉛筆を中心とした教室体系の中では、英単語のつづりを覚えるとは紙の上に鉛筆で筆記できることであり、英語を書けるとは英語の文章を紙の上に鉛筆で筆記できることが中心であった。より広く振り返ってみると、従来の中学・高校・大学の中で行われてきた英語教育において「確立した伝統的な教授法」としては、テキストがあり、学生がこれを音読し、日本語の訳を行い、教員が補足・解説を行うというものであった。もちろん、口頭表現を重視すべきであるという要請は常に存在したが、大学で行われてきた「確立した伝統的な教授法」を根底から覆すには至らず、口頭表現を重視するためという名目のため戯曲の訳読が流行するというような滑稽な時代も続いた。中学・高校においても、やはり口頭表現・音声・表現とコミュニケーションのための英語という題目は繰り返して来たが、入試の預木から離れて本来の語学教育を達成できている学校は少数であろう。そのようなより大きな課題も含めて、「伝統的な」英語教育において重視されてきた技能は、入学試験を典型としたテストの環境で英文を読んで理解する、ないし日本語のようなものに置きかえるという技能であり、英語で文章をつづるという訓練は、きわめて例外的にしか行われていないのが実情である。そうした例外的な訓練においても、恐らくは紙と鉛筆を前提としてきたものと思われるが、紙と鉛筆で単語をつづることとキ

ーボードからの文字入力とは運動感覚機能としては直接転移せず、再学習が必要となる。現状で運動感覚の記憶として筆記体による文字筆記の訓練が単語のつづりの銘記として有効か無効かの判断は微妙であるが、出入国書類への記入やクレジットカードの請求書にサインをするなどの場合をのぞくと、実社会において文字としての英語を使用する際、筆記することよりは圧倒的に多くの場合キーボード入力であろう。これは、ワープロなどを利用して文書を作成する場合でも、電子メールなどを含めてコミュニケーションの手段としてネットワークを利用する際でも同様である。従って、「社会に出てから」あるいは「大学にいるあいだ」の「実用的必然性」を考えると、キーボード入力を前提とした英語による文章作成が求められていることになる。一方、PCの情報処理能力・通信回線の帯域ならびに技術的な制約から文字を中心に浸透してきたインターネットなどのマルチモーダル通信も、音声や映像を豊富に取り!

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 4|\$+\$i!"\$5\$i\$K8}F,I=8=\$X\$N4X?4\$X\$H2]Bj\$,0¥\$k2DG=@-\$b9M\$(\$i\$l\$k!#

授業においては *readiness* が問題となる。狭義の情報教育でない英語の授業でコンピュータ教室を利用しようとする、学生がどれだけその利用に習熟しているかどうかは、実際の授業実施について大きな影響を与える。1994年以前に英語の授業をコンピュータ教室で行おうとすると、受講している学生もそれ以外の学生も、圧倒的に多くは「なんで?」「めんどくさい」という反応を示していた。1994年度から1999年度にかけて情報科学研究教育センター(現メディアネットワークセンター)のカリキュラムは毎年大きな修正が加えられてきたが、コンピュータとネットワーク利用の基礎を教える科目の受講可能者数はおおよそ3000人前後という水準である。これは、独自にコンピュータ・リテラシー教育を学部のカリキュラムの一環として実施している理工学部と人間科学部を除いた学部新入生の半分弱に相当する。一方、ネットワークの利用を希望する学生は毎年着実に増加し、1995年度当初2000名で始まった *mn* システムの登録者数は1998年12月で4万人を超え、独自のネットワークを運用している人間科学部の *humanet* 利用者も含めると、早稲田大学のほぼすべての学生がインターネットを利用できる状況にある。母集団となる学生が大きすぎるため、大学全体としては学生のネットワーク利用実態を把握していないが、法学部の学生に対して授業での簡単な問い合わせに対しては、入学時にインターネットに触れてきた学生は1999年度でもまだ比較少数である。4月のセミナーにはほぼ全員が参加しており、MNCの授業を受講している学生も何割か程度まで見られるという状況だが、6月を過ぎると半数以上の学生が何らかの形でメールを使ったことがあるという。したがって、4月に宿題をメールで提出させるとなるとかなりの手間隙を浪費する可能性があるが、6月後半以降であると、「宿題をメールで。わからなかったら友達に聞きなさい」という進め方でも半数

以上の学生は特に困らず、残った学生も何回か宿題をこなすうちに、だんだん慣れてくるという様子である。

1994年当時 WordPerfect を使用した際は、学年が始まる前に操作の基本に関する補助教材の準備を始めた。それまでの経験から、英作文の授業にとって最低限必要な操作に絞り、1ページ1項目の体裁でそのページだけ見ればその操作が可能で、関連することがとりあえず書いてあるという形式にした。初めの段階では PC の起動と電源の切断、初期メニューからの WordPerfect の選択と WordPerfect の終了、文字の入力と削除、プリントアウト、ファイルへの保存とファイルからの読み込みなどである。また、ワープロや PC に慣れてしまうと何でもなく感じて、わかりやすい説明をするのが意外にむずかしいことがらとして、文字の入力と削除の基本についての説明もある。入力に関しては、文字以外の改行やタブも計算機内部では文字と同様のコードであること、改行キーは改行の入力のためにあること、パラグラフの初めを字下げするのに Tab キーを利用できることなどを説明した。後退キーと削除キーの動きの違いなども、慣れるとなんでもないことだが、その場で実際に動かしながら説明しないとわからないことであった。一方、1996年以降はほとんどパソコンの利用自体については授業中に説明しなくなっている。例えば、PowerPoint については、Word が使えればだれでも使えるとあって、実際にいくつかのスライドを作って見せるだけですぐに作業に入れる学生が数名いるので、あとはその学生にデモをさせると、ほかの学生が真似をするというような状況にある。1994,5年までであれば、年度始めの1,2回の授業で機械の起動や終了についてしつこく説明し、キーボード操作やホームポジションの練習をしないと、その後の授業が円滑に進行しなかったが、現在ではそうした説明は最小限に留めても特に支障がない。

従来は p という事実を記憶することが重要であったかもしれないが、これからは p という事実にとどりに着くにはどのような情報探索の経路があるかというメタな知識が重要となるかもしれない。あるいは q という一つの結果を得る能力ではなく、q という結果に至るプロセスを複数備えていることが求められるかもしれない。英作文の授業では、ワープロと電子メールなどを毎週繰り返して使うことになる。従って、ソフトの機能を通り一遍に教える必要はなく、それぞれの授業展開に応じて必要な機能について紹介することができる。たとえば、BITNET で返信をする場合、自分宛に来たメールを引用する場合には REPLY TEXT とコマンド入力し、引用が必要ない場合は単に REPLY とコマンド入力するのだが、メールを送信することと返信することの違いもまだぴんとこない初心者にあまりあれもこれもと説明しても消化不良になるばかりである。しかし、毎週宿題をメールで提出させて添削して返却し、また、毎週授業時間にアメリカの学生と文通させていると、メールを書いているときに学生の方から「この向こうから送ってきているメールについて引用しながら返事を書きたいんですけど」というような質問が出てきた。これこそまさに good question である。機械操作を機械操作のために説明してしまうと、通りいっぺんの説明を次々と聞かされて消化不良になるが、具体的な課題をこなす中でこれこれの作業をするた

めにはどのような機能を使えばよいか、そのための操作は何かという形で機械の操作に習熟していくことが理想的である。

個々の mail handler でどのような操作をすることでこうした機能を使うことが出来るかというのは、必要があればマニュアルをひっくりかえすなり、人に聞くなりしてわかれば済むことであって、重要なのはメールのやりとりの中で相手の書いた文章を引用することがあること、また mail handler にそうした機能が備わっていることを体験として心の片隅のとどめることである。英語の授業の中で電子メールの扱いを教えるということは、機械操作を教えることが目的ではなく、電子メールのやりとりという文化を教えることが目的である。1994年度の授業で BITNET の操作を覚えた学生が 1995年の春になってあらたに Windows 上の GUI ソフトを使用するメールシステムのアカウントを取得して電子メールを使いたいと申し出てきたが、その時点で利用マニュアルを作成中であったため、1月ほど待った方がよいと伝えたのだが、昨年度の授業で電子メールの使い方はわかったから、あとの操作は自分で試してみますと答えていた。システム固有の制約やシステム固有の操作ではなく、概念や文化を教えることが、コンピュータやネットワークのように短い日時の内に激しい変化を遂げていく対象については重要であろう。そしてそのことは、コンピュータの操作ではなく、英語教育の本質にもつながるものである。

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12

チャンクに関する古典的先行研究のまとめ

中野美知子 大和田和治

ここでは、まとめ覚え(チャンク)が言語学習に深く関わっているとする先行研究の中で、ことに有名な論文を4点挙げ、解説している。

(1) Kenij Hakuta

“Prefabricated patterns and the emergence of structure in second language acquisition”

Language Learning 24:2, 1974

被験者：教室外の自然な状況で英語を第二言語として習得している日本人の女の子 Uguisu（文法の教授は未受、インプットは近所の友だちからが主である）

期間：15 カ月（60 週）、英語に接して5 カ月を経過した5.4 才からから6.5 才まで。

方法：2 週間ごとに最低2 時間の自発的な会話をテープに録音し書き起こす（友達との遊びでの会話）。

第1 月 第3 月で、581 の発話中、名詞（121 種類）、動詞（56 種類）、修飾語（40 種類）を習得する（Smith (1926)によればネイティブの子供は5 才で2000 語の語彙を獲得するといわれている）。

Brown (1968,1973)は what's that や what dat のように全体をひとかたまりとして覚えているものを prefabricated routines と名付ける。また、彼は what's plus a slot のことも言及し、slot のところにさまざまな名詞句が挿入されるとしているが、Hakuta は routines というよりも prefabricated patterns の方が適切だとする。

分析項目は、（1）copula be を用いた様々な文、（2）質問文に用いられる do you、（3）how-to の how-questions の埋め込み文、である。

1. copula be を用いた様々な文(be + not も含む)

Brown (1973)は、L1 において文法形態素は、それが必要なコンテキストでは、全くない状態から完全な使用の状態へと段階的(gradual)に、また可変的(variable)な performance をもって習得されるとしている。質問文における倒置(question-inversion)も同様なパターンを示す。Uguisu もネイティブと同様の結果が報告されている（Hakuta 1974）。

copula に関して、Uguisu は、1%の割合でしか脱落(omission)を起こしていない。月ごとにおける200 発話中に占める copula の割合は、第1 月は約50%であったが、第2 月には20%に下がり、第10 月までその割合を維持している。これと同じ時期に、Uguisu の友達の300 発話中に占める copula の割合も20%になっているのは興味深い。

2. 質問文に用いられる do you

Uguisu は、以下の4例 (you(=listener)が主語の場合) を発話した。表面上は、この型は習得されているように見える。

Do you know?

How do you do it?

Do you have coffee?

Do you want this one?

しかしながら、問題は、主語が3人称や過去時制のときにどう現れるかである。主語が3人称でなければならないとき、Uguisu は次のように発話している。

What do you doing, this boy?

What do you do it, this, froggie?

What do you doing?

表面上は習得しているようだが、詳しくみていくとそうでないことが分かる。つまり、do you はこれ以上分解(segment)されずに question marker の segment として覚えられていることが分かる。

過去時制が使われなければならない場面では、第3月から第8月までは、where/what/how did you と do you が併存している。第8月では do you + 動詞の過去形 (Do you saw these peppermint?) がみられる。第9月以降になってようやくその形が did you + 動詞の原形に取って代わられる。つまり、それだけ do you が segment に分解されずに、根強く残るのである。

3. how-to の how-questions の埋め込み文

第3月から6月までは、how to +動詞句は、本来使用されなければならない状況において、約100%の正しく使用されている。以下がその例。

I know how to do it.

I know how to do read it this.

I know how to read it this.

I know how to make.

I know how to draw it cat.

I know how to draw (it) butterfly.

I know how to draw it boy.

しかし、第 11 から第 15 月には、正しく使用されている率が 0-50%に下がってしまう。以下がその例。

First I gotta write it and show you how do you spell "Debra."

I know how do you spell "Vino."

We only know how do you make it like that.

I know how do you write this.

比較として、where questions の埋め込み文の習得過程をみしてみる。

- | | |
|-------|---|
| 第 1 月 | 倒置が起きる時期。 I don't know, where is money. = "sentence + question" with inversion (Hatch 1974) |
| 第 6 月 | copula が倒置されない時期。 I know where it is. |
| 第 8 月 | 余剰がっ生じる時期。 You will see where is your house is. |
| 第 9 月 | 正しく使用される時期。 I know where it is. |

以上を踏まえて、Uguisu の how-to の how-questions の埋め込み文の習得過程を考察すると、最初 は how to をひとつの unit として習得する。恐らく、最初に挙げた 7 つの how to の文は、I know how to + 動詞句で覚えたと考えられる。後の発話サンプルにおいては、how to を他の動詞 (show, tell, and be) と共に使用している。さらに、その後になると、"sentence+question" with inversion (上の例、First I gotta write it and show you how do you spell "Debra." など) に取って代わられている。

Uguisu の実験はここで終わるが、予想としては、how の埋め込み文も where の埋め込み文と同じプロセスをたどり、正しい how to の用法に戻ると思われる。

解決されるべき問題は、次の三点である。

1. Uguisu が how to をかたまりとして先に習得していなかったら、how-questions の埋め込み文はどのように習得されたのであろうか。
2. prefabricated pattern をかたまりとして覚えることによって、それが文の中に組み入れられるプロセスが早められるのか、遅らせられるのか。

3. prefabricated pattern はその内部構造(internal structure)が最終的に把握されたとしても、prefabricated pattern のまま、かたまりとして発話され続けるのか、あるいは、prefabricated pattern としては、単に捨て去られ、活用されないのだろうか。

(2) Pawley, A and F. Syder

“Two puzzles for linguistic theory: nativelike selection and nativelike fluency” in J. Richards and R. Schmidt (eds.): Language and Communication. London: Longman, 1983.

1. Introduction

Pawley and Syder (1983)は、言語能力 (linguistic capacities)として、nativelike selection と nativelike fluency の2つを挙げている。まず、nativelike selection とは、母語話者が文法的でかつ nativelike な表現を用いて慣習的 (routinely)に意味を伝える能力のことである。ここでのポイントは、同じ意味を表わすことのできる(言い換え可能な)文法的な文が他にもあるのに自然 (natural)で慣用的(idiomatic)な文を選ぶのはなぜか、ということである。次に、nativelike fluency とは、自発的(spontaneous)でまとまりのある談話のかたまりを産出する能力のことである。ここでのポイントは、あらかじめ、あるいは話している最中に、新たな発話を符号化 (encode)する人間の能力には限界があるにもかかわらず、その限界を越えると思われるようないくつもの節からなる発話 (multi-clause utterances)を発することができるのはなぜか、ということである。

2. The puzzle of nativelike selection

人間には、言語の使い手として、生成文法のいう、統語規則から創造的に文法文(grammatical sentences)を生成する能力 (the creative power (potential) of syntactic rules)だけではなく、nativelike selection を生み出す能力がある。この nativelike selection を経たものは、grammatical sentences の小さな一部を占める。

学習者は、「生成文法」だけでなく、unnatural で highly marked なものと normal で unmarked なもの--nativelike なもの--を見極められなければならない。

grammatical と ungrammatical sentences と同様に、nativelike と non-nativelike sentences にもはっきりとした境界はない。例えば、I want to marry you.という文は、I wish to be wedded to you. や I desire you to become married to me.等のように言い換えられるが (pragmatic synonymity や functional equivalence がある)、慣用的 (idiomatic)とはいえ、自然さ(naturalness)の点で差があ

る。

nativelike selection の問題は、syntactic rule、syntactic structure、length or complexity、grammatical simplicity、discourse context、familiarity といったものでは統一的な説明ができない。例えば、Do what I say!や Do what I tell you は、同じ意味をなす Obey me!よりもふつうであるし、That's got nothing to do with it.は That's irrelevant.と同様に慣用的である。また、英語では慣習的に1時間を1/2、1/4に区切るため、It's twenty to six.という表現を用いるが、慣習的にそういう以外の説明は不可能である。

3. The puzzle of nativelike fluency

nativelike fluency を外国語学習者が身に付けるには何年もかかるが、母語話者は当たり前のこととしてできてしまう。不慣れな話題についての話やスピーチ等をするにいたってはじめて fluency というものの重みを知るのである。

これまでの実験によると、一回の encoding で産出できる最大の単位は4-10語からなる一つの節とされる。我々の実験では、fluent な話し手でも4-10からなる節の終わりで slow down や pause があることが分かった(節内ではまれである)。このことから、one clause at a time constraint があるといえる。

これまでの実験より次のことが明らかにされている。すなわち、英語母語話者は、会話において、(a)fluent units (ふつう、1秒間に約5音節以上の発話速度で話される pause のない unit と定義される)では、一分間に270-300音節の発話速度を保つ。この速度は rehearsed speech においてもそれほど大きく速くなることはない。(b)fluent units の50%以上は完全な文法的な節である。(c)節内に現れる hesitations においては0.5秒以上、節の境界においては2.0秒以上ポーズすることはめったにない。

4. Memorized sequences

これまで、nativelike selection/nativelike fluency は簡単には説明が付かないことをみてきた。言語を操る能力には、「生成文法」以外の何か--memorized sequences--があることもはや疑問の余地はないであろう。

memorized sequences とは、例えば、Can I help you?, Can I help?, Need any help?といった1つの節だけでなく、それより長い If you believe that you will believe anything. や There's something I forgot to tell you. のようなものも含まれる。

これらの memorized sequences はすでに出来上がっているので、ほとんど encoding の作業を必要としない。

このような memorized sequences の中から、次に述べる lexicalized sentence stems を作りだすモデルとなるものが生じるのである。

5. Lexicalized sentence stems

memorized sequence と lexicalization の違いは、前者は Chomsky のいう performance に、後者は competence に相当するということである。ある表現が lexical item となる条件は、(1)その表現の意味が形からは（完全に）予測できないこと、(2)ある統語機能の目的を果たす際の最小の単位であること、(3)その社会において慣習化されたものとして扱われていること、である。

lexical items とは、single morphological lexical items（例えば、headache/backache）、morphologically complex lexical items（long house がダヤク族の住宅を意味する）、lexicalized sentence stems（これには、a complete sentence と less than a complete sentence が含まれる）を含む概念である。

お詫びの意を表明するには、

I'm sorry to keep you waiting.

I'm so sorry to have kept you waiting.

Mr X is sorry to keep you waiting all this time.

等の表現があるが、これらから、lexicalized sentence stem として、

NP be-TENSE sorry to keep-TENSE you waiting

が導きだされる。I'm や Mr X が inflections で、so や all this time が expansions となる。

lexicalized sentence stems は文字通りの意味がほとんどだが、慣習化された会話の含意をもつことがある。例えば、

That be-TENSE the last time I'll (ever) ask NP to V (NP) for me!

(That'll be the last time I'll ever ask Harry to do a job for me, etc.)

のように、話者による怒りを表明する場合には、本来の文字通りの意味とのずれが生じる。また、lexicalized sentence stems には、inflection や expansion をせずに固定化した(completely rigid)ものもある。

重要なことは、lexicalized sentence stem ごとにその文法は異なるため、学習者が句構造規則や変形規則がこれらの lexicalized sentence stem に当てはまると仮定すると、文法的ではあるが idiomatic でない文を作りだしてしまう、ということである。つまり、ある特定の lexicalized sentence stem から novel forms を生成するには、その stem 自体の文法を熟知する必要があるのである。

6. Theoretical implications

英語母語話者のレキシコンの大部分は、約 50-60 万の lexicalized sentence stems を含む complex lexical items から成り立っている(the lexicalized sentence stem hypothesis)。

システムティックに統語規則で説明できないものを Chomsky のように marginal cases として、考察の対象からはずすこともできるが、complex lexical items は除外するにはあまりにもその数が多い。

complex lexical items と、そこから inflection/expanding/transformation を通して nativelike sequences を生み出す semi-productive な規則を扱う独自の部門も文法記述には必要である。

(3) Nattinger, J. R. and J. S. DeCarrico

Chapter 1: The nature and description of lexical phrases
in *Lexical Phrases and Language Teaching*. Oxford: OUP, 1992

Nattinger and DeCarrico (1992)は、母語話者（主に英語母語話者）が母語を話し、理解し、文法を分析的に理解していく過程における lexical phrases の果たす役割に注目し、それが同様に、第2言語および外国語教育にも有効であると主張する。さらに、この文法と語彙の中間に位置する lexical phrase に基づくアプローチは、これまで文法能力(grammatical competence)、あるいは伝達能力(communicative competence)のどちらかに片寄ってきた教授法を結び付ける橋渡しのような役割をなすとする。もちろん、適切な言語使用を目指すのが、統語規則の分析がないがしろにされているわけではない。

Nattinger and DeCarrico (1992)は、lexical phrases を以下のように言い換えている。また、

collocation とは関連はあるものの、異なるとしている。

- lexical phrases =
- chunks of language of varying length
- an ideal unit which can be exploited for language teaching
- prefabricated language chunks
- ritualized bits of language
- form/function composites

lexical phrases は、a --- ago, if I X, then I Y, the ----- er X, the ----- e などのことで、固定した基本的な枠からなり、slot に様々な filler を入れることによって、a year ago, a month ago,, the higher X, the higher Y, the longer you wait, the sleepier you get とといった表現が生じる。

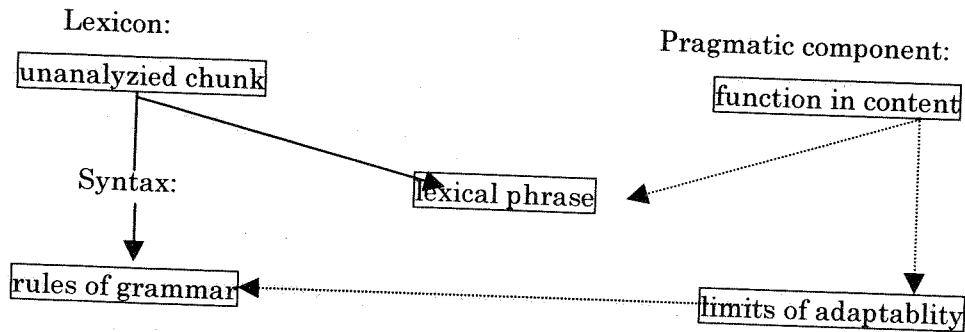


Figure 4 (p. 16)

実線は文法能力にかかわるプロセス、点線は語用論的能力にかかわるプロセスを示す。

母語習得に関して、Peters (1983)がいうように、lexical phrases は unanalyzed lexical chunks として場面における機能(function in context)と結びついて学ばれる。例えば、I-want-t-go がひとつのかたまりとして分解されずに、<要求>という機能が埋め込められた形で学ばれる。やがて、I-want-to-get-up, I-want-my-ball, I want-a-cookie といった統語的に似たような表現に接し、そこから場面(context)とは切り離された形でパターンを抽出し、統語的に分析し、一般化し、通常統語規則に組み込む。

lexical phrases には limits of variability (adaptability)があるが、これは pragmatic competence の一部をなす。例えば、this is a piece of cake (= X can be accomplished with ease)は<目下の話題についての評価>という機能を持つ。this is/it's going to be/will be a piece of cake はいいが、this had been a piece of cake や this is a piece of baklava (評価の機能として) はおかしい。他の例として、

学習者は You are pulling my legs (正しくは You are pulling my leg) , John has a thigh-ache (正しくは John has a pain in the thigh), I intend to teach that rascal some good lessons he will never forget(正しく I intend to teach that rascal a lesson he will never forget)といったように文法的だが、英語らしくない(unidiomatic)誤りを犯す傾向がある。

重要なことは、統語規則を操る能力が芽生え、文法能力に組み込まれても、lexical phrase が場面における機能(function in context)と直結している関係は維持され、分析されようがされまいが部分的あるいは全体的にあらかじめかたまりをなすパターンとしてすぐにアクセスされる。つまり、一種類の辞書項目としての固定した lexical phrase frame は、同時に言語能力の一部ともなる。例えば、if I were you は、忠告の機能と結びついており、pragmatic competence と関連するが、if I were the one that she really wanted to talk to.は特定の機能とは結びついておらず、統語規則から生成される grammatical competence に関連している。

this is a piece of cake(= X can be accomplished with ease)は目下の話題についての評価という機能を持つ。this is/it's going to be/will be a piece of cake はいいが、this had been a piece of cake や this is a piece of baklava (評価の機能として) はおかしい。他の例として、学習者は You are pulling my legs, John has a thigh-ache, I intend to teach that rascal some good lessons he will never forget のような文法的だが、英語らしくない(unidiomatic)誤りを犯す傾向がある。

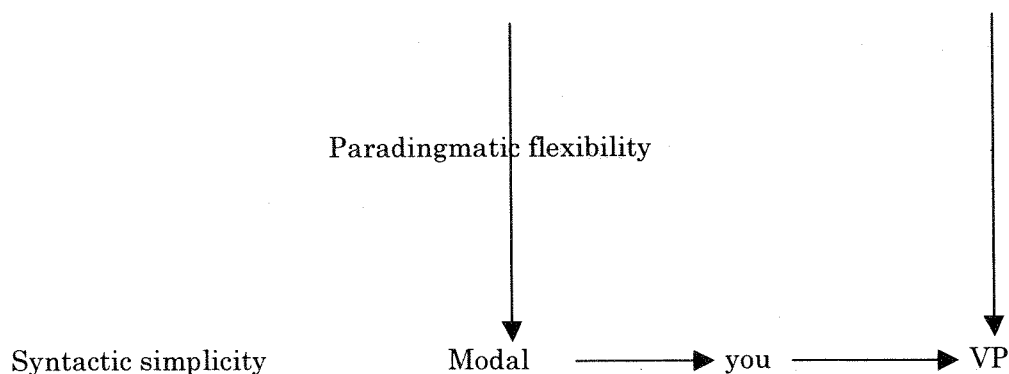


Figure 5 (p. 18)

lexical phrases が慣習化されたものとして選択される2つの基準を示唆している。ひとつは、統辞的連鎖の単純さ(syntagmatic simplicity)、もう一つは、範列的關係の単純さ(paradigmatic simplicity)である。つまり、統辞上は比較的単純であるが、語彙の選択に関しては柔軟であることが求められる。例えば、要求を表わす間接発話行為としての'Modal + you + VP'はこれら2つの要件を十分に満た

している。

(4) Myles, F., Hooper, J. and Mitchell, R.

“Rote or rule? Exploring the role of formulaic language in classroom foreign language learning”
Language Learning 48:3, 1998

Myles, Hooper and Mitchell (1998)は、formulaic language が言語習得に果たす役割は、これまで3つの角度から扱われてきたと主張する。第一に、学習者が formulaic language を使うのは、十分な competence を補うことによって最低限の意思伝達をなすための communicative strategy であるという視点。第二に、学習者は、formulaic language を使って、fluency を高めるための production strategy であるという視点。そして、第三として、分析されないで全体として記憶されている formulaic language が文法能力の発展といかにかわってくるか、すなわち、rote-learned utterance が creative, rule-governed utterance へと移行する過程を探る視点。この最後の第三の視点がこれまでもっとも多く formulaic language に関して議論されてきた点だとしてしている。

Peters (1983, 1985), Weinert (1995)に倣って、chunk を同定する基準として以下のものを挙げている。

1. at least two morphemes in length;
2. phonologically coherent, that is fluently articulated, non-hesitant;
3. unrelated to productive patterns in the learners' speech;
4. greater complexity in comparison with the learner's other output;
5. used repeatedly and always in the same form;
6. may be inappropriate (syntactically, semantically or pragmatically) or
7. otherwise idiosyncratic;
8. situationally dependent;
9. community-wide in use.

実験として、英語を母語として、フランス語を初めて学ぶ生徒を2年間(11歳から13歳)にわたって調査した。先に述べた基準をもとに chunk として、

1. ある種の疑問文

ou habites-tu?, quel age as-tu?

2. ある種の否定を含む文

je ne comprends pas, je ne sai pas, je n'ai pas, je n'aime pas

3. 一人称と動詞を含む文

j'ai, j'aime, j'adore, j'habite

を認定し、最後の3を研究対象とした。例えば、*she likes shopping* と言いたいときに、*elle j'aime le shopping (she I like shopping)*、*Richard likes museums* と言いたいときに、*Richard j'aime le musée (Richard I like the museum)* というように、*j'aime (I like)* といった chunk がそのまま代入される形で使用される。彼らは、これを *over-extension* と呼んでいる。

実験の結果、以下のことが明らかになった。

1. chunk が分解(breakdown)される過程は、定型表現を使われない場面で主語の人称代名詞の体系化が生じる過程と関連している。

2. 学習者は3つのタイプに別れた。

(1) 2年間の研究期間の最後までに、chunk を分析的に分解し、他の場面でも自由に人称代名詞を使えるグループ。

(2) 上のグループよりはゆるやかに chunk を分析的に分解していくグループ。

(3) 全く chunk を分析的に分解できなかったグループ。

CLAWS7によるPOSタグ付けの例
 (中学生の日記の一日分)

| | |
|-------------------------|------------------------------|
| 0000001 001 **6;0;START | 01 NULL |
| 0000001 002 | |
| 0000002 001 ” | 03 ” |
| 0000002 010 Monday | 93 NPD1 |
| 0000002 011 , | 03 , |
| 0000002 020 May | 93 [NPM1/100] NP1%/0 VM@/0 |
| 0000002 030 17 | 17 MC |
| 0000002 031 , | 03 , |
| 0000002 040 sunny | 03 JJ |
| 0000002 041 ” | 03 ” |
| 0000003 010 I | 93 [PPIS1/100] ZZ1%/0 MC1%/0 |
| 0000003 020 got | 93 [VVD/100] VVN/0 |
| 0000003 030 up | 93 [RP/100] II@/0 VVO%/0 |
| 0000003 040 at | 93 II |
| 0000003 050 5:45 | 59 MC |
| 0000003 051 . | 03 . |
| 0000004 001 | |
| 0000004 010 I | 93 [PPIS1/100] MC1@/0 ZZ1@/0 |
| 0000004 020 slept | 98 VVD |
| 0000004 030 late | 03 [RR/95] JJ/5 |
| 0000004 040 this | 93 [DD1/100] RG%/0 |
| 0000004 050 morning | 93 NNT1 |
| 0000004 051 . | 03 . |
| 0000005 001 | |
| 0000005 010 So | 97 RR |
| 0000005 020 I | 93 [PPIS1/100] MC1%/0 ZZ1%/0 |
| 0000005 030 ate | 98 VVD |
| 0000005 040 breakfast | 93 [NN1/99] VVO@/1 |
| 0000005 050 in | 93 [II/99] RP@/1 |
| 0000005 060 a | 93 AT1 |
| 0000005 070 hurry | 93 [NN1@/99] VVO/1 |
| 0000005 071 . | 03 . |
| 0000006 001 | |
| 0000006 010 And | 93 CC |
| 0000006 020 I | 93 [PPIS1/100] ZZ1%/0 MC1%/0 |
| 0000006 030 left | 98 VVD |
| 0000006 040 home | 93 [RL/95] NN1/5 VVO%/0 |
| 0000006 050 at | 93 II |
| 0000006 060 6:15 | 59 MC |
| 0000006 061 . | 03 . |
| 0000007 001 | |
| 0000007 010 We | 93 PPIS2 |

| | |
|------------------------|--------------------------|
| 0000007 020 started | 98 VVD |
| 0000007 030 for | 93 [IF/100] CS%/0 |
| 0000007 040 Tokiwa | 06 [NP1/81] NN1@/19 |
| 0000007 050 by | 93 [I1/100] RP%/0 |
| 0000007 060 bus | 93 [NN1/100] VV0@/0 |
| 0000007 061 . | 03 . |
| 0000008 001 ----- | |
| 0000008 010 We | 93 PPIS2 |
| 0000008 020 went | 98 VVD |
| 0000008 030 to | 93 [I1/100] TO/0 |
| 0000008 040 five | 93 MC |
| 0000008 050 colors | 04 [NN2/85] VVZ@/15 |
| 0000008 060 ponds | 93 NN2 |
| 0000008 070 and | 93 CC |
| 0000008 080 made | 93 [VVD/86] VVN/14 |
| 0000008 090 a | 93 AT1 |
| 0000008 100 sketch | 03 [NN1/100] VV0/0 |
| 0000008 110 of | 93 IO |
| 0000008 120 it | 93 PPH1 |
| 0000008 121 . | 03 . |
| 0000009 001 ----- | |
| 0000009 002 " | 03 " |
| 0000009 010 Then | 93 [RT/100] JJ%/0 |
| 0000009 011 , | 03 , |
| 0000009 020 we | 93 PPIS2 |
| 0000009 030 went | 93 VVD |
| 0000009 040 hiking | 93 [VVG/99] NN1@/1 JJ%/0 |
| 0000009 050 around | 93 [I1/55] RP/44 RG@/0 |
| 0000009 060 the | 93 AT |
| 0000009 070 ponds | 93 NN2 |
| 0000009 071 . | 03 . |
| 0000009 072 " | 03 " |
| 0000010 001 ----- | |
| 0000010 010 They | 93 PPHS2 |
| 0000010 020 were | 93 VBDR |
| 0000010 030 very | 97 RG |
| 0000010 040 beautiful | 93 JJ |
| 0000010 041 . | 03 . |
| 0000011 001 **8;7;text | 01 NULL |

A Needs Analysis Focusing on Motivation: Establishing New Goals and Objectives

by
Kazuo Yukina

Introduction

Most researchers in the late 1960s and the early 1970s were not very sensitive to individual differences among learners of different ages or different mother tongues (Ellis, 1994, p.2). In other words, they tried to fit all of those differences into a single abstract construct called language aptitude, just focusing on apparently common features in second language learning. Since those two decades, a growing number of researchers have come to realize the necessity of explaining individual differences more analytically (Skehan, 1989). Those researchers are convinced that second language learning results from the interaction and integration of analyzable factors. This longitudinal study focuses on one of those factors.

The primary purpose of this longitudinal study is to investigate students' needs in a private school as a basis for establishing curriculum goals and instructional objectives of a new curriculum to fulfill those needs. This longitudinal study started with regular needs analyses in the form of questionnaires to junior high school students I was in charge of in the following year. Although more than one-third of those students listed reasons for studying English that indicated integrative motivation, such as "because I want to talk with foreign people," or "because I want to make friends with foreign people," or "because I want to live overseas" to a simple question "For what purpose do you study English?", another third listed instrumental motivation such as "because English is useful and practical," or "because English is necessary to get a good job," or "because I want to get a good school record." As a result, I have established new curriculum goals and instructional objectives to satisfy those two almost contradictory kinds of motivation at the same time.

This paper is composed of two sections. First, I shall investigate students' needs through a series of questionnaires. Second, I shall deal with curriculum goals and instructional objectives, giving consideration to those needs perceived in the questionnaires. This particular context in Japan, together with the students' motivation and learning style, suggests a need to proposing a new supplementary syllabus. Although a new supplementary syllabus in the compulsory educational curriculum in Japan is an interesting issue, I shall center on interpreting needs analysis, and establishing goals and objectives because the other factors in the curriculum design are obviously beyond the scope of this study.

1 Needs Analysis

As psychologists have long claimed, motivation is essential for learning to take place (McClelland, 1987). In this section, I now concern myself with the motivation of the target students. Their motivation to learn English can be expected to vary considerably. Each student is brought up in a different environment. Each region or even each district has special characteristics. This diversity, nevertheless, is hardly reflected in the Course of Study designed by the Ministry of Education. This is partly because, as a general rule, the Course of Study is approved on legal grounds for the purpose of standardizing the nationwide level of basic education.

The problem is that students' needs at the junior high school level are often ignored. As far as I know, very little literature dealing with student motivation has been published for decades. Moreover, most of the analyses are cross-sectional. It seems that the people working with the Ministry are not very interested in what the students are like, or what kinds of skills in English they really desire to learn. This is probably because Japanese educational

systems are based on the academic rationalism. In other words, there is an authoritarian belief that the policy makers and the people working with them already know everything the students need to learn in real life, and even everything most students want to know. Consequently, what those people usually put into the Course of Study is what they traditionally, or sometimes intuitively, believe the students should learn at school. Otherwise, it would not be very realistic to require publishers to distribute similar kinds of authorized textbooks on the same structural syllabus to various types of schools or districts for years.

1.1 Educational Setting

Here I have to mention one of the special characteristics that is closely related to the social context in Japan. The students studying at most private junior high schools are fairly free from the pressures of the entrance examinations of the senior high school. This applies to most private junior high schools that are attached to a senior high school. In the target school, for instance, nearly 95% of the students, if their records are satisfactory, are accepted by the high school within the same educational institution. Therefore, the results in the target school cannot be interpreted as typical of the students studying in an ordinary public junior high school. In this section, I shall describe the educational setting of the target students. Without this description it would be very hard for outside people to recognize what should be considered when they interpret and evaluate this longitudinal study.

The target school is a private all-male junior high school in Tokyo. Each grade is composed of about 180 students: about 70 of whom are graduates of the attached co-ed elementary school in Tokyo, about 15 of them are overseas returnees, the majority of whom are from English-speaking countries, and the rest of the students are screened by an entrance examination. Thus, as compared with ordinary students studying in a public junior high school, the cognitive levels of most students are homogeneous and fairly high.

As for English, the students in Grade 7 receive three hours per week of grammar and reading lessons, and spend one hour in the language laboratory. In addition, those who have already started English conversation lessons receive one hour per week of conversation lessons with a native-speaker teacher, while the others receive another hour of grammar and reading lessons. The students in Grades 8 and 9 receive three hours per week of grammar and reading lessons and one hour per week of reading or grammar lessons, according to their skill level. They also receive one hour per week of conversation lessons with a native-speaker teacher, and spend one hour per week in the language laboratory. Each class, except for the class in the language laboratory, is a skill-level class. Namely, the class is divided into half-class sections of about 20-to-25 students each. The students are assigned to one of the two class sections, according to their scores in English in the previous term.

1.2 Questionnaires on Motivation

In the absence of a needs analysis, we can hardly expect to develop teaching materials that interest the students. Although some people may be dubious about the results of questionnaires for junior high school students as young as 12 to 15 years old because they might not mean what they say in their responses, some needs analyses are far better than nothing at all in that those analyses often suggest some tendencies about students' behaviors. In fact, I have learned a lot about the target students from a series of needs analyses. Also, I have perceived from needs analyses a considerable number of communicative factors that can be used in teaching materials. For example, when the students with integrative motivation are asked to prepare and make a speech about themselves, they work harder and learn more (Robinson, 1980). A specific curriculum effective with some students will surely be effective, to some extent, with others with similar motivation. Consequently, putting together similar factors in students'

needs facilitates designing a commonly effective curriculum for a large number of students in the classroom. This could apply to fairly homogeneous groups of students in the compulsory educational system.

I have long thought that some needs analyses would be necessary to increase my understanding of the students, especially of their motivation, which is closely related to their span and degree of attention that is the key for any kind of learning to take place. I started with various small-scale needs analyses in 1988. The data gathered varied too much to allow useful interpretation, probably because of the diversity of the subjects, the number of the items, and the dates and the ways of sending out the questionnaires (Reid, 1987, 1990; Johnson, 1985). So in 1990, I started using needs analyses quite small in scale and with quite simple items. The analyses were quite small because I wanted to ask all the students the same questions in exactly the same manner at almost the same time of the year, limiting the analyses to only the students I was going to be in charge of.

Quite simple items were selected in the questionnaire; I wanted to avoid complexity mainly because of the students' age. The needs analysis began with handing out one card to each student at the very first meeting of the year. I asked the entire class to write down responses to three target questions for the analysis. They were to include their name and other miscellaneous data about them in Japanese. The three target questions in Japanese are as follows:

1. Do you like English? Write down one of the numbers 1 through 5 according to the degree to which you like the subject. For example, if you really love English, write down the number 1. If you hate English, write down the number 5.
2. What line of business do you want to follow in the future?
3. For what purpose do you study English?

The accumulated results for seven years (1990-97, N = 1749) were not striking, but were much simpler than I had expected. The typical answers and the numbers of classified responses to the third question are shown in Table 1. Interpretation of the responses, however, is not as simple as the results might indicate.

1.3 Classification of the Data

There were two critical problems when I classified the types of motivation from the responses. First, the two categories of instrumental motivation and integrative motivation did not apply to some ambiguous responses. For example, the motivation of those who answered that they wanted to study abroad could be interpreted as instrumental as well as integrative because the students must pass a number of tests to be successful as a candidate in this test-oriented society.

Secondly, the motivation classified as instrumental had two subcategories. For example, the motivation of those who responded "because I want to get a good job" were able to be classified as test-oriented instrumental and as job-oriented instrumental. Some who wanted to be lawyers might have responded that way because English is one of the main subjects in the entrance examination. Others who wanted to be interpreters or translators might have responded in the same way because the job itself required proficiency in English.

In order to classify their motivation more precisely, I had to ask a further question by means of a validated qualitative research method. However, I purposely avoided giving precise directions on how they should respond, or having the student pick one out of a number of written alternatives because, according to my previous experience, those ways of asking often lead students to produce answers determined by the directions or by the alternative answers (Patton, 1990). What I needed was answers expressed in their own words about what they really wanted to do with English.

Table 1: Students' Responses on Motivation (1990-97)

| | Grade | | | Total |
|--|---------------|---------------|---------------|---------------|
| | 7 | 8 | 9 | |
| Because I think that English is useful and practical in the future. (A1) | 69 13.4 % | 179 29.2 % | 136 21.9 % | 384 22.0 % |
| Because I think English is necessary to get a good job. (A2) | 87 16.9 % | 62 10.1 % | 43 6.9 % | 192 11.0 % |
| Because I want to get a good school record. (A3) | 22 4.3 % | 31 5.1 % | 15 2.4 % | 68 3.9 % |
| Because I want to read English books. (a1) | 7 1.4 % | 12 2.0 % | 14 2.3 % | 33 1.9 % |
| Because I want to understand English movies. (a2) | 2 0.4 % | 1 0.2 % | 13 2.1 % | 16 0.9 % |
| Because I want to understand and sing English songs. (a3) | 0 0.0 % | 6 1.0 % | 7 1.1 % | 13 0.7 % |
| Because I want to read English newspapers. (a4) | 0 0.0 % | 2 0.3 % | 3 0.5 % | 5 0.3 % |
| Because I want to talk with foreign people. (B1) | 121 23.5 % | 107 17.5 % | 130 20.9 % | 358 20.5 % |
| Because I want to make friends with foreign people. (B2) | 73 14.2 % | 59 9.6 % | 52 8.4 % | 184 10.5 % |
| Because I want to live overseas. (B3) | 12 2.3 % | 23 3.8 % | 24 3.9 % | 59 3.4 % |
| Because I want to travel abroad. (b1) | 48 9.3 % | 43 7.0 % | 42 6.8 % | 133 7.6 % |
| Because I want to go abroad. (b2) | 33 6.4 % | 36 5.9 % | 45 7.2 % | 114 6.5 % |
| Because I want to study overseas. (b3) | 15 2.9 % | 12 2.0 % | 7 1.1 % | 34 1.9 % |
| Because I want to work overseas. (b4) | 1 0.2 % | 2 0.3 % | 8 1.3 % | 11 0.6 % |
| Because I think studying English is our duty. (C1) | 1 0.2 % | 5 0.8 % | 32 5.2 % | 38 2.2 % |
| Because I just like (to study) English (C2) | 3 0.6 % | 11 1.8 % | 7 1.1 % | 21 1.2 % |
| Because I think speaking English looks stylish. (C3) | 4 0.8 % | 6 1.0 % | 4 0.6 % | 14 0.8 % |
| I study English for other miscellaneous purposes. (c1) | 8 1.6 % | 8 1.3 % | 10 1.6 % | 26 1.5 % |
| I study English for no purposes. (c2) | 9 1.7 % | 8 1.3 % | 29 4.7 % | 46 2.6 % |
| Total | 515 100 % | 613 100 % | 621 100 % | 1749 100 % |

As is easily imagined from the social context in Japan, the motivation distinctively classified as instrumental such as "English is useful and practical in the future (A1)" and "English is necessary to get a good job (A2)" and "I want to get a good school record (A3)" prompted more than one third (36.9%) of the students to study English. What is more interesting is the percentage of those who listed integrative motivation such as "I want to talk with foreign people (B1)" and "I want to make friends with foreign people (B2)" and "I want to live overseas (B3)." It also accounted for more than one third (34.4%).

1.4 Questionnaires on the Learning Style

The results seemed to be a little odd because very few students speak out or read aloud enough during the class session, even if the teacher tries hard to encourage them. Then, I gave another questionnaire (N = 176) asking why the target students would hesitate to speak out or read aloud enough in the classroom. The majority of the students gave two reasons. First, they were not confident in oral articulation (Lennon, 1990, p. 409). Second, they were afraid of being laughed at by other students when they made errors.

Then, I assumed the majority of the target students were willing to speak aloud if they had a clear idea of articulation, and if they were told that a clear and loud voice is necessary for effective communication. At the same time, however, some students who were themselves unnecessarily sensitive to sound were equally willing to laugh at other students' divergent articulation, even though that articulation would not impede the natural stream of communication. In other words, the target students were not mature enough to create a "comfortable classroom atmosphere" (Morley, 1991, p. 504). I was afraid that this classroom atmosphere would not only make the students lose confidence in phonology, but would also produce a negative effect on pair work and group work in the classroom, which are the central means of the Communicative Approach.

Of course, what is relevant for the improvement of the situation is to create a comfortable classroom atmosphere which would accept variants of articulation. But that is not enough. What is more relevant is not only presenting new cognitive knowledge that would make students confident in articulation, but also giving exercises that would make students put their linguistic knowledge into actual practice every day. In fact, according to other questionnaires on learning style in 1994 (N = 350), when they were told to memorize difficult English sentences, 41.1% of students (N = 144) in Grade 8 (N = 92) and Grade 9 (N = 52) of the students responded that they wrote those sentences along with reading them aloud over and over again, while 30.9% (N = 108) of the students in Grade 8 (N = 49) and Grade 9 (N = 59) responded that they only wrote those sentences.

This process is somewhat dangerous because it might lead to fossilization of the students' pronunciation, unless they have precise auditory images of the real sound together with clear ideas of the sound system of English. This is especially true of beginners who are totally subject to the sound system of Japanese. In the long run, it saves time to give detailed instructions on articulating distinctively and recognizing correctly each phoneme that could cause confusion. This means the teacher not only saves time by preventing fossilized articulation from scratch, but the teacher also increases the amount of "audible input" from the very first stage of language learning. I coined this term from Thomas Sticht's concept of "auding" (cited in Crowder, et al., 1992, p. 112) for the purpose of describing the presumed brain process right before that of "comprehensible input" in spoken language in Krashen's sense (1985) begins.

In sum, I have found an unexpectedly high percentage of the target students have integrative motivation on the one hand. On the other hand, those students have to survive in the test-oriented society in which performance on written examinations that focus on grammar

and translation skills is highly valued. Then, giving consideration to their desire to communicate in spoken English with people from all over the globe, I put up the following two kinds of need:

1. needs to have the target students develop their linguistic knowledge in the strict order of sequence predetermined by the authorized textbook; and
2. needs of the students to receive more "audible input" during pair work and group work.

Unfortunately, those two types of need are almost contradictory. It is obvious that a teacher who spends more time on translating from the target language into mother tongue or vice versa has his/her students score much better in traditional types of written tests, at least in the short run (Savignon, 1991, p. 266). That is especially true when a curriculum filled with grammatical structures with limited vocabulary is employed because the test items suggested for the curriculum show nothing but how well those structures and vocabulary have been memorized during the course. However, those atomistic chunks of knowledge are hardly accessible in time-limited conversation.

On the other hand, giving students more opportunities for listening and speaking increases the "audible input/output", which leads to communicative competence in the long run through pair work and group work (Swain, 1985). However, this "audible input/output" hardly contributes towards solving problems of complicated syntax in time-limited written examinations. In sum, the central task for a curriculum designer consists in proposing curriculum goals and instructional objectives that would integrate reading/writing materials with listening/speaking materials.

2 Establishing Goals and Objectives

The two types of needs described in the previous section was interpreted as increasing "audible input" without "loss of morphosyntactic accuracy" (Savignon, 1991, p. 268). What is necessary in the next step is to establish curriculum goals and instructional objectives. I also distinguish objectives from goals as in Brown (1995). He defines program goals as "general statements of the desirable and attainable program purposes and aims based on the perceived language and situation needs in a program (p. 139)," and instructional objectives as "specific statements, which describe the particular knowledge, behaviors and/or skills that the learner will be expected to know or perform at the end of a course or program (p. 142)." Obviously, putting up instructional objectives with subject performance, conditions, measure and criterion (pp. 164-71) gives a clear picture about what the teacher is supposed to do in the classroom not only to outsiders but also to the teacher himself/herself, especially when the teacher introduces new materials, exercises and techniques.

2.1 Social Context

We must take many factors into consideration when we establish curriculum goals and instructional objectives: language aptitude, age, language backgrounds, interest, needs, motivation, learning styles, previous knowledge of the target language, and cognitive knowledge. Social context is also a decisive factor (Spolsky, 1988, 1989). Even in a fairly homogeneous society in Japan, where English is a foreign language, we can readily imagine that students in the city are quite different from those in the rural areas not only in learning opportunities but also attitude toward foreign language learning.

There are three critical points in terms of the social context in Japan. First, the transactional function of the written language is often most valued in this context because lecture-type classes rather than discussion-type classes are more often the case in most institutions of higher education in Japan. Second, Japanese society is test-oriented. In other words, test scores are almost always used as criteria to screen candidates applying for a school

placement or a job opportunity. In addition, importance is attached to the scores in written examinations that are usually considered to be objective, fair and practical. Finally, the input in written English is considerably larger than that in spoken English for ordinary junior high school students because all the subjects in the compulsory education system in Japan, often including English itself, are taught in Japanese because that language is the sole official one.

Consequently, Japanese junior high school students must score high in written examinations in order to survive in the test-oriented society. The tests in English, often focusing on cognitive knowledge about grammar and translation, are used when the skills of the students are evaluated in almost all junior and senior high schools, though most language teachers agree with the idea that language as a means of communication is primarily spoken, and that the writing system plays a secondary role (Jespersen, 1933, p. 17). Indeed, beside the difficulties in setting the criteria employed in the assessment of proficiency in speaking, it is hardly realistic to administer other types of tests such as interview tests several times a year.

2.2 Curriculum Goals

The general goals of the curriculum I proposed for each grade are stated as follows:

By the end of each grade, the students will be able to:

1. understand, memorize and use the grammatical structures assigned by the Course of Study;
2. understand, memorize and use the vocabulary on the authorized textbook adopted for the grade; and
3. have "phonological confidence" (Lennon, 1990, p.409).

The rationale of those goals are as follows: Since the main purpose of this longitudinal study was establishing curriculum goals and instructional objectives in order to propose new supplementary syllabi that satisfy the target students' motivation perceived in the needs analyses with a close look at the social context, the new goals and objectives ought to be consistent with the main goals and objectives already established by the Course of Study. Besides, the supplementary goals and objectives ought to be passed in a rather limited number of class sessions. Thus, we established the third goal: making students have phonological confidence. In fact, the first two are what every teacher in the compulsory educational system puts up as general goals.

There are two advantages when students have confidence in phonology. First, students' confidence in phonology facilitates introducing pair work or group work in the spoken English in the classroom context. This drastically increases "audible input" during any kind of communicative tasks among students. Second, the confidence reinforces the association between visual images and auditory images when the students listen to somebody reading aloud a passage in the textbook, when the students themselves read aloud, and even when the students read silently through the process of sub-vocalization. Thus, it could be possible that the input in the written English transform into the input in the spoken English. This process that presumably happens in the brains hopefully offers an opportunity to learn English by means of the written forms to students in the social context where the input in the spoken English is more exiguous than that in the written English.

In order to give a concrete shape to the general goal of making students have phonological confidence, I have decided on three phased goals for each grade as follows:

1. By the end of Grade 7, the students will be able to pronounce consonants acceptably when they read aloud a passages in the textbook, and will be able to recognize consonant precisely when they listen to a passage in the textbook.
2. By the end of Grade 8, the students will be able to read aloud unfamiliar sentences within a limited vocabulary acceptably with confidence when they are asked to do so

in the front of the classroom.

3. By the end of Grade 9, the students will be able to write down unfamiliar sentences within a limited vocabulary fairly accurately with confidence when they listen to the sentences.

2.3 Instructional Objectives

For the purpose of making the phased goals listed above more concrete, I have decided on supplementary objectives which focus on the sound/spelling relationships, as suggested by Morley (1991, p. 486), as follows:

By the end of Grade 7, the students will be able to:

1. recognize and identify each consonant pronounced in simplified speech with 70 % accuracy;
2. articulate each consonant distinctively (Gimson, 1980, p. 316);
3. have self-confidence to pronounce any word within a carefully selected vocabulary list (e.g., COBUILD 2,000) with its stress accent with 50 % accuracy;
4. immediately pronounce any word of a fundamental vocabulary list (e.g., COBUILD 1,000) when they see the word on a card with 70 % accuracy;
5. write down any word of the fundamental word list when they listen to the word with 50 % accuracy; and
6. have a general idea about basic morphemes by means of word families of the selected vocabulary list.

By the end of Grade 8, the students will be able to:

1. recognize and identify critical words within the fundamental vocabulary list in authentic speech with 70 % accuracy; and
2. pronounce each word in sentences composed of words within the selected vocabulary list naturally.

By the end of Grade 9, the students will be able to:

1. write down critical sentences composed of words within the fundamental vocabulary list in authentic speech with 70 % accuracy; and
2. pronounce sentences composed of words within the fundamental vocabulary list appropriately.

The focus of our objectives moves slightly from consonants toward vowels during Grades 7 and 8, and the focus moves from segmental phonemes to prosodic features during Grades 8 and 9. Here, it might be necessary to mention the goals and objectives for Grade 9. Since Grade 9 is the last year of the junior high school, namely the very last year of the compulsory education in Japan, a concrete and practical goal is essential. Otherwise, it can be extremely difficult to motivate most students to learn the language on their own.

Conclusion

In this longitudinal study, I focused on motivation. Motivation is one of the critical factors in second language learning. One of the simplest ways to inquire of a large number of students about their motivation is by means of questionnaires. According to a relatively informal needs analysis, I estimated that more than one third of the students in our junior high school have highly instrumental motivation while another third of the students have ordinary types of integrative motivation. Furthermore, I became increasingly sure of these proportions as the data accumulated year by year. For the purpose of satisfying those two almost contradictory kinds of motivation perceived in the questionnaires, I established supplementary curriculum goals and instructional objectives that would focus on reinforcement of the association between the phonemes and the graphemes of the target language.

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Prototype Effects in Understanding Word Meanings.

Norifumi Ueda

1. Introduction

For second language learners, to rich their vocabulary is very important in order to improve their language skills: reading, writing, speaking and listening. In Ueda (1997a) and Ueda (1997c), two things are examined: (1) how subjects (Ss) understand a polysemous word, *Play*, or how the representation of *play* in the mental lexicon of Ss is, and (2) whether there any differences in the mental lexicon between second language learners of English (SLLE) and native speakers of English (NSE). As to (1), it is found that some prototypical meanings are center and other meanings are around them. Here, we can see prototype effects. Concerning the question (2), the structure of the mental lexicon between SLLE and NSE is found to be similar.

Here, we have one question: how Ss understand the sentences with peripheral meanings of a polysemous word. In this paper*, we will examine the prototype effects in understanding unfamiliar usages in a polysemous word, *play*, through their way of translating English sentences with a polysemous word into Japanese.

2. Prototype Effects

The concept of prototype effects was examined through the experiments by Rips and Shoben (1973) Rosch and Mervis (1975), , and Rosch, Mervis, Gray, Johnson and Boyes-Braem (1976). In Rosch and Mervis (1975), a prototype is defined as the best example in a category, and conceptual categories are structured around central members or prototypes. The characteristics of a prototype are defined as follows:

1. Items judged to be typical members of a concept can be categorized more efficiently than atypical one.
2. Typical members are learned first by children.
3. Prototypes are named first when subjects are asked to give examples of

* This paper is based on the presentation in the 2nd Korea/Japan colloquium of Applied Linguistics held at Waseda University in July, 1997

members of a concept.

4. Prototypes serves as cognitive reference points.

(Hatch and Brown 1995:52)

3. Preliminary Study

Before going into a case study, we will first examine the mental lexicon of SLLE in Ueda (1997a, 1997c) In Ueda, 18 sentences with different meanings in a polysemous word, play, is used. Table 1 shows the list of the 18 sentences. In the analysis, each sentences is judged by Ss according to the similarity, and the results are analyzed by Multidimensional scaling and Cluster analysis. The results of multidimensional scaling is shows in Table 2, and those of Cluster analysis, in Table 3.

Table 1: the list of *Play* in Ueda (1997a, 1997c)

| |
|--|
| (S1) You'll have to play inside today. |
| (S2) I used to play baseball. |
| (S3) I've never played center-forward before. |
| (S4) Do footballers hear the crowd, when they are playing? |
| (S5) I think we should play Bill on the wing in the next match. |
| (S6) There is classical music playing in the background. |
| (S7) She played her records too loudly. |
| (S8) She plays the piano well. |
| (S9) The guitars played. |
| (S10) A world-famous violinist is playing at tonight's concert. |
| (S11) He will play concerts in Amsterdam and Paris. |
| (S12) They played a joke on me. |
| (S13) His ambition is to play the part of Dracula. |
| (S14) The UN would play a major role in monitoring a cease-fire. |
| (S15) You're always playing the fool. |
| (S16) Sikander Bakht played a bad shot. |
| (S17) The sun played on the frosty roofs. |
| (S18) A smile played on her lips. |

Table 2: the results of Multidimensional Analysis in Ueda (1997a, 1997c)

| | dimentio n1 | dimentio n2 |
|-----|----------------|----------------|
| S1 | 0.9851 | -1.2617 |
| S2 | 0.9895 | -1.2278 |
| S3 | 0.7105 | -0.9084 |
| S4 | 0.8942 | -0.3959 |
| S5 | 0.0184 | -0.9843 |
| S6 | 0.8443 | 1.3224 |
| S7 | 0.7233 | 1.0905 |
| S8 | 0.6565 | 1.4298 |
| S9 | 0.6413 | 1.3407 |
| S10 | 0.5279 | 1.539 |
| S11 | -0.01 | 0.8206 |
| S12 | -0.8968 | -0.8409 |
| S13 | -0.1586 | -0.095 |
| S14 | -0.7309 | -0.4732 |
| S15 | -0.4327 | -0.807 |
| S16 | -0.1088 | -1.1045 |
| S17 | -2.3339 | -0.0074 |
| S18 | -2.3192 | 0.563 |

In the results, some meanings are judged to be quite too peripheral or too similar. To solve the problem, we leave out 7 sentences from the list: S5, S6, S9, S11, S14, S16 and S17. However, some meanings in the cluster which has prototypical meanings as central meanings are left.

Next, we examine two clusters: cluster(1) consists of S1(You'll have to play inside today.), S2(I used to play baseball.), S3(I've never played baseball.) and S4(Do footballers hear the crowd, when they are playing.), and cluster (2), of S7(She played her records to loudly), S8(She play the piano well.) and S10(A world-famous violinist is playing at tonight's concert.). Sentences included in the clusters have similar meanings to each other. To find out how similar they are in each cluster, Euclidean distances among each sentence are calculated. The results are in Table 4.

Table 3: the Dendrogram of Cluster Analysis in Ueda (1997a)

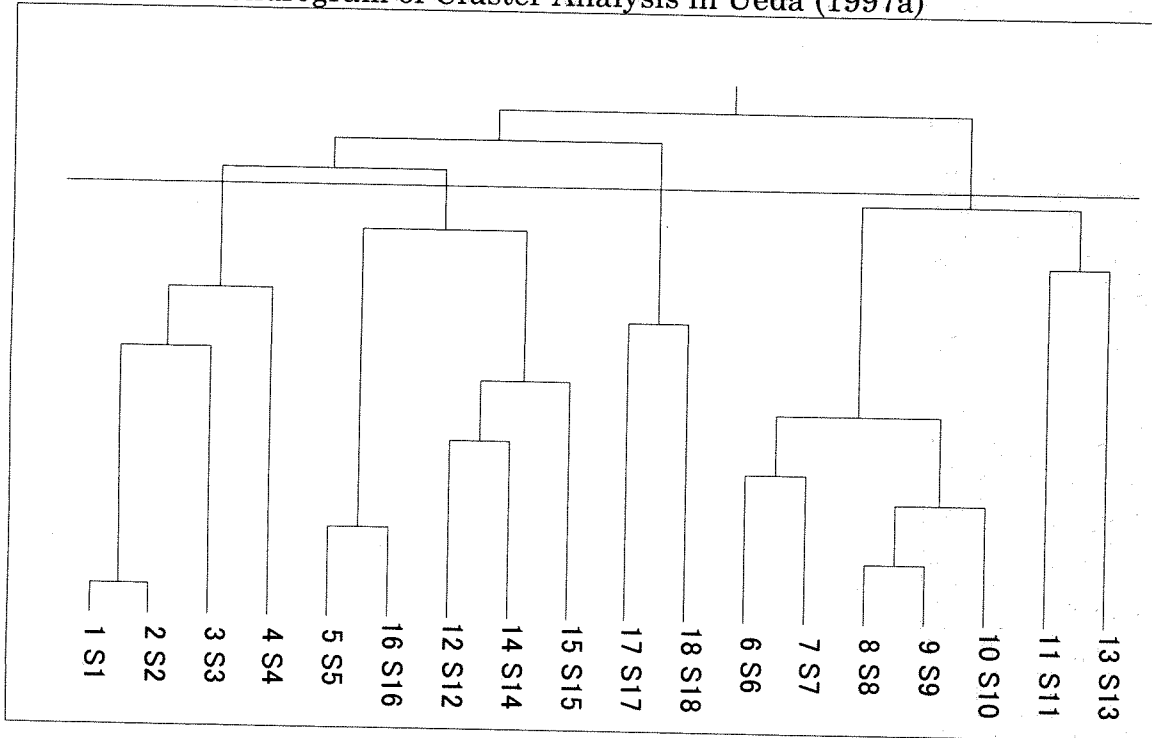


Table 4: Euclidean Distances among the sentences calculated based on the results in Ueda (1997a, 1997c)

| S1 | S2 | S3 | S4 | S7 | S8 | S10 | S12 | S13 | S15 | S18 |
|-----|------|------|------|------|------|------|------|------|------|------|
| S1 | 0.03 | | | | | | | | | |
| S2 | 0.45 | 0.42 | | | | | | | | |
| S3 | 0.87 | 0.84 | 0.54 | | | | | | | |
| S4 | 2.37 | 2.33 | 2.00 | 1.50 | | | | | | |
| S7 | 2.71 | 2.68 | 2.34 | 1.84 | 0.35 | | | | | |
| S8 | 2.84 | 2.81 | 2.45 | 1.97 | 0.49 | 0.17 | | | | |
| S10 | 1.93 | 1.93 | 1.61 | 1.85 | 2.52 | 2.75 | 2.77 | | | |
| S12 | 1.63 | 1.61 | 1.19 | 1.09 | 1.48 | 1.73 | 1.77 | 1.05 | | |
| S13 | 1.49 | 1.48 | 1.15 | 1.39 | 2.22 | 2.49 | 2.54 | 0.47 | 0.76 | |
| S15 | 3.77 | 3.76 | 3.37 | 3.35 | 3.09 | 3.10 | 3.01 | 2.00 | 2.26 | 2.33 |
| S18 | | | | | | | | | | |

In the cluster (1), the distance between S1 and S2 is closest (0.03). S3 is close to both S1 and S2. S4 is close to S4 but not to S1 and S2. Concerning cluster (2), S8 and S10 are closest, and S8 and S7 are next.

4. Case Study

The purpose of this case study is to examine whether we can find the prototype effects in understanding the various meanings of the polysemous word. And research hypothesis is as follows:

Research Hypothesis:

Ss use prototypical meanings as a referential point to understand the meanings which are a little away from the prototypical meanings, or the peripheral meanings.

This case study consists of three experiments: Experiment 1, Experiment 2 and Experiment 3. Experiment 1 is production test. In this experiment, we examine which usage/usages is/are prototypical in Ss. Experiment 2 is acceptability test, where we identify which meanings of *play* are familiar or unfamiliar to Ss. The Experiment 3 is translation test. In Experiment 3, we find out what kind of strategy is used by Ss when they translate unfamiliar meanings of play into Japanese.

4.1. Experiment 1

Subjects

24 Japanese university students participate in this study. They are all junior and senior students of Waseda University, who major in English language and literature.

Method

In experiment 1, we asked 23 Ss to write 5 sentences by use of play. At this time, there was no limitation in the part of speech so that we can identify which meaning(s) is/are a prototype/prototypes of play in Ss' mind. We use two ways for analyzing the results: one is to identify which meanings are more often produced by Ss, and the other is to examine which meaning first occurred to Ss. The reason why I used two ways in the analysis is that, even if the meanings of the sentences are not produced first, they could be prototypical meanings in Ss, because prototypical meanings as referential

points are not necessarily only one in a word. (See the results of the Multidimensional Analysis of Ueda (1997a , 1997c))

Results and Analysis

We can get 144 sentences, because one subject produced only 4 sentences. These sentences are analyzed according to the meanings. Firstly, we examine which meanings are more frequently produced by Ss, and, secondly, which meanings first occurred to Ss. In the results, some students produced all the sentences by use of the only one meaning, so they could be thought to use cheating way in producing the sentences. But it does not matter, because this only one meaning can be influenced by prototype effects, so we can think of this meaning as a prototypical meaning in Ss.

Table 5 shows the result of the analysis that which meanings are frequently produced by Ss. As can be seen in Table 1, the sentences which got more than 10% are "to do sports," "to produce sound by a musical instrument," "to amuse oneself," "drama," and "to perform a role." Among them, the most frequently produced meaning is "to do sport" (28% of the total). The second most frequently produced meaning is "to produce sound by musical instrument." (16% of the total); the third one, "to amuse oneself" (15% of the total); the fourth one, "drama" (13% of the total); and the fifth one, "to perform a role" (11% of the total).

Table 6 to Table 10 shows the results of the analysis according to the production order. Considering the results from the view point of how first the meanings occurred to Ss, and how many of the sentences with the same meaning Ss produced, In Table 6, the most frequently produced meaning is "to do sports," (78%) and next one, "to produce sound by a musical instrument." (17%) As can be seen in Table 6 to Table 10, frequently produced meanings are "to do sport," "to produce sound by musical instrument," "to amuse oneself," and "to perform a role."

Table 5: The analysis of all the sentences produced by Ss, according to the difference of the meaning.

| Meanings of produced sentences | the number of produced sentences | Percentage |
|--|----------------------------------|------------|
| amusing oneself | 2 | 1% |
| to perform a role | 13 | 11% |
| to produce sound by musical instrument | 18 | 16% |
| to do sports | 32 | 28% |
| drama | 15 | 13% |

| | | |
|---|----|-----|
| to amuse oneself | 17 | 15% |
| to pretend to be | 1 | 1% |
| to plan and carry out for one's own amusement | 1 | 1% |
| performance | 2 | 1% |
| game | 2 | 1% |
| to participate in the game | 5 | 4% |
| person who play around | 6 | 5% |
| performer | 3 | 3% |
| for amusing | 1 | 1% |
| to make cassette produce sound | 1 | 1% |

Table 6: Analysis of the meanings in the first sentences produced by Ss

| meaning | total | percentage |
|--|-------|------------|
| to do sports | 17 | 73% |
| to produce sound by musical instrument | 4 | 17% |
| drama | 1 | 4% |
| amusing oneself | 1 | 4% |

Table 7: Analysis of the meanings in the second sentences produced by Ss

| meaning | total | percentage |
|--|-------|------------|
| to produce sound by musical instrument | 7 | 30% |
| to perform a role | 5 | 22% |
| to do sports | 4 | 17% |
| drama | 3 | 13% |
| to pretend to be | 1 | 4% |
| to participate in the game | 1 | 4% |
| person who play around | 1 | 4% |

Table 8: Analysis of the meanings in the third sentences produced by Ss

| meaning | total | percent |
|------------------|-------|---------|
| to amuse oneself | 6 | 26% |
| drama | 5 | 21% |

| | | |
|---|---|-----|
| to do sports | 4 | 17% |
| performer | 2 | 9% |
| amusing oneself | 1 | 4% |
| to plan and carry out for one's own amusement | 1 | 4% |
| to participate in the game | 1 | 4% |

Table 9: Analysis of the meanings the forth sentences produced by Ss

| meaning | total | percent |
|--|-------|---------|
| to amuse oneself | 6 | 26% |
| to do sports | 5 | 22% |
| drama | 5 | 22% |
| to produce sound by musical instrument | 2 | 9% |
| to perform a role | 2 | 9% |
| performance | 1 | 4% |
| game | 1 | 4% |
| to participate in the game | 1 | 4% |

Table 10: Analysis of the meanings in the fifth sentences produced by Ss

| meaning | total | percent |
|--|-------|---------|
| to produce sound by musical instrument | 5 | 23% |
| to amuse oneself | 4 | 18% |
| to perform a role | 3 | 14% |
| to do sports | 2 | 9% |
| drama | 1 | 5% |
| to participate in the game | 2 | 9% |
| performer | 1 | 5% |
| for amusing | 1 | 5% |
| to make cassette produce sound | 1 | 5% |
| game | 1 | 5% |
| performance | 1 | 5% |

4.2. Experiment 2

The purpose of Experiment 2 is to examine which meanings of play are familiar

or unfamiliar to Ss and which meanings are prototypical in *play*. In this Experiment, we ask Ss to judge, by 7 point scale, the acceptability of the sentences with different meanings of *play* in the list. If some meaning gets lower acceptability than the others, it can say that it is an unfamiliar meaning in Ss, because the criteria of judging acceptability of each sentence can be influenced by prototype effects.

Subject

37 university students from Waseda University participated in this experiment. They are all senior and junior students, whose majors are English language and literature.

Method

Ss are given a list in Table 11, which contains 11 sentences with different meanings, and asked to judge the acceptability of each sentence by use of 7 point scale. In this 7 point scaling, 1 represents the most acceptable, and 7, the least acceptable. That is, the acceptability is reduced from 1 to 7.

Table 11: the list of *Play*

- | |
|--|
| (S1) You'll have to play inside today. |
| (S2) I used to play basketball. |
| (S3) I've never played center forward before. |
| (S4) Do footballers hear the crowd, when they are playing? |
| (S5) She played her records too loudly. |
| (S6) She plays the piano well. |
| (S7) A world-famous violinist is playing at tonight's concert. |
| (S8) They played a joke on me. |
| (S9) His ambition is to play the part of Dracula. |
| (S10) You're always playing the fool. |
| (S11) A smile played on her lips. |

Analysis and Results

Table 12 shows the results of Experiment 2. As can be seen in Table 12, the most acceptable sentence judged by Ss is S2 (I used to play baseball.) (average=1.56, standard deviation=1.33, variance=1.77), and the next one, S6 (She plays the piano well.) . The variances of the two meanings are 1.77 and 2.38, respectively. Hence, we can consider that these two meanings in S2 and S6 are most familiar meanings among Ss. On the other hand, S11 (A smile played on her lips.) is judged as the least

acceptable meaning by Ss.

Table 12: the results of analysis of acceptability test.

| Sentence | total | average | standard deviation | Variance |
|----------|-------|---------|--------------------|----------|
| S1 | 81 | 2.38 | 1.78 | 3.15 |
| S2 | 53 | 1.56 | 1.33 | 1.77 |
| S3 | 109 | 3.21 | 1.93 | 3.74 |
| S4 | 88 | 2.59 | 1.81 | 3.28 |
| S5 | 115 | 3.38 | 2.00 | 4.00 |
| S6 | 50 | 1.47 | 1.54 | 2.38 |
| S7 | 100 | 2.94 | 2.06 | 4.24 |
| S8 | 113 | 3.32 | 2.14 | 4.59 |
| S9 | 71 | 2.09 | 1.73 | 2.99 |
| S10 | 105 | 3.09 | 1.86 | 3.48 |
| S11 | 157 | 4.62 | 1.69 | 2.85 |

4.3. Experiment 3

We examine how Ss translate the polysemous word, *play*, into their native language, Japanese, and how prototypical meanings influence the way of understanding the various meanings of *play* and the way of translation.

Subjects

37 university students of Waseda university participated in Experiment 3. Their major is English language and literature.

Method

Ss were given the same list as in Experiment 2, and asked to translate each usage of *play* into Japanese. During the task, using dictionary by Ss was not allowed.

Analysis and Results

The translations produced by Ss are analyzed according to the difference of the meanings. The results are showed in Table 13. As can be seen in Table 13, S1 (You'll

have to play inside.) got only one translation, “asobu (“to amuse oneself”).” And also, Ss gave S2 (I used to play baseball.) the same translation, “*suru* (“to do sports”).” As to S6 (She plays the piano well.), we can find two ways in its translation: “*hiku*” and “*ensou-suru*,” for which English translation is the same one, “to make sound by a musical instrument.” The difference between these translation is in the degree of formality (“*ensou-suru*” is more formal than “*hiku*”), so it can be said that these two meanings are almost the same. S4 got almost all the same translation, “*shiai-wo-suru* (“to participate in a sport game”)” with one exception, “*asonn-de-iru* (“to be amusing oneself”).” Hence, we can say that almost all Ss gave the same translations to S1, S2, S4 and S6, though we can find various translations given to the other sentences.

Table 13: Analysis of translated sentences according to the meanings.

| Sentence Number | Translation | Total |
|-----------------|--|-------|
| S1 | asobu(to amuse oneself) | 38 |
| S2 | suru (to do sports) | 38 |
| S3 | tantou-suru (to perform a role in a position.), | 27 |
| | pureisuru (to do a sport in some position) | 4 |
| | mamoru (to do a sport in some position) | 4 |
| | ichi-ni-tuku (to do a sport in some position) | 1 |
| | yakuwari-wo-eru (to get a role) | 1 |
| | shutujyou-suru (to participate in a game) | 1 |
| S4 | shiai-wo-suru (to do a sport) | 37 |
| | asonn-de-iru (to being amusing oneself) | 1 |
| S5 | kakeru (to put on records) | 31 |
| | narasu (to put on records) | 2 |
| | yomu (to read) | 2 |
| | kiku (to listen to) | 1 |
| | hanasu (to talk about) | 1 |
| S6 | hiku (to make sound by a musical instrument) | 24 |
| | ensou-suru (to make sound by a musical instrument) | 14 |
| S7 | ensou-suru (to make sound by a musical instrument) | 31 |

| | | |
|-----|--|----|
| | hiku (to make sound by a musical instrument) | 2 |
| | hiraku (to hold) | 2 |
| | shutuen-suru (to appear) | 1 |
| | iu (to say) | 1 |
| S8 | iu (to say) | 25 |
| | karakau (to make fun of) | 8 |
| | shikakeru (to make fun of) | 3 |
| | okonau (to make fun of) | 1 |
| | itazura-wo-suru (to do something mischievous) | 1 |
| S9 | enjiru (to act a part) | 28 |
| | yaku-wo-hatasu (to perform a role) | 8 |
| | mi-te-iru (to see) | 1 |
| | jyouen-suru (to present) | 1 |
| S10 | suru (to do) | 10 |
| | enjiru (to perform a role) | 8 |
| | furi-wo-suru (to pretend) | 7 |
| | fuzakeru (to do something mischievous) | 4 |
| | furumau (to behave) | 3 |
| | iu, tuku (to say) | 3 |
| S11 | ukabu (to appear) | 20 |
| | arawareru (to appear) | 6 |
| | koboreru (to appear) | 2 |
| | deru (to appear) | 2 |
| | ukagawareru (to see) | 1 |
| | nasareru (to be done) | 1 |
| | bishou-suru (to smile) | 1 |
| | mieru (to be seen) | 1 |
| | kazaru (to decorate) | 1 |
| | tukuriwarai-wo-suru (to put on a forced smile) | 1 |

5. Discussion and Conclusion

In Experiment 1, we find Ss consider “to do sports,” “to produce sound by a musical instrument,” and “to amuse oneself,” as prototypical meanings in *play* in the case we eliminate the meaning, “drama.” From the result in Experiment 1, we could expect that the acceptability in the sentences with these three meanings would be high in Experiment 2. In Experiment 2, sentences whose meanings were considered to be more acceptable by Ss are “to do sports” and “to produce sound by musical instrument.”

On the other, as to the meaning, “to amuse oneself,” is not given as high acceptability as “to do sports” and “to produce sound by musical instrument” are. (Average of the acceptability=2.83 standard deviation=1.78 variance=3.15) Nevertheless, the meanings, “to do sports” and “to produce sound by musical instrument,” and “to amuse oneself” can be regarded as prototypical meanings in Ss. Hence, from Experiment 1 to Experiment 3, we can say that, for Ss, prototypical meanings are more acceptable and more easy to understand.

Now let us consider the prototype effects in understanding a polysemous word. As we examined in preliminary study, the list of Table has two groups of the sentences whose meanings are similar: one group consists of S1, S2, S3 and S4 (corresponding to cluster (1) in the preliminary study), and the other one, of S6 and S7 (corresponding to cluster (2) in the preliminary study). As to the group with S6 and S7, S6 has a prototypical meaning from the results on Experiment 1 and Experiment 2. Moreover, we cannot find any variations in its translations produced by Ss in Experiment 2. On the other hand, S7, meanings of which are slightly different from that of S6, are given various translations. However, most of the translations for S7 are prototypical meanings.

As to the group with S1, S2, S3 and S4, we found that S1 and S2 are both prototypical meanings from the results of Experiment 1 and Experiment 2. According to the distance in Table 4, S2 is closer to S3 and S4 than S1 is, so S2 is used as a referential point, if the experimental hypothesis is correct. Considering the translations of S3 and S4, they are not the same as that of S2. However, if we introduce the idea, image schema, as in Lakoff (1987), Dewell (1994) and so on, and if we hypothesize “to do some role in a sport” as the image schema for S2, most translations in S3 and S4 can be explained. This is the case of S6 and S7. If “to make sound by a musical instrument” is hypothesized as the image schema for S6, most translations can be explained as to the relation between S6 and S7.

In conclusion, we point out the possibility that prototypical meanings in a polysemous word can be used as referential points, and that when Ss understand unfamiliar or peripheral meanings in a polysemous word, Ss use a strategy to transfer prototypical meanings to image schema. Of course, in this study, we cannot examine much of the various meanings gradually away from the prototypical meanings. We leave this problem in the future study.

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The Learning Effect of Unknown Word Inference Strategy in Reading

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Abstract

This paper examines whether or not, learning unknown words in a context is useful to Japanese high school students.

The present study examined the learning effect of unknown word inference strategy in reading. The subjects were 70 students in the 2nd year in a public high school. 38 students were given the lists of unknown words before reading (the control group). 32 students inferred the meanings of unknown words while reading (the experimental group). After the reading comprehension, all the subjects took the unknown word tests. The result of the tests showed that the unknown word inference strategy was more effective in retaining the unknown words than the word list learning.

Preceding Studies

Many researchers have developed studies on the relationship between unknown words and a context. Some of the researchers have discovered positive evidence in the relationship between unknown words and a context. Nattinger states that "guessing vocabulary from context is the most frequent way we discover the meaning of new words" (1988:63). He continues that to discover the meaning of new words, we have learned to look for a number of context clues: for example, the topic, the other words in the discourse, grammatical structure and so on. Oxford and Scarcella (cited in Lawson and Hogben, 1996) mention that "by far the most useful [vocabulary learning] strategy is guessing from context."

From these two positive arguments for the relationship between unknown words and a context, we understand that Nattinger explains that guessing the meaning of a word from context is very important in vocabulary comprehension, and that Oxford and Scarcella declare the importance of context in vocabulary learning.

On the other hand, Nation and Coady suggest that "studies on learning words from context have not shown the large amounts of learning we might expect, considering the rates at which first-language learners seem to increase their vocabulary" (1988:103). Lawson and Hogben (1996) report their study on vocabulary-learning strategies of foreign-language students. According to their observations on

vocabulary-learning strategies, the great majority of the students used the unknown word repetition strategy, and did not use the unknown word inference strategy. However, as regards the result of Lawson and Hogben's experiment, there is a problem in that one sentence is considered to be a context.

From these two negative statements against the relationship between unknown words and a context, we recognize that Nation and Coady doubt how much a learner learns a new word on the basis of a given context. We also understand that Lawson and Hogben question the importance of context in vocabulary learning.

As far as the EFL studies in Japan on the relationship between unknown words and a context are concerned, I presented a piece of evidence of these studies in my paper, Saito (1996). According to my research, in the area of Japanese EFL learners' unknown word inference strategies, when learners guessed the meanings of unknown words, the context was most used as one of the unknown word inference strategies. In my experimental study, it was found that there were six kinds of information sources used as unknown word inference strategies: grammatical knowledge, prototypical knowledge, native language transfer, general knowledge, personal experience, and context. In the unknown words' test researching the use of unknown word inference strategies in a multiple-choice format, the context occupied 84% among all the six kinds of information sources (See Figure 1). Therefore, Saito supports the above Nattinger's argument that is a piece of positive evidence in the relationship between unknown words and a context.

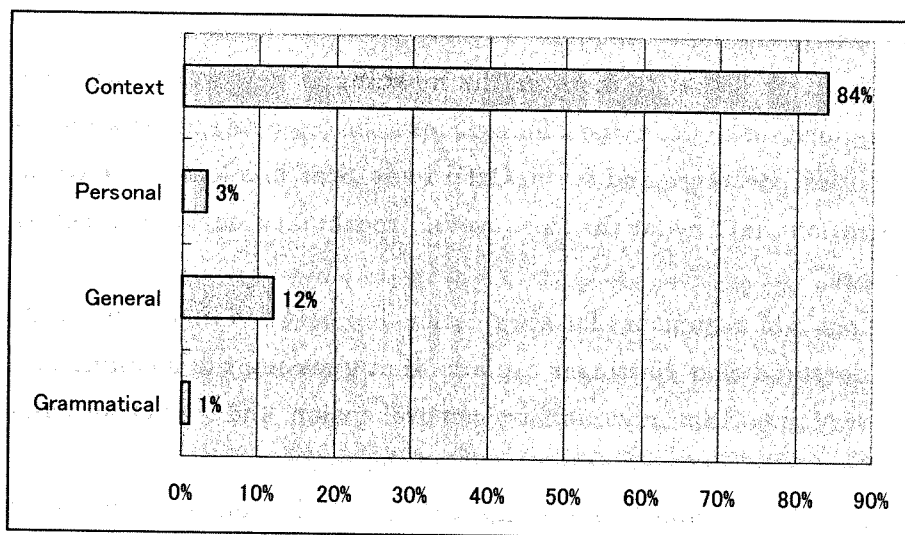


Figure 1: Unknown word inference strategies

Taking these preceding studies into account, in the present research, I investigate the effect of context use upon the unknown word learning. The unknown words mean

here unfamiliar or new words to learners, which might be inferred in a context, and might be important for learners.

Experiment

1. Purpose

The purpose of the present study is to examine whether or not guessing the meanings of unknown words in a context is effective in learning vocabulary.

2. Research question

In order to accomplish the purpose of my research, the following research question was considered.

Research question: Whether or not, the meanings of unknown words would be retained in learning the words in a context rather than in learning them with a word list.

Next, I indicate my research design according to the subjects, the materials, and the procedure.

3. Method

1) Subjects

The subjects were 70 second year students in a public high school. 70 subjects were divided into two groups. One group had 38 subjects who were given word lists of unknown words before reading. It is called here a **control group**. The other group had 32 subjects who were given contexts to infer the meanings of unknown words while they were reading. It is called here an **experimental group**. Two groups included both girls and boys. Their English abilities in these two groups were statistically the same level.

2) Materials

The material is *Lingua-Land English Course II*, Kyoiku Shuppan (1991). It is a school textbook the students use to learn English at school (See Appendixes A and B). Materials were taken from two lessons in the textbook. The title of one lesson is 'Ms. Green'. This material is called here Lesson 1. The title of the other lesson is 'A League of Their Own'. This material is called here Lesson 2. After reading comprehension with each lesson, two kinds of tests were conducted.

Test 1 was conducted immediately after reading comprehension. This test format was to make the subjects choose suitable words from the word group to fill in the blanks and make them answer the meanings of the words (See Appendix C). **Test 2** was

produced 80 days after reading comprehension of Lesson 1 and 63 days after reading comprehension of Lesson 2. This test had two formats. One was to make the subjects answer the meanings of words which were presented in a word list format. Namely, in this format, there was no context. The other format was to make the subjects answer the meanings of words which were given in a context. That is, in this format, there was a context (See Appendixes D and E).

3) Procedure

70 subjects took Tests 1 and 2 according to the schedule (See Table 1). As I said before, Test 1 was conducted soon after reading comprehension, while, Test 2 was produced 80 days after reading comprehension of Lesson 1 and 63 days after reading comprehension of Lesson 2. That is to say, Test 2 would be able to measure the retention of unknown words.

The subjects spent 5 minutes to answer Test 1, and spent 15 minutes to answer Test 2. If they wanted to take more time, they were given 5 to 10 more minutes. They submitted each test right after they finished it.

| | Lesson 1 | | Lesson 2 | |
|------------|----------|--------|----------|--------|
| | Test 1 | Test 2 | Test 1 | Test 2 |
| Control | Sep. 13 | Dec. 2 | Sep. 30 | Dec. 2 |
| Experiment | Sep.13 | Dec. 2 | Sep. 30 | Dec. 2 |

Table1: Tests' Schedules

4. Results

1) Result in Test 1

Table 2 and Figure 2 show the result of two groups' mean scores of Test 1 in Lesson 1 and Lesson 2. According to the Figure 2, it can be recognized that the mean score of the experimental group is higher than that of the control group in both Lesson 1 and Lesson 2. Moreover, I conducted the statistical t-test to know whether or not the mean scores of these two groups are truly different (See Table 3).

| | Lesson 1 | Lesson 2 |
|------------|----------|----------|
| Control | 7.8 | 6.7 |
| Experiment | 9.3 | 7.9 |

(max=12)

Table 2: The means of Test 1

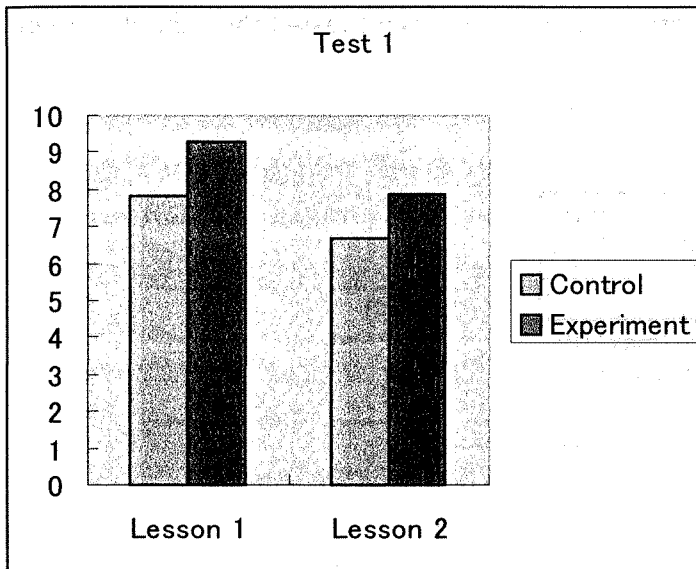


Figure 2: The means of Test 1

| Material | t-value | df | p |
|----------|---------|----|-------------|
| Lesson 1 | 2.66 | 64 | significant |
| Lesson 2 | 1.6 | 61 | n.s |

$p < .02$

Table 3: The result of t-test in Test 1

As a consequence of t-test analysis in Test 1, it was found that in Lesson 1, the experimental group was significantly different at $p < .02$. In Lesson 2, however, there was non-significant difference between the two groups. Therefore, in the Test 1, which was conducted soon after reading comprehension, there was a difference between the experimental group and the control group, but it was not significant.

2) Result in Test 2

Test 2 was conducted 80 days or 63 days later. Table 4 and Figure 3 indicate the result of the two groups' mean scores of Test 2 in both the word list format and the context format. According to the Figure 3, it can be found that the mean score of the experimental group is higher than that of the control group in both formats. Like the t-test in Test 1, the statistical t-test in Test 2 was conducted (See Table 5). As I mentioned before, Test 2 was constituted of two kinds of formats: the word list format and the context format. Each format contained 10 test items concerning 5 new words in Lesson

1 and 5 new words in Lesson 2. In other words, each format tested the subjects on new words of both Lesson 1 and Lesson 2.

| | Word list | Context |
|------------|-----------|---------|
| Control | 3.9 | 5.2 |
| Experiment | 5.3 | 7 |

(max=10)

Table 4: The means of Test 2

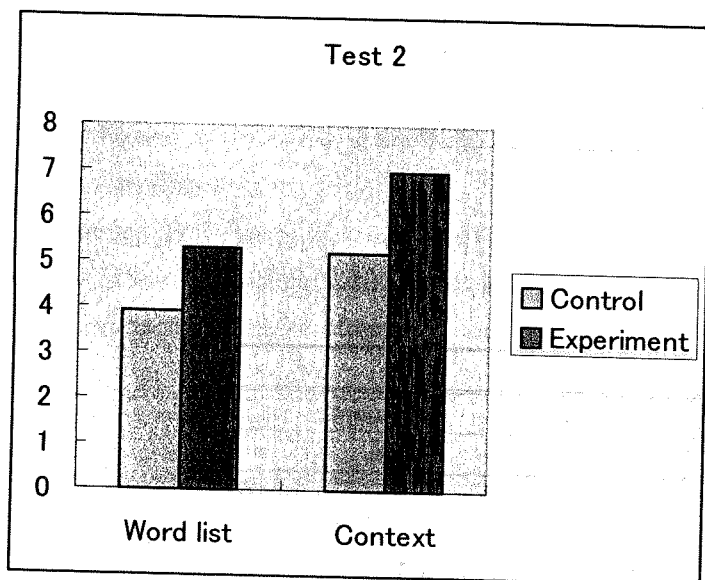


Figure 3: The means of Test 2

| Format | t-value | df | p |
|-----------|---------|----|-------------|
| Word list | 3.6 | 64 | significant |
| Context | 4.62 | 64 | significant |

$p < .001$

Table 5: The result of t-test in Test 2

As a consequence of t-test analysis in Test 2, the following result was found. In both the word list format and the context format, there were significant differences at $p < .001$ between the experimental group and the control group.

3) Retention of unknown words

How about the retentive rates of unknown words in two groups? Are there any differences in the retentive rates of the unknown words between the control group and the experimental group? The another research calculated the retentive rates of unknown words in the two groups (See Table 6 and Figure 4).

| | Control | Experiment |
|--------|---------|------------|
| Test 1 | 60 | 72 |
| Test 2 | 52 | 70 |

(%)

Table 6: The mean percentage scores of Tests 1 and 2

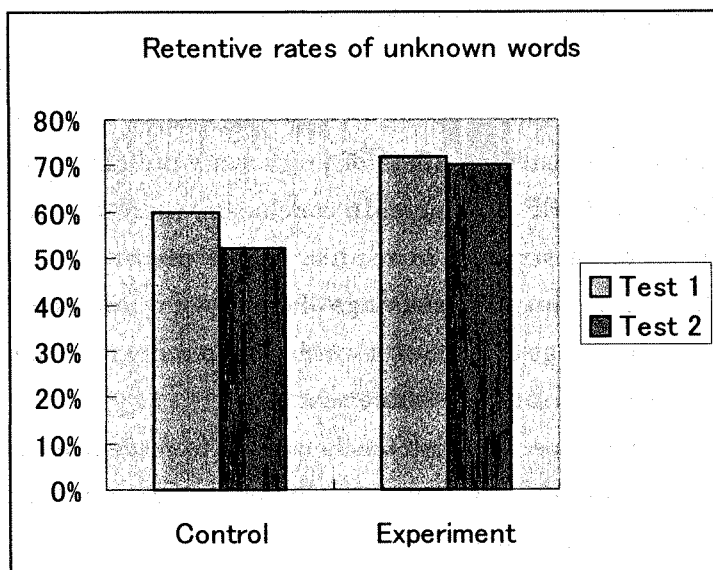


Figure 4: The mean percentage scores of Tests 1 and 2

According to Table 6 and Figure 4, in the control group, the retentive rate of unknown words decreased from 60% to 52% in 80 days or 63 days later, which indicated 8% down. On the other hand, in the experimental group, the retentive rate of unknown words decreased a little from 72% to 70% in 80 days or 63 days later, which showed only 2% down.

5. Discussion

According to the results, we can understand the following three points. First, in Test 1, which was a test about unknown words conducted soon after reading comprehension, there was a little difference between the control group and the

experimental group, though, it was not significantly different. It is suggested that in the unknown word test immediately after reading comprehension, the differences of the two kinds of learning: the word list learning and the word-inferential learning would not have a great influence upon the word learning. Second, in Test 2, which was a test about unknown words done 80 days or 63 days later, there were significant differences in both the word list format and the context format between the experimental group and the control group. From this result, we recognize that in the unknown word test 80 days or 63 days after reading comprehension, the differences between the word-inferential learning and the word list learning would influence vividly the word learning. Thirdly, the retentive rates of unknown words in the experimental group was higher than those in the control group. Therefore, it is emphasized that the meanings of unknown words tend to be retained in inferring the meanings of unknown words during reading rather than in learning the meanings of unknown words using the word lists.

Conclusion

The present research was about the learning effect of unknown word inference strategy in reading of Japanese high school EFL learners. In conclusion, there was the learning effect of unknown word inference strategy in reading in the present study. Therefore, it would be suggested that in reading, the meanings of unknown words would be retained, when learners guess the meanings of unknown words in the context during reading, rather than when learners use the word lists before reading.

Taking account of the results in this paper, English teachers have to recognize the learning effect of unknown word inference strategy and improve our teaching techniques to help our students learn new vocabulary.

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Appendix A

[Lesson 1: Ms. Green]

Yesterday, I met my next-door neighbor and introduced myself. He looked very friendly. Then he said, "Nice to meet you, Miss Green," and I didn't feel very comfortable.

"Please call me 'Jane' or 'Ms. Green' when you are speaking English," I said. He looked a little puzzled, so I explained.

"*Miss* or *Mrs.* Label women whether they're married or not. *Mr.* doesn't label men that way. I just want to have the same advantage as men."

He seemed more puzzled and started to introduce himself. "My name is Akira Tanaka. I'm a mailman."

Then I couldn't help saying, "Oh, I see. You're a mail carrier, Mr. Tanaka." He looked even more puzzled. Maybe he thought I was not very friendly.

I wish I could make myself understood better!

Appendix B

[Lesson 2: A League of Their Own]

They were pretty, and they could play baseball. That was the reason they were chosen to play professional baseball in a league of their own.

When was it? – It started in 1944.

Where was it? – In the Midwest of the United States.

Why did they start a women's pro baseball league? – Because all the good men players were fighting in the World War II.

At first most people thought it was a joke. But they played so well that their owners had a Women's World Series.

One coach who had once been a famous player always got drunk and slept on the job. At last he began to coach the hardworking women seriously.

He is talking to his team, the Peaches, just before their first World Series game.

Jimmy Dugan: Okey troops. I hate admitting this, but I love you and I'm sorry I gave you all such a bad time.

Team: Ahhhhhh! We love you too, Jimmy.

J: Right now, I want you all to get out there and play like there's no tomorrow. Because you know something? There is no tomorrow. Okey. Go get them.

They were so popular that they continued to play even after the men came back. In the Baseball Hall of Fame in Cooperstown, New York, there is a display with this sign: ALL-AMERICAN GIRLS' BASEBALL LEAGUE, 1944-1954.

Note: The unknown words are underlined here in Appendixes A and B.

Appendix C

[Test 1] (About " Ms. Green ")

Class () No. () Name ()

The following sentences indicate a summary of " Ms. Green ". Fill in the each blank selecting a suitable word from the word group below, and write down the meaning of each word.

Jane Green is an AET. One day, she met her (1) () neighbor, Akira Tanaka. He is a mail (2) (). When he said to her, " Nice to meet you, Miss Green," she didn't feel very (3) (). Because *Miss* is used only for (4) () women, but *Mr.* is used for all men. She wanted to have the same (5) () as men. Akira didn't understand her and was (6) ().

[word group] puzzled, carrier, advantage, next-door, unmarried, comfortable

[Answer]

- (1) () the meaning: []
(2) () the meaning: []
(3) () the meaning: []
(4) () the meaning: []
(5) () the meaning: []
(6) () the meaning: []

Appendix D

[Test 2] (Word list format)

Class () No. () Name ()

Write down the meaning of each word.

1. display []
2. puzzled []
3. seriously []
4. next-door []
5. admit []
6. carrier []
7. continue []
8. advantage []
9. owner []
10. comfortable []

Appendix E

[Test 2] (Context format)

Class () No. () Name ()

Read the following two kinds of sentences. Write down the meanings of underlined words.

I.

Yesterday, I met my next-door neighbor and introduced myself. He looked very friendly. Then he said, "Nice to meet you, Miss Green," and I didn't feel very comfortable.

"Please call me 'Jane' or 'Ms. Green' when you are speaking English," I said. He looked a little puzzled, so I explained.

"*Miss* or *Mrs.* Label women whether they're married or not. *Mr.* doesn't label men that way. I just want to have the same advantage as men."

He seemed more puzzled and started to introduce himself. "My name is Akira Tanaka. I'm a mailman."

Then I couldn't help saying, "Oh, I see. You're a mail carrier, Mr. Tanaka." He looked even more puzzled. Maybe he thought I was not very friendly.

I wish I could make myself understood better!

| | | |
|-------------|---|---|
| next-door | [|] |
| comfortable | [|] |
| puzzled | [|] |
| advantage | [|] |
| carrier | [|] |

II.

They were pretty, and they could play baseball. That was the reason they were chosen to play professional baseball in a league of their own.

When was it? – It started in 1944.

Where was it? – In the Midwest of the United States.

Why did they start a women's pro baseball league? – Because all the good men players were fighting in the World War II.

At first most people thought it was a joke. But they played so well that their owners had a Women's World Series.

One coach who had once been a famous player always got drunk and slept on the job. At last he began to coach the hardworking women seriously.

He is talking to his team, the Peaches, just before their first World Series game.

Jimmy Dugan: Okey troops. I hate admitting this, but I love you and I'm sorry I gave you all such a bad time.

Team: Ahhhhhh! We love you too, Jimmy.

J: Right now, I want you all to get out there and play like there's no tomorrow. Because you know something? There is no tomorrow. Okey. Go get them.

They were so popular that they continued to play even after the men came back. In the Baseball Hall of Fame in Cooperstown, New York, there is a display with this sign: ALL-AMERICAN GIRLS' BASEBALL LEAGUE, 1944-1954.

| | | |
|-----------|---|---|
| owners | [|] |
| seriously | [|] |
| admitting | [|] |
| continued | [|] |
| display | [|] |

A Study of the Output Hypothesis: Cognitive Processes of Speaking a Foreign Language

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This study examines the role of output, especially of speaking, in a foreign language learning environment. Japanese senior high school learners who are learning English in classroom settings often have some difficulty in speaking English. One of the reasons may be lack of practice and opportunity for using the target language. In this experiment, while learners were speaking English, their performances were videotaped and they were asked to reflect on their cognitive processes of speaking by watching the video. Their think-aloud protocols were classified according to the cognitive processes, and they were examined. It appears that through producing a target language, language acquisition/learning can occur, and it can be said that the data supported the Output Hypothesis.

I Introduction

The purpose of this thesis is to investigate the role of output in foreign language learning, especially among Japanese senior high school learners who are studying English as a foreign language in a school setting. For many years, English education in Japan has placed emphasis on a written form of English, reading and writing, and most students have tried to gain a good knowledge of grammar and to enlarge their vocabulary in order to pass required entrance examinations. As a result, even though they have some knowledge of English, they have difficulty in communicating in English, especially in oral English, listening and speaking.

In order to improve English education in Japan, the Ministry of Education introduced the new Course of Study in 1994, which emphasizes communicative competence. Since then, more emphasis has been put on listening and speaking, according to the newly introduced subjects, Oral Communication A, B and C. Students now have far more opportunities to listen to English by listening to tapes or team-teaching lessons in which a Japanese teacher of English and a native speaker of English (ALT) conduct lessons together. According to Krashen's Input Hypothesis(1982, 1985), this is the best and only way of learning a second language in the sense that learners can receive comprehensible input. Teachers often use the target language English, as

a means of instruction. In this case, this is a kind of content-based lesson and similar to immersion bilingual education in Canada. It is true that students now have much opportunity to listen to English, but as far as their speaking ability is concerned, they still have much difficulty in speaking even simple English. Thinking about this fact, it is not clear if comprehensible input is enough both for developing listening and speaking ability, and so one of the purposes of this thesis is to consider a possible solution to this problem.

Little attention has been given to the role of output, though a considerable number of studies have been made on the role of input. Swain (1985, 1995) proposes that while learners are producing a target language, either speaking or writing it, they are in the process of acquiring the language, especially syntax or grammar. According to this Output Hypothesis, the production of the target language seems to improve learners' speaking ability even in English classrooms in Japan, too. It seems very important for Japanese senior high school teachers of English to know the cognitive processes of producing the target language, and to examine whether this hypothesis can be applied to Japanese learners of English or not.

II Pretest

Before examining the details of cognitive processes of speaking, a questionnaire was done as a preparation for the experiment. In order to collect data, the classifications for the protocols have to be made beforehand. That is to say, the purpose of the pretest is to make a list of the classifications for the cognitive processes.

1 Subjects

The subjects in this test were 32 eleventh grade senior high school learners of English at Inagakuen Comprehensive Upper Secondary School in Saitama prefecture. 12 subjects were boys and 20 were girls. In addition to studying an English reading course as a part of their required lessons, all of them had completed English listening lessons in their tenth grade and were taking English speaking lessons at the time the experiment was done. Since none of them has studied abroad, we can say that all the subjects have a similar educational background. They have been learning English in a school setting for about five years.

2 Procedure

Two questions were given to the subjects and they were to write as much as

possible in response to each question. The instructions and questions were given in Japanese.

(the content of the questionnaire)

Answer the following questions. Give concrete examples item by item to each question. (Detailed explanation was given to the subjects orally.)

1. What do you think you are doing in your mind when you are about to speak in English (just before you try to speak in English)?
2. What do you think you are doing in your mind while you are speaking in English? You can write the same answer as you wrote in no. 2.

The processes of speaking are divided into two questions because it may be easier for the subjects to think about what they are doing before and while they are speaking in English respectively. It took about fifteen minutes for the subjects to complete this task, and they answered three items to no.1 and two items to no.2 on average.

3 The classification

The questionnaire data were integrated into the classifications of eighteen items. The item for grammar has four small categories. When the descriptions from the subjects were classified, the language related episodes of Swain and Lapkin (1995) were sometimes referred to, but in order to make the characteristics of Japanese learners clearer, the classification was divided into more items. For example, 'think about Japanese words and then translate them into English' is equivalent to 'Lexical search via English (L1)' in Swain and Lapkin's category, and 'think about Japanese sentences and then translate them into English' means 'Translation (phrase or greater)' in their category. However, we cannot find the categories equivalent to 'trying to speak English by thinking in English by the unit of sentences or phrases' and 'think about the content of what they want to talk about and then compose the appropriate English sentences' in their language related episodes.

The classifications are as follows:

- 1 search for English words by thinking in English
- 2 try to speak English by thinking in English by the unit of sentences or phrases
- 3 think about the content of what they want to talk about and then search for the appropriate English words

- 4 think about the content of what they want to talk about and then compose the appropriate English sentences
- 5 think about Japanese words and then translate them into English
- 6 think about Japanese sentences and then translate them into English
- 7 try to remember and use idioms or expressions which you have already learned
- 8 try to search for more appropriate expressions
- 9 try to speak English by thinking about grammatical rules
 - a- think about agreement of number (singular form and plural form)
 - b- think about sequence of tenses
 - c- think about verbs and their sentence patterns
 - d- think about uses of prepositions
- 10 try to compose sentences by applying them to sentence patterns
- 11 speak English, paying attention to pronunciation of each word
- 12 speak English, paying attention to rhythm and intonation
- 13 pronounce English words by remembering their spellings
- 14 wonder if the sentences that you spoke are grammatically correct or not
- 15 wonder if the English words that you used are appropriate or not
- 16 wonder if there is a more appropriate expression
- 17 wonder if your pronunciation was correct or not
- 18 wonder if you can communicate and be understood in English

III Experiment

1 The purpose

The aim of this experiment was to try to elicit the cognitive processes by using the think-aloud method and these concrete examples were examined to make clear the characteristics of the cognitive processes for speaking English.

According to Mann (1982), think-aloud protocols can be divided into three kinds: "introspective protocols" (learners' reports about what they are aware of, while carrying out comprehension activities), "immediate retrospective protocols" (recollections by learners of what they had done to fulfill the preceding step of a task), and "delayed retrospective protocols" (learners' reflections on the whole process after the completion of a task) (qtd. in Bot, Paribakht and Wesche, 1997: 319). To collect the data for the cognitive processes for speaking, the elicitation method for delayed retrospective protocols were adopted in this experiment because of the following reason.

As far as the descriptive case study on the cognitive processes for second or foreign languages is concerned, many kinds of research on reading and writing have been done by using the think-aloud method (Block, 1986, 1992. Bot, Paribakht and Wesche, 1997. Garner, 1982. Hosenfeld, 1984. Kern, 1994. Swain and Lapkin, 1995). It has been thought impossible to observe the cognitive processes for speaking by using the think-aloud techniques simply because we cannot speak a language and talk about the cognitive processes for the utterances at the same time. However, it can be regarded as plausible that a human being can memorize clearly what he/she did just a few minutes ago and this memory makes a research on the mental processes for speaking possible. It can be said for this reason that on the basis of this delayed memory the speakers can trace the cognitive processes of making their utterances and the protocols can be observed and examined.

It may be true that not every cognitive process can be elicited by asking "Did you do that?" or "What did you do?" about the utterances, but a certain amount of concrete examples of the cognitive processes can be drawn and examined. It is very likely that specific characteristics of the processes of producing English by Japanese learners can be observed in this experiment.

2 Subjects

The subjects were 30 eleventh grade senior high school learners of English at Inagakuen Comprehensive Upper Secondary School in Saitama prefecture. 3 subjects were boys and 27 were girls. They were different students from the subjects in the pretest. To make sure all subjects have a similar English educational background, two conditions had to be met when asking for volunteers. One was that they had no experience in living and studying in English speaking countries for more than one month, and the other is that they took English I and Oral communication B class (listening class) in their tenth grade and were taking English reading class, Advanced English reading class and Oral communication A class (speaking class) at the time when this experiment was performed. These were the required English classes for the English major students, but some of the subjects were studying Current English or General English in addition to these required classes in their eleventh grade. 36 students volunteered as the subjects and 30 students were chosen at random among them. Their English levels varied from high to low in the school grades of their English classes. None of them had studied or stayed abroad for more than two weeks.

3 Procedures

Each subject met the researcher individually in a quiet room. First the subjects were received a brief explanation in Japanese outlining the task that they would expect to do. In order to give all the subjects the same explanation of the experimental procedure and instructions, the researcher used a handout explaining the procedure of the experiment. After this introduction, they were told that they should describe in English for one minute a series of four pictures concerning a typical high school student's life, and that in order to understand the story or meanings of each picture, they would be given thirty seconds before starting to describe the pictures in English. Thirty seconds was considered to be long enough to understand the pictures and longer time would give the subjects extra time to think about English itself which they would use for describing the pictures. They were asked to speak in a voice loud enough to be videotaped, and were also told that they would not be allowed to use dictionaries or ask any questions while they were engaged in describing the pictures.

The researcher prepared eight different series of pictures, which were chosen and combined from the picture cards which were included in an authorized senior high school textbook "Birdland. Oral Communication A" (Buneido) as additional teaching aids. However, since one of them was found to be too difficult for the subjects to describe in English while one of the subjects was trying to do so, only seven of the eight picture series were used in the experiment. In order to avoid one subject talking about the content of the pictures to the other subjects beforehand, only one of the seven kinds of pictures was presented to each subject by the researcher at random.

After receiving a series of pictures and thinking about the contents for thirty seconds, the subjects were told to start describing them in English. All the processes of describing the pictures were videotaped. And just after finishing describing them, each subject looked at the videotape with the researcher which had just been recorded, and were asked what they were doing in their mind when they were speaking English or describing the pictures. The researcher asked questions about their cognitive processes whenever the subjects made pauses before or while they were speaking English. The subjects were also asked to explain their reasons for paraphrasing or changing a previous utterance into another form. The researcher stopped the videotapes when asking questions. In order for the subjects to think about and explain their cognitive processes more easily, they were told to read through a handout which listed the classification of the cognitive processes for speaking. These think-aloud procedures were recorded on audio tapes, and the researcher transcribed their utterances and then classified the protocols.

IV Results

285 episodes were collected as the cognitive processes. The frequency for each classification is shown in Figure 1.

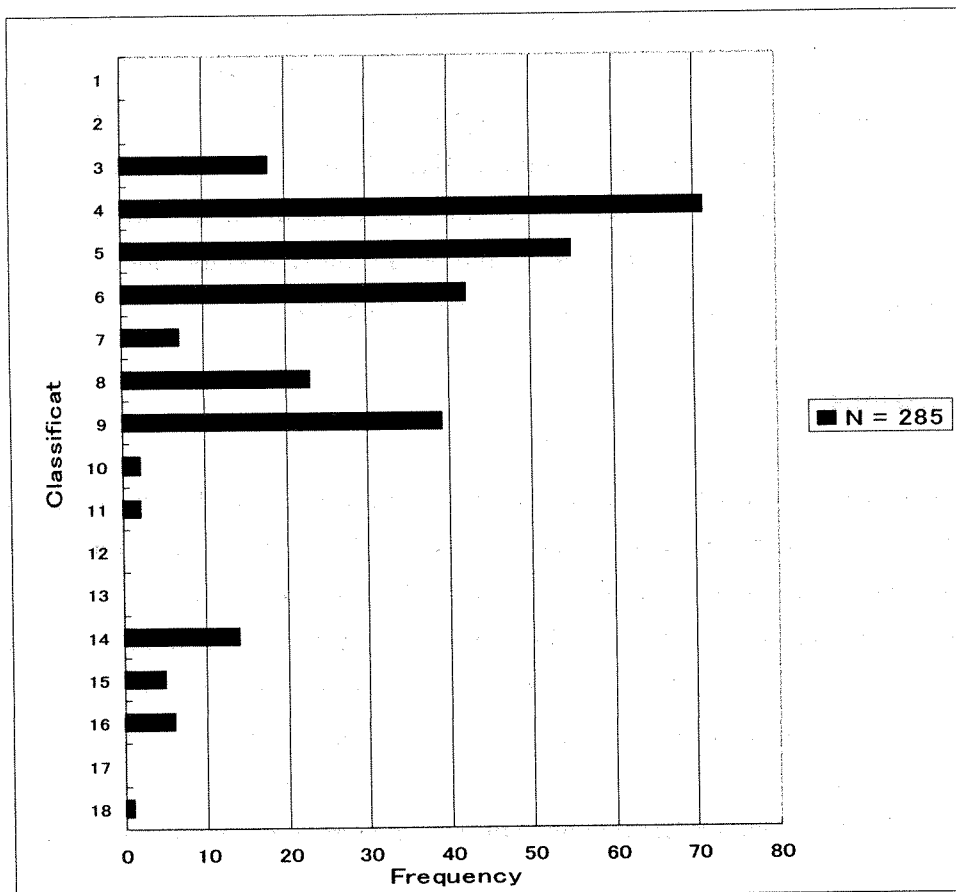


Figure 1: Frequencies of Cognitive Processes for Speaking English
(Each number refers to the classifications of the cognitive processes)

Before looking into the concrete examples of cognitive processes for speaking, one can summarize general tendencies observed in Figure 1. Among other things, the most prominent category is no.4, in which the subjects use images or contents to make sentences. It means that they often depended on images to prepare their utterances. The second and third prominent categories are no.5 and no.6. Both of them are categories about translation and it means that Japanese learners of English used

Japanese translation quite often when they prepared to speak English. It might be related to the traditional grammar-translation method the subjects received. Compared with the frequent use of images and translation, the subjects never used or thought in English in producing their utterances in English.

No. 9 and no. 14 are categories concerning grammar. While making sentences, the subjects were sometimes paying attention to grammatical items and even after finishing their utterances, they monitored their utterances by checking their grammaticality. And also thinking about their expressions was one of the important factors when the learners were producing their utterances (no. 7 and no. 8). It can be said that these facts support the Output Hypothesis. Nevertheless, as far as pronunciation is concerned, the subjects seldom paid attention to individual sounds, stress or intonation as can be seen in no. 11 and no. 12, for they could not afford to think about pronunciation when they attempted to speak English.

V Discussions

To make the characteristics of the cognitive processes for Japanese learners of English much clearer, some typical examples for each category are examined below. Each classification is listed in order and some of the examples are discussed. The number of each episode which could be found during this experiment is shown in brackets after the titles of each classification. The protocols elicited from the subjects were shown in English translation. The original protocols were all in Japanese.

- 1 search for English words by thinking in English (0)
- 2 try to speak English by thinking in English by the unit of sentences or phrases (0)

It should be noticed that the subjects never used English as a means of generating their utterances.

- 3 think about the content of what they want to talk about and then search for the appropriate English words (18)

Example (a):

"I made a image of 'wallet' (not through the Japanese word *saifu*) and then searched for the appropriate English word. However, I thought it strange to interrupt the utterance to think about one word. So I spent some time to search for the appropriate word by repeating the same phrases 'she can't, she can't find ---' and then the word 'money pocket' came to mind."

As in this example, the subjects stalled for time by using the method of repetition, in order not to pause in the utterance, and eleven examples of this kind could be found in elicited data. Though native speakers of English would usually use some phrases like "Well" or "Let me see" in these cases, the Japanese learners of English used some easy words or chunks (set phrases) which they did not have to pay attention to while thinking about the next word to come. It seems that this is one of the strategies for the Japanese learners to spend time for thinking about the sentence to follow.

Example (b):

"Judging from Ken's facial expression, he is in a bad mood. I searched for the appropriate words to describe him. First I said the word 'sad' and then 'tired.'"

By looking at the picture, the subject recognized a negative image in the boy's facial expression and then thought about two words which represented negative images. In this case, the image itself led to English words and it seems that this process is very similar to the process which takes place in our native language (Brown, 1994: 23). During the interview after the experiment, this subject said that if she first thought of a specific Japanese word, she found it difficult to search for the equivalent English word. Therefore, she tried to use images to think about suitable English words.

4 think about the content of what they want to talk about and then compose the appropriate English sentences (71)

Example(a):

"While I was repeating the word 'Ken' three times like 'Ken---Ken---Ken---,' I understood the situation that Ken was standing on the platform at the station. Therefore I said 'Ken was waiting for a train.'"

This subject was observed to use the repetition method of an easy word 'Ken' while thinking about the situation of the picture and making an English sentence which described the situation. This is just the same method that could be observed in the previous category.

Example(b):

"Considering that Emi likes *wan-piisu* (dress), the English sentences 'The one-piece is very nice. She likes very much.' came into my mind."

Though the word 'one-piece' is what is called Japanese English, three subjects out of five used this word when describing one of the pictures. Since they thought of 'one-piece' as an English word and they were also familiar with this word quite well, they did not have to search for another English word and could make a sentence without much trouble only through images. It can be said that the familiarity with English words is

very effective in producing utterances even if the words are used incorrectly.

Example(c):

"I thought Emi had to get up early tomorrow morning because she was supposed to take an examination tomorrow. So she was now setting the alarm clock. I wondered how I could express this situation in English. I had no idea."

In this example, the subject understood the situation depicted in the picture quite well. However, the fact that the subject tried to integrate different pieces of information into one sentence made her cognitive processes more complicated, preventing her from making any utterance.

Example (d):

"I thought the situation was in the girl's room. The image of it naturally led to a phrase 'in the her room.'"

This wrong usage was seemed to be influenced by a chunk "in the." It can be said that this subject has a fixed set phrase "in the" in his mind, possibly because he was familiar with and learned or remembered it as a set phrase "in the," as in "in the morning." In this example, a chunk played an important role in producing an utterance and it seems to have occurred to the subject automatically, though the usage was wrong.

Generally speaking, in the case of using images or thinking about contents to compose sentences, it is true that the subjects needed some time to make their images lead to utterances. However, when they could use quite easy words or their familiar phrases, their utterances could be made smoothly or almost spontaneously even if the usage was sometimes wrong. From this viewpoint, it may be said that chunks play important roles in producing quick utterances.

5 think about Japanese words and then translate them into English
(55)

Example(a):

"I spent a long time thinking how I translate Japanese word *kaisha* into English, but I couldn't."

In this example, the lack of knowledge of only one English word prevented the subject from producing the whole utterance and led to a pause before the next utterance. When a learner has a fixed Japanese word, especially a noun, in his/her mind and cannot think of the equivalent English word, he/she may sometimes have much difficulty in composing a sentence which includes the word and often takes up a lot of time trying to translate.

Example(b):

“A Japanese word *sichaku* came to mind, but I could not translate this word into English.”

This seems to be an example of a lack of knowledge of English words, but in this case, the problem was that the subject tried to think of this English expression as one word. That is to say, Japanese senior high school learners of English sometimes remember English words based on a ‘one Japanese word to one English word’ principle. When teachers encourage the learners to speak English, they should teach them that knowing and trying to use a way of paraphrasing make it possible to express what they want to say in English.

Example(c):

“When I thought about a Japanese word *asa*, an English phrase ‘in the morning’ came to mind automatically.”

This is a good example of automaticity for producing an English utterance, in which a chunk or a set phrase could be used very effectively. The subject first thought of one Japanese word, *asa*, then she could get a fixed prepositional phrase. This automaticity might make it possible for her to make a sentence quite smoothly and naturally without spending an extra time in thinking about grammar or usage.

Example(d):

“After saying ‘She is eating,’ I could not thought of an English word which meant *yushoku* immediately. So while I was spending some time by repeating the previous part ‘She is eating,’ I searched for the equivalent English word and then said ‘dinner.’”

In this example, the subject repeated a phrase which was apparently familiar to him, as the other subjects used the same method when they used images or contents to produce English. In this process, since the subject concentrated on searching for the equivalent English word, it can be said that the automaticity of a chunk played an important role for searching for words instead of saying ‘Let me see’ or ‘Well’ in English way.

Example(e):

“I was thinking what the English word to *nakama* was, and thought of an English expression ‘his friends.’”

This subject succeeded in paraphrasing when she had difficulty in translating one Japanese word into the equivalent English word. The fact that she did not stick to the original Japanese word and paraphrased it into another expression made it possible to continue her utterance and not to make an extra pause. This subject had a better command of English according to her English grade in English classes; she got the highest grade 5 both in English reading class and Oral communication A (speaking)

class.

The subjects often had difficulty in translating a Japanese word into English if they stuck to the original Japanese word and did not know how to paraphrase it into easier or more familiar expressions. In this case, thinking of Japanese words in an early stage sometimes distracted learners from producing English sentences. It seems reasonable to conclude that learners should be flexible without sticking one Japanese word and learn to paraphrase. And also it can be said that chunks led to smooth utterances even when they used Japanese translation, as seen in this category.

6 think about Japanese sentences and then translate them into English (42)

Example (a):

"I tried to translate the Japanese sentence *Emi wa tsukareta* into English and I said 'She is very tired.'"

This is one of the typical examples that Japanese translation into English sentences works well in communication. The reason might be that this English sentence was very familiar to the subject; in other words, it worked just like a chunk and the sentence came to mind automatically just after thinking of a Japanese sentence. However, in the next example, the situation was quite different from this one.

Example (b):

"Though I thought a Japanese sentence *denshani norouto sitakeredomo nakanaka norenakatta* and tried to translate this sentence into English, I could not do it."

This subject struggled to translate a Japanese sentence into English, but could not do so. Compared with the previous example, the Japanese sentence was longer and it contained a more difficult Japanese expression to translate like *nakanaka*. It follows from this fact that it can be hard to produce an English sentence spontaneously after thinking of a whole Japanese sentence especially including some expressions peculiar to Japanese.

Example (c):

"While repeating the word 'she' with some pauses like 'she---she---,' I tried to translate Japanese sentences *kanojowa hasitteiru, isoide iru*, and then said 'She run, hurry up.'"

The method of repeating an easy word was also used here while translating a Japanese sentence into English. Though this subject could produce an English sentence, she could not afford to pay attention to grammatical items. She missed the third person singular "s."

Example (d):

“After wondering how to say *denwao kakeru* in English, I said ‘She is calling telephone her friend.’”

In this example, a Japanese expression appears to have confused the subject. In Japanese, the expression *denwao kakeru* consists of two parts, a noun and a verb, but in English, just one verb is enough, for example, ‘call,’ ‘ring,’ ‘phone,’ or ‘telephone.’ It may be said that if learners use images or contents instead of using the sentence translation, they can avoid this kind of mistakes.

Example (e):

“When I thought of the Japanese sentence *pikunikku ni yuku*, the English phrase ‘go on a picnic’ came to mind.”

In this example, even if the subject made a Japanese sentence first, a chunk or set phrase made it possible to produce an English utterance in a natural way. The data in this category also suggests that chunks are the very important factor for making the subjects produce utterances successfully.

Example (f):

“Since an English sentence for *yamano kuukiwa oishii* did not come to mind, I thought another way of saying by using the words which I knew and said ‘Mountains are very beautiful.’ In this process, I kept searching for an English expression for *kuukiwa oishii*.”

The Japanese word *oishii* in this situation meant ‘fresh’ in English. Since this was an expression peculiar to Japanese, the subject could not translate the Japanese sentence into English and then paraphrased it, but the meaning was different from the original Japanese sentence. While she was engaged in this process, she still tried to translate the original Japanese sentence. It might be said that the specific Japanese expression prevented the subject from expressing what she wanted to say in English.

When the subjects tried to translate the entire Japanese sentence or lengthy phrases, they would have a great deal of difficulty in doing so. Japanese sentences with some length or with some peculiar expressions were especially difficult to translate and the learners often spent a long time to produce English and sometimes could not say anything in English. It was true that chunks worked well in this category too, but the role of chunks would be limited if the chunks were only a part of the whole sentence. By way of conclusion in this category, it does not seem better to use sentence translation for smooth and correct English utterances.

7 try to remember and use idioms or expressions which they have already learned (7)

Example:

“When I tried to describe the people in the train, I want to use the set-phrase for *ippouwa---tahouwa---*. I thought of the only one word ‘other’ and could not remember the first one.”

The subject tried to search for an appropriate expression in her own knowledge sources and to apply it to her English sentence. In this case, the subject failed to produce an English utterance because of the vague knowledge about the idiomatic expression ‘one is ---, the other is ---.’ However, she noticed her linguistic problem in the process. The fact that learners pay attention to English expressions which they have already learned and try to use them in their own sentences can fix and foster their knowledge of English expressions. This fits in well with the Output Hypothesis that while producing a language, learning may occur.

8 try to search for more appropriate expressions (23)

Example (a):

“I said ‘shop’ but I want to describe the picture more precisely, so I changed the word for ‘boutique.’”

In this category, the subjects compared more than two expressions and tried to select a more suitable one for English. In these cognitive processes, the subjects might be engaged in reconfirming their knowledge of expressions and they must learn to use the expressions correctly at the same time. In the above example, though the subject first used the word ‘shop’ to describe the place where clothes were displayed and sold, she put this word in another way by using the more specific word ‘boutique.’ In the process, by comparing the word ‘shop’ with another word ‘boutique,’ she checked some semantic difference between the two words and applied it to the actual production of a sentence as an output.

Example (b):

“While repeating the girl’s name saying ‘Emi---Emi---,’ I was wondering which word I should use to say *tesutoo ukeru*, ‘take’ or ‘have.’”

This subject struggled to choose more appropriate verb for ‘examination,’ and compared the two words ‘take’ and ‘have’ in her mind. Finally, though she decided to use ‘take,’ she was not sure whether she made the right decision or not. At that time, she had no way of receiving any feedback and checking her decision. The method of repeating an easy word to stall for a time to think could be found in this example again.

Example (c):

“I was wondering which of the two expressions ‘sleep’ or ‘go to bed’ was appropriate to *neru*. And then I found a magazine on the bed in the

picture, so I used 'go to bed.'"

This subject used the context or situation in the picture effectively to select the suitable word. Since the Japanese word *neru* has two meanings of both 'sleep' and 'go to bed,' she thought about the situation carefully and tried to use more appropriate word in her utterance. It could be said that she was engaged in the process of learning how to use English words or expressions according to a specific context.

These examples from this category make it clear that the learners are engaged in the processes of reconfirming their knowledge of English expressions by having had chances to produce output. This seems quite effective especially when learners have fixed knowledge of these expressions, in other words, after receiving enough comprehensible input. However, learners with insufficient knowledge cannot learn the proper usage unless they receive some kinds of feedback about these expressions, though they can notice their linguistic problems or lack of the knowledge.

9 try to speak English by thinking about grammatical rules (39)

This category is divided into five small groups.

a- think about agreement of number (singular form and plural form) (0)

No episodes could be found in this group. It is likely that the subjects could not afford to pay attention to the number agreement or they did not perhaps care about it because Japanese language does not have these kind of grammatical rules.

b- think about (sequence of) tenses (13)

Example (a):

"I was wondering which the most appropriate tense in this context was, 'is waiting,' 'was waiting' or 'waited.'"

This subject first thought of the three tenses and then attempted to select one of them by comparing the three forms, the present progressive tense, the past progressive tense and the past tense. In this process, she confirmed the forms and the meanings of each tense and was very careful to apply the knowledge to her utterance.

Example (b):

"I wanted to talk about an event in the future, so I was going to use the word 'will.'"

Since this subject had the knowledge that the auxiliary verb 'will' indicated future tense, she thought that she should use 'will' when she talked about an event in the future. In this case, she tried to apply her grammatical knowledge in producing an English sentence, output, and she could confirm her grammar, which meant that she was engaged in the processes of learning English.

c- think about verbs and their sentence patterns (4)

Example:

"The verb phrase 'enjoy -ing' came into my mind, so I said 'They enjoyed hiking.'"

This example shows that the subject remembered the sentence pattern for the verb 'enjoy', which takes a gerund as its object, and by using this knowledge, she could successfully produce the utterance. It can be said that the process of producing the output provides an opportunity to confirm her grammar.

d- think about uses of prepositions (8)

Example (a):

"I used 'at' first when I wanted to say the time. But if I say 'at', the exact time should follow it. So I said 'about seven o'clock' instead."

This subject seemed to know the usage of a preposition 'at,' so during the process of producing the utterance with the preposition, she had a chance to check whether her knowledge could be applied or not. As a result, she seemed to have confirmed the usage.

Example (b):

"I had no idea of how to combine 'They go' with 'hiking.' At that time, the phrase 'go to school' came to mind, so I said 'go to hiking.'"

Since the phrase 'go to school' seemed to have been familiar with this subject, 'go to' worked as a chunk when she tried to combine the two words 'go' and 'hike.' Therefore, in this example, insufficient knowledge about grammar and the set phrase resulted in the grammatically wrong sentence.

It can be said that in this category some grammatical knowledge leads to learning through output, however, insufficient knowledge sometimes makes learners lead to wrong usage.

e- Others (14)

Example (a):

"I was wondering whether 'the' should be placed before 'movie theater.'"

Example (b):

"After I said 'She pay,' there was a pause to think about whether I should say 'a' before the noun 'money.' Since I thought it unnecessary, I said just 'money.'"

In example (a), the subject thought about the usage of a definite article 'the,' and the subject in example (b) checked the usage of an indefinite article 'a' in the cognitive processes of producing English utterances. It can be said that these processes of speaking made the subjects think about how to use articles and made them have good

opportunities of confirming the knowledge of articles.

Example (c):

"I was thinking about the Japanese words *isshokenmei* and *kibisiso*, and wanted to put this kind of word into an English sentence. I thought of the English word 'hard,' but I didn't know where to put this word in the sentence 'I practice volleyball,' so I couldn't help making a pause after saying 'I practice.'"

This subject tried to add information by using the adverb 'hard' in the English sentence 'I practice baseball.' The process she was engaged in involved checking her knowledge of the position of an adverb in a sentence. This might be regarded as one of the processes of learning.

Example (d):

"I said 'After she call his friend,' in which the word 'his' appeared automatically. However, since I recognized that 'she' was a girl and I should have said 'her' instead of 'his,' I corrected myself. The reason why I said 'his' first was that I was used to say 'he' or 'his,' because the model sentences for memorization which we learned in Advanced Reading class contained these words more often."

Two important facts could be considered in this example. First, the subject had her own speech habit of using the pronoun 'his' before a common noun automatically, for she had memorized many sentences which contained the pronoun. The second fact was that the subject did not pay much attention to the gender distinction in English. This is possibly because Japanese people do not use pronouns in their first language, Japanese, so often.

Many other examples relating to grammatical items could be found in the protocols. The subjects sometimes noticed their linguistic problems and tried to solve them by using their grammatical knowledge. Some succeeded in solving their problems and confirmed the knowledge, but some could only recognize their linguistic problems and failed to produce grammatically correct sentences.

10 try to compose sentences by applying them to sentence patterns (2)

This classification could be integrated into the previous one, grammar, because a sentence pattern is often considered to be one of the items in grammar. However, since the purpose of this study was to examine the details of the cognitive processes of the learners, these two classifications were prepared separately. Attention was paid to the whole sentence, basic sentence patterns or English word order in this classification, whereas individual grammatical items were to be considered in the classification for

grammar.

Example:

"I was thinking about a subject and a verb of the sentence that I was then making. I decided to use 'Emi' as a subject and 'waiting' as a verb."

Since most of the Japanese learners of English studied five major English sentence patterns (SV, SVC, SVO, SVOO, SVOC) at the early time of their junior high school days, they sometimes tried to combine words according to these sentence patterns, and the above example was one of them. This subject first thought about a sentence pattern and then attempted to put two words into the pattern. In this process, she might get used to English word order, which was different from the Japanese one, and this could be considered to be one of the learning processes.

11 speak English, paying attention to pronunciation of each word (2)

Example:

"I was wondering which the correct pronunciation was, 'gui-tar' or 'gui-tar.'"

Only two examples were found in this category. While the subject was trying to pronounce the word 'guitar,' she was wondering where the stressed syllable should be placed. This might happen because the word 'guitar' was also used in Japanese, yet the place of the stressed syllable was different. This subject at least noticed her linguistic problem of the word pronunciation and this could lead to acquisition of the pronunciation for 'guitar.'

12 speak English, paying attention to rhythm and intonation (0)

This classification is about the attention to sentence rhythm and intonation, not to word pronunciation. However, no example could be found in this category. It could be said that since the subjects were concentrating on making sentences, they could hardly afford to pay attention to pronunciation both for words and sentences.

13 pronounce English words by remembering their spellings (0)

No example could be found for this classification, for the subjects were likely to separate spoken English from written English, especially when they were thinking about words in their cognitive processes.

The classifications from one to thirteen were all about cognitive processes during the pauses before the subjects produced utterances or while they were producing utterances. The next five classifications, from fourteen to eighteen, were about the subjects' attention to the utterances which they had just produced. In other words, these were the cognitive processes just after the utterances were produced or these were the processes of conscious learning in which "monitor" (Krashen, 1982) worked after the

utterances were actually made.

14 wonder if the sentences that they spoke are grammatically correct or not (14)

Example (a):

“After I said ‘wait for,’ I was wondering this was the correct usage or not.”

This subject looked back on her utterance and was anxious about the usage of the preposition ‘for.’ This might be a part of the process of reconfirming the knowledge of grammar, in other words, she was learning the usage of the preposition ‘for.’

Example (b):

“I wondered whether the utterance ‘is coming back home,’ which I had just said, was grammatically correct or not and I kept wondering until the next utterance was produced.”

In this example, the utterance “is coming back home” triggered the subject to notice his vague knowledge. This had the advantage of helping him to notice his linguistic problem, but this cognitive process also took some time and delayed the next utterance.

15 wonder if the English words that they used are appropriate or not (5)

Example:

“Did the word ‘payming’ mean *sihara*? Was it enough to add ‘ing’ to ‘pay?’”

This was an example that the word itself which the subject said triggered her to recognize the lack of her knowledge about the word and gave her a chance to compare the meanings of some synonyms.

16 wonder if there is a more appropriate expression (6)

Example:

“I wondered if I could use a better expression instead of saying “There are five people.””

The subject was wondering after the utterance if she could find a more appropriate expression than what she had just used. It might be a first step for the subject to learn how to paraphrase a sentence, which could help her to avoid leaving pauses to compensate her lack of lexical knowledge.

17 wonder if their pronunciation was correct or not (0)

No protocols could be found in this classification. Just as could be seen in the classifications eleven and twelve, it is very likely that the subjects could not afford to pay attention to pronunciation even after having issued utterances.

18 wonder if they could communicate and be understood in English (1)

Example:

"I was wondering if the sentence 'He come his house' made sense or not."

This classification relates to communication factors. In this example, by looking back on her own utterance, the subject could make an assessment of it and confirm whether her communicative purpose was achieved or not.

In collecting data, some protocols appeared to be classified into more than two categories. In this case, the most typical factor in each protocol was focused and the classification to each protocol was decided.

To sum up the major characteristics of the cognitive processes observed in the above examples, the following five points are of most significance.

- (1) In order to avoid leaving pauses before or during utterances, the subjects often stalled for time by repeating an easy word or phrase which they did not have to pay conscious attention to, or a set phrase (or chunk) to which they were familiar. This might be one of the strategies of Japanese learners of English for stalling for time, whereas the native speakers of English usually use the chunks "Let me see," "Well" and so on.
- (2) Chunks which the learners had already remembered or acquired helped to make their utterances automatic and to reduce the number of unnecessary pauses.
- (3) Their lack of lexical knowledge of English often led them to pause before or during utterances.
- (4) If the subjects first thought of a long Japanese sentence containing a lot of information or an expression peculiar to Japanese and then attempted to translate it into English, they sometimes had difficulty in producing English (never to produce any utterances) or left a long pause before they started to speak.
- (5) The learners who had some knowledge of English grammar and words after receiving enough input could check their knowledge and confirm it in the processes of speaking. On the other hand, the learners with poor knowledge could notice their linguistic problems in the processes, but they could not learn the correct usage while they were speaking English.

VI Implications

In this experiment, the details of the cognitive processes for speaking were observed and examined by using the think-aloud method, and five characteristics of the Japanese learners of English were derived from the descriptive data. At first, it was observed that they used the repetition method for stalling for time to prepare utterances. They repeated an easy word or short phrase and sometimes a set phrase (chunk) with which they were familiar in the process of producing an utterance. It might sound unnatural to native speakers of English, for they do not use this kind of method. By teaching some English set phrases, like 'Let me see' or 'Well,' and then making the usage be familiar to the learners, their utterances may become more natural and they can produce their utterances more smoothly.

The second finding was about the important role of chunks in the process of producing utterances. Chunks sometimes made the utterances automatic and helped to reduce the number of unnecessary pauses. If learners can use chunks effectively in the process of speaking, it may lead them to reduce the time to think in Japanese and to make the learners produce utterances more successfully. So teachers should recognize the significant role of chunks in English utterances and try to enrich learners' source of chunks as a preparation for speaking English.

The third one was that the lack of lexical knowledge of English led the learners to pause before or during utterances. It is safe to say that learners can compensate for their lack of knowledge if they know how to paraphrase the word or phrase in another way. So learners should be flexible without sticking only one word (either in Japanese or English) and learn to paraphrase it into another expression.

The next finding was about one of the problems concerning the frequent use of Japanese translation. If learners attempted to translate a Japanese sentence with some length or with some peculiar expressions, they were often forced to spend a long time before speaking English and they sometimes could not produce any utterance. This was because the learners depended on Japanese translation too much. It may be said that teachers should instruct their learners not to use Japanese translation too much but to use images in the process of producing English utterances.

Finally, it is true that the learners with some knowledge of English grammar and expressions could confirm their knowledge in the process of speaking. However, the learners with poor knowledge could not learn the correct usage only while they were speaking English because of the lack of or vague knowledge, though they could notice their linguistic problems. For the former learners, teachers should encourage them to

produce more utterances to provide them with another opportunity to consolidate their knowledge. For the latter learners, teachers should try to give them some kind of feedback to compensate the lack of knowledge and to make them confirm the right usage.

The result of the experiment clearly shows that learners are in the process of learning the language while they are trying to produce output. By way of conclusion of this thesis, the significant role of output should be emphasized in language learning and learners must be provided enough opportunity to notice their linguistic problems and to confirm their knowledge of grammar, expressions and other factors of learning English.

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A Reanalysis of Grammaticality Judgements Test Concerning Dative Shifts among Korean, Japanese and Chinese Learners of English

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1.0 Purpose

The present experiment has two purposes. One is to replicate Ellis (1991) and to see whether the different native languages will bring about differential grammatical judgements on dative constructions among Korean, Japanese and Chinese learners of English. The other is to find out how these learners understand passivized dative constructions. 21 Chinese subjects in Ellis (1991) were graduate students and 40 Japanese university students and 28 Korean university students took part in the present experiment. This is an reanalysis of Park and Nakano(1997) based on Lexical Functional Grammar (LFG). While Ellis (1991) is concerned with the validity of grammatical judgement tests themselves, we focused our analysis on predicting the learners' judgements on the basis of LFG and compared our predictions with the data obtained.

2.0 An analysis of the elicitation data presented to the subjects

Appendix presents the elicitation data given to the subjects. This section classifies the data into to-datives and for-datives and comments their usage in simple terms. As you can see below, the well-formedness of such constructions with the verbs, reserve and design, is controversial. In this sense, we should point out first that all the constructions used in Ellis (1991) are not strictly controlled. It is therefore questionable that Ellis (1991) can argue the relevance of grammatical judgements tests based on his data.

2.1 To-datives and for-datives

Based on Jakendoff (1991) and Levin(1991), we regard dative shifts as consisting of two kinds: to-datives and for-datives shifts. In to-datives, the thematic role of the subject NP is source and that of the NP in the prepositional phrase is goal. According to LFG, the double object construction is derived from the single object construction with its PP. When we illustrate this derivation, using the verb, send, according to the simplified argument structure, we get the following:

send (source, theme, to(goal))

→

send (source, goal, theme)

It is known that the goal NP must be animate. This constraint indicates that the

recipient of the theme needs to be animate. The to-dative constructions includes such verbs as giving verbs (give, hand, offer, pay, pass, sell, feed, lend, etc.), sending verbs (mail, send, ship, forward, etc.), instantaneous verbs of action(throw, toss, flip, kick, etc.) speaking verbs (tell, ask, advise, etc.) the verbs of communicative media (telegraph, telephone, fax, e-mail, etc.) But all the verbs belonging to these verbal categories are not eligible for the dative shift, but some other constraints are known to exist. According to Pinker (1994), the Latinate verbs are ineligible for the dative shift, but the monosyllabic verbs as well as the polysyllabic verbs whose first syllables are stressed are eligible for the dative shift.

On the other hand, the recipient of the theme is a beneficiary in the case of for-datives. According to LFG, the double object construction is derived from the single object construction with its PP. We illustrate this derivation by using the verb, bake; according to the simplified argument structure, we get the following:

Bake (agent, theme, for (beneficiary))

→

bake (agent, beneficiary, theme)

For-dative verbs include making or preparing verbs (bake, boil, build, cook, make, peel, sew, slice, toast, carve, prepare, fix, etc.), getting verbs (get, buy, call, book, catch, order, etc.), and performing verbs (sing, etc.). The phonological constraint is essentially the same as in to-datives. The making or preparing verbs and performing verbs belong to the class of achievement verbs according to Vendler's classification. Therefore, the theme roles represent the respective outcomes of the actions denoted by these verbs. Furthermore, it is important to distinguish the grammatically obligatory for-beneficiary expressions from the optional adjuncts with the preposition, for. In the following examples, the first one stands for the former and the second, the latter.

1. He fixed supper for me. → He fixed me supper.

2. He opened the door (for me).

In the first example, the prepositional phrase is obligatory and for this reason, the dative shift is possible, as shown in the right hand side of the arrow. On the other hand, in the second example, the prepositional phrase represents an adjunct and it is an optional constituent which modifies the verb phrase. For this reason, in the second example, the for-dative shift is not permitted. Since the verb 'open' is an instantaneous verb of action, this property is one of the relevant features for the for-dative shift, rendering the verb a seemingly plausible candidate for the for-dative shift. However, the nature of its argument structure hinders ; the recipient (i.e., 'me' in the prepositional phrase) does not receive the door (the theme role), but the action denoted

by the verb phrase as a whole.

2.26 predictions based on LFG

Ellis used six verbs in his judgement test: send, offer, report, explain, buy, reserve, open, and design. The following six sentence constructions were employed:

- A. The sentences before the application of dative shift rule: 8 examples with send, report, and explain.
- B. The sentences before the application of beneficiary shift: 8 examples with buy, reserve, open and design.
- C. The ditransitive sentences after the application of dative shift: 8 examples with the same verbs used in a. These constructions can be further divided into two: those with human subjects and those with institutional subjects.
- D. The ditransitive sentences after the application of beneficiary shift: 8 examples with the same verbs as in a. These constructions can be further divided into two: those with human subjects and those with institutional subjects.
- E. The passive sentences whose subjects are personal pronouns or human nouns, and the verbs used are report, explain, open and design. (4 examples)
- F. The passive sentences whose subjects are institutional names and the verbs used are the same as in E. (4 examples)

On the basis of the above classification of sentence constructions, the following six predictions would be made within the framework of LFG.

Prediction 1

Based on the order of the lexical rule for the dative shift, we predict that Pattern A would yield more acceptability than Pattern C.

A > C

Prediction 2

Based on the order of the lexical rule for the beneficiary shift, we predict that Pattern B would yield more acceptability than Pattern D.

B > D

Regarding the passive sentences in E and F, we can predict the following. The passive lexical rule in LFG is stated as follows:

Subj → by obj

Obj → subj

Therefore, the EFL learners who regard the passive sentences in E and F as acceptable must accept the ditransitive constructions given in C and D. Otherwise, the passive lexical rule would not be applied. That is, the acceptance of E and F presupposes the acceptance of C and D. Let me illustrate this point. The passive sentences presented are as follows:

- 9 She was reported the accident.
- 10 He was explained the problem.
- 11 He was opened the window.
- 12 She was designed a house.
- 21 The police was reported the robbery.
- 22 The people were explained the difficulty.
- 23 The little girl was opened the door.
- 24 My girl friend was designed a trouser suit.

It must be noted first of all that these passive sentences are all ill-formed. The subjects who accept these ill-formed sentences as acceptable must have thought that the ditransitive constructions are acceptable, in order for them to apply the lexical rule (obj → subj). The ditransitive constructions were in fact all included in the judgement test:

- 3 The policeman reported me the accident.
- 4 The teacher explained me the answer.
- 7 Mr. Smith opened her the door.
- 8 Mrs. Jones designed her a dress.
- 15 The bank reported the police the accident.
- 16 The council explained the public the decision.
- 19 The bank opened my son an account.
- 20 The factory designed the manager a new car.

We predict that the subjects who accept 3 and apply the passive rule would accept 9 as well-formed. Likewise, those who accept 4 as well-formed and apply the passive rule would accept 10 as well-formed. The same reasoning would apply to the following pairs: (7, 11), (8, 12), (15, 21), (16, 22), (7, 23) and (20, 24). For this reason, we have the following prediction.

Prediction 3

In the following pairs, the first pair would elicit larger amount of acceptance among the subjects than the second pair would.

- (3, 9), (4, 10), (7, 11), (8, 12), (15, 21), (16, 22), (7, 23), (20, 24)

Sentence 19 is ill-formed and it stands for a metaphorical meaning of the verb 'open'; i.e.,

open an account. For this reason, 23 is not regarded as derived from 19, but from 7.

Next, let us consider a difference in terms of the subject nouns. As noted earlier, the eight subject nouns in C and D are realized as human nouns (1,2,3,4 in dative shift constructions and 5, 6, 7, 8 in beneficiary constructions) and on the other hand, the other eight, as constitutional names(13, 14, 15, 16 in dative shifts and 17,18,19, 20 in beneficiary shifts). This difference closely relates to the subjecthood hierarchy in LFG, notably the proto-agent roles. According to this, the human subject nouns are closer to the notion of the proto-agent roles than the other remaining institutional subjects. Therefore, we can predict that the subjects would accept the sentences with the human subjects more readily than those with the institutional names.

Prediction 4

The sentences with the human subjects will be accepted by the subjects more than those with the institutional names.

Now, we will proceed to the predictions for the acceptability order of the ditransitive sentences. We will deal with the dative shift, first. In 2.1, we have seen that the subset principle for this lexical rule involves some knowledge of ①phonological rule, ② argument structure and ③ the internal structure of a verb phrase. There are eight sentences derived from the dative shift. Depending on the nature of the subject nouns, they can be divided into two:

I. The first group: four sentences belonging to E

- 1 My wife sent me a letter. ○①②③
- 2 The president offered him a job. ○①②③
- 3 The policeman reported me the accident. ×①③②
- 4 The teacher explained me the answer. ×①③②

II. The second group: four sentences belonging to F

- 13 The shop sent my wife the dress. ○①②③
- 14 The committee offered my brother a gift. ○①②③
- 15 The bank reported the police the accident. ×①③②
- 16 The council explained the public the decision. ×①③②

First of all, we should note that since the institutional names are the subjects in Group II, the rate of acceptability would be lower than the first group. Secondly, a learner's familiarity of the verb can be taken into consideration. It is evident that all the learners would be familiar with the verb, send. Thus, one can predict that sentence 1 would rank highest in the acceptance order, followed by 13. It is also possible to assume that a grammatically correct sentence would be accepted more readily by the subjects than otherwise. For this reason, sentences 2 and 14 would

be accepted by the subjects more readily than ungrammatical sentences, 3, 4, 15 and 16. Due to the subjecthood hierarchy in LFG, 2 would be accepted more than 14 would. So far, we have predicted the rank order of acceptability to be 1, 13, 2, and 14. With respect to sentences 3, 4, 15 and 16, one can point out that they contain the same argument structures as those which are eligible for the dative shift among verbs of communication (see 2.1). Therefore, the important constraint which blocks the dative shift is the phonological rule reflecting a historical accident; since they are Latinate verbs, they are not eligible for the dative shift. Unless a learner is explicitly taught about this, it would be difficult for them to reject these sentences. Since 'report' is a borrowed word in Japanese, the learner's familiarity would be greater than the verb, 'explain.' Taking the LFG's subject hierarchy into account, the acceptability ranking would be in the order of 3, 15, 4 and 16. Thus, we get Prediction 5.

Prediction 5

The rate of acceptability among the ditransitive sentences derived from the dative shifts would be in the order of 1, 13, 2, 14, 3, 15, 4 and 16.

In the ditransitive sentences involving the beneficiary shifts, there are eight sentences as in the dative sentences above. They can be also divided into two, depending on the nature of the subject nouns. In the first group, the subject nouns are human. In the second group, the subject nouns are institutional names.

I The subject nouns are all human.

5 My mother bought me a shirt. ○①②③

6 The manager reserved me a seat. △①③②

7 Mr. Smith opened her the door. ×③②①

8 Mrs. Jones designed her a dress. △①③②

II The subject nouns are all institutional names

17 The government bought its ministers new cars. ○①②③

18 The school reserved Mr. Smith's son a place. △①③②

19 The bank opened my son an account. ×③②①

20 The factory designed the manager a new car. △①③②

As in Prediction 4, since the institutional names are the subjects in Group II, the rate of acceptability would be lower than the first group. Secondly, a learner's familiarity of the verb can be taken into accounts. It is evident that all the learners would be familiar with the verb, 'buy'. Thus, one can predict that sentence 5 would rank highest in the acceptance order, followed by 17.

There are four sentences marked by triangles which indicate that their acceptability is uncertain even among native speakers. Ellis(1991) however regards sentences 6 and 18 as acceptable and sentences 8 and 19 as unacceptable. On the other hand, BBI Dictionary states the opposite. Some native speakers pointed out to me that they would not use sentences 6 or 18, but children might use those forms on the semantic analogy of the verb, 'book'; i.e., "I booked a seat for him." → "I booked him a seat." This suggests that since the double-object constructions are native to English and perhaps colloquial, some Latinate verbs such as 'reserve' are inclined to retain more formal register with the prepositional phrase. These grammatically ambiguous sentences would elicit a larger amount of acceptance than the completely ungrammatical sentences, 7 and 19. In terms of the native language interference, we can point out that 'open', 'reserve' and 'design' are a part of Japanese borrowed from English. We cannot predict which verb would influence the grammatical judgements most among the subjects. However, we can predict that the order of presentation 17, 18, 19 and 20 would influence their judgments. They are presented as a group, and there is a definitely metaphorical sentence in them, i.e., 'open an account.' After all, the sentences with institutional names are more abstract (less concrete) than the sentences with the human subjects. In this case, the psychologically well-known effect of concrete vs. abstract effects might override the effects of proto-agent roles. It is known that the abstract effects can sway the balance of human judgements which can relevantly control the concrete materials: see Nakano (1986 and the numerous experiments cited there). In the present experiment, the concrete-abstract effects yields the prediction which contradicts with the one derived from the subjecthood hierarchy. This is the main reason why the experiment provided by Ellis (1991) is not controlled and it does not give us any clear prediction among the for-datives. So, we can only produce two separate predictions.

Prediction 6: The Acceptance Rank-order for the for-dative shifts

If the subject hierarchy overrides the concrete-abstract effects, 5, 17, (6, 8), (18,20), 7, 19..The brackets stand for tied ranks.

If the concrete-abstract effects overrides the subject hierarchy,

19 > 7, 18 > 6, and 20 > 8.

We do not have any means to predict the magnitude of the concrete-abstract effects among the three verbs, the prediction is relative to each verb.

2.3 Procedure

2.3.1 Subjects

In Ellis(1991), the subjects were 21 Chinese graduate students from the People's Republic of China studying in London. Their age varied from 25 to 46 years old. They had been studying English between 4 and 15 years. They had lived in London between 6 months and more than 4 years.

28 Korean students were English majors at Korea University. All of them were taking the TEFL course and wanted to become teachers of English at the secondary school level. They had been studying English between 9 and 14 years. Their age varied from 20 to 24 years old.

40 Japanese students were third year students, majoring in English, at school of Education, Waseda University. They had been studying English between 9 and 11 years.

2.3.2 Procedure

The subjects were given a sheet of paper where 40 sentences were printed (see Appendix). The subjects were given three choices in giving their response to a test sentence: (1) grammatically correct (○), (2) not grammatically correct (×) and (3) not sure (?). They were asked to discriminate and correct the sentences if they are ungrammatical. The responses were not timed. They could change their judgements on each sentence.

3.0 Result and Discussion

In 3.1, following the method of scoring and tabulation in Ellis (1991), the results were compared among three kinds of subjects. In 3.2, we discussed the results and the six predictions derived from LFG.

3.1 A comparison with Ellis (1991)

According to the method of analysis in Ellis (1991), Table 1 summarizes accuracy of judgements among the subjects, Table 2, analysis of erroneous judgements, and Table 3, Erroneous Judgements per verb.

Table 1 Accuracy of judgements

| | Correct (%) | Incorrect (%) | Not sure (%) | No response (%) |
|----------|-------------|---------------|--------------|-----------------|
| Chinese | 719(85.6) | 112(13.3) | 9(1.1) | 0(0.0) |
| Koreans | 836(73.7) | 284(25.0) | 14(1.2) | 0(0.0) |
| Japanese | 1060(66.3) | 464(29.0) | 68(4.25) | 8(0.5) |

As Ellis (1991) indicates, the 'not sure' choice was used very little, suggesting that they were temporarily sure of their judgements at the time of the test; otherwise they would

not respond.

Table 2 Analysis of erroneous judgments

| | No. Subjects Erroneous Judgment | Total No. of Erroneous Judgments |
|--------------------------------------|------------------------------------|-------------------------------------|
| | China/Korea/Japan | China/Korea/Japan |
| NPNP (wrongly rejected) | 20/20/34 | 43/61/124 |
| NPNP (wrongly accepted) | 11/23/30 | 41/88/135 |
| Passives (wrongly accepted) | 11/20/33 | 31/138/234 |
| NP (pronoun)PP (wrongly rejected) | 2/ 4/10 | 6/ 7/ 39 |

We should note that Ellis regarded 'reserve' as ditransitive and 'design' as mono-transitive, which is counter-intuitive for some native speakers. Therefore, we cannot accept the result above as it is. But, the mean number of erroneous judgments suggests that the ratio of correct judgments is in the order of Chinese speaker, Korean Speaker and Japanese speaker. This could be interpreted as suggesting their level of English. This interpretation accords with the description of the subjects, i.e., Chinese speakers were graduate students in London, Korean speakers, candidates of English teachers, and the Japanese speakers who did not have any desire of becoming English teachers did not pay much attention to the grammatical points in question.

Table 3 Erroneous judgments per verb

| | Total No. of errors China/Korea/Japan | Error ratio(%) China/Korea/Japan |
|---------|--|-------------------------------------|
| send | 1/ 6/ 26 | 1.2/ 5.4/16.3 |
| offer | 3/16/ 42 | 3.6/14.3/26.3 |
| report | 31/62/101 | 24.6/36.9/42.1 |
| explain | 22/49/102 | 17.5/29.2/42.5 |
| buy | 11/ 2/ 23 | 13.1/ 1.8/14.4 |

| | | |
|---------|-----------|----------------|
| reserve | 32/39/ 64 | 38.1/34.8/32.0 |
| open | 4/57/ 79 | 3.2/33.9/32.9 |
| design | 8/69/101 | 6.3/41.1/42.1 |

Although we cannot agree with Ellis's method of scoring completely, this analysis can tell us the rank-order of difficulty according to the verb. We regard the number of erroneous judgments as indicating the learner's difficulty.

The rank-order correlation coefficient between Chinese and Japanese speakers:

0.4048 Non-significant relation.

The rank rank-order correlation coefficient between Japanese and Korean speakers:

0.7143 Significant relation.

The rank rank-order correlation coefficient between Chinese and Korean speakers:

0.4048 Non-significant.

The significant correlation between Korean and Japanese speakers might indicate a strong similarity between their native languages.

3.2 The results of the 6 predictions

In this section, each prediction is discussed separately. On the whole, the predictions derived from LFG accord with the results very well, except for the passives. In the 6th prediction, the concrete-abstract effect can override the proto-agent constraint, as we see below.

3.2.1 The result of Prediction 1 : To-datives

A > C (the sentences belonging to A would elicit more acceptance than those belonging to C).

Table 4 The result of Prediction 1 (to-datives)

| | A No. of Correct responses | | > | C | | Prediction |
|---------|----------------------------|--|---|--------------|--------------|------------|
| | Japan/ Korea | | | Japan/ Korea | Japan/ Korea | |
| send | 37 / 27 | | | 35 / 26 | | ○/○ |
| offer | 36 / 27 | | | 25 / 20 | | ○/○ |
| report | 39 / 27 | | | 23 / 20 | | ○/○ |
| explain | 40 / 27 | | | 21 / 21 | | ○/○ |

○ represents that the prediction was confirmed by the observations.

This prediction was 100 % met by the observations, indicating that the lexical rule for the to-datives in LFG is supported by the present EFL learners' data.

3.2.2 Prediction 2: For-datives

B > D (the sentences belonging to B would be accepted more than those in D).

Table 5 The result of Prediction 2

| | B Japan/Korea | > | D Japan /Korea | Prediction Japan/Korea |
|----------------|---------------|---|----------------|---------------------------|
| buy | 37 / 28 | > | 35 / 28 | ○/○ |
| reserve(Ellis) | 36 / 28 | > | 14 / 19 | ○/○ |
| | 36 / 28 | > | 26 / 19 | ○/○ |
| open | 40 / 28 | > | 35 / 22 | ○/○ |
| design(Ellis) | 39 / 28 | > | 22 / 18 | ○/○ |
| | 39 / 28 | > | 18 / 10 | ○/○ |

○ represents that the prediction was confirmed by the observations.
The prediction derived from the lexical rule for the for-datives is completely confirmed by the observation data.

3.2.3 The result of Prediction 3

Prediction 3 states that in the following pairs, the first pair would elicit larger amount of acceptance among the subjects than the second pair would:

(3, 9), (4, 10), (7, 11), (8, 12), (15, 21), (16, 22), (7, 23), (20, 24)

Table 6 represents the result.

Table 6 The result of Prediction 3

| | (Japan/Korea, | Japan/Korea) | Prediction(Japan/Korea) |
|------------------|---------------|--------------|-------------------------|
| report(3, 9): | 17/ 8, | 29/ 20 | ×/× |
| report(15, 21): | 18/ 13, | 32/ 19 | ×/× |
| explain(4, 10): | 19/ 7, | 33/ 15 | ×/× |
| explain(16, 22): | 17/ 10, | 32/ 14 | ×/× |
| open(7, 11): | 5/ 6, | 29/ 16 | ×/× |
| open(7, 23): | 19/ 19, | 26/ 16 | ×/× |
| design(8, 12): | 18/ 10, | 29/ 23 | ×/× |
| design(20, 24): | 22/ 15, | 28/ 15 | ×/○ |

× indicates that the prediction was not born out.

It is evident that the subjects did not use the structural assumption mentioned above, to arrive at their judgment. This suggests that they consulted their argument structure directly. This conjecture is supported among the Japanese speakers in that all the passives in this test are acceptable in Japanese. Recall that in an argument structure semantic roles are specified in relation to a predicate and that in the test sentences these semantic roles are the same both in Japanese and English. If so, it would follow that the passive sentences are accepted by the subjects more than mostly ungrammatical ditransitive sentences are.

3.2.4 The result of Prediction 4

Prediction 4 is to do with the nature of the subject nouns. According to the subject hierarchy in LFG, the sentences whose subjects are closer to the proto-agents would be accepted more readily than otherwise. In the present test, ①the sentences with the human subjects would be accepted by the subjects more than ②those with the institutional names.

Table 7 The result of Prediction 4

| | ① | ② | Prediction |
|-----------------|--------|-------|------------|
| send | 35/ 26 | 27/25 | ○/○ |
| offer | 25/ 20 | 24/21 | ○/× |
| report | 23/ 20 | 22/15 | ○/○ |
| explain | 21/ 21 | 23/18 | ×/○ |
| buy | 35/ 28 | 27/26 | ○/○ |
| reserve (Ellis) | 14/ 19 | 31/20 | ×/× |
| | 26/ 19 | 9/ 8 | ○/○ |
| open | 5/ 6 | 19/19 | ×/× |
| design(Ellis) | 18/ 10 | 22/15 | ×/× |
| | 22/ 18 | 18/13 | ○/○ |

According to our scoring, apart from 'open' and 'offer' among the Korean speakers, the other verbs supported the prediction. In the case of 'open', the effect of abstract-concreteness would explain the performance made by the subjects. This effect is well-known in psychology and Nakano(1986) lists many well-known experiments concerning the effect. Although human judgments operates on concrete stimuli relevantly and effectively, the biasing factors in face of the abstract stimuli tend to be triggered and distorts human judgments. In our example, the subjects responds

negatively to the ungrammatical concrete sentence, "Mr. Smith opened her the door." Their grammatical judgments are thus sound in dealing with the concrete stimulus. But the same subjects respond positively (although their responses should be negative) to the abstract ungrammatical sentences, "The bank opened my son an account." The abstract stimulus thus distorts and sways the judgments, leading to their wrong acceptance of the ungrammatical sentence. The same argument can be applied to Koreans' response to 'offer'.

We should bear in mind that the subject hierarchy can be overridden by the concrete-abstract effect, as shown in the responses to 'open.'

3.2.5 The result of Prediction 5: to-datives

Prediction 5 states that the rate of acceptability among the ditransitive sentences derived from the dative shifts would be in the order of 1, 13, 2, 14, 3, 15, 4 and 16. The following table shows the result.

Table 8 The result of Prediction 5

| Sentence No | Predicted Order | Observed Order Japan | Observed Korean Order |
|-------------|-----------------|----------------------|-----------------------|
| 1 | 1 | 1 | 1 |
| 13 | 2 | 2 | 2 |
| 2 | 3 | 3 | 4 |
| 14 | 4 | 4 | 3 |
| 3 | 5 | 7.5 | 7 |
| 15 | 6 | 6 | 5 |
| 4 | 7 | 5 | 8 |
| 16 | 8 | 7.5 | 6 |

The agreement coefficient between the predicted rank-order and the observed rank-order among the Japanese subjects: 0.8743 ($p < 0.02$)

The agreement coefficient between the predicted rank-order and the observed rank-order among the Korean subjects: 0.8571 ($p < 0.02$)

The agreement between the Korean and Japanese observed rank-order: 0.8262 ($0.02 < p < 0.1$)

As we have seen in Prediction 4, we can observe the abstract effect here. The predicted order for S 3 and S 15 among Japanese is $3 > 15$ but actually S 15 elicited 18 positive responses as opposed to 17 responses in S 15. Likewise, among the Korean subjects, the predicted order for S 3 and S 15 is $S 3 > S 15$, but in reality, S 15

elicited 13 positive responses and S 3, 8 positive responses. Furthermore, S 2 elicited 20 positive responses and S14, 21 positive responses. These three cases triggered the abstract effect, although in S3 and S 15 among the Japanese and in S2 and S 14 among the Koreans the difference is only slight. It is our future research topic how much the abstract effect can nullify the stored knowledge of the subject hierarchy.

3.2.6 The result of Prediction 6

Prediction 6 states that if the subject hierarchy overrides the concrete-abstract effects, 5, 17, (6, 8), (18,20), 7, 19. The brackets stand for tied ranks.

If the concrete-abstract effects overrides the subject hierarchy,

19 > 7, 18 > 6, and 20 > 8.

Table 9 The result of Prediction 6

| Sentence No. | Predicted Ranks | Observed Ranks(Japan) | Observed Ranks (Korea) |
|--------------|-----------------|-----------------------|------------------------|
| 5 | 1 | 1 | 1 |
| 17 | 2 | 2 | 2 |
| 6 | 3.5 | 8 | 8 |
| 8 | 3.5 | 4 | 3.5 |
| 18 | 5.5 | 6 | 3.5 |
| 20 | 5.5 | 5 | 6 |
| 7 | 7 | 7 | 7 |
| 19 | 8 | 3 | 3 |

The agreement coefficient between the predicted rank-order and the observed rank-order among the Japanese subjects: 0.5904 ($p < 0.1$)

The agreement coefficient between the predicted rank-order and the observed rank-order among the Korean subjects: 0.7152 ($0.02 < p < 0.1$)

The agreement between the Korean and Japanese observed rank-order: 0.8623 ($p < 0.02$)

The agreement coefficients are not statistically significant in the first two cases. This is because the abstract effects were observed among the following pairs:

S 19 and S 7 in both groups

S 18 and S 6 only among the Japanese

S 20 and S 8 in both groups.

The statistically significant agreement coefficient between the Korean and Japanese observed rank-order might be a reflection of similarities between their native

languages.

4.0 Conclusion

The present experiment replicated Ellis(1991), but the six predictions derived mainly from LFG were examined. The order of the lexical rules for the to-datives and for-datives were entirely confirmed by the data obtained. The present method of scoring also supported the notion of subject hierarchy in LFG. The more particular predictions 5 and 6 showed that the abstract effects needed to be incorporated into the framework of 2nd language acquisition. The analysis suggested at the same time that the acceptability of the passive constructions might be directly derived from a learner's argument structure rather than from the structural assumptions required in theory. The present experiment and analysis also indicated that a part of elicitation data were not appropriate for us to determine the adequacy of grammatical judgments tests themselves.

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Appendix

From Ellis(1991)

- 1 My wife sent me a letter.
- 2 The president offered him a job.
- 3 The policeman reported me the accident.
- 4 The teacher explained me the answer.
- 5 My mother bought me a shirt.
- 6 The manager reserved me a seat.
- 7 Mr. Smith opened her the door.
- 7 Mr. Smith opened her the door.
- 8 Mrs. Jones designed her a dress.
- 9 She was reported the accident.
- 10 He was explained the problem.
- 11 He was opened the window.
- 12 She was designed a house.
- 13 The shop sent my wife the dress.
- 14 The committee offered my brother a gift.
- 15 The bank reported the police the accident.
- 16 The council explained the public the decision.
- 17 The government bought its ministers new cars.
- 18 The school reserved Mr. Smith's son a place.
- 19 The bank opened my son an account.
- 20 The factory designed the manager a new car.
- 21 The police was reported the robbery.
- 22 The people were explained the difficulty.
- 23 The little girl was opened the door.
- 24 My girl friend was designed a trouser suit.
- 25 She sent the flowers to her brother.
- 26 He offered some money to my friend.
- 27 She reported his absence to her boss.
- 28 He explained the problem to his friend.
- 29 He bought a bicycle for his son.
- 30 She reserved a place in the queue for her friend.

- 31 He opened the window for his father.
- 32 She designed a new house for her mother.
- 33 He sent the money to me.
- 34 She offered a piece of cake to him.
- 35 He reported the accident to me.
- 36 She explained the story to him.
- 37 He bought a new dress for her.
- 38 She reserved a car for him.
- 39 He opened the bottle for her.
- 40 She designed the coat for him.

A Study of Pragmatic Functions of Refusal Expressions among Japanese and Korean Learners of English

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Abstract

For the past thirty years, studies on language performance, especially speech act/ behavior realization patterns have been conducted not only in the fields of first language acquisition/learning but also in that of second/foreign language acquisition and learning albeit Chomsky's influence on the importance of studying linguistic competence.

Many researchers of language teaching and learning (Billmyer, Jakar, Lee, 1989; Hahn, 1998, etc.) have shown that linguistic competence of the target language cannot guarantee the sociolinguistic competence of the target language community. The pragmatic aspects of a language are extremely important for learners to be aware of in order to efficiently and appropriately engage in communication activities in the target language. Learning how to interact in target language environments is essential so it doesn't cause miscommunication or pragmatic failure.

Different views are adopted by different speech communities as to what is considered the appropriate means of remedial verbal actions expressing various semantic functions, although there are some similarities observed. These differences can be a cause of miscommunication or pragmatic failure among people from different cultural and linguistic backgrounds. Therefore, language learners are expected to learn and acquire sociocultural and sociolinguistic proficiency of the target language.

The most widely studied speech acts comparing the performances of native speakers(NS) with those of nonnative speakers(NNS) are (1) request, (2) apology, and (3) refusals and (4) compliment respectively. All of these speech acts are related in terms of their actional characteristics and pragmatic universality.

The study reported here is on the study of refusals between Japanese and Korean learners of English and Korean native speakers(NS). It is part of a larger scale cross-cultural project of comparing the similarities and differences observed among (1) Japanese and Korean learners of English living in their respective countries, (2) Japanese and Korean learners of English living in America, (3) Japanese and Korean NS living in their respective countries, (4) American learners of Japanese and Korean living in America, and (5) American learners of Japanese or Korean living in the respective countries of their target language.

The research questions of this study are as follows:

1. What kind of strategies is used by the learners (both Japanese and Koreans) to express refusals?
2. Is there any difference in terms of the number of sentences used to express refusals in the two different situations, such as a refusal of marriage proposal and that of lending a large amount of money?
3. What is the order of semantic functions for both Japanese and Korean students?
4. What is the frequency of semantic functions used by both Japanese and Koreans?
5. What types of expressions are used or preferred by Japanese and Koreans?
6. Are there any cultural and socio-linguistic characteristics not shared by Japanese and Koreans?
7. What types of verbs are used by Japanese and Koreans to express refusals indirectly or directly?

1.0 Background

For the past twenty years studies on language performance, especially speech behavior/act realization patterns, have been widely conducted not only in the fields of the first language acquisition/learning but also in those of second/foreign language acquisition and learning albeit Chomsky's claims on the importance of studying linguistic competence, not communicative competence.

As is discussed in many researches on language teaching and learning, possessing linguistic competence of the target language alone cannot guarantee the learners of a target language to be able to efficiently engage in the social interaction of the target language community (Billmyer, Jakar, & Lee 1989, Hahn 1998, etc.). The importance of native-like socio-cultural and socio-linguistic proficiency presupposes the significant roles played by speech act sets in language learning.

Every society has some means of remedial verbal actions expressing various semantic functions. Different views on the appropriate verbal remedies have been adopted by different speech communities and these differences could bring about some serious misunderstanding in communication or serious pragmatic failure among people from different linguistic and cultural backgrounds. Therefore, language learners are in a situation where they should be aware of and be familiar with different semantic functions so as to make themselves clearly understood.

Research on various speech act behaviors have been conducted comparing the performances of native speakers (NSs) with those of nonnative speakers (NNSs) of the language.

As of present, the most widely studied speech act sets are request, apology, compliment, thanking, refusals and complaints both from cross-cultural and interlanguage pragmatic perspectives. The languages included in the cross-cultural and interlanguage studies so far have been Hebrew/English (Cohen-Oshtain 1981, 1990; Danish/English (Trosborg 1987), Japanese/English (Takahashi-Beebe 1987), German/English (House 1988), Spanish/English (Garcia 1989), Chinese, Japanese, Korean, Russian, Spanish/English (Eisenstein & Bodmen 1986), Japanese/English (Beebe et al. 1998), Chung (1998) to name a few.

These studies, however, focused on one or two speech act sets. For instance, Eisenstein & Bodman (1986) for thanking, Beebe et al (1998) refusals, and Maeshiba-Yoshinaga-Kasper-Ross (1995) apology among others. In the case of Korean subjects, Eisenstein & Bodman (1986)'s subjects ranged from 4 months to 5 years in terms of the length of studying the target language born and raised in America and from a variety of socio-economic backgrounds. Chung (1998)'s Korean subjects are very small in number and again are students studying at a university in the US. Moreover, these studies focus on diverse situations representing severe social domains and interlocutor role relationships in terms of social status and distance. In order to clearly examine the existence of cultural differences reflected in languages and the existence of pragmatic transfer in foreign language learning it appears to be very important to collect appropriate and sound data, not just any data, ranging from the learners of a target language in their native language settings to those in target language settings. Here, the importance of corpus linguistics comes under way.

The main focus of the studies conducted so far was on one of the following:

- (1) What is considered to be a speech act set?
- (2) How is a speech act set realized?
- (3) What is the value of contextual factors?
- (4) What types of formulaic expressions are used by people from different cultural backgrounds?
- (5) What strategies are used?
- (6) Does pragmatic transfer exist?
- (7) What types of intensifiers are used in the realization of speech act sets?

Regarding the method of data collection, both written and oral interviews or role plays have been adopted. For written type of data collection, both a discourse completion test (DCT) and a questionnaire which provided different situations are used.

1.1. Speech Act Sets

Speech act sets are defined as the linguistic and pragmatic strategies which either alone or in combination represent the particular speech behavior in a given situation (Cohen, Olshtain, & Rosenstein 1986). Speech act sets are, therefore, sometimes referred to the strategies or the semantic formulas of speech behavior (Wolfson, 1989).

Speech acts have the narrowest scope within the framework of communicative competence, the speech situation being at the top, speech events activities directly governed by rules of speech comes second because they take place within the speech situation and refer to the acts we perform when speaking such as giving reports, giving advice, apologizing, complaining, agreeing, thanking, refusing, and so forth.

It has been pointed out by researchers that the verb carrying particular semantic meanings is closely related to many speech acts in English (Austin 1962, Searle 1972). For instance, 'to complain,' 'to appreciate,' 'to apologize,' and so forth, which are usually referred to performative verbs according to the notion of a performative act (Austin 1962). However, a variety of verbs different in semantic meanings can be very useful in realizing the semantic functions as the performative verbs in informal speech events. Indirect speech acts are used in informal speech events by a variety of verbs.

2.0 Research Questions

The study reported here is part of a larger cross-cultural project on native and nonnative speech act sets. In the broader project, we are comparing the three speech act performances (i.e. Refusals, Apology, and Compliment/Thanking) of three groups: Japanese and Korean native speakers of EFL learners, English native speakers of Japanese and Korean learners, and finally Japanese and Korean native speakers. In this paper, we focus only on Japanese and Korean learners of English compared to native speakers of Korean language with respect to their performance on refusals.

The purpose of this paper is to generalize claims made by Beebe, et al (1990) with some relevant modifications by comparing Japanese learners of English with Korean learners of English in terms of the following 5 areas:

- (1) number of sentences used for different situations
- (2) order of semantic functions
- (3) number/frequency of semantic functions
- (4) content of semantic functions
- (5) cultural and socio-linguistic characteristics not shared by each other
- (6) types of verbs indirectly used for refusals

3.0 Method

3.1. Subjects

The subjects of this study are 52 informants: 28 Korean learners of English studying at K.U. in Seoul, Korea, and 24 Japanese L1 learners of English enrolled at Waseda University in Tokyo, Japan. Both Japanese and Korean subjects are considered to be advanced learners of English who have been studying English for more than 9 years and are proficient in making themselves understood in English.

The following table 1 illustrates this point:

Table 1

| | Japanese subjects | Korean subjects |
|---------------------------|--|-----------------|
| 1. number of subjects | 24 | 28 |
| 2. sex (male vs. female) | 15:9 | 4:24 |
| 3. years studying English | 6 to 25 years | 8 to 15 years |
| 4. age range | 19 to 50 | 20 to 25 |
| 5. major fields | varied(English, Math, Education, Japanese, Social Science, etc.) | English |

While Korean learners of English were undergraduate students majoring in English Language and Literature at Korea University, Japanese learners of English were both graduate and undergraduate students from a variety of majors taking an applied linguistics course and English writing course at Waseda University. Their average age was 24 for Japanese and 22 for Korean students. Considering their average length of years of

studying English and their performances of written English they are considered to be advanced learners of English.

Since female students outnumber male students an attempt was not made to compare the performances of males with those of females. All the subjects of this study are requested to participate in this experiment on a voluntarily basis.

3.2. Procedure

Two versions of a language use questionnaire for 15 situations (Korean and English versions) were designed to elicit apologies, thanking, and refusing by modifying those situations used in previous studies in this field (Eisenstein & Bodman 1986, Cohen, Olshtain & Rosenstein 1986, etc.). Three different pragmatic functions of apology, thanking, and refusing were included to avoid the possibility that the students may answer mechanically using the same forms for all the situations without any prior thinking; six situations for apology, seven thanking and two refusals. The 15 situations are given in the appendix.

Both the English and Korean versions of 15 situations of language use were prepared for Korean subjects in May 1998. In early May, the 15 item dialogue construction questionnaire (DCQ) for various situations were given to the Korean respondents first in English and then in Korean a week later. This was done so that mechanical and automatic repetition could be avoided in their responses. A month later, the English version of the 15 situations was given to Japanese students. The Japanese version of the 15 situations was not prepared at the time of this study. They also had a week to respond.

The DCQ represented situations which were likely to occur in everyday life. However, the situations did not represent severe different social domains and interlocutor role relationships in terms of relative social status and social distance except in a couple of cases. The present study focuses on examining how Japanese and Korean learners of English respond when there are no great differences in terms of their social status (because they are friends and students).

Although DCT was adopted by many (Beebe, et al. 1990, Blum-Kula 1982, Olshtain & Blum-Kulka 1985, Cohen, Olshtain & Rosenstein 1986, etc.) DCQ was used in this study following Maeshiba, Yoshinaga, Kasper, & Ross (1995), the main reason being that the students are considered to be advanced and proficient enough to do the work in English. The major difference between DCT and DCQ is that the former asks the subject just to complete part of a dialogue while the latter the whole utterances or dialogue which is meant to elicit more sentences to make himself or herself understood. Detailed explanations of the instructions and unfamiliar words were given to the students at the beginning of the study. The subjects were asked to supply what he had to or wanted to say in a given situation, which was analyzed later.

An assessment session at the beginning of the study was prepared for the students in order to examine the relationship between contextual factors and strategy use. Instead of preparing an assessment questionnaire an oral discussion session was given to rate each context according to their acceptability, probability, context-external factors such as social distance, and so forth.

The following table 2 illustrates the classification of 15 DCQ and their assessments

| stimulus type | status | DCQ number | situation | assessment(J) | assessment(K) |
|---------------|-----------|------------|-------------------|--------------------------|--------------------------|
| offense | not known | # 1 | in a subway | improbable | probable |
| offense | higher | 2 | car accident | improbable | probable |
| offense | not known | 3 | break into a line | improbable unless urgent | improbable unless urgent |
| offer | not known | 4 | proposal | probable | probable |
| offense | higher | 5 | late for meeting | probable | probable |
| offense | equal | 6 | borrow camera | probable | probable |
| offense | equal | 7 | laughing at | improbable | improbable |

| | | | | | |
|------------|--------|----|------------------|-----------|---------------------|
| invitation | equal | 8 | dinner | probable | probable but seldom |
| offer | equal | 9 | borrow \$3,000 | probable | very seldom |
| request | equal | 10 | borrow \$3,000 | probable | very seldom |
| offer | equal | 11 | borrow \$10 | probable | probable |
| offer | equal | 12 | Birthday present | probable | probable |
| offer | higher | 13 | pay raise | very rare | very rare |
| invitation | equal | 14 | Fancy restaurant | probable | probable |
| invitation | equal | 15 | farewell party | probable | probable |

Oral discussions in class provided very interesting cultural differences. In this paper only two situations concerning refusals (situations 4 and 10) are presented.

Situation 4: Marriage Proposal

While a marriage proposal is normally offered by a boy in Korean community, it can be done by a girl in Japan, which is neither very surprising nor unusual to Japanese respondents.

Situation 10: Borrow \$3000

This situation was assessed as improbable by Japanese respondents. According to them, only a small amount of money like \$5 or \$10 could be asked to be lent from friends. They never ask their friends for a large sum of money to borrow. Neither do they lend it. But, Korean respondents found situation 10 not very improbable.

4.0 Data Analysis

The 15 situations are classified into three main different speech act sets of refusals, apologizing and thanking, adopting Bergaman & Kasper(1992) classification of apology, Eisenstein & Bodman (1986)'s classification of thanking, and Beebe and et al.'s(1990) classification of refusals as models or frameworks to determine if there are any differences observed. The length of speech act sets are computed according to different semantic functions.

The order of semantic functions for each situation of refusals was coded according to the framework of Beebe, Takahashi, & Uliss-Weltz(1990) and then calculated. Both the total number of each semantic function and the frequency of each function were calculated for each speech act set and semantic function. Grammatical acceptability or accuracy were not examined because our main interest was to uncover the existence of transfer and whether there is any similarity between Japanese and Korean responses.

Among the three different speech act behaviors of refusal, apology, and thanking only refusals are discussed in this paper. The study is presented in the order of data analysis followed by findings and relevant discussions.

The present study includes two situations of refusal.

The refusals were analyzed in terms of (1) the number of sentences used and (2) the sequence of semantic functions. For instance, if a respondent refused a marriage proposal by saying "Sorry. I am not prepared. Would you give me time to think?" this was coded as : <expression of regret>, <excuse>, and <avoidance by postponing>. The remarks at the beginning of an utterance which cannot stand alone but function as refusals are termed adjuncts (Beebe, etc. 1990): examples such as "I'd love to....," "Well,," "Uhh,....," etc.

The order of semantic functions used in each refusal was coded in order to compare three varieties of written questionnaire by the two groups of students. Therefore, the above example was coded as (1) <expression of regret>, (2) <excuse>, and (3) <avoidance by postponing>. Both the total number of each semantic function (formula) and the frequency of each function (i.e. the number of regret, excuse, etc.) were calculated for each situation.

4.1 Results and Discussions

Evidence of both negative transfer (situations where dissimilarity between Korean and Japanese responses is believed to be due at least in part to influence from native language pattern) and positive transfer were observed in 1) the number of sentences used, 2) the frequency of semantic functions, 3) the content of semantic functions, and 4) the order of semantic functions.

Pragmatic transfer (i.e. transfer of native, discourse level, socio-cultural competence when performing L2 speech acts Beebe, et al.1990) is also found in the data.

4.2. Number of sentences used

The following Table 3 illustrates the mean number of sentences used for the situations of refusals.

Table 3

| Situation 4 Marriage proposal | Shortest sentence | | | Longest sentence | | | Mean #of sentence | | |
|---------------------------------------|-------------------|-------|----|------------------|-------|----|-------------------|-------|----|
| | Japan | Korea | KK | Japan | Korea | KK | Japan | Korea | KK |
| | 1 | 1 | 1 | 8 | 5 | 6 | 3 | 3 | 3 |
| Situation 10 Refusal to lend money | Shortest sentence | | | Longest sentence | | | Mean #of sentence | | |
| | Japan | Korea | KK | Japan | Korea | KK | Japan | Korea | KK |
| | 1 | 1 | 1 | 4 | 6 | 8 | 4 | 2 | 4 |

As far as the mean number of sentences used for the speech act behavior of refusals is concerned, both Japanese and Korean respondents are the same in case of situation 4. However, in case of situation 10 in terms of the mean number of sentences both Japanese learners of English and Korean responses by Korean learners of English are the same. However, Japanese learners of English and Korean learners of English differ: Japanese tend to use longer sentences than Korean learners of English. One possible explanation may be due to the nature of the situation itself. That is, Korean respondents might have felt that they should not just say "no" to a friend who is in need when they respond in Korean. If they do, they are afraid that their friend might think that they are stingy and devoid of feelings. Therefore, they tried to explain to and persuade their friend as to why they can't lend that amount of money by giving plausible and reasonable excuses and justifications. Another possibility may be that Korean respondents when asked to write their responses in English did not tend to write lengthy ones when they are in a position to refuse. This was probably due to a lack of confidence in their English abilities. This is usually the case for Korean students. However, this does not seem to apply to Japanese respondents. Japanese learners of English appeared to perform a little better than Korean learners of English in terms of the mean number of sentences. We have to see how they respond when they are asked to write their response in Japanese.

4.2 Order of semantic functions/formulas

Either similarity or dissimilarity in the domain of the order of semantic functions between Japanese and Korean is considered to be evidence of transfer.

The following Table 4 indicates typical order of semantic functions of refusals for situations 4 and 10, where KK represents Korean responses in Korean.

Table 4

Situation 4

| sentence order | Japanese respondents | Korean respondents | KK |
|---|--------------------------------|--------------------------------|--|
| 1 (= first sentence of the students' responses) | Regrets (40%) Adjuncts(20%) | Adjuncts (70%) Regret (20%) | Avoidance (50%) Adjuncts (40%) Regret (0.7%) |

| | | | |
|---|---------------------|--------------------------|---------------------|
| 2 | Excuse/reason (90%) | Avoid (40%) | Excuse/reason (75%) |
| 3 | Avoid (45%) | Excuse (80%) | Avoidance (40%) |
| 4 | {---} | Attempt to dissuade(60%) | {---} |

Situation 10

| Order of functions | Japanese students | Korean students | KK |
|--------------------|--------------------|--------------------|----------------------------------|
| 1 | Regret (50%) | Regret 52% | Regret/Apology(51%) |
| 2 | Excuse/reason(50%) | Excuse/reason(50%) | Excuse/reason(50%) |
| 3 | {---} | {---} | Alternative / set condition(35%) |

{---} : indicates there are so many varieties of responses observed in the data that no preferences in terms of the frequency of certain semantic function of refusals can be said about.

Our study shows that both Korean and Japanese respondents used indirect refusals compared to direct refusals, the ratio of direct refusals being 0.5% to 1.0 % respectively

Beebe et al. (1990) reported that Japanese speaking Japanese in Japan(JJJ) and Japanese speaking English in Japan (JEJ) respond differently in terms of the order of semantic formulas depending on the refuser status. That is, while they started refusals in requests with status unequals with apology/regret whereas American Native speakers of English put it second, they start with positive opinion omitting apology or regret. Americans speaking English (AE), on the other hand, use positive opinion, not empathy in the beginning of an utterance and maintain apology/regret in second position.

Our study shows that both Japanese and Korean respondents react differently depending on different situations. Although excuses were a very common semantic formula, the order in which they appeared differed. For example, when they were in a position to refuse the proposal (either from her boy friend or his girl friend to get married), the Japanese respondents started with regret followed by excuse and avoidance while Korean respondents started with adjuncts followed by avoidance and excuse. However, when they were in a position to refuse to lend a large sum of money to a friend, they start with the expression of regret followed by excuse, reason, and explanation of why they can't lend it.

Beebe et al (1990) reported that Japanese speaking Japanese and Japanese learners of English typically put their excuses second in all status situations. Our study supports their finding in that excuses are made second in both situations(Situation 4 and 10) by Japanese learners of English and in situation 10 by Korean learners of English. When the Korean learners of English were asked to write in English in situation 4, however, the order in which the excuse appeared differed: after the statement of avoidance. This may be due to the fact that in the present study there is no differences between the interlocutors in terms of social domain and role relationship. Further studies are needed to investigate why this is so.

Unlike Beebe et al's finding (JE, JJE and Americans all started with an initial adjunct when the refuser was higher in social status), our study shows that even to the person with the status equal to his or hers at the utterance initial positions adjuncts were very commonly used. Rather than expressing empathy for the requester in their adjuncts, they commonly expressed pure pause fillers such as "Well, Uhhh, Oh, Uhh, Ah, etc.). Korean respondents in their written Korean data seldom did it. After adjuncts, an excuse was presented for situation 4. For situation 10 an expression of excuse is preceded by the expression of regret.

To recapitulate, both Japanese and Korean respondents are very similar in their use of semantic formulas but different in the order of semantic formulas.

4.3 The number/frequency of semantic functions

J, K, and KK all used the formula of “(I am)(terribly/really) sorry,” “I’m afraid that...” “I need the time to think.” Only in situation 4 (not in situation 10) one Japanese responded “Excuse me. I can’t meet your propose.” This clearly shows the lexical level transfer of the Japanese tendency to apologize in Japanese using English “Excuse me” or “I apologize.” No such examples are observed from Korean respondents. Both Japanese and Korean learners say “I am sorry” very frequently. However, J, K, and KK did not use a formula of “I apologize...” for both situations of refusals.

J, K, and KK have a similar range of differences in response to different situations. The ranges of difference in the frequency of formulas used both by Japanese and Korean learners of English and Korean responses by Korean learners of English(KK) clearly show an additional source of evidence for pragmatic transfer. KK and English responses by Korean learners of English displayed noticeable code-switching in frequency of regret and excuse depending on the situations whereas Americans speaking English are not said to display such noticeable code-switching in frequency of formulas(Beebe et al. 1990).

Evidence of pragmatic transfer was found in frequency counts of semantic functions in situations where the percentage of the Questionnaire response of a given formula reflecting any one of the following 6 patterns :

- (1). KK> K>J : This means that in terms of the semantic function of avoidance, KK displays a much higher frequency than K and J. The frequency order pattern is KK>K>J in situation 4.
- (2). J>KK>K in terms of the frequency rate of the semantic function of excuse in situation 4.
- (3). J>K>KK in terms of the frequency rate of the semantic functions of regret and excuse in situations 4 and 10.
- (4). K>KK>J in terms of the frequency of the semantic function of statement of alternative in situation 10.
- (5). K>J=KK in terms of the frequency of the semantic functions of adjuncts in both situations of 4 and 10.
- (6). K>J>KK in terms of the frequency of the semantic function of regret for situation 10.

The following table 5 illustrates this point:

Table 5

| Situation # | Status | Situation | Sfunctions | Japanese(J) | Korean(K) | KK | Pattern |
|-------------|---------|----------------|-----------------|-------------|-----------|----|---------|
| 4 | unknown | propose | Avoidance | 16 | 22 | 30 | KK>K>J |
| | | | Excuse | 30 | 16 | 20 | J>KK>K |
| | | | Adjuncts | 10 | 20 | 10 | K>KK=J |
| | | | Regret | 16 | 10 | 4 | J>K>KK |
| 10 | equal | borrow \$3,000 | Regret/ Apology | 35 | 50 | 25 | K>J>KK |
| | | | Excuse | 24 | 21 | 16 | J>K>KK |
| | | | Adjuncts | 10 | 15 | 10 | K>J=KK |
| | | | Alternative | 2 | 9 | 8 | K>KK>J |

Sfunction: semantic functions/formula

Only 4 cases of regret /Apology (approximately 4 %) of KK responses contained “mianhay(I am sorry)” No expressions such as “I apologize...” is to be found in KK. This is probably due to the social status of interlocutors.

4.4 The content of semantic functions

In order to discuss the existence of pragmatic transfer in our data, not only the frequency and the order of semantic functions/formulas but also the actual content of the formulas should be examined.

To claim that both Japanese and Korean respondents use excuses or suggest alternative as formulae when refusing is not enough. Rather, what counts as an acceptable and appropriate excuse should also be suggested together with the appropriate type of alternatives. The following discussions are just initial findings of our long term project.

The following table 6 illustrates the semantic formulas used by Japanese not found in Korean respondents.

Table 6: Semantic formulas used only by Japanese

| Situation | Semantic formula |
|--|--|
| Situation 4: refuse to accept the proposal | Avoidance by Joking Leave-Taking Statement of Alternative Set Condition for future or past acceptance |
| Situation 10: refuse to lend \$3,000 | Attempt to dissuade the interlocutor Statement of empathy |

It is very interesting to find out that classification of refusals on the basis of the framework for this study adopted from Beebe, et.al.(1999) is far too complex and detailed for our data. For example, most refusals are made indirectly : for Japanese 20% (21 occurrences out of 105) whereas for Korean respondents only 9%(13 occurrences out of 143) for both situations belong to direct refusals.

Table 7: Percentage of indirect refusals in each of the two situations

| Situation | Direct refusals | | | Indirect refusals | | |
|--------------|-----------------|--------|-------|-------------------|----------|------|
| | Japanese | Korean | KK | Japanese | Korean | KK |
| Situation 4 | 13(18%) | 13(9%) | 7(7%) | 47(78%) | 66(84%) | 93% |
| Situation 10 | 8 (20%) | 0 (0%) | 0 | 37(80%) | 64(100%) | 100% |

Both Japanese and Korean respondents differ in their use of direct refusals: J>K>KK. For indirect refusals KK>K>J: Korean learners use more indirect refusals than Japanese learners of English. It has been assumed that Americans speaking English tended to be a little more direct and specific about their plans. Koreans and Japanese are assumed to be more indirect when they have to refuse a request. Our result shows an interesting difference between Japanese and Korean in that Japanese tend to be a little bit more direct than Korean.

Pragmatic transfer exists in the content of several semantic formulae, the most significant being excuses, adjunct pause fillers, verbal avoidance, and statement of alternative.

Excuses are considered to be one of the most interesting and promising areas for content analysis. According to Beebe, et al (1990), Japanese excuses are less specific than American excuses, thus L1 transfer is expected in Japanese learners of English. One might assume the same thing from Korean learners of English could be observed in our study. Both Japanese and Korean respondents in our study appeared to use excuses 27% and 20% respectively in situation 4 and 18% and 22% respectively in situation 10. This seems to indicate that Japanese tend to use more excuses than Koreans when making refusals.

Specific expressions realizing excuses(/reason/explanation) used by Japanese respondents are compared with Korean ones in the following table 8:

Table 8.

Situation 4: Marriage Proposal

| KK | Japanese | Korean |
|----|----------|--------|
|----|----------|--------|

1. Have to ask my parents
2. Too sudden to me
3. not prepared yet
4. marriage is not an easy matter
5. not ready for it yet
6. never thought of it though I love you
7. let's just be friends
8. marriage is a burden to me
9. too many things to do
10. do not have enough money to get married
11. too early to get married

1. I still want to be single
2. I have a man I love now
3. I am very tired. I want to be happy. Everyday is same thing.
4. Everyday is the same thing
5. Everything is the same
6. I'm not prepared.
7. I don't want to.
8. I don't want to get married.
9. Because it's very short that I've getting along with you
10. This is too sudden to me
11. I have worked for ever
12. I have things what I want to do, and same thing for you as well
13. I can't get married.

1. Honey, as you know, I don't have enough money to get married
2. So I have to make some money
3. As you know, I'm not ready for marriage yet
4. I haven't thought about marriage
5. I don't want to marry anybody now
6. This is not a little thing in my life
7. I want to enjoy my life and work hard
8. I have a lot to do except marriage
9. I hope I live free without any define
10. I have a lot of things to do
11. I want to work more now, so that I don't feel like marrying anybody now
12. But to get married is reality

Situation 10: Borrowing \$3000

1. don't have any money with me
2. my situation is bad

1. I don't have a lot of money
2. I don't have money so much
3. I don't have \$3,000
4. Because I don't have it
5. I am need of money, too
6. I have only \$100
7. but now I don't have enough money to lend you
8. I am a student

1. In fact, I am also in the same situation where you desperately need some money
2. I don't have as much money as you need.
3. How can I explain my financial state these days?
4. But I don't have enough money now
5. Nowadays, I don't have enough money to spare

In the columns of KK of both situations 4 and 10, the translations are mine.

As is shown from the above table 8 less specific excuses are used in KK, J, and K.

KK used only two types of excuses for situation 10 whereas J 8 and K 5 for situation 10 and for situation 4, KK 11, J 13, and K 11 are used. Japanese learners of English tend to use a variety of expressions of excuse more than Korean learners of English and KK.

Regarding how often and how much indirect refusals by using excuses are enjoyed by Koreans I have been told a very interesting true anecdote of miscommunication between a Korean boy who went to the States to study in late 60's. It seems that both interlocutors in this story are very unaware of appropriate sociocultural and pragmatic rules. The boy who was eager to improve his English decided to take private English lessons from an American classmate who also wanted to learn Korean from him. They had the mutual interests and it went on like this for several months until one day the girl told him that she fell in love him and that she wanted to get married him. The boy was very embarrassed when he was told so. She asked what he thought about her proposal. He didn't want to get married to her but neither did he want to discourage her by saying just one word of "No" directly to her. So he told her what he must have said when he was in the same situation back home by saying "I don't think I can make you happy." After saying that he thought he couldn't have told her in any better way. However, to his surprise, the girl said, "Oh, don't worry! I can make you happier." To her reply he didn't know what to do and to say. He calmed himself down a little bit and decided to tell her family situation back home so as to dissuade his interlocutor by saying "You see, I am the first child of my family.

In Korea the first son of a family has to live together with his parents and support them. I don't think I can support both you and my family back home financially. The girl still smiling at him said "Don't worry, I will support them financially." The boy was really at lost. He had been trying hard to make himself understood in vain. He decided to tell her about the sanitary conditions and other inconveniences of living back home by saying "You see, the sanitary condition back home is not good and I don't think you want to live there." But she said, "Don't worry. No problem. We can make our house very convenient and nice." At this point he had no place to head for but a complete dead end. So he decided to say what he never wanted to say and should have said, "Well, I don't love you."

To this she got mad at him by saying "Why didn't you tell me that before now?" And off she went.

It was evident that the excuses he had been using were not taken as refusals by her.

From this story we can see what consequences and misunderstanding can be brought about through cultural differences when making a refusal. It is, therefore, very important for those who are engaged in foreign language education to teach the learners of a target language to be aware of the socio-cultural differences of culturally different speech communities. Appropriate use of speech act sets should be emphasized even in formal classroom settings.

As for the use of adjuncts to refusals only statements of positive feeling and pause fillers are used by Japanese respondents. No cases of statement of empathy are observed from Japanese data. Observe the following table 9 for that:

Table 9

| | Japanese | Korea |
|--|---|--|
| KK AIPF S-4 | 1. It would be nice...but... 2. I love you very much,... | 1. I like you but... 2. Thank you for your proposal, but... |
| S-10 1. I'm sorry. I'd like to ... but... | 1. I want to lend you \$3,000... | 1. I'd like to help you, but... 2. I really want to hlep you, but... |
| A2PF S-4 1. Well(ceki) 2. Uhmm, ce, cakiya | 1. Well,... 2. Oh,... | 1. Well, 2. Oh, |
| S-10 1. Ah,... 2. Oh,... 3. Hwu... | 1. Oh, ... | 1. Oh, |
| SE S-4 1. I like you but... | | 1. Please understand me 2. I fully understand you, but... 3. Yeah, I understand your situation 4. Thank you for your kindness |
| SE S-10 | | |

AIPF: Adjuncts 1 positive feelings

A2PF: Adjuncts 2 pause fillers

SE: Statement of empathy

As can be shown from the Table 9 no statement of empathy is used by Japanese learners of English for both situations. This can also be taken as a piece of evidence that Japanese are a little bit more direct than Koreans when refusing. For pause fillers, various types of fillers are used in KK. The most interesting one is "caki-ya

(self-vocative)" used as a pause filler. Nowadays, this expression is very frequently used among young couples when addressing their spouses.

As for the avoidance function, no nonverbal avoidance was observed since our study was based on the written responses of both Japanese and Korean learners of English.

Regarding performative realizations of verbal avoidance no topic switch is observed in our data. The following table 10 gives us an idea of what types of verbal avoidance expressions are used:

Table 10.

Japanese

Situation 4

1. postponing: Would you wait for me?
 Could you give me time to think about it?
 I need the time for thinking
 Just a moment
 So please wait for me
2. Hedging: I'm not sure if it is good that we marry

Korean

Situation 4

1. postponing: Could you give me some time so that I can consider what you asked?
 I need some time to think of it.
 Please give me some time to think about that
 I think we need more time to know each other
 Are you give me some time to think about it?
 I need some time to consider.
 Let's talk about it later, okay?
 I'd have some time to answer that
2. repetition of part of request
 What? Get married?
3. Hedging: Your proposal was so unexpected that I can't say anything to you now.
 Besides I am not sure that I really want to marry you
 I am not sure I really love you
4. Joke: You must be joking.

Situation 10

1. repetition: You need some money?

KK

Situation 4

1. Postponing: I need some time to think about it
 Will you give me some time
2. Hedging: I am not sure of marriage
3. Joke: You must be kidding.
4. repetition: Marriage?

Situation 10

1. repetition: You need money?
2. postponing: give me some time to find another one who has the money

From the above Table 10, we can see that Japanese respondents use more postponing than hedging in situation 4 while neither of them are used in situation 10. For situation 4, four types of functions are displayed by Korean respondents: only topic switch is not observed in the situation 4 while only repetition is employed by them in situation 10. In case of KK postponing, hedging, joke and repetition are displayed by Korean students in the situation 4 whereas both repetition and postponing are employed by them in the situation 10. This also

seems to show that Japanese learners of English are more direct than Korean students in their refusal responses.

Finally regarding expressions of statement of alternative none is displayed by Japanese learners of English whereas Korean students employ some as in the following Table 11:

Table 11.

| | |
|------------------|--|
| Japanese none | Korean Situation 4 1. If you want to get married now, why don't you look or another girl? Situation 10 1. please mention this to others. 2. I will look for some others who can lend you money. 3. Why don't you tell your situations to others? |
|------------------|--|

KK

Situation 4: Marriage Proposal

1. look for another one if you really want to get married now

Situation 10: Borrowing \$3000

1. why don't you ask for other friends?

2. I will try to look for others who can lend you money

No passive construction is used for refusals while some are used for apology and thanking.

Beebe et al. classifies refusals into two broad categories of direct and indirect refusals. Direct refusals subclassified into performative (I refuse) and nonperformative statements (No and negative willingness of I can't, I won't, and I don't think so, etc.). For indirect refusals 12 subcategories of (1) statement of regret (I'm sorry, I feel terrible...), (2) wish (I wish I could help you...), (3) excuse, reason, explanation (I have a stomachache...), (4) statement of alternative (I'd rather... I'd prefer... and why don't you ask me?), (5) set condition for future or past acceptance (If you have studied harder yesterday, you would have...), (6) promise of future acceptance (I'll do it next time...), (7) statement of philosophy (One can't be too careful), (8) statement of principle (I never do business with friends...), (9) attempt to dissuade interlocutor (self-defense, request for help, empathy, criticize the requester, threat or statement of negative consequences to the requesters), (10) acceptance that functions as a refusals, (11) avoidance, and (12) adjuncts to refusals

Both Japanese and Korean learners of English share common features in their use (1) statement of regret, (2) excuse, reason, explanation, (3) avoidance, and (4) adjuncts to refusals. However, no use of statement of alternatives, promise of philosophy, set conditions for future or past acceptance, and attempts to dissuade interlocutor is observed from the data of Japanese learners of English in our study.

4.5 Intensifiers, multiple semantic formulae, and types of verbs used for indirect refusals

When refusing indirectly, intensifiers can play a very important role in that they indicate the degrees of speakers' regrets for having to refuse the requests made by their interlocutors. In spoken languages, however, nonverbal elements can also play significant roles.

The following Table 12 illustrates the types of intensifiers used by the students in the present study:

| | | | |
|-----------|---------------------|----|--------------------|
| Table 12 | | | |
| situation | Korean students | KK | Japanese students |
| S-4 | so/actually/please | | too/really/ |
| | really/frankly/more | | terribly/very much |

From the above Table 12 when expressing their regrets, Koreans learners of English used 6 types of intensifiers to show the degrees of their regrets conveying to their interlocutor that they are really sorry for not being able to meet with the interlocutor's request. Korean learners of English appeared to use more varieties of intensifiers than Japanese learners of English. It is very interesting to find that very few intensifiers are used by KK: in fact none is used in situation 4 and only two in situation 10. The reason may be due to the fact that in Korean indirect ways of expressing one's feeling are preferred. Showing one's mind openly is not recommended if it would hurt one's interlocutors as well as the speaker. Thus in situation 4 when refusing a marriage proposal from a friend, using intensifiers would make one's interlocutors in a more difficult position. He or she might have felt that he or she is not good enough for the speaker. Most expressions used by KK in situation 4 are the ones of asking to give him or her some time to think about it, thus indirectly refusing the offer. Thus no intensifiers are necessary because they do not display the expressions of regret in situation 4 in KK.

Regarding multiple semantic formulae, Korean learners of English tend to use groups of functions combined to form the high level speech act set of expressing refusals. Depending on the situation we found speech act sets ranging in length from two functions (expressing pause fillers + avoidance) to five functions (pause fillers + regret + avoidance + excuse + attempt to dissuade). Sometimes repetition of the same semantic functions are used (pause fillers+regret+ excuse+attempt to dissuade+excuse / regret +excuse +statement of alternative + excuse). If a speaker feels especially sorry for not being able to meet his interlocutor's request, he tended to produce a lengthy speech act set. Greater emotion often resulted in lengthier speech act sets. However, it is very difficult to give a generalization because this emotional feeling depends on each individual. Each individual may feel differently even for the situations 4 and 10.

As for the types of verbs used by the students in our study, the verb forms used to express excuse, reason, explanation, avoidance, regret, and so forth are the ones used for indirect refusals: varieties of verbs are used by the students in our study.

5.0. Conclusion

The study reported here is part of a larger cross-cultural project on native and nonnative speech act sets of refusals, apology, and compliment and thanking. In the broader project, we are planning to compare the speech act performance of Japanese learners of English in Japan, Japanese learners of English in America, Japanese native speakers in Japan, Korean learners of English in Korea, Korean learners of English in America, Korean native speakers in Korea, American learners of Japanese both in Japan and America, and American learners of Korean both in Korea and in America.

In this paper we have tried to show evidence that transfer is also manifested at the level of pragmatics. Pragmatic transfer from both Japanese and Korean influence the English of Japanese and Korean speakers in Japan and in Korea respectively on the levels of the order, frequency, content, number, and the type of semantic functions. Although both Japanese and Koreans are categorized as Orientals thus considered to be very similar by many westerners, there are definitely some similarities as well as differences between them from cross-cultural and interlanguage pragmatic perspectives. Japanese students appeared to be more direct than Korean students when they are in the situations of refusing. Frequency of semantic functions, the order of semantic functions, the content of semantic functions, use of expressions realizing certain semantic functions, use of adjuncts and avoidance, and use of intensifiers are not the same between Japanese and Korean learners of English. It is interesting to note that their cultural and socio-linguistic differences can be a source of their different speech act behaviors.

The evidence given in this paper, albeit tentative it is due to several reasons such as the method of data collection, inherent variables affecting the data, the number of subjects and so forth, appears to be sufficient enough to support the existence of pragmatic transfer in the area discussed in this paper.

We also believe that this study supports the importance of teaching various semantic formulas in formal educational settings so as not to be misunderstood in a given situation. Grammatical and linguistic competence in itself may be a necessary condition for smooth interactional communication but surely not a sufficient condition for it. Learners of a target language need to learn and be aware of not only the rules of the language but also socio-linguistic and pragmatic rules of when to use what form to whom. Language performances in given situations are not easy matters especially for foreign language learners. They may know certain expressions and rules without knowing when to use them. They may also be unaware of the acceptable forms of the expressions in a given speech community.

Different cultures have their own unique way of expressing certain things. For example, in English 'I am sorry' and 'Excuse me' are used differently in that the former is an expression of regret for the pain and disgust the addressee has to persevere. The fact that a fair number of natives would select 'Excuse me' in the situation 1 in our study does not hold true for our respondents. Both Japanese and Korean respondents adhere to 'I am sorry' as the form to express apology. This suggests that they might have overgeneralized the use of 'sorry' as a safe strategy expressing apology in almost all cases.

Another example can be drawn from the sentence, "I didn't expect you here," uttered by a Korean student meeting a Japanese student in an international conference. The Japanese student was annoyed to hear the sentence from a Korean friend who evidently didn't understand the consequences of what he has just said. What the Korean student meant was "I am glad/happy to see you here," "I was wondering whether I could see you in this conference or not," or "You surprised me with rejoice/I rejoiced to see you here in this conference." Direct and literal translation of one's native language into a target language without taking any socio-linguistic and pragmatic differences into consideration would cause a fatal miscommunication often resulting in a deep and serious wound in one's heart.

Therefore, it is suggested that curriculum materials be designed on the basis of the studies performed in the area of pragmatic transfer.

To recapitulate, in this study a detailed description of how refusals are realized both by Japanese and Korean respondents are presented. The main purpose of this is to examine the extent and the nature of gaps between Japanese and Korean respondents, if any. The current study shows that both Japanese and Korean respondents showed (1) lack of sensitivity to certain expressions, (2) lack of variety in their realization of certain semantic formulas, (3) preferences of using multiple semantic formulas by repetition, (4) tendencies of using large percentage of conjunction 'but' followed by a sentence, (5) preference of using indirect refusals, and finally (6) dominant use of adjuncts such as interjection, surprise, and pause fillers in case of Korean respondents.

In general, a variety of intensifiers/adverbs and semantic formulas (especially interjections and adjuncts) were used more often by Korean respondents when required to write in Korean than when requested to write in English in DCQ.

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Appendix

Instruction

Please read the following situations. In each situation, please try to do your best to respond if you're in an actual situation. Write your response in a separate sheet of paper. Write your response as much or as little as you wish - you may choose to write nothing in some situations.

[Situation 1]

Everyday you take a subway to go to work in your office. This morning the subway is very crowded and you step on a passenger (same sex, similar age but good looking) in the subway. The passenger said: "Look what you have done to me."
What would you say?

[Situation 2]

You are at a crossing to cross the road. The red traffic light is on for the pedestrians. Many people are at the crossing to cross the road when they see a car accident. A driver in his late 20's is coming from the opposite direction speeding up. When the traffic light changes he is trying to stop his car abruptly in vain. He hit an elderly woman in her late 60's. The lady gets fainted and motionless. The pedestrians gather around the old lady and said: "Oh, what did you do to her?" to the driver. The driver gets out of the car.
What would the driver say?
How would you describe the situation?

[Situation 3]

You want to take a taxi to visit your mother in a hospital. But there is a long line waiting for taxis to come. You break into a queue of people waiting for a taxi. A gentleman in the queue said: "What are you doing? Don't you see these people in a long queue?"
What would you say?

[Situation 4]

You have been getting along well with a boy friend for a couple of years. Your boyfriend wants to get married and he makes an offer of marriage to you/proposes marriage to you. But you don't want to accept his proposal of marriage. You don't want to give your hand to him. Your boyfriend said: "Let's get married."
What would you say?

[Situation 5]

You have a very important formal meeting of the board of regents. Due to a heavy traffic you are late (almost 35 minutes late) for the meeting. However, the thing is that this is not your first time to be late for the meeting. The director said: "What happened?"
What would you say?

[Situation 6]

You promised to return a camcorder to your close friend within a couple of days after videotaping your mother's birthday party. However, you kept it for almost a month. Your friend said: "I am really upset about the camcorder because I needed it for my brother's graduation ceremony."
What would you say?

[Situation 7]

Today is the home-coming day for those who graduated from A High School in 1970. You are enjoying it very much meeting old friends and teachers. After the home-coming party sponsored by the school, you go out to drink beers with some of your old friends. When drinking you make a fun of one of your old friends in the school. Your friend said: "What is the matter with you? You're drunk. You don't know what you are doing to him."
What would you say?

What would you say?

[Situation 8]

You have been invited to the home of a friend. You have dinner with him and his wife and a few other friends of theirs. You really enjoyed the evening with the great food. As you leave, your hosts accompany you to the door.

What would you say?

[Situation 9]

You are in sudden need of money (\$ 3,000). You mention this to a friend who immediately offers to lend it to you. You are very surprised and very thankful. You take the money from your friend.
What would you say to him?

[Situation 10]

Your friend is in sudden need of money (\$ 3,000). Your friend mentions this to you and you refused to lend it to your friend.

What would you say?

[Situation 11]

It's Saturday. You have only 5 dollars in your wallet. Your friend at work is willing to lend you 5 to 10 dollars when he hears you saying that you have to go to the bank. Your friend is a rich man who knows that you will pay the money back to him on Monday.

What would you say?

[Situation 12]

It's your birthday and you have a birthday party with your close friends. One of your friends brings you a present of pink sweater.

What would you say?

[Situation 13]

You have been working for a company only for six months when you are called into the office of your boss. He told you how much he was pleased with you working so hard and doing a good job. He gave you a 1,500 dollar raise a week.

What would you say?

[Situation 14]

Your friend suggested going out to lunch. Your friend didn't know you didn't have enough money to go out for a lunch with him. You told him that you didn't have enough money for it. Your friend assured that he would take you to a very nice restaurant much more expensive than the ones you usually go to. You have a very nice time. Your friend paid and you got up to leave.

What would you say?

[Situation 15]

Just recently you have gotten a new and better job. A friend at the office tells you that he has organized a farewell party for you.

What would you say?

Can Japanese Students Pass the Entrance Examinations for Universities?

Yoshiro HAMAOKA

The purpose of this paper is to describe the difference between the level of Japanese high school English textbooks and that of the English examinations for Japanese universities from the viewpoints of the size of the vocabulary and readability scores.

The Japanese government sets the guideline for teaching. The contents of textbooks in Japan are required to follow it. High schools must also follow the guideline in teaching.

Nevertheless, it seems that there is another guideline for teaching. It is the level of university entrance examinations. From the standpoint of high school teachers, entrance examinations should test the achievement level of the applicants. However, university teachers in university usually expect the applicants to have the academic level of ability to understand the instruction there.

Many criticize this situation and it is thought university entrance examinations have distorted the lower level education. The same kind of issues can also be observed in many of the countries in the world. However, this issue is too political to be discussed here.

Therefore, the status quo of the university entrance examinations was analyzed from the viewpoints of vocabulary level and readability score, hoping this could be basic data for further discussions.

1. Introduction

A number of articles have been devoted to the study of entrance examinations. Li,-Chen-ching (1994) states the introduction of essay writing into the English section of the Joint College Entrance examination gave the positive impact of English as a second/foreign language writing in Taiwan. Arjona (1993) in Denmark reports on the test created for the purpose of having students to be assured, once they have been accepted for graduate study, of passing the final examination. A success rate of 91% has been experienced in the use of the test so far. The entrance examination has its own functions and effectiveness.

However, it has been said that entrance examinations should be improved. Ingram(1982) in Australia states it seems that a score in the Entrance examination does not predict success in the Institute's courses. Sym(1976) in Korea found the present system was inefficient and unprofitable, and suggested a change in the university entrance examination system.

Takahashi and Williams(1974) say, since the entrance examinations seem to be the main guideline in high school English teaching, examination questions all over the country must be improved to permit high schools to teach English for real communication. Still the pace is slow in improving the situation of the entrance examination.

Furthermore, it seems that discussing entrance examinations is not academic and that it is not a job of university teachers but of the teachers of cram schools. Therefore, at least in Japan, only a few attempts have so far been made by university teachers at the analysis of the

quality of the entrance examinations.

One more problem is that the level of the materials used for teaching at high schools is not high enough to enable students to pass the entrance examinations. High school teachers have claimed that the level of the entrance examinations should be lowered as it is far above the level of high school textbooks.

Hence, the status quo of the university entrance examinations should be analyzed to supply the basic data for discussion. This time, they are analyzed from the viewpoints of vocabulary level and readability score.

This time the Korean Entrance Examination was also analyzed to give honor to the attendants from Korea as this conference is held in Korea

2. Materials

2.1. Textbooks

Table 1 shows 12 senior high school textbooks which are analyzed. They are chosen according to their market share to obtain samples of popular textbooks. They cover approximately one fourth of the population. Book 1 is for the first grade students, Book 2 is for the second grade students and book R is for the third graders. Three kinds of textbooks for junior high school students are also analyzed.

All the texts in the textbooks are scanned in and broken into words and their frequency of appearance are counted. There are 2,753 types of word forms in 50,480 tokens for junior high school textbooks and 9,225 types of words in 136,862 tokens for senior high school textbooks. Readability scores of the passages are also estimated.

2.2. Examinations

The analyzed entrance examinations are listed in table . Z-scores for the universities in an examination of a cram school are added for reference. Those for some of the universities are not available this time. The Korean “修学能力試験” or “Academic Scholastic Aptitude Test in Korea” are also analyzed. The procedures of analysis are all the same as those for textbooks.

Table 1 High School Textbooks

| Book 1 | share | Book 2 | share | Book R | share |
|-------------|-------|--------------|-------|-------------|-------|
| unicorn I | 6.9 | unicorn II | 8.7 | unicorn R | 7.4 |
| Powwow I | 5.2 | Powwow II | 5.5 | Milestone R | 7.1 |
| Vista I | 7.5 | Milestone II | 5.0 | Spectrum R | 12.5 |
| Milestone I | 5.2 | Spectrum II | 4.9 | | |
| Spectrum I | 4.6 | | | | |
| Total | 29.4 | | 24.1 | | 27.0 |

Table 2 University

| | | Z-score |
|---------------|----------|---------|
| Tokyo | National | |
| Tokyo Mtro. | Public | |
| Ochanomizu | National | |
| Tokyo Tech. | National | |
| Shizuoka | National | |
| Okayama | National | |
| Chiba | National | |
| Hokkaido | National | |
| Waseda poli. | Private | 67 |
| Waseda Lit. | Private | 67 |
| Keio Lit. | Private | 66 |
| Waseda Edu. | Private | 65 |
| Kansai Gakuin | Private | 63 |
| Aoyama Lit. | Private | 60 |
| Asia | Private | 55 |
| Senshu Eco. | Private | 55 |
| Kanagawa | Private | 54 |
| Tokyo Eco. | Private | 52 |
| Surugadai | Private | 49 |

3. Techniques and Procedures

3.1. Readability Score

Harris –Jacobsons Readability formula was chosen to estimate the readability of the texts, because it was the newest formula when the writer set the system to calculate readability scores in the computer. It is based on the list of words with flexion, and, therefore its reliability is higher than other formulae without a wordlist.

Three numbers are used to calculate the Raw Score. Firstly the words in a text which are found in the list are deleted. The rest of the words in the text are counted. This is the number of hard words (B). The other numbers are the number of words in the text(A) and the number of sentences (C). The V1 score and V2 score are obtained by the following formulae;

$$V1=B/A \times 100 \text{ and } V2=A/C.$$

Then the Raw Score is calculated by the following; $V1 \times 0.245 + V2 \times 0.160 + 0.642$.

The Raw Score is found in the table and then the corresponding Readability Score is also found. The Readability Score shows the grade level in the United States schools.

3.2. Type Token Ratio or Lexical density

Type Token Ratio or Lexical density is the ratio of different words to the total number of the words in a text, sometimes used as a means of measuring the difficulty of a passage or text. Lexical density is normally expressed as a percentage and is calculated by the following formula; $\text{Lexical density} = \text{number of separate words} / \text{total number of words in the text} \times 100$.

Richards(1992)

3.3. Word frequency and cross checking of the words

All the procedures are performed with a computer. Some of the programs are written by the writer. They are

1. Scanning the texts in.
2. Breaking the texts down into words
3. Counting the numbers of the words and sentences, and word frequency.
4. Cross checking of the words in the vocabularies to examine the inclusion.

4. Result

Table 3

| filename | TYPE | TOKEN | TTR | wd tokn coverd by txt | type coverd by txt | wd type cover rate | wd tokn cover rate | wds not found in time | exam time | w/m |
|----------|------|-------|-------|-----------------------------|--------------------------|--------------------------|--------------------------|-----------------------------|--------------|-----|
| Cnt1ck2 | 844 | 2621 | 32.2 | 2282 | 680 | 80.60% | 87.10% | 12.90% | 80 | 33 |
| Cnt2ck2 | 898 | 2670 | 33.63 | 2323 | 742 | 82.60% | 87.00% | 13.00% | 80 | 33 |
| kreack2 | 1644 | 4995 | 32.91 | 4105 | 1216 | 74.00% | 82.20% | 17.80% | 100 | 50 |
| Ochack2 | 489 | 981 | 49.85 | 850 | 370 | 75.70% | 86.60% | 13.40% | 100 | 10 |
| Asiack2 | 754 | 2175 | 34.67 | 1953 | 618 | 82.00% | 89.80% | 10.20% | 90 | 24 |
| Okack2 | 601 | 1280 | 46.95 | 1105 | 477 | 79.40% | 86.30% | 13.70% | 120 | 11 |
| Kanck2 | 1125 | 3272 | 34.38 | 2838 | 842 | 74.80% | 86.70% | 13.30% | 90 | 36 |
| Keiock2 | 452 | 863 | 52.38 | 699 | 321 | 71.00% | 81.00% | 19.00% | 120 | 7 |
| Suruck2 | 560 | 1240 | 45.16 | 1121 | 475 | 84.80% | 90.40% | 9.60% | 60 | 21 |
| Kanack2 | 948 | 2919 | 32.48 | 2592 | 768 | 81.00% | 88.80% | 11.20% | 70 | 42 |
| Aoyack2 | 863 | 2456 | 35.14 | 2020 | 616 | 71.40% | 82.20% | 17.80% | 100 | 25 |
| Shizuck2 | 552 | 1258 | 43.88 | 1098 | 430 | 77.90% | 87.30% | 12.70% | 80 | 16 |
| Chiback2 | 855 | 2086 | 40.99 | 1763 | 645 | 75.40% | 84.50% | 15.50% | 90 | 23 |
| Sensck2 | 558 | 1423 | 39.21 | 1210 | 424 | 76.00% | 85.00% | 15.00% | 90 | 16 |
| Waedck2 | 920 | 2511 | 36.64 | 2110 | 672 | 73.00% | 84.00% | 16.00% | 90 | 28 |
| wapolck2 | 811 | 2333 | 34.76 | 2044 | 631 | 77.80% | 87.60% | 12.40% | 90 | 26 |
| walitck2 | 1076 | 2760 | 38.99 | 2300 | 763 | 70.90% | 83.30% | 16.70% | 90 | 31 |
| Tmetck2 | 525 | 1102 | 47.64 | 993 | 430 | 81.90% | 90.10% | 9.90% | 120 | 9 |
| Tokyck2 | 856 | 2887 | 29.65 | 2600 | 704 | 82.20% | 90.10% | 9.90% | 120 | 24 |
| Toeck2 | 404 | 1001 | 40.36 | 917 | 341 | 84.40% | 91.60% | 8.40% | 60 | 17 |
| Totck2 | 529 | 1070 | 49.44 | 964 | 448 | 84.70% | 90.10% | 9.90% | 90 | 12 |
| Hock2 | 598 | 1363 | 43.87 | 1180 | 460 | 76.90% | 86.60% | 13.40% | 90 | 15 |

TYPE = Word type Examination vocabulary.

TOKEN= Number of words in the Examination vocabulary.

TTR=Type Token Ratio.

wd tokn coverd by txt=Number of words in the Examination vocabulary covered by textbook vocabulary.

type coverd by txt= Number of word types in the Examination vocabulary covered by textbook vocabulary.

wd type cover rate=The rate which textbook vocabulary covers word types in the Examination vocabulary.

wd tokn cover rate = The rate which the textbook vocabulary covers words in the Examination vocabulary.

wds not found in txtbook = Number of the words which are not in the textbook vocabulary.

exam time= duration of the examination

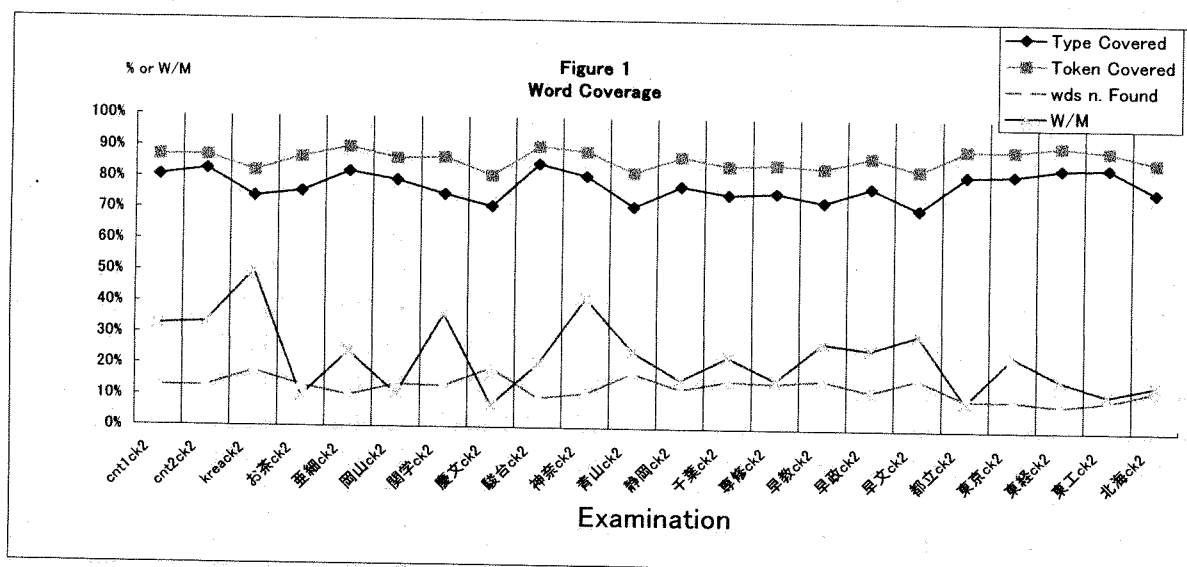
w/m= Number of words applicants have to process during the examination.

when you read a passage containing 100 words with TTR of 50%. Percentage of the unknown words or the words that are not found in the textbook vocabulary ranges between 19.0% and 8.4%. These numbers of percentage are fairly large, suggesting that the readers find the passage difficult

to comprehend and the words could be an obstacle for comprehension. The number of the words which the applicants have to process in a minute while they are taking the examination ranges between 50 and 7. This must be take into account when comparing the difficulty of the examination. However, it is not the main point for discussion here.

4.2. Word Coverage

Figure 1 shows how many of the words in the Entrance examination vocabulary are covered by the words in the textbook vocabulary. The number of the words the applicant has to process in a minute is also indicated. (The unit for this figure is not percentage but the number of words.)



4.3. Readability Score

Table 4 is the statistics of the readability scores of the passages in Korean Entrance Examination. Table 5 and 6 show statistics of readability scores of the passages in the textbooks and the entrance examinations. In the fifth column, differences of the numbers for each group are shown.

Maximum score for each group is the same because the number is the upper limit of the commutation table for readability score. However, only two passages in the textbooks exceed the limit while eight of the passages in entrance examination have the scores over the limit.

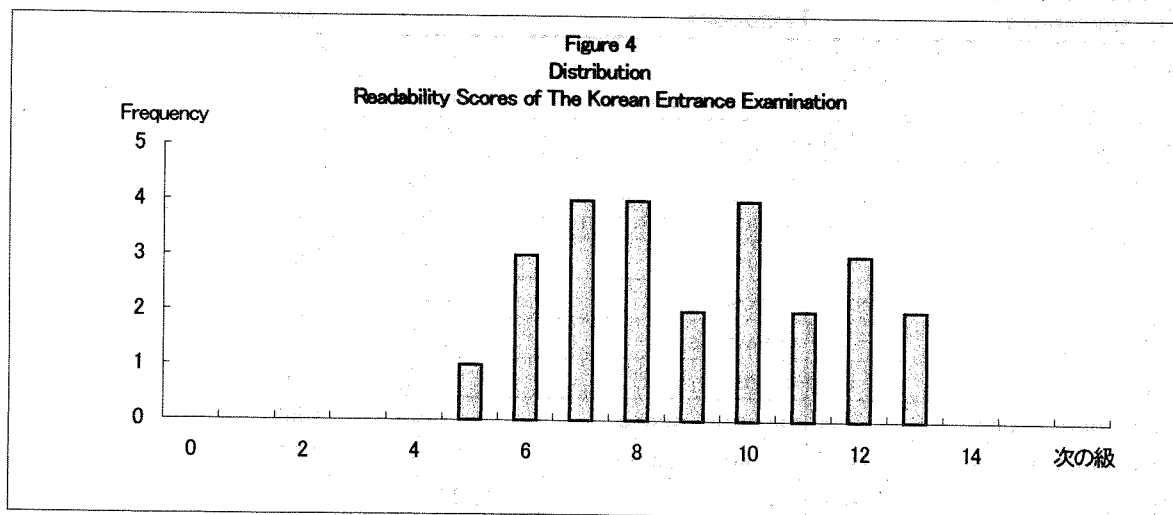
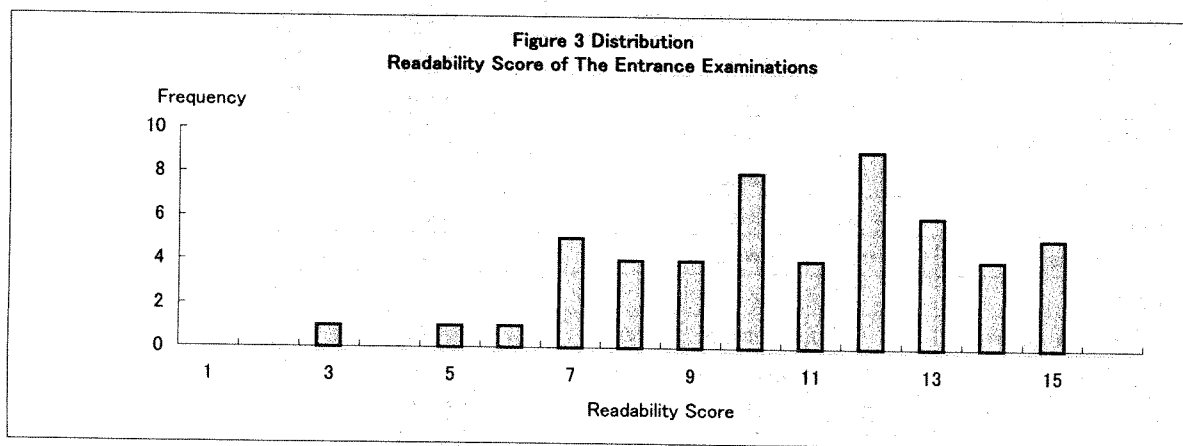
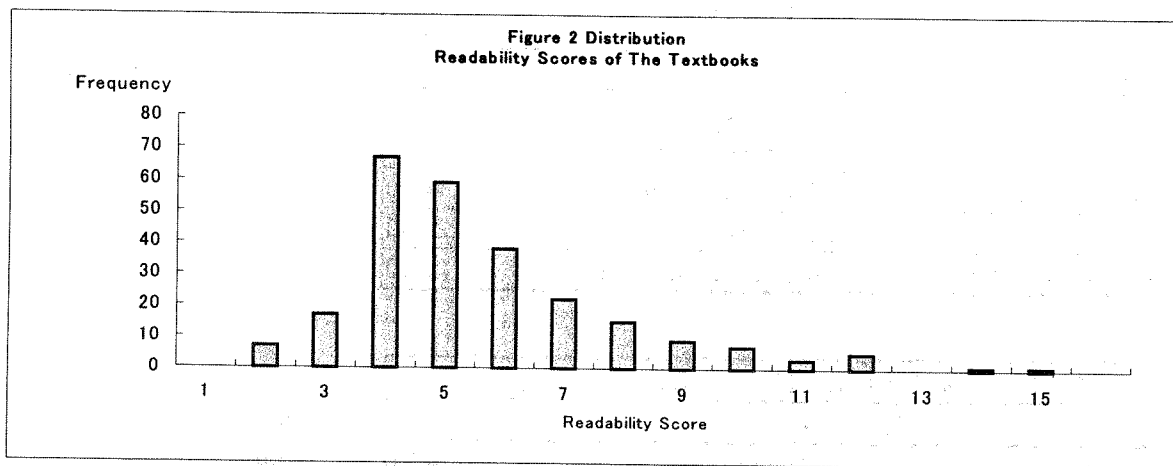
| Table 4 Korean Entrance Examination | | | |
|-------------------------------------|--------|--------------------|--------|
| Raw Scores | | Readability Scores | |
| mean | 7.22 | mean | 8.75 |
| standard error | 0.35 | standard error | 0.52 |
| median | 7.05 | median | 8.60 |
| mode | 5.50 | mode | 6.40 |
| standard deviation | 1.90 | standard deviation | 2.63 |
| variance | 3.60 | variance | 6.90 |
| kurtosis | 0.16 | kurtosis | -0.89 |
| skewness | 0.74 | skewness | 0.28 |
| range | 7.60 | range | 9.40 |
| minimum score | 4.40 | minimum score | 4.60 |
| maximum score | 12.00 | maximum score | 14.00 |
| total | 216.50 | total | 227.40 |
| num of samples | 30.00 | num of samples | 26.00 |

| table 5 Examinations | | Textbooks | | |
|----------------------|--------|--------------------|---------|-------|
| Raw Scores | | | | dif. |
| mean | 7.84 | mean | 4.51 | 3.33 |
| standard error | 0.23 | standard error | 0.08 | 0.15 |
| median | 8.05 | median | 4.40 | 3.65 |
| mode | 8.10 | mode | 4.40 | 3.70 |
| standard deviation | 1.84 | standard deviation | 1.26 | 0.59 |
| variance | 3.40 | variance | 1.58 | 1.82 |
| kurtosis | 0.28 | kurtosis | -0.02 | 0.31 |
| skewness | -0.30 | skewness | 0.37 | -0.67 |
| range | 9.00 | range | 6.20 | 2.80 |
| minimum score | 3.00 | minimum score | 1.70 | 1.30 |
| maximum score | 12.00 | maximum score | 7.90 | 4.10 |
| total | 486.00 | total | 1109.80 | |
| num of samples | 62.00 | num of samples | 246.00 | |

| Table 6 Readability Scores | | | | |
|----------------------------|--------|--------------------|---------|-------|
| Examinations | | Textbooks | | dif. |
| mean | 10.28 | mean | 5.17 | 5.10 |
| standard error | 0.41 | standard error | 0.14 | 0.27 |
| median | 10.70 | median | 4.60 | 6.10 |
| mode | 11.80 | mode | 4.60 | 7.20 |
| standard deviation | 3.00 | standard deviation | 2.26 | 0.74 |
| variance | 8.98 | variance | 5.11 | 3.87 |
| kurtosis | -0.32 | kurtosis | 2.49 | -2.81 |
| skewness | -0.52 | skewness | 1.39 | -1.91 |
| range | 11.80 | range | 13.30 | -1.50 |
| minimum score | 2.90 | minimum score | 1.40 | 1.50 |
| maximum score | 14.70 | maximum score | 14.70 | 0.00 |
| total | 554.90 | total | 1303.70 | |
| num of samples | 54.00 | num of samples | 252.00 | |

Comparing Figures 2 and 3, the difference of the distributions of the readability scores is obvious. Most of the scores of passages in the textbooks are lower than 9 grade, that is the highest grade in a junior high school. Only a few of them are in the level of high school.

On the contrary, almost one third of the passages in the entrance examinations has scores over the high school level. Korean Examination comes between the two. Five of them exceed the level of high school. Five out of 30 passages seems a reasonable number for the entrance examination for university.



Conclusion

Nation and Coady(1988) state on what the optimal ratio of unknown to known words in a text is :

Marks et al.(1974) found that replacing 15 per cent of the words in a reading text with low frequency words led to a significant decrease in comprehension. Freebody and Anderson (1983), however, have called Marks et al.'s criteria for high and low frequency words into question. Freebody and Anderson compared two low frequency word ratios - one low frequency word in three content words, and one low frequency word in six content words. Counting both function and content words, these translate into ratios of roughly 1 in 6 (17 per cent) and 1 in 12 (8 per cent). Although there was some decrease in comprehension at the 1 in 12 ratio, it was only at the 1 in 6 ratio that there was a reliable decrease in comprehension. Kameenui et al (1982) found that ratios around one low frequency word in fourteen running words (7 per cent) gave a reliable decrease in correctly answering inferential questions based on the text. The answering of literal questions was not significantly affected.

In short, 7 to 17 percent of low frequency words in a text leads to a significant decrease in comprehension. All of the passages in the entrance examinations have more than 9 percent of unknown words in them. All of them are incomprehensible if the applicants study only with these textbooks at high schools. Furthermore the textbook vocabulary consists of the words from three or more kinds of high school textbooks and junior high school textbooks. There is little possibility for students to study with three different kinds of textbooks for reading at a time.

The mean of the Readability Scores of the passages in the entrance examinations are five grade higher than that of the passages in the textbooks and the scores of most of the passages are on the level of high school or university in the United States. Applicants for a university who have never studied at a cram school must feel as if they were elementary school students reading a university level reading.

Therefore, it is thought natural for the students to go to cram schools to get ready for entrance examinations. Is it cram schools' job to have the students learn English to be competent enough to study at universities? Who should fill the gap between the levels of teaching in high schools and universities. Moreover, it is a matter of importance to establish a

system by which students are taught English to be competent enough to get along with the rest of the world. This comment is only on the present situation in Japan, as the writer is a visitor to Korea and not familiar with what it is like in this country.

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Techniques, Exercises and Materials in New Phonics for Beginners

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Abstract

This article belongs to a series of articles on New Phonics, an innovative course designed for Japanese EFL beginners, focusing on the sound/spelling link in the English language. After a brief introduction to the development of New Phonics, this article describes the concrete contents of this course for beginners, i.e., the techniques, the exercises and the teaching materials for Grade 7. The techniques of the course draw heavily on the presentation of the relationships between letters and types of sound they usually represent. The characteristic exercises are repeating after a recording without looking at the text, and dictation as a review. As for teaching materials, vocabulary control is an important issue for future research.

Introduction

This syllabus design study started with investigating learners' motivation and social context (Hutchinson & Waters, 1987; Tessler, 1990). Motivation, which often springs from social context, is one of the critical factors in second/foreign language learning (Yukina, 1996; 1998a). One of the simplest ways to inquire of a large number of students about their motivation is by means of questionnaires. An informal needs analysis revealed that more than one third of the target students in a junior high school in Japan have motivation to talk with foreign people, while another third of the students have ordinary types of instrumental motivation. Furthermore, these proportions became increasingly steady as the data accumulated (Yukina, 1996, p. 27; 1998a, p. 9; in press). Then, to satisfy those two rather contradictory kinds of motivation at the same time, the study changed its focus to adopting, adapting and designing an innovative course (Yukina, 1998b).

Further needs analyses also revealed that it was a very hard job for the target students to speak up in the classroom (Yukina, 1996, pp. 28-29; in press). There are two arguments. The most convincing argument is that Japanese people can lead a

normal daily life without any skill in speaking and understanding English. Namely, it is not critical whether or not one can communicate in English as long as one is living in Japan. The other argument draws on the differences between the English and Japanese languages. Significant differences in the area of phonology become a crucial factor in second/foreign language learning because sound is the very base of language learning and ordinary communication. In addition, the re-categorization of phonemes has been reported to be exclusively difficult after the sensitive period of phonology. After the differences in orthography and phonology were investigated closely, it was concluded that Japanese learners do not follow the restructuring continuum in most of the stages of interlanguage phonology, but the continuum which is somewhat similar to the developmental continuum (Yukina, 1996, p.12 ff.). On the other hand, since the cognitive level of junior high school students is fairly high, such cognitive knowledge should be utilized and play a major role in second/foreign language learning.

New Phonics for beginners is an introductory course focusing on simplified cognitive knowledge of the learnable letter/sound link in the English language, designed specifically for Grade 7 students who start learning English for the first time in the classroom context in Japan (Yukina, 1998a, p. 221). This course was developed through environment analysis, needs analysis and the application of principles supported by research and theory (Nation, 1996). The goals of the course for beginners are 1) to have the learners gain phonological confidence in reading aloud and listening to English letters and basic English words; and 2) to introduce the learners to a rudimentary descriptive system of English sounds. The following sections describe the three important factors in New Phonics for beginners: 1) how the letter/sound link is

presented throughout the course, 2) how the students are practiced to develop their fluency, and 3) how the teaching materials are selected for the course.

1 Presentation of the Letter/Sound Link

The techniques of New Phonics for beginners draw considerably on the presentation of the letter/sound link of the English language. When the letter/sound link is presented, the real problem lies in the fact that the relationships between letters and types of sound they represent in the English language are notoriously complex and complicated as compared with those even of other Indo-European languages. On the other hand, most students in Japan start learning English after they enter junior high school because English is a subject in the junior high school afterwards as prescribed by “the Course of Study”. Therefore, the Roman alphabet as well as English sounds ought to be introduced because the Japanese writing system uses completely different graphemes from those of the English system.

One of the characteristic techniques of New Phonics for beginners is introducing only the block capitals of the Roman alphabet at the very first stage. In order to introduce types of sound in English, New Phonics uses those capital letters with three devices (Yukina, 1998b, pp. 225-26). In other words, the technique incorporates newly introduced capital letters as its own descriptive system of sound. Then, the course introduces the lowercase letters.

1.1 Vowel Letters in Block Capitals

Basic vowel letters are treated in Lesson 1. One of the fundamental goals of

New Phonics for Grade 7 is having the students able to articulate each consonant distinctively with confidence, and to recognize each consonant accurately. Lessons 2 through 7 are constructed for those purposes. However, both basic vowel letters and cognitive knowledge of the articulation of vowels are introduced in the first lesson. There are three reasons. First, cognitive knowledge of basic vowels is essential for the students to pronounce any letter name or any word with confidence. Second, those vowel letters occasionally represent their letter name. Finally, there are very few words composed of consonants alone, such as "pst".

The five basic vowel letters, "A", "E", "I", "O" and "U" are introduced with ten basic types of vowel sound in Lesson 1. The "long" vowel sounds are easily introduced through presenting the actual sound of English in quite a short time, as almost all students know all the letter names of the Roman alphabet before entering junior high school. Of course, some minor corrections are required at a later stage because the actual sound that the letter "U" represents is a combination of two types of sound /y/ and /(long) oo/. With the intention of keeping a consistency of description, however, if necessary, the correction is made only implicitly.

Some rules that would explain what kind of phonetic circumstances determine the occurrences of "long" sound, "short" sound, or "schwa" are also introduced briefly in Lesson 1. However, whenever rules are presented, it is necessary to investigate outstanding exceptions of the limited vocabulary that the students could have access to. No rules have persuasive power without its limitation clearly described. Words such as "have", "give" and "live" are the exceptions in this case.

The difficult part of Lesson 1 lies in the presentation of the "short" vowel sounds.

Close attention is paid to the three difficult types of sound /(short) i/, /(short) o/ and /(short) u/. It is most efficient to present the differences as follows: The English sound /(short) i/ is a neutral sound between the Japanese phonemes "i" and "e". The English sound /(short) o/ is similar to the Japanese sound "a" with the mouth wide open. The English sound /(short) u/ is similar to the Japanese sound "a" with the mouth half-closed as in articulating the Japanese sound "o".

Two kinds of homework are assigned for Lesson 1. The first one is writing down in the notebook the five capitals of the vowel letters as many times as possible while pronouncing both "long" sound and "short" sound that those letters usually represent. The second one is preparing for dictation in the next lesson, which will use the ten words covered during Lesson 1. In Lesson 1, several consonants are introduced with little explanation because each vowel sound have to be presented as part of a word. Still, this does not give the students a burden as the words employed in this lesson are all loan words that are well established in the Japanese language.

The treatment of meanings of each word covered in each lesson may also be characteristic. Since the focus of this program is on cognitive knowledge on phonology, meanings are introduced after Lesson 13, which is the final lesson of the introduction to the alphabet. That avoids too heavy a load on the students. Those words employed until Lesson 13 are materials that are selected just for the purposes of explaining rules and their exceptions concretely, and for having the students practice pronunciation. In New Phonics, meanings are referred to, only if they are closely related to the morphology of words enumerated as examples.

1.2 Basic Consonant Letters in Capitals

Taking the existing variety of vowels among dialects into consideration, pronunciation and recognition of consonants are more important than vowels when it comes to real communication (Gimson, 1980, pp. 315-16). Lesson 2 through 4 treat basic consonant letters and the types of sound they represent. Lessons 2 and 3 introduce those consonant letters that have letter names closely related to the sound they usually represent. After Lesson 2, dictation is given as a review exercise for the previous lesson at the very beginning of each lesson. The correct answers are written on the blackboard after the dictation in order to help the students mark each other's papers in pair work. Some of the low scorers are asked to repeat some words from the blackboard so that they can fix them in their memories.

Lesson 2 chiefly covers the four most fundamental voiceless consonant letters, "P", "T", "K" and "C", and the voiced consonant letters, "B", "D" and "G" with the corresponding types of consonant sound. In presenting these letters and types of sound, close attention is paid not only to the place and manner of their articulation but also to the aspiration that occurs when one of the voiceless consonants come at the beginning of a stressed syllable (Lisker & Abramson, 1964). As far as the voiced consonants are concerned, most students learn the articulation easily as compared with that of their voiceless counterparts. As the letters "C" and "G" are treated, the two types of sound /s/ and /j/ are also introduced in this lesson. Close attention is paid to having the students avoid the interference from Japanese. Japanese students often pronounce the sound /s/ as /sh/ before /(long) e/ and /(short) i/, and almost always pronounce the sound /j/ as /zh/.

This consonant /zh/ can not be ignored even in this simplified descriptive system of sound because it often appears in high-frequency words such as "television", "usually", "pleasure", and "genre". Nonetheless, it is found efficient to spend more time on the articulation of the sound /j/ because the sound quality of /zh/ is very close to the consonant part of the Japanese syllabic sound "ji". The phonetic symbol of /zh/ is in limited use throughout New Phonics for Grade 7 in order to reduce the complexity of the letter/sound link. The letter names introduced in Lesson 2 are described as /PE/, /TE/, /KA/, /SE/, /BE/, /DE/ and /JE/, by means of each consonant letter as a symbol of the sound that the letter usually represents.

There are two remarks to make about Lesson 2. First, although each consonant in Lesson 2 can be practiced alone, each letter name is first introduced and then each consonant is practiced because some Japanese students resist somewhat when they are asked to pronounce some consonants such as /p/, /t/ and /k/ alone. Second, as for the letters "C" and "G", only the fact that those two letters usually represent two types of sound each, namely, a "soft" sound and a "hard" sound is introduced, because there are a number of exceptions that can not be tidied up easily in the basic vocabulary, such as "get", "give" and "girl". However, each of these two consonant letters has the possibility of representing two types of consonant sound mostly according to the phonetic circumstances in which they occur, while ordinary consonant letters usually represent only a single type of consonant sound. Namely, those two letters usually represent the sound /s/ and /j/ respectively when they come immediately before one of the letters "e", "i" and "y". In other circumstances, they usually represent the sound /k/ and /g/ respectively.

Two kinds of homework are assigned for Lesson 2. The first one is writing down in the notebook the seven capitals of consonant letters as many times as possible, at the same time pronouncing both each letter name and the sound that each letter usually represents. The second one is preparing for dictation in Lesson 3, which will use the words covered in Lesson 2.

Lesson 3 introduces the consonant letters, "J", "S" and "Z". Like the letters introduced in Lesson 2, those letters have a letter name that has a consonant that each letter usually represents. Although it has already been introduced in the previous lesson, the sound /j/ is presented again as a part of the letter name of "J" at the beginning of this lesson again because distinguishing the two types of sound /j/ and /zh/ in articulation is quite difficult for Japanese learners. The letter "S" is also introduced as a consonant letter that has the possibility of representing one of the two types of sound /s/ and /z/. The letter names introduced in this lesson are described as /JA/, /ES/ and /ZE/, by means of using each consonant letter as the symbol of sound that the letter usually represents.

Two kinds of homework are also assigned for Lesson 3. The first one is writing down in the notebook those three capitals of consonant letters as many times as possible while at the same time pronouncing both each letter name and the type(s) of sound that each letter usually represents. The second one is preparation for the dictation of the words covered in Lessons 1 through 3.

Lesson 4 introduces the consonant letters "M", "N", "F", "V", "L" and "R". Those letters also have a letter name that has a consonant that each letter usually represents. It is very effective to explain the place of articulation with a face diagram

in describing the articulation of the types of sound /s/, /z/ and /n/ at this point. Obviously, the difficult part of this lesson lies in introducing the articulation of /f/, /v/, /l/ and /r/, which are far removed from the corresponding consonant part of the Japanese syllabic sound. A traditional way of instruction to produce the types of sound /f/ and /v/ is to have the students breathe out, gently biting their lower lip with their upper teeth. This presentation does not work well because most students pronounce those types of sound as plosives, biting their lip too strongly. It gives a little better result to have the students breathe out through their upper teeth and lower lip with their teeth slightly touching their lower lip.

The type of sound /l/ is by far the most difficult for students both in articulation and in perception. The most critical part is having the students breathe out along both sides of their tongue in articulating the sound. For that purpose, it is often helpful for most students to have them breathe out with their mouths open wide with lips spread, with their tongue expanded vertically and pressed hard on the alveolar ridge. In contrast, the articulation of /r/ is a little easier for most students, especially when it occurred between vowels (e.g., very). For the purpose of consciously distinguishing the articulation of /r/ from that of /l/, it is also an effective way of instruction for most students not only to have them point the tip of the tongue towards the throats without touching the roof of their mouth, but also to have them open their mouth horizontally so that the breath can not leak out on either side of the tongue.

The letter names introduced in this lesson are described as /EM/, /EN/, /EF/, /VE/, /EL/ and /AR/, by means of using each consonant letter as the symbol of sound that the letter usually represents. The phonetic description of the letter name of "R",

which is actually a new vowel sound, is introduced as it is in order to avoid complexity. Two kinds of homework are also assigned for Lesson 4. The first one is writing down in the notebook those six capitals of consonant letters as many times as possible while at the same time pronouncing both each letter name and the type(s) of sound that each letter usually represents. The second one is preparation for dictation. This time, however, the students are warned that the teacher will use any new and unfamiliar one-syllable words composed only of the letters introduced in Lessons 1 through 4 as dictation items.

1.3 Other Consonant Letters in Capitals

Lesson 5 introduces the remaining block capitals of the Roman alphabet: "X", "W", "Y", "Q" and "H". Those letters are introduced late not only because their letter names are difficult to pronounce for Japanese beginners, but because they are hardly related to the types of sound each letter usually represents. The sound quality of the letter "X" can be inferred to some extent from the phonetic circumstances like the cases of "C", "G" and "S". In final position in a word, the sound becomes /ks/, while it becomes /z/ in initial position. Otherwise, the quality becomes /ks/ or /gz/. Again, only the fact that the letter "X" can represent one of those three types of sound is introduced in order to avoid complexity.

The letter "W" has two roles: one as a consonant letter and the other as a vowel letter. When the letter comes immediately after a vowel letter, it works as the vowel letter "U", while it works as a consonant letter otherwise. The sound that the letter "W" as a consonant usually represents is used in the letter name of "Y". The

articulation of the sound is introduced by making the students release a puff of air after puffing out their cheeks with their mouths puckered up.

Also, the letter "Y" has two roles: one as a consonant letter and the other as a vowel letter. When the letter comes initially in a word, it works as a consonant letter, while it works as the vowel letter "I" otherwise. The articulation of the sound that the letter "Y" as a consonant usually represents is introduced by making the students raise the tongue up to the roof of the mouth from the position of the tongue where the long "E" is articulated. The letter "Q" also has a peculiarity. This letter together with the letter "U" represents the sound /kw/. However, it does not seem to be necessary to introduce the fact that this combination sometimes represents the sound /k/, such as in the words, "mosquito" and "cheque".

The letter "H" is a little complicated. The sound that this letter usually represents is introduced as the sound of breath made when shining a mirror or when warming up the cold hands. The difficult part lies in the fact that the letter "H" that comes immediately after another consonant letter changes the sound quality of the preceding consonant through the combination. In fact, the letter name of this letter can not be described without the combination of letters "CH". Using this combination, the letter names are described as follows: /EKS/, /DUBLU/, /WI/, /KU/, /ACH/.

Two kinds of homework are also assigned for Lesson 5. The first one is writing down in the notebook all the block capitals as many times as possible while pronouncing both each letter name and the types of sound that each letter usually represents, since all the letters of the Roman alphabet have already been introduced to this lesson. The second assignment is preparation for dictation in Lesson 6, which will

use the words covered in Lesson 1 through 5 as dictation items.

1.4 Combinations of Consonant Letters in Capitals

Lesson 6 introduces the peculiarity of the letter "H" that has already been referred to in Lesson 5. The combinations introduced in this lesson are "CH", "SH", "TH", "WH" and "PH". The sound that the combination "CH" usually represents is introduced as the sound /J/ without the vibration of the vocal chords. The sound "SH" is introduced by having the students press both sides of the tongue to the roof of the mouth when they breathe out.

The most difficult part of this lesson is how to articulate the two types of sound that the combination "TH" usually represents because the Japanese phonetic system does not have similar sound. This combination represents both a voiceless consonant and a voiced consonant. A traditional way of instruction to articulate these two kinds of sound is having students put the tongue between the teeth. It is more effective to have the students feel the breath coming gently out between the upper teeth and the tongue with the tongue sticking a little way out of the mouth.

The combination "WH" is not too difficult for those who can accurately articulate the sound /w/ because they easily understand the meaning of the phonetic symbol /HW/ cognitively. The combination of letters "PH" is easily articulated by means of re-writing it as /F/. Although the articulation of this sound has already been introduced and practiced in Lesson 3, working on it again is not a waste of time because the sound is not found in the phonetic system of the Japanese language.

Two kinds of homework are also assigned for Lesson 6. The first one is

writing down in the notebook the five combinations of consonant letters introduced in this lesson as many times as possible while pronouncing the types of sound that each combination usually represents. The second one is preparing for dictation in Lesson 7, which will use the words covered in Lesson 1 through 6 as dictation items.

Lesson 7 introduces typical combinations of letters other than those introduced in Lesson 6. Only the four combinations, "-NG", "-CK", "WR-" and "KN-" are selected because the chances are that very few students come across words beginning with one of any other interesting combinations such as "GN-", "PS-", "PN-", "PT-" and "CT-" throughout the three years of junior high school. When the progress of the students is not satisfactory, just the first two of the four combinations is introduced because the other combinations can be introduced and practiced as examples of silent letters in fluency activities.

Close attention is paid to the combination "NG" in Lesson 7. This combination usually represents two types of sound /ng/ and /ngg/. The former is the difficult type for both articulation and perception. The cue to be pointed out is that the place of articulation of /ng/ is the same as that of /k/. It is extremely difficult for most students to distinguish the two types of sound /ng/ and /n/ in perception. In fact, the Japanese orthography has only one syllabogram "n" for the syllabic types of sound /m/, /n/ and /ng/ such as in the words, "*tombo*", "*hantai*", "*kenkou*". Of course, the difference between the two types of sound /ng/ and /n/ does not cause serious communication breakdown. However, conscious awareness of the place of articulation is essential for students to produce any types of sound with confidence. But for clear presentation of the place and manner of articulation, ambiguous or the wrong articulation could be

fossilized easily through the process of pair work or group work in EFL settings.

Two kinds of homework are also assigned for Lesson 7. The first one is writing down in the notebook the four combinations of consonant letters introduced in this lesson as fast, and as clearly as possible while pronouncing the types of sound that each combination usually represents. The second one is preparing for dictation in Lesson 8. This time, the students are warned that any new and unfamiliar one-syllable words besides the words covered in Lesson 1 through 7 might be used as dictation items.

If necessary, the teacher can give a review lesson at this point. He/she can investigate how well the students have developed the automatic processing of transcribing the types of sound into corresponding letters through new and unfamiliar words in dictation. The purpose of this review lesson is to give the students confidence in transcribing a considerable number of new and unfamiliar words, just employing the rules they have already learned. Consequently, the number of real new and unfamiliar words used in dictation should be limited. Two to three items out of twenty are enough. After marking in pair work, some of the low scorers are asked to repeat some words from the blackboard so that they may fix them in their memories.

1.5 Lowercase Letters in Review Activities

No lowercase letters are introduced or employed until Lesson 7. The intention is to have the students concentrate merely on the relationships between sounds and letters. Lesson 8 reviews the relationships between vowel sounds and vowel letters, using the lowercase letters. Lessons 9 and 10 review the letter/sound link introduced

in Lessons 2 and 3, respectively. Lesson 11 also reviews those relationships presented in Lessons 4 and 5, introducing the lowercase letters. Lessons 12 and 13 correspond to Lessons 6 and 7, respectively, using all the lowercase letters.

At this stage, stress accent is explicitly demonstrated through two-syllabled words. There are two reasons. First, stress accent is critical in real communication. Second, the position of primary word stress can be predicted with some probability. In other words, the first syllable of any word of COBUILD 2,000 that bears the primary stress when they are read aloud separately is between 60% and 70%, according to rough estimation. Having students with high cognitive skills realize this fact is extremely practical because this piece of information automatically reveals what kind of words they have to memorize cognitively concerning stress accent.

For intermediate students, instruction on certain relationships between particular combinations of letters and the position of stress accent is also helpful. For instance, the positions of primary stress in words beginning with "a-", "be-", "de-", "dis-", "in-", "re-" or "sub-", and words ending with "-ic", "-ate" or "-ese" can be introduced from time to time. In addition, clarifying stress accent also helps students learn how to deal with unstressed vowels in an unfamiliar word, namely pronounce some of them successfully with reduced vowels (Gimson, 1980, pp. 261-64). After the students become able to write any sentences in block letters freely and comfortably, the relationships between each letter and its typical type(s) of sound are reviewed again, introducing the cursive form of regular writing, which also has capital letters and lowercase letters.

The preceding sections described the basic techniques of New Phonics for Grade

7. Yukina (in press) describes the concrete examples of Lessons 1 through 13 together with the list of units used throughout the year. Each unit, which is originally designed to be introduced one per week, is different in nature from Lessons 1 through 13. As mentioned above, listing a large number of materials in those units is not for the purpose of suppressing other teaching materials in the classroom, but for the reference of practitioners who might be interested in relating materials for this letter/sound link to the materials of an authorized textbook.

The order of presentation of those units do not have any strictness as in Lessons 1 through 13. In other words, the list of units is more like a memorandum for teachers so that the teacher could select any units or any items from the entire series of units according to his/her students' aptitude, ability, interest and needs. After introducing basic relationships between letters and types of sound in Grade 7, New Phonics for pre-intermediate learners has the Grade 8 students tackle the difficulties of the vowel/spelling link.

2 Exercises in New Phonics

As is often the case with an ordinary school grammar of syntax, just presenting cognitive knowledge does not improve students' performance in language use. In short, exercises that make the controlled processing into the automatic processing are crucial. Two characteristic exercises are adopted for New Phonics for beginners throughout the year. Those two exercises are repeating after a recording as a fluency activity, and taking dictation as an accuracy activity (Murphy, 1991, pp. 62-3).

One of the characteristic exercises of New Phonics for automatizing cognitive

knowledge about the letter/sound link is repeating after a recording. The exercise of having an individual student, a group of students, or the whole class repeat after the recording of teaching materials from the textbook has long been employed in a number of classrooms even where the focus is on the grammar/translation since tape recorders are available at a fairly low cost in Japan. However, the exercise used in New Phonics is slightly different from those exercises in two points. First, the students are not allowed to see the scripts before and during the exercise. Second, the students are not expected to repeat exact bits and pieces of the sentence, let alone to understand the meaning of what they repeat.

The other characteristic exercise of New Phonics is dictation. Dictation is used for three reasons. The first reason is related to Savignon's suggestion about ideal activities (1991, p. 269). Dictation might be used as one of the few activities which contribute to the integration of form-focused exercises and meaning-focused experience. Second, dictation can be interpreted as a base for note-taking skills, which are essential for those who intend to study at institutions of higher education. Finally, dictation can be used as a measure of communicative competence (Savignon, 1982, p. 45).

2.1 Repeating after a Recording

In the exercise of repeating after a recording, one student is asked at a time to repeat one sentence or part of it of the target materials after listening to a recording without looking at the textbook. This exercise focuses on fluency, which reveals the student's integrated skills of reconstruction, and checks what kind of phonetic cues that students can not use (Brown, 1990, p. 12).

The purpose of this exercise is to have the students perceive and imitate not only each segment of the sound but also authentic intonation patterns at their best so that they can learn some clues to obtain as much "auded" input in authentic listening as possible (Yukina, 1996, pp. 30-32). When students are allowed to look at the written text, it becomes next to impossible for them to be free from the interference from the sound system of the Japanese language through the visual images of letters. They are then far from concentrating on physical sound. In other words, they become hardly able to re-categorize the stream of sound on their own.

Of course, it is hard for those who have never had access to authentic listening to repeat an English sentence aloud at first. The exercise of repeating after a recording becomes unexpectedly easy when students are asked to repeat the same sentence over and over, starting with the last word and gradually expanding from the last meaning unit to the whole sentence. They soon become accustomed to repeating an unfamiliar sentence, taking good advantage of reduced sounds for unstressed syllables with considerable accuracy (Gimson, 1980, pp. 127-8). In the process of repeating and imitating exactly what they have heard, the students come to realize without any cognitive explanation that most of the vowel letters in an authentic sentence are reduced to a "schwa" except for those carrying word stress or sentence stress. Through the exercise, the students are set free from the idealistic view on pronunciation (Brown, 1990, p. 2).

2.2 Dictation as a Review

As for the exercise of dictation, appropriate items for the dictation have to be

selected. As was mentioned above, the dictation employed in New Phonics is an exercise focusing on accuracy. Therefore, some of the sentences printed in the textbook are handy to use. Besides, the authorized textbook ought to be used anyway. The students are told to prepare for the dictation as a review of the previous lesson. Since most students are extremely sensitive to any type of test in most educational settings, an exercise of dictation is given at the very beginning of each lesson in order to have them concentrate on the lesson. As far as the authorized textbooks for Grades 7, 8, and 9 are concerned, it takes less than ten minutes to dictate all the sentences for a one-hour grammar and reading lesson unit. By means of dictation, the materials for grammar and reading in the textbook are used as those for listening. However, there are still two problems to solve: in what manner the items should be presented, and according to what criteria the answers should be marked.

2.2.1 Way of Presentation

In the exercise of dictation, the way of presentation has to be determined. According to Gillian Brown (1990), spoken English as teaching material is presented in two styles and two manners. The two styles of spoken English are interpreted as simplified speech and authentic speech (pp. 3-4). The speech in the former style is composed of easily identifiable segments or words, and has stable phonetic form. The speech in the latter style is employed by ordinary native speakers to communicate in real life. Authentic speech is difficult for language learners who are accustomed only to simplified speech because it has many phonetic cues only available for native speakers (p. 12). When having students take dictation, some teachers read sentences

aloud so slowly and clearly that the function words, the contracted forms, or the morphology would become unnaturally obvious. Although that kind of presentation appears to be considerate to the students, it actually robs the students of opportunities to learn the essential sub-skills in communicating in spoken English (Ur, 1984, p. 46). In addition, from the viewpoint of the sensitive period, this manner could be pernicious.

Brown also introduces two manners in authentic speech. Those two manners of spoken English are interpreted as the public manner and the informal manner (p. 7). The speech of the former manner, which has a transactional function, usually centers on transmitting new information. Therefore, even function words in that manner are easily transcribed. In contrast, the speech of the latter manner, which has an interactional function usually centers on reinforcing human relationships. Therefore, some segments of the sequence of sound can not be transcribed without critical information about the context where the speech has been performed. Since academic skills are considered to be the most valued in EFL settings in Japan, the transactional function of spoken English is much more relevant. Consequently, the public manner of speech is found more appropriate for this educational setting than the private manner. Then, in New Phonics for beginners, the sentences are dictated in the public manner as naturally as possible.

2.2.2 Criteria for Marking

Establishing criteria for marking is a difficult issue, especially when the answers are marked as pair work. The class members are told to exchange papers with their partners for marking and correction in New Phonics. Through this process of marking,

the students receive immediate feedback from their partner. The purpose of this exercise lies not only in automatizing the skill of transcribing perceived sound as visual letters, but also in making students sure of the sound that those letters represent. The criteria employed for marking are as follows:

- 1) Each student starts with 20 points when he/she does a dictation.
- 2) With one letter wrong or missing, he/she loses 1 point.
- 3) He/she loses 5 points at most for one word.
- 4) He/she loses 10 points at most for one sentence.

The above criteria come from my ongoing pilot research on dictation. The face validity of the criteria can be understood this way: If a student transcribes a few wrong letters for dictation, one of two cases is highly probable. First, he/she has misspelled a few words. Second, he/she has missed a few morphemes because of a lack of knowledge on syntax. Thus, a point is reduced. If a student has missed two content words in a sentence, it is highly probable that he/she has misunderstood the sentence because two words usually mean more or less 20% of each sentence in the textbook. Each sentence is composed of about ten words. If a student has missed two sentences, it is highly probable that he/she has misunderstood the entire text because two sentences usually mean more or less 20% of each section of the textbook. Each section is composed of about ten sentences.

The idea is that the points given to an answer should reflect the degree of the student's understanding of the entire text to some extent. However, some more empirical research should be done before the criteria are generalized and adopted as the ones for other types of test such as the norm referenced test for students at various levels.

The criteria are sometimes changed slightly according to the level and the number of the students in the classroom even in New Phonics for beginners.

The above criteria certainly seem to be a little too severe. There are two reasons, however, for adopting those criteria. First, the criteria ought to be strict so that the students know how well they have reviewed the previous lesson in terms of phonology as well as syntax. The number of the wrong sentences does not give the student nor the teacher much information. Second, the criteria ought to be clear and fair enough to have the students mark efficiently with confidence.

Every day, while the students are marking, the teacher has time to circulate, checking their homework assignments. Besides completing the corresponding section of the workbook, there are two major assignments on a daily basis. One of them is only for those who score less than zero in dictation. They are told to write down in their notebook every sentence of the test three times. The other assignment is to translate the transcript of the dictation (which is exactly the same as the unit covered in the previous lesson) into Japanese as a review. This exercise of translation, which is often criticized as ineffective, is employed for two reasons. First, through this process of translation, students consciously realize and spot what they do not perfectly understand. Second, it is easy for the teacher to identify, while circulating, what students do not understand during the previous series of lessons. In fact, it is extremely useful for the teacher to receive feedback about the lessons directly from the students by means of examining in what way each student understands or misunderstands each sentence. It is often the case that students do not make mistakes in the way the teacher expects.

3 Materials for New Phonics

Because New Phonics for beginners focuses on word-level phonology, vocabulary control is a serious issue for selecting teaching materials for the course. However, too much simplification in the classroom hardly helps students in the authentic communication situation (Brown, 1990, p. 6). For example, too strict control over the vocabulary does not improve students' understanding of not only the whole structure of phonology but also of authentic discourse because native speakers naturally use a fairly large amount of vocabulary unconsciously when they talk with other native speakers (Widdowson, 1979, p. 197).

Recently, a number of frequency count word lists (e.g., West, 1969; Hofland & Johansson, 1982) have become available. The problem lies in which part of which list should be employed for the course because there are significant differences among the lists. Employing COBUILD 2,000 has bright prospects for the future because about 87% of the current words of authentic texts in written English are claimed to be on the list of COBUILD 2,000 (Nation, 1990, p. 14). As far as reading and listening materials of second/foreign language learning are concerned, the percentage could be probably much higher because words in those materials are usually selected according to a more simplified word list.

In contrast, there are three criticisms about adopting and adapting COBUILD 2,000. First, the list is based on research on British written discourse. As Gimson (1980, p. 302) suggests, from the viewpoint of geography, American English might be a better choice for Japanese learners who mostly live and work in the countries around the Pacific Ocean. Besides, written discourse is different from spoken discourse in terms

of vocabulary. Second, this rather large range of vocabulary, which British people use in their daily life, must be a burden to Japanese students in a setting where English is taught as a foreign language. Finally, too strict control over the size of the vocabulary would not improve students' understanding of the letter/sound link in the English language (Yukina, 1998b, pp. 217-18). This would be contrary to expectations. For example, it is hardly possible to construct a set of rules about phonology from the bare list of the vocabulary selected by the Ministry of Education. However, vocabulary control is another serious issue, which goes far beyond the scope of this discussion. The issue should be kept in hand for future empirical research.

Thus, the drawn conclusion was as follows: It would be necessary to introduce as many words that would follow the basic rules from COBUILD 1,000 as possible. On the other hand, exceptions of the rules should be first selected from COBUILD 2,000 because the existence of exceptions of high frequency of use would indicate the limitation of each basic rule. Also, exceptional words of the level far beyond COBUILD 2,000 could be enumerated to clarify the limitation of rules for practitioners' reference.

For most students, however, it does not seem to be a burden to present the basic rules of this letter/sound link with those exceptional words, even without any meanings. Many junior high school students easily memorize and sing English songs and parts of them without knowing their meanings. Moreover, it would not be a waste of time to have the students associate an auditory image by the sound of a word with a visual image by its spelling as a very first step to expanding their receptive vocabulary if it is a high-frequency word. Namely, memorizing words or fragments of words by sound

could help students recognize which word or which part of a word they do not understand or recognize when they come across an unfamiliar sequence of sound. In that case, they could construct probable words, taking good advantage of the consonants and vowels they have positively perceived. Then, they could consult a dictionary to identify enough words to understand the meaning of the sequence of sound.

Conclusion

Many factors should be taken into consideration in adopting, adapting and designing any new course for second/foreign language teaching: age, language aptitude, interest, needs, motivation, learning style, previous knowledge of the target language, and cognitive knowledge. Among other things, both motivation and the relationship between the target language and the mother tongue is often ignored because second/foreign language learning has been considered as a collection of homogeneous human activities. New Phonics for beginners has been designed and developed in the light of those factors.

Most practitioners in Japan seem to have paid little attention to phonetic forms even at beginning levels, since the Communicative Approach was introduced. However, the focus of instruction should be changed according to learners' skill levels. Learners are expected to practice sub-skills that are critical at their levels as well as to repeat integrated activities they can perform at their levels. Instructional objectives and ultimate goals belong to two different categories. It is sometimes efficient for some specific learners to do certain activities that look quite different from the language skill they really need to acquire in the long run.

Although the letter/sound link in the English language introduced in New Phonics for beginners is expected to be understood, memorized and used immediately after being introduced, even this simplified version of the letter/sound link with priorities indicated is found far too complex and complicated for the target beginners. Therefore, basic rules and their exceptions are presented and practiced by means of the characteristic techniques and exercises of the course over and over again throughout Grades 7 and 8, and even in Grade 9.

In short, as for techniques and exercises in the classroom, those of grammar and reading materials in the authorized textbook should be thought out because the textbook is packed with syntactical rules with a bare list of limited vocabulary. Thus, dictation using written materials in the textbook might be one of the prospective activities that contribute to integrating form-focused exercises on the grammar/translation with those of the letter/sound link. Also, most students feel at ease when the materials are presented like those of other subjects such as history or science. As far as teaching materials are concerned, vocabulary control for this innovative course is an important issue for future research. In other words, empirical research studies on vocabulary control for beginners are required for refinement because the simplicity of the letter/sound link on which New Phonics for beginners are based depends heavily on selection of words.

In sum, what is really required of course designers of second/foreign language teaching does not seem to be a brand-new course but rather empirical data about the results of the application of existing courses with precise descriptions of their adaptation, the learners and the teaching context. Only precise data can make it possible for other

practitioners to make a better choice in designing a different course which is most appropriate for their target learners in a particular teaching context. Designing a course prompted by practitioners' intuition as well as by administrative coercion not only interferes in the smooth and favorable development of methodology in second/foreign language teaching, but also could finally leave both practitioners and learners with the process of making the same mistakes made by preceding generations over and over again.

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A Study of the Acquisition of Unaccusative Verbs *break* and *fall*

by Japanese Learners of English¹

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The purpose of this paper is (1) to call into question the data of grammaticality judgment tasks (GJT) on which several GB-based studies on the second language acquisition of the unaccusative verbs by Japanese learners of English base their arguments and (2) to report on the results of a pilot study. The results of the pilot study show that students are sensitive to the context and that they conceptualize the meanings and argument structures of the two unaccusative verbs *break* and *fall* in various ways.

1. Introduction

Previous research as well as our own experience as teachers of English suggest that students have problems with the usage of particular kinds of verbs; unaccusative verbs such as *break* and *fall* whose subject NP takes a thematic role of theme or patient.

So far there has been a lot of discussion of intransitive verbs concerning the distinction between unergative verbs and unaccusative verbs. This distinction based on some empirical motivation from Italian verbs is often referred to as the Unaccusative Hypothesis, as in (1). This hypothesis was first formulated by Perlmutter (1978) within the context of Relational Grammar and later adopted by generative linguists.

Unaccusative Hypothesis

- (1) a. Mary worked. (unergative)
b. Mary arrived. (unaccusative)

¹ This is based on a paper read at the 3rd Japan-Korea Association of Applied Linguistics (JKAAL) conference held at Sungkonghoe University, Seoul, Korea, 3-5 August 1998. I would like to thank Victoria Muehleisen for her collaboration in this research. This research was supported by a grant (98A-092) from Waseda University.

In (1a) the subject *Mary* is the agent, while in (1b) the subject *Mary* is the theme or patient. Please note that unaccusative verbs are also known as ergative verbs and that there is still considerable confusion over the terminology (e.g. Crystal 1997).²

According to GB-theory, although (1a) and (1b) look alike on the surface, the members of the two classes are associated with the D-Structure syntactic configurations schematized in (2).

D-Structure syntactic configurations

(2) a. Unergative verbs: NP [_{vp}V]

b. Unaccusative verbs: [_{vp}V NP]

An unergative verb takes a D-Structure subject and no object, as in (2a). And its S-Structure is identical to the D-Structure. On the other hand, an unaccusative verb takes a D-Structure object and no subject, as in (2b). The unaccusative verb is unable to assign accusative case to its complement NP because it lacks an external argument (the underline). Therefore, at S-Structure the NP will have to move to the subject position to be case-marked.

² Two textbooks on GB-theory and one student grammar book may illustrate this point. Haegeman (1994) uses the term 'unaccusative' for passive verbs, raising verbs and verbs of motion and (change of) state, while one-argument verbs like *sink* are referred to as 'ergatives'. Napoli (1993:293) makes a distinction between 'unaccusatives' and 'middles' as follows:

unaccusative: The bottle broke when she knocked it over.

middle: Glass bottles break easily if you knock them over.

The Collins COBUILD grammar (1990:155) defines 'ergative verbs' as follows:

Verbs which can have the same thing as their object, when transitive, or their subject, when intransitive, are called **ergative verbs**. For many students of English, the ergative verb is a new idea, and may take a little time to learn.

However, it is an important type of verb, as the common examples below make clear. There are several hundred ergative verbs in regular use in current English. In the last case 'ergative verbs' are used to refer to both intransitive and transitive verbs.

Some linguists make a further distinction between alternating unaccusative verbs and non-alternating unaccusative verbs. Alternating unaccusative verbs such as *break* have transitive counterparts, as in (3b). According to Levin and Rappaport Hovav (1996), the intransitive form of an alternating verb like *break* (3a) is derived from the causative form (3b). In short the surface subject of unaccusative verbs originates in the object position. On the other hand, non-alternating unaccusative verbs such as *fall*, *arrive* and *happen* can only occur as unaccusative verbs, as in (4)-(6).

Two types of unaccusative verbs

A. alternating unaccusatives (unaccusatives with a transitive counterpart)

(3) a. The window broke.

b. John broke the window.

B. non-alternating unaccusatives (unaccusatives without a transitive counterpart)

(4) The leaves fell.

(5) The guests arrived.

(6) Something happened.

Within the framework of GB-theory just mentioned, several studies have been made thus far on the acquisition of unaccusative verbs by Japanese learners of English (Shomura 1996, Hirakawa 1997, Tomita 1998, etc.). Hirakawa (1997), for example, concludes that although Japanese learners of English were sensitive to not only the distinction between unergatives and unaccusatives but also the two classes of unaccusatives just like native speakers, they, unlike native speakers, had two problems in the process of acquisition. One problem is that unaccusatives are harder to acquire than

unergatives because of syntactic characteristics. The other problem is that alternating unaccusatives are more difficult (see Shomura (1996) for the opposing argument, i.e., easier) than non-alternating unaccusatives because of syntactic characteristics. Furthermore, she claims that these two problems are predicted by innate principles of Universal Grammar such as the UTAH (the Uniformity of Theta Assignment Hypothesis).

Although these studies based on GB-theory use various tasks to elicit student data, there are some problems. First of all, they apparently classify the verb types based on certain syntactic features without considering the individual behaviors and semantic features of each particular verb. Second, they tend to rely heavily on the simple yes/no answers in their grammatical judgment tests without context. Therefore, the data may not actually be as reliable as they first seem to be. For example, Tomita (1998), after reviewing the previous studies in this field, still uses Grammatical Judgment Task, as can be seen in some of his examples (7)-(10).³

³ Tomita (1998) classified the verbs into three types: 'ergative verbs' (both transitives and intransitives are included; both types are referred to as 'ergative'), 'unaccusative verbs' (only intransitives are included) and 'unergative verbs' (only intransitives are included). Then he conducted three tests: a meaning test, a grammatical judgment task and a suffix *-able* attachment task. The meaning test was conducted to see if the students can translate the English verbs into Japanese. The grammatical judgment task was the one explained above. And the suffix *-able* attachment task was done to examine whether the students knew that they could attach *-able* to the 'ergative verbs'.

Based on the results of the meaning test, eight verbs which had the highest rate of correct responses were selected for each verb type, that is, *change, dry, move, open, close, stand, break, and roll* for 'ergative verbs'; *happen, live, stay, arrive, fall, appear, occur, and exist* for 'unaccusative verbs'; *dance, smile, swim, cry, jump, sleep, speak, and work* for 'unergative verbs'. He combined the results of the three tests and calculated the average scores for the eight verbs in each type.

The results were as follows. In the case of 'ergative verbs' no verb exceeded the targeted 40% correction rate. In the case of 'unaccusative verbs' three verbs exceeded the targeted 40% correction rate. And in the case of 'unergative verbs' seven verbs exceeded the targeted 40% correction rate. Therefore he concluded that 'ergative verbs' are the most difficult to acquire.

Grammatical Judgment Task (from Tomita 1998)

Direction: In the statements below, which verbs do you feel are correctly used? Circle "a" and/or "b".

A. alternating unaccusative verbs ('ergative verbs' in Tomita's terms)

Correct Judgment (%)

break (Results of Meaning Test=92.31)

- | | |
|-----------------------------|-------|
| (7) a. Jane broke the vase. | 92.71 |
| b. The vase broke easily. | 9.38 |

move (Results of Meaning Test=99.04)

- | | |
|--|-------|
| (8) a. The little boy moved the big stone. | 79.61 |
| b. The big stone moved. | 55.34 |

B. non-alternating unaccusative verbs ('unaccusative verbs' in Tomita's terms)

fall (Results of Meaning Test=85.58)

- | | |
|---|-------|
| (9) a. *Mayumi fell her watch on the floor. | 30.34 |
| b. Mayumi's watch fell on the floor. | 44.94 |

arrive (Results of Meaning Test=86.54)

- | | |
|--|-------|
| (10) a. *The plane arrived Ken'ichi in time. | 76.67 |
| b. Ken'ichi arrived in time. | 94.44 |

Grammatical judgment tests without context such as this one may be useful for checking the understanding of some other grammatical constructions in English. But in the case of unaccusativity, grammatical judgment tests without context may be problematic on two points. First, the numbers of arguments in two sentences in a pair are not the same. That is, the amount of information given in a test sentence is not the same. For example, when students are faced with a pair such as (7), they

may be more inclined to accept the one having two arguments including a person as the agent, (7a), than the other having only one argument, (7b), because the former may make it easier for them to create a context in their mind. Second, the data from students who have little or no training in linguistics may be incomplete without looking into what kind of criteria students might use for their grammatical judgment. Some might reject 'The big stone moved' in (8b), for instance, just because they might think that a stone is highly unlikely to move by itself, at least not in the real world.

Although it is beyond the scope of this paper to discuss in depth the validity of grammatical judgment tasks in GB-based SLA studies, I will present the results of a pilot study which is designed to elicit more reliable student data in the following section.

2. The pilot study

2.1. Purpose

The purpose of this pilot study was (1) to investigate whether students are sensitive to the context in choosing/interpreting verbs and (2) to gain an understanding of the Japanese learners' conception of the meanings and argument structures of two unaccusative verbs, the alternating verb *break* and the non-alternating verb *fall*.

2.2. Subjects

The subjects were 44 Japanese EFL students. Of those 44, 35 were undergraduate students and 9 were graduate students at Waseda University, Tokyo.

Of the 35 undergraduate students, 8 students were enrolled in an Elementary class, 8 students in an Intermediate class, 9 students in an Advanced class at the Institute of Language Teaching. Which class students are enrolled in is based on students' self-selection and/or consultations with

the instructor. These students come from various departments. And 10 undergraduate students are seniors majoring in English at the School of Education.

Of the 9 graduate students, 6 students are English Literature majors and 3 students are Applied Linguistics majors at the Graduate School of Education.

As native controls, 5 native speakers of English (American graduate students) participated in this experiment. According to the Japanese language instructor who teaches them, they had no trouble understanding the directions in the test sheets because they were all very proficient in Japanese.

2.3. Materials and procedure

Two test sheets were used in this study. First, the subjects were given the first test sheet. Then, after completion, they were given the second test sheet.

The first test sheet was Contextualized Translation Test in which the subjects were asked to write four English sentences which would correspond to the Japanese cues so as to fit the discourse context (see appendix 1). The second test sheet consisted of Multiple Choice Judgment Test and Guided Composition (see appendix 2). Contextualized Translation Test and Multiple Choice Judgment Test are developed from the original multiframe cartoon (see appendix 3).

One of the reasons to conduct Contextualized Translation Test and Multiple Choice Judgment Test on the same material was to investigate whether students have a tendency to avoid the intransitive form of *break* in question 4.

Furthermore, since it was one of the points to find out what kind of explanation they would give for rejection, ambiguous words such as *good* and *bad* were deliberately used in the directions of the Multiple Choice Judgment Test in order to give the subjects some leeway to make their own

decisions as to whether to answer based on pragmatics or based on grammaticality.

As for the Guided Composition, the adverb *just* was placed before the blank in order to guide subjects toward the use of intransitive *break*. The reason is that in a situation where the speaker has no idea as to what went wrong with something, or tries to avoid responsibility in some way, it is usually the case that an adverbial such as *just* or *by accident* is inserted before the verb.

3. Results and discussion

3.1. Contextualized Translation Test

TABLE 1 shows the results of the Contextualized Translation Test.

TABLE 1

The Results of the Contextualized Translation Test

| | Controls n=5 | E n=8 | I n=8 | A n=9 | N n=10 | G n=9 | Total(%) n=44 |
|----------------------------------|-----------------|----------|----------|----------|-----------|----------|------------------|
| 1 transitive use of <i>break</i> | 5 | 8 | 7 | 8 | 7 | 6 | 36(82%) |
| other uses | 0 | 0 | 1 | 1 | 3 | 3 | 8(18%) |
| Total | 5 | 8 | 8 | 9 | 10 | 9 | 44(100%) |
| 2 transitive use of <i>break</i> | 5 | 7 | 8 | 5 | 9 | 6 | 35(80%) |
| other uses | 0 | 1 | 0 | 4 | 1 | 3 | 9(20%) |
| Total | 5 | 8 | 8 | 9 | 10 | 9 | 44(100%) |
| 3 transitive use of <i>drop</i> | 5 | 2 | 5 | 6 | 3 | 3 | 19(43%) |
| transitive use of <i>fall</i> | 0 | 2 | 2 | 1 | 4 | 2 | 11(25%) |
| other uses | 0 | 4 | 1 | 2 | 3 | 4 | 14(32%) |
| Total | 5 | 8 | 8 | 9 | 10 | 9 | 44(100%) |
| 4 passive use of <i>break</i> | 0 | 4 | 3 | 3 | 2 | 4 | 16(36%) |
| 'broken' | 0 | 1 | 2 | 1 | 4 | 0 | 8(18%) |
| transitive use of <i>break</i> | 0 | 2 | 2 | 2 | 0 | 2 | 8(18%) |
| intransitive use of <i>break</i> | 5 | 0 | 1 | 0 | 0 | 0 | 1(2%) |
| other uses | 0 | 1 | 0 | 3 | 4 | 3 | 11(25%) |
| Total | 5 | 8 | 8 | 9 | 10 | 9 | 44(99%*) |

Note: *The total equals less than 100% due to rounding. E=Elementary class; I=Intermediate class; A=Advanced class;

N=Nakano Seminar; G=Graduate School.

The answers given by the native speakers were basically the same in every question. However, the answers given by the Japanese students were varied. In question 3, for example, 11 students out of 44 (25%) used the ungrammatical transitive use of *fall*. And, in question 4, although all 5 native speakers used the intransitive use of *break*, only 1 Japanese student out of 44 (2%) used it.

3.2. Multiple Choice Judgment Test

3.2.1. The results of native speakers' judgment on the Multiple Choice Judgment Test.

TABLE 2 displays the results of native speakers' judgment on the Multiple Choice Judgment Test.

TABLE 2

The Results of Native Speakers' Judgment on the Multiple Choice Judgment Test

| | | 1 | 2 | 3 | 4 | 5 | Total | |
|-------|-------------------------------|---------------------------|---|---|---|---|-------|---|
| 1 (a) | It broke by accident | ungrammatical | O | X | X | X | X | 1 |
| (b) | I just broke them by accident | pragmatically appropriate | O | X | O | O | X | 3 |
| (c) | They broke by accident | grammatical | O | X | X | O | O | 3 |
| 2 (a) | Dad's binoculars broke | grammatical | △ | O | X | O | O | 3 |
| (b) | Dad's binoculars broken | ungrammatical | X | X | X | X | X | 0 |
| (c) | I broke Dad's binoculars | pragmatically appropriate | O | O | O | O | O | 5 |
| 3 (a) | They just fell | grammatical | X | O | X | O | O | 3 |
| (b) | I just fell them | ungrammatical | X | X | X | X | X | 0 |
| (c) | I just dropped them | pragmatically appropriate | O | O | O | O | O | 5 |
| 4 (a) | (And) they were broken | grammatical | △ | △ | X | O | X | 1 |
| (b) | (And) they broke | pragmatically appropriate | O | O | O | O | O | 5 |
| (c) | (And) they break | ungrammatical | X | X | X | X | X | 0 |

Note: A triangle indicates that subjects specified the context under which the question item became acceptable.

In this test, (1b) *I just broke them by accident*, (2c) *I broke Dad's binoculars*, (3c) *I just dropped*

them, and (4b) (And) *they broke* were supposed to be pragmatically appropriate answers because these expressions were exactly the same as in the original cartoon. However, in question 1, two native speakers rejected the original line (1b) because *by accident* and *just* sounded unnatural to them, respectively.

Each question contains three choices; one pragmatically appropriate sentence, one grammatical sentence, and one (situationally) ungrammatical sentence.

Two patterns will emerge from the table. One native speaker (NS3) chose only pragmatically appropriate answers, while the other native speaker (NS4) chose all the grammatical answers including pragmatically appropriate ones. In other words, NS3 is pragmatically-oriented, while NS 4 is grammatically-oriented. It should be added that none of the Japanese students responded pragmatically in all the questions as NS3, while only one Japanese student responded grammatically in all the questions as NS 4.

3.2.2. The Results of Japanese Learners' Judgment on the Multiple Choice Judgment Test

TABLE 3 presents the results of the Multiple Choice Judgment Test.

TABLE 3

The Results of Japanese Learners' Judgment on the Multiple Choice Judgment Test

| | E n=8 | I n=8 | A n=9 | N n=10 | G n=9 | Total(%) n=44 |
|-----------------------------------|----------|----------|----------|-----------|----------|------------------|
| 1 (a) It broke by accident | 1 | 0 | 0 | 1 | 1 | 3/44(9%) |
| (b) I just broke them by accident | 8 | 7 | 8 | 10 | 9 | 42/44(95%) |
| (c) They broke by accident | 1 | 2 | 1 | 2 | 1 | 7/44(16%) |
| 2 (a) Dad's binoculars broke | 1 | 4 | 2 | 1 | 4 | 12/44(27%) |
| (b) Dad's binoculars broken | 6 | 3 | 3 | 9 | 1 | 22/44(50%) |
| (c) I broke Dad's binoculars | 8 | 8 | 9 | 9 | 8 | 42/44(95%) |
| 3 (a) They just fell | 5 | 4 | 3 | 4 | 6 | 22/44(50%) |
| (b) I just fell them | 3 | 3 | 2 | 3 | 1 | 12/44(27%) |
| (c) I just dropped them | 7 | 8 | 9 | 8 | 7 | 39/44(89%) |
| 4 (a) (And) they were broken | 8 | 8 | 9 | 9 | 8 | 42/44(95%) |
| (b) (And) they broke | 2 | 3 | 2 | 2 | 4 | 13/44(30%) |
| (c) (And) they break | 0 | 0 | 0 | 1 | 1 | 2/44(5%) |

The number indicates the number of subjects who drew a circle, or said okay to each choice. Two points need to be made here. First, the reaction to question 3 shows that the students do not have a very good grasp of the verb *fall* because 12 out of 44 (27%) accepted the ungrammatical transitive use of *fall*. Second, a number of students chose (4a) over (4b), quite contrary to the reaction by the native controls.

3.2.3. On avoidance of intransitive use of *break* in question 4

In the Contextualized Translation Test, 16 students out of 44 used the passive form of *break*. Of those 16, only one student accepted (4b) in addition to (4a) in the Multiple Choice Judgment Test. This result refutes my assumption that students would use avoidance strategy (i.e., choose the passive form rather than the intransitive although they know both forms are possible) because they feel more secure in using the passive form.

3.2.4. The results of *fall* (question 3)

The students adopted three strategies in answering the question 3. That is, out of 44 students, 17 students used Strategy A (grammatically-oriented), 13 students used Strategy B (pragmatically-oriented) and 8 students used Strategy C (the other frequently used strategy).

17 students gave grammatically-oriented answers to question 3, as in TABLE 4.

TABLE 4

Strategy A: grammatically-oriented (n=17)

3 a. They just fell. (O) / b. I just fell them.(X) / c. I just dropped them.(O)

Reasons for rejecting (3b):

| | |
|---|----|
| <i>Fall</i> has only intransitive use. | 9 |
| <i>Fall</i> means 'ochiru' in Japanese. | 3 |
| <i>Fall</i> should be changed to 'dropped'. | 2 |
| Unclear explanation | 2 |
| No response | 1 |
| Total | 17 |

We can say from the reasons given that the 9 students who stated that 'Fall has only intransitive use' know the behavior of the verb *fall*. On the other hand, we may not be so sure of the 3 students who cited the Japanese verb *ochiru*. They probably accepted (3a) because the Japanese verb *ochiru* is usually used to refer to something falling. If they have only a one-to-one correspondence between *fall* and *ochiru*, they probably would reject such sentences as *I (John) fell* and *I (John) fell down* which are translated by using another Japanese verb *korobu*.

13 students gave pragmatically-oriented answers to question 3, as in TABLE 5.

TABLE 5

Strategy B: pragmatically-oriented (n=13)

3 a. They just fell. (X) / b. I just fell them. (X) / c. I just dropped them. (O)

Reasons for rejecting (3a):

| | |
|--|----|
| Calvin made them fall and/or they didn't fall by themselves. | 6 |
| It should be passive. | 2 |
| Unclear explanation | 5 |
| Total | 13 |

Reasons for rejecting (3b):

| | |
|---|----|
| <i>Fall</i> should not be used in this case. | 5 |
| <i>Fall</i> means that someone 'falls' something intentionally, i.e., someone intends to make them fall. Therefore, it is not appropriate in this situation because Calvin did not make them fall on purpose. | 2 |
| <i>Fall</i> has only intransitive use. | 1 |
| <i>Off</i> should be added to the sentence. | 1 |
| No response | 4 |
| Total | 13 |

On the surface, we may conclude from these results that those 13 students were really sensitive to the context and that they had a fairly good grasp of the verb *fall* just like the native controls. However, when we start looking into what they had to say, we will soon realize that those results are really misleading. In other words, what may be true of native speakers is not necessarily true of Japanese learners of English.

First, consider their reasons for rejecting (3a). 6 students showed some sensitivity to the context by stating that 'Calvin made them fall and/or they didn't fall by themselves'. And we can say that the 2 students who stated that 'It should be passive' mistakenly believe that *fall* can be used transitively.

Next, consider their reasons for rejecting (3b). It is interesting to note that the 2 students stated that 'fall means that someone falls something intentionally, i.e., someone intends to make them fall. Therefore, it is not appropriate in this situation because Calvin did not make them fall on purpose'. They falsely believe that *fall* can be used transitively in certain contexts, but not in this context.

8 students responded as follows.

TABLE 6

Strategy C: the other frequently used strategy (n=8)

3 a. They just fell. (X) / b. I just fell them. (O) / c. I just dropped them.(O)

Reasons for rejecting (3a):

| | |
|--|---|
| Calvin made them fall and/or they didn't fall by themselves. Intransitive <i>fall</i> is used to refer to something falling naturally without any force. | 6 |
| A person should be a subject. | 2 |
| Total | 8 |

We may think that those 6 students rejected (3a) because of their lack of knowledge that *fall* is intransitive. But their reason suggests that they did not necessarily reject the intransitive use of *fall* outright. Rather, they were sensitive to the context according to their own intuitions.

3.2.5. The results of *break* (questions 1, 2, and 4)

TABLE 7 shows the results of *break*.

TABLE 7

The results of *break*

Reasons for rejecting (1c), (2a) and (4b):

| | |
|--|----|
| The binoculars were broken by Calvin, so it should be passive. | 7 |
| A thing in the subject position is unacceptable. | 4 |
| <i>Break</i> means to break naturally without any force | 3 |
| <i>Break</i> has transitive use only. | 2 |
| Binoculars cannot break their own body. | 2 |
| Binoculars cannot break a thing. | 2 |
| Binoculars are not something that breaks by itself. | 1 |
| It lacks an object | 1 |
| Unclear explanation | 5 |
| Total | 27 |

Note: Number of students who rejected (1c), (2a), and (4b), that is, all the intransitive uses of *break* = 27

In the case of *break*, we will only look into the data by the students (n=27) who rejected (1c), (2a), and (4b), that is, all the intransitive uses of *break*. The reason is that by the time the students got around to question 4, they might have gotten some hints on the use of intransitive use of *break*.

Please note that their answers were combined because the same types of answers were given throughout all the three choices. We can say that 7 students who said that 'the binoculars were broken by Calvin, so it should be passive' and 3 students who said that 'break means to break naturally without any force' were sensitive to the context. It is interesting to note that for those students who stated that 'binoculars cannot break their own body' (2 students), 'binoculars cannot break a thing' (2 students), and 'binoculars are not something that breaks by itself' (1 student), binoculars are conceptualized as something to be broken, not something to break by themselves.

Also, 4 students said that 'a thing in the subject position is unacceptable' and 2 students said 'break has transitive use only'. Therefore, we can conclude from these results that at least these 6

students think that the intransitive use of *break* such as *they broke* is ungrammatical.

3.3. Guided Composition

TABLE 8 shows the results of the Guided Composition.

TABLE 8

The Results of the Guided Composition

| | Controls n=5 | E n=8 | I n=8 | A n=9 | N n=10 | G n=9 | Total n=44 |
|---|-----------------|----------|----------|----------|-----------|----------|---------------|
| broke | 5 | 0 | 1 | 0 | 2 | 2 | 5 |
| broke+by/of themselves/itself | 0 | 2 | 0 | 0 | 2 | 3 | 7 |
| broke+although . . . | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| had broken | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| ?broke down | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| were broken | 0 | 2 | 1 | 0 | 1 | 1 | 5 |
| are broken | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| have been broken | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ?broken | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| fell | 0 | 0 | 0 | 2 | 1 | 1 | 4 |
| fell+by/of themselves/itself, by accident | 0 | 3 | 2 | 0 | 1 | 1 | 7 |
| ?fell down | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| ?fell down by themselves | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| dropped | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| dropped from my hands | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| were dropped by the wind | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| other uses | 0 | 0 | 0 | 3 | 1 | 0 | 4 |
| Total | 5 | 8 | 8 | 9 | 10 | 9 | 44 |

Note: A question mark indicates ill-formedness.

All 5 native speakers wrote only the verb *broke*. However, some Japanese students used the verb *fall* or *drop* contrary to my expectation that they would have no choice but to use the verb *break* in this Guided Composition. The results show many variations on each verb.

It is worth noting that in the case of *break*, 7 students added such phrases as *by themselves*. And in the case of *fall* also, 7 students added such phrases as *by themselves*. This may indicate that reluctance on the part of the students to use intransitive verbs may be somewhat overcome by the use of such phrases. In other words, both the context in this Guided Composition and the adverb *just* are not enough to make students feel safe to use intransitive *break* or *fall* only. The implication drawn from this is that students are more likely to accept intransitive *break* or *fall* with phrases such as *by oneself* even in a grammatical judgment test without context.

TABLE 9 shows the ratio of each verb used.

TABLE 9

The Ratio of Each Verb Pattern

| <i>break</i> (n=21) | | <i>fall</i> (n=11) | | <i>drop</i> (n=3) | |
|---------------------|---------|--------------------|--------------------|-------------------|---------|
| intransitive | passive | intransitive | transitive/passive | intransitive | passive |
| 14(67%) | 7(33%) | 11(100%) | 0(0%) | 2(67%) | 1(33%) |

Note: Subjects who wrote the ill-formed sentences are excluded.

Out of 21 students who used *break*, 14 used passive form of *break*, compared to 7 who used the intransitive *break*. This result indicates the tendency on the part of students to use the intransitive form of *break* more often than the passive form of *break* in a context where conveying the meaning of avoiding responsibility is required. On the other hand, in the case of *fall*, all the students used *fall* intransitively.

4. Conclusion

Several findings can be drawn from this pilot study.

First, in this pilot study, some students showed sensitivity to the context in their use of the two verbs *break* and *fall*, a fact which we would not have found out without looking into their reasoning. Some stated that intransitive *break* and *fall* mean to break and fall naturally without any force, respectively. Their conception of these intransitive verbs is somewhat narrower than that of the native speakers since it may be possible for native speakers to describe a situation where someone wants to deflect responsibility by saying “I don’t know what happened. It just broke.” This issue needs to be addressed more thoroughly in future research.

Second, this pilot study showed that Japanese learners of English did not have a good grasp of seemingly simple verbs such as *break* and *fall*. Even some of the university students have a mindset that intransitive *break* is ungrammatical, while transitive *fall* is grammatical.

Third, as the results of the Guided Composition shows, a certain context plays an important role in the students’ decision as to whether to use intransitive or passive forms. In future research it would be interesting to look into how students choose one form over another in various contexts.

Fourth, as became apparent in the reasons given, Japanese learners’ conception of the meanings and argument structures of the unaccusative verbs such as *break* and *fall* were so complex that simple yes/no answers in the grammatical judgment tests could not tell us the whole story.

Fifth, this pilot study reminded us once again that what the experimenters think they are investigating are not necessarily the same as what goes on in learners’ mind. As we saw, although the students seemed to have responded on the surface in a pragmatic way, they were actually thinking in a grammatical way, and vice versa. That is, too much reliance on simple yes/no answers may distort the overall picture of a research. Therefore, simple yes/no answers by learners need to be supplemented by other methods such as the one used in this pilot study.

As a final point, with these insights in mind, this pilot study should be modified to address

more specific research questions to gain a much better understanding of the learners' conception of these unaccusative verbs.

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L2 Input and Output: Do L2 Textbooks Contain Enough Syntactic Information?

Ueda, N., Miyasaka, N., and Yamazaki, T.

1. Introduction

When we consider the language acquisition in the early stage, the most important problem is poverty of stimulus. There are two kinds of ideas to solve this problem. Gleitman (1990) claims that syntactic information can help L1 children acquire L1 grammar at the early stage (syntactic bootstrapping). On the other hand, Pinker (1989) claims that semantic information can help L1 children form their grammar at the early stage (semantic bootstrapping). These two solutions seem not to be contradict. Rather, they are inter-dependant. But, in the very early stage of the first language acquisition, it may be plausible that syntactic information can be used by the L1 children because it would be difficult for L1 children to identify how many and what kind of semantic roles there are. Of course, information of semantic roles would be considered to be innate.

Naigles, L. R. and Hoff-Ginsberg, E. (1995) claim the plausibility of syntactic bootstrapping from their findings based on the data from mothers: (a) verbs in different semantic categories appear in different syntactic environments, and (b) individual verbs are distinguished by the set of frames in which they appear.

When we consider the second language acquisition, syntactic and semantic information is still important. To the L2 learners, one of the main information sources L2 learners can get is textbooks. However, what kind of role textbooks can play in acquisition of syntactic knowledge has not been discussed very much. And also, it has not been discussed very much whether L2 textbooks could be thought of as one of the main resources and could have the same quality as L1 input. In this research, we examine the syntactic information in textbooks.

In this research, we do two experiments by comparing the data of Naigles, L. R. and Hoff-Ginsberg, E. (1995). In Experiment 1, the difference between L1 and L2 input is examined. In Experiment 2, the effects of L2 input on L2 output are examined from the syntactic perspective.

2. Experiment 1

In Experiment 1, we examine whether there is any difference between L1 and L2 input data from the syntactic perspective: in other words, whether textbooks as L2 input include enough syntactic information or not.

2.1. Material

The maternal data from Naigles and Hoff-Ginsbergs (1995) is used as the L1 input, and the data from the junior high school and high school textbooks as the L2 input.

For Japanese junior high school students, seven kinds of textbooks (including first through third year) are published by seven different companies. We use all of them for the present analyses (*Columbus, Everyday, New Crown, New Horizon, One World, Sunshine, and Total*). In addition, the data of 8 Japanese high school textbooks for oral communication course are used (*Birdland, Crown, Echo, Expressways, Hello there!, Interact, Progressive, and Select*). These textbooks are most frequently distributed ones across Japan. (*Naigai Kyoiku* [Inside and Outside of Education] 1999). Note that we cannot get so many sentences for the data from high school textbooks because they are all task based textbooks and have a few model sentences. The texts of 29 textbooks are entered into the computer for corpus-based analyses. Eighteen verbs are chosen to analyze, which are all included in the List of the Course of Study for Lower Secondary School Foreign Languages (507 words).

2.2. Method

All the 18 verbs in the data from the textbooks (including gerunds, infinitives, and present and past participles) are analyzed according to the syntactic frames (Naigles, L. and Hoff-Ginsberg, E. 1995). The syntactic frames are based on Transformational Grammar, and the subcategorization frames are the sister nodes to the verb under the verb phrase node. We examine how many syntactic frames of textbook data can match those of the maternal data. We compare three pairs: the maternal data with the junior high school textbook data, the maternal data with the high school textbook data, and the maternal data with the total data of junior high and high school textbooks. The detail of the data is shown in Appendix.

2.3. Results

Table 1 shows the percentages that the range of the frames in each verb appeared in the textbook data do not cover that of the maternal data.

Table 1: The percentage of non-covered range in the syntactic frames.

| | Come | Go | fall | put | run | give | take | open | sit |
|--------|------|-----|------|-----|-----|------|------|------|-----|
| MD -JH | 33% | 37% | 56% | 75% | 0% | 33% | 47% | 64% | 71% |
| MD -H | 62% | 52% | 89% | 80% | 67% | 60% | 64% | 76% | 67% |
| MD- T | 33% | 22% | 56% | 65% | 0% | 33% | 47% | 55% | 59% |

| Look | See | think | like | want | hear | Know | need | listen |
|------|-----|-------|------|------|------|------|------|--------|
| 47% | 43% | 29% | 22% | 50% | 25% | 0% | 70% | 0% |
| 67% | 50% | 29% | 33% | 92% | 50% | 40% | 90% | 100% |
| 40% | 36% | 14% | 22% | 50% | 25% | 0% | 70% | 0% |

MD stands for the maternal data.
JH stands for junior high school textbook data.
H stands for high school data.
T stands for the total data of textbooks.

In Table 1, the number of the verbs which cover more than 50 percent range of the syntactic frames appeared in the maternal data is 13 out of 18 in the junior high school textbook data, 11 out of 18 in high school textbook data, and 5 in the total data of the junior high and the high school textbooks. Considering that L2 learners in Japan take the syntactic information from both junior high and high school textbooks, the L2 learners can get almost the same quality in syntactic information from the textbooks as the L1 learners can get from the maternal data.

3. Experiment 2

In Experiment 2, we examine to what extent the syntactic information in the textbooks can affect the L2 learners' output.

3.1. Material

The textbook data used in Experiment 1 are used as L2 input. We use diary data as L2 output. They are produced by 26 fourth grade students in Waseda University. They kept diaries (fifteen minutes in the class and twice a week outside the class for about three months), which were submitted to the instructor (a native speaker of English) for evaluation.

3.2. Method

We analyze all the data and classify them into the syntactic frames by using the same method as Experiment 1. Then, we compare two pairs of data to examine the effects of L2 input on L2 output: we compare the diary data with the junior high school textbook data and with the high school textbook data. Wilcoxon matched-pairs signed-ranks test is used. The analysis was performed with the statistical package (SPSS Ver. 7.5.1. J). The detail of the data is in Appendix.

3.3. Results

3.3.1. The diary data and the junior high school textbook data.

The results of almost all of the verbs in Table 2 and Table 3 are not statistically significant, while only the result of 'take' is significant. This means all the verbs except 'take' both in the diary data and in junior high school textbooks have the same syntactic information.

Table 2: The results of Wilcoxon matched-pairs signed-ranks test between the diary data and the junior high school textbook data

| | come | fall | give | go | hear | know | like | listen | look |
|--------|------|------|------|----|------|------|------|--------|------|
| -Ranks | 19 | 3 | 9 | 22 | 5 | 8 | 4 | 8 | 9 |
| +Ranks | 14 | 7 | 8 | 15 | 7 | 11 | 9 | 6 | 10 |
| Ties | 62 | 85 | 78 | 58 | 83 | 76 | 82 | 81 | 76 |
| Total | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |

| | need | open | put | run | see | sit | take | think | want |
|--------|------|------|-----|-----|-----|-----|------|-------|------|
| -Ranks | 4 | 4 | 10 | 3 | 12 | 11 | 18 | 25 | 8 |
| +Ranks | 5 | 4 | 5 | 6 | 6 | 7 | 7 | 8 | 6 |
| Ties | 86 | 87 | 80 | 86 | 77 | 77 | 77 | 62 | 81 |
| Total | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |

Table 3: The results of Z-scores of Wilcoxon matched-pairs signed-ranks test between the diary data and the junior high school textbook data

| | come | fall | give | go | hear | know | like | listen | look |
|----------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| Z-score | - | - | -.193 | - | -.435 | -.323 | - | -1.027 | -.727 |
| | 1.173 | 1.007 | a | 1.080 | b | b | 1.470 | a | b |
| | a | b | | a | | | b | | |
| 2-Tailed | | | .847 | | .664 | .746 | | .304 | .467 |
| P | .241 | .282 | | .280 | | | .141 | | |

| | need | open | put | run | see | sit | take | think | want |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Z-score | -.356 | -.497 | -.233 | - | -.176 | -.752 | - | - | -.583 |
| | b | b | a | 1.794 | a | a | 2.401 | 1.741 | a |
| | | | | b | | | a | a | |
| 2-Tailed | .722 | .619 | .816 | | .860 | .452 | | | .560 |
| P | | | | .073 | | | .016 | .082 | |

a shows that z-score is calculated based on +Rank.

b shows that z-score is calculated based on -Rank.

3.3.2. The diary data and the high school textbook data.

On the contrary to the results in Table 2 and Table 3, Table 4 and Table 5 show that the results of almost all of the data are statistically significant. The results of the three verbs, 'fall', 'like' and 'open' are not significant. This means that the syntactic information of 'fall', 'like' and 'open' is similar between the diary data and the high school textbook data.

Table 4: The results of Wilcoxon matched-pairs signed-ranks test between the diary data

and the high school textbook data

| | come | fall | give | go | hear | know | like | listen | look |
|--------|------|------|------|----|------|------|------|--------|------|
| -Ranks | 28 | 4 | 13 | 28 | 7 | 12 | 7 | 8 | 15 |
| +Ranks | 0 | 1 | 0 | 4 | 0 | 1 | 6 | 2 | 5 |
| Ties | 67 | 90 | 82 | 63 | 88 | 82 | 82 | 85 | 75 |
| Total | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |

| | need | open | put | run | see | sit | take | think | want |
|--------|------|------|-----|-----|-----|-----|------|-------|------|
| -Ranks | 7 | 5 | 12 | 7 | 16 | 12 | 23 | 26 | 11 |
| +Ranks | 0 | 2 | 1 | 2 | 2 | 3 | 7 | 1 | 0 |
| Ties | 88 | 88 | 82 | 86 | 77 | 80 | 65 | 68 | 84 |
| Total | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |

Table 5: The results of Z-scores of Wilcoxon matched-pairs signed-ranks test between the diary data and the high school textbook data

| | come | fall | give | go | hear | know | like | listen | look |
|----------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| Z-score | - | - | - | - | - | - | -.035 | - | - |
| | 4.640 | 1.511 | 3.215 | 4.056 | 2.379 | 3.015 | a | 1.911 | 2.936 |
| 2-tailed | a | a | a | a | a | a | | a | a |
| P | .000 | .131 | .001 | .000 | .017 | .003 | .972 | .056 | .003 |

| | need | open | put | run | see | sit | take | think | want |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Z-score | - | -.954 | - | - | - | - | - | - | - |
| | 2.375 | a | 2.967 | 1.809 | 2.428 | 2.446 | 3.460 | 4.103 | 3.019 |
| 2-tailed | a | | a | a | a | a | a | a | a |
| P | .018 | .340 | .003 | .070 | .015 | .014 | .001 | .000 | .003 |

a shows that z-score is calculated based on +Rank.

b shows that z-score is calculated based on +Rank.

3.4. Discussion

In the comparison between the diary data and the junior high school textbook data, we can find little difference between them in the syntactic frames. This means that L2 learners may acquire the main syntactic frames from junior high school textbooks. On the other hand, in the comparison between the diary data and the high school textbook data, we can find differences between two data. This is because, as we can see in Experiment 1, high school textbooks contain fewer kinds of syntactic frames than junior high school textbooks do. And also we can find another factor for making this difference. High school textbooks used in this research are for the oral communication course, and they do not contain many model sentences. This poverty of model

sentences would cause this difference. So, it needs further study about the relationship between the diary data and high school textbook data.

4. Conclusion

From the results in Experiment 1, we find that there is little difference in syntactic information of the verbs between the L1 and the L2 input. From the results in Experiment 2, we find out the effects of L2 textbooks as L2 input on the L2 learners' output, though it needs further study on the relationship between the diary data and the high school textbook data. Therefore, we can say that the textbooks can play some key roles in giving L2 learners syntactic information. It can help them form their syntactic knowledge.

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| Frame | Open | | | Sit | | | Look | | | See | | | Think | | | Like | | | Want | | |
|---------------------|------|-----|----|-----|-----|----|------|-----|----|-----|-----|----|-------|-----|----|------|-----|----|------|-----|----|
| | Mom | JHS | HS | Mom | JHS | HS | Mom | JHS | HS | Mom | JHS | HS | Mom | JHS | HS | Mom | JHS | HS | Mom | JHS | HS |
| # (Wh-NP) | 1 | 3 | | | | | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| # (P) | | | | | | | | | | | | | | | | | | | | | |
| # (LOC) | | | | | | | | | | | | | | | | | | | | | |
| # (AdjP) | | | | | | | | | | | | | | | | | | | | | |
| # [conj] S | 2 | | | | | | | | | | | | | | | | | | | | |
| # (S) | | | | | | | | | | | | | | | | | | | | | |
| P LOC | | | | | | | | | | | | | | | | | | | | | |
| P NP | | | | | | | | | | | | | | | | | | | | | |
| P | | | | | | | | | | | | | | | | | | | | | |
| P Adv | | | | | | | | | | | | | | | | | | | | | |
| P [conj] S | | | | | | | | | | | | | | | | | | | | | |
| P PP | | | | | | | | | | | | | | | | | | | | | |
| P (Wh-NP) | | | | | | | | | | | | | | | | | | | | | |
| P NP [conj] S | | | | | | | | | | | | | | | | | | | | | |
| P NP PP | | | | | | | | | | | | | | | | | | | | | |
| P NP PP [conj] S | | | | | | | | | | | | | | | | | | | | | |
| P NP PP PP [conj] S | | | | | | | | | | | | | | | | | | | | | |
| P NP Adjunct | | | | | | | | | | | | | | | | | | | | | |
| P NP Adv | | | | | | | | | | | | | | | | | | | | | |
| P NP Adv PP | | | | | | | | | | | | | | | | | | | | | |
| P NP Adv [conj] S | | | | | | | | | | | | | | | | | | | | | |
| P NP LOC | | | | | | | | | | | | | | | | | | | | | |
| P NP [conj] S | | | | | | | | | | | | | | | | | | | | | |
| P NP PP Adv | | | | | | | | | | | | | | | | | | | | | |
| P NP PP Adjunct | | | | | | | | | | | | | | | | | | | | | |
| P Adv PP PP | | | | | | | | | | | | | | | | | | | | | |
| P Adv Adjunct | | | | | | | | | | | | | | | | | | | | | |
| P adjunct | | | | | | | | | | | | | | | | | | | | | |
| P Adjunct [conj] S | | | | | | | | | | | | | | | | | | | | | |
| P (Wh-NP) NP | | | | | | | | | | | | | | | | | | | | | |
| P PP [conj] S | | | | | | | | | | | | | | | | | | | | | |
| P PP Adjunct | | | | | | | | | | | | | | | | | | | | | |
| P LOC [conj] S | | | | | | | | | | | | | | | | | | | | | |
| P LOC Adjunct | | | | | | | | | | | | | | | | | | | | | |
| P PP PP | | | | | | | | | | | | | | | | | | | | | |
| PP | | | | | | | | | | | | | | | | | | | | | |
| PP PP | | | | | | | | | | | | | | | | | | | | | |
| PP Adv | | | | | | | | | | | | | | | | | | | | | |
| PP LOC | | | | | | | | | | | | | | | | | | | | | |
| PP [conj] S | | | | | | | | | | | | | | | | | | | | | |
| PP PP Adv | | | | | | | | | | | | | | | | | | | | | |
| PP Adjunct | | | | | | | | | | | | | | | | | | | | | |
| PP (Wh-NP) | | | | | | | | | | | | | | | | | | | | | |
| NP | | | | | | | | | | | | | | | | | | | | | |
| NP PP | | | | | | | | | | | | | | | | | | | | | |
| NP LOC | | | | | | | | | | | | | | | | | | | | | |
| NP P | | | | | | | | | | | | | | | | | | | | | |

| Frame | Hear | | | Know | | | Need | | | Listen | | | | | | | |
|---------------------|------|-----|----|-------|-----|-----|------|-------|-----|--------|----|-------|-----|-----|----|-------|----|
| | Mom | JHS | HS | Diary | Mom | JHS | HS | Diary | Mom | JHS | HS | Diary | Mom | JHS | HS | Diary | |
| # | 2 | | | 9 | + | 46 | 11 | 24 | + | | | | 3 | | | 11 | |
| # (Wh-NP) | | | | | + | 1 | | | + | | | | | | | | |
| # (P) | | | | | | | | | | | | | | | | | |
| # (LOC) | | | | | | | | | | | | | | | | | |
| # (AdjP) | | | | | | | | | | | | | | | | | |
| # [conj] S | | | | | | | | | | | | | | | | | |
| # (S) | | | | | | | | | | | | | | | | | |
| P LOC | | | | | | | | | | | | | | | | | |
| P NP | 6 | | | 3 | | 3 | | | | | | | | | 11 | 3 | 14 |
| P | | | | | | | | | | | | | | | 1 | | |
| P Adv | | | | | | | | | | | | | | | 1 | | |
| P [conj] S | | | | | | | | | | | | | | | 1 | | |
| P PP | | | | | | | | | | | | | | | 1 | | 2 |
| P (Wh-NP) | | | | | | | | | | | | | | | | 2 | |
| P NP [conj] S | | | | | | 1 | | | | | | | | | | 1 | |
| P NP PP | 1 | | | | | | | | | | | | | | | 1 | 3 |
| P NP PP [conj] S | | | | | | | | | | | | | | | | | |
| P NP PP PP [conj] S | | | | | | | | | | | | | | | | | |
| P NP Adjunct | 1 | | | | | | | | | | | | | | | | |
| P NP Adv | | | | | | | | | | | | | | | | 1 | 2 |
| P NP Adv PP | | | | | | | | | | | | | | | | | |
| P NP Adv [conj] S | | | | | | | | | | | | | | | | | |
| P NP LOC | | | | | | | | | | | | | | | | | |
| P NP [conj] S | | | | | | | | | | | | | | | | | 2 |
| P NP PP Adv | | | | | | | | | | | | | | | | | |
| P NP PP Adjunct | | | | | | | | | | | | | | | | | 1 |
| P Adv PP PP | | | | | | | | | | | | | | | | | |
| P Adv Adjunct | | | | | | | | | | | | | | | | | |
| P adjunct | | | | | | | | | | | | | | | | | |
| P Adjunct [conj] S | | | | | | | | | | | | | | | | | |
| P (Wh-NP) NP | | | | | | | | | | | | | | | | | |
| P PP [conj] S | | | | | | | | | | | | | | | | | |
| P PP Adjunct | | | | | | | | | | | | | | | | | |
| P LOC [conj] S | | | | | | | | | | | | | | | | | |
| P LOC Adjunct | | | | | | | | | | | | | | | | | |
| P PP PP | | | | | | | | | | | | | | | | | |
| PP | | | | 1 | + | 2 | | | | | | | | | 5 | + | 1 |
| PP PP | | | | | | | | | | | | | | | | | |
| PP Adv | | | | | | | | | | | | | | | | | |
| PP LOC | | | | | | | | | | | | | | | | | |
| PP [conj] S | | | | | | | | | | | | | | | | | |
| PP PP Adv | | | | | | | | | | | | | | | | | |
| PP Adjunct | | | | | | | | | | | | | | | | | |
| PP (Wh-NP) | | | | | | | | | | | | | | | | | 1 |
| NP | + | 23 | 1 | 12 | + | 41 | 3 | 31 | + | 25 | 4 | 6 | | | | | 3 |
| NP PP | | 6 | 1 | 1 | | 9 | | 6 | + | 8 | | 1 | | | | | 1 |
| NP LOC | | | | | | | | | | | | | | | | | |
| NP P | | | | | | | | | | | | | | | | | |

A Study of Listening and Speaking Processes in a Foreign Language: Dialogues between Japanese Senior High School Learners and Native Speakers of English

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1. Background

With the introduction of the new subjects, Oral Communication A, B and C, oral communication skills have been emphasized in senior high school English education in Japan. In spite of this improved situation, many learners still have some difficulties in listening to and speaking English. As a result, their teachers are always trying to investigate effective ways of teaching oral English skills. The problem seems to lie in the fact that teachers are unaware of the learners' cognitive processes for listening to and speaking English.

Some studies show that the cognitive processes of listening to and speaking a language are different and each of these processes play different roles in language learning (Swain 1985; Ano 1998a). In a study of monologues in English made by Japanese senior high school learners, unnecessary pauses were sometimes made. This was mainly because they thought of the Japanese words and sentences first and then translated these into English (Ano 1998b). However, language use is mainly conversational rather than simply a monologue. Conversation is a supportive and ideal mechanism for language learning and has another factor 'negotiation of meaning' (Skehan 1998). Here, learners are thought to be engaged in different cognitive processes than those of monologue. Furthermore, if learners have rather long unnecessary pauses during conversation, they may disturb the flow of conversation. These are the reasons why we should examine the cognitive processes of foreign language learners while they are talking with a native speaker of English.

2. Hypotheses

- (1) Learners sometimes make long pauses while they are talking with a native speaker of English, because they spend time translating Japanese into English or English into Japanese.
- (2) The pause that follows the utterance made by a native speaker of English is used by the learners of English in order to prepare for their next utterances.

- (3) In the process of producing their utterances, learners are engaged in confirming their knowledge of grammar and expressions.
- (4) Learners who can engage continuously in smooth conversation use set phrases which have been already acquired successfully.

3. Experiment

3.1 Subjects

The subjects are 11 twelfth grade senior high school learners of English at Inagakuen Comprehensive Upper Secondary School in Saitama prefecture in Japan. All of them are girls who major in English. They have a similar educational background in English; they take about ten English lessons a week, and about one-third of the lessons are instructed in English using a style of team-teaching with a native speaker of English. None of them has studied abroad for more than two weeks.

3.2 Procedure

Each subject met the researcher and one native speaker of English in a quiet room. Before starting the experiment, the researcher explained in Japanese to each subject what she would be expected to do. First, the subjects were told to have a one-minute conversation in English with a native speaker of English. Four of the subjects had a conversation with a 24-year-old female native English speaker from the U.S., and the other seven subjects spoke with a 24 year-old female native English speaker from South Africa, both of whom were assistant language teachers at Inagakuen. The native speakers started their conversations by asking a question about the learners' hobbies. This topic was chosen because it was an easy topic for the subjects to talk about, and they seemed not to spend a long time thinking about what to say. The whole procedure of each conversation was videotaped.

Next, after finishing the one-minute conversation, each subject watched the video, which had been just recorded, with the researcher. Each subject was told that the researcher was interested in what each subject was doing in her mind. The researcher asked questions about their cognitive processes while they were speaking with a native English speaker, especially when they had pauses. When the researcher asked the subjects questions, the researcher stopped the videotape. These reflective think-aloud processes were done in Japanese, and all the

procedures were recorded on audio tapes. The whole procedure for each subject took about fifty minutes.

3.3 Results

The researcher transcribed all the conversations and examined their think-aloud processes and then classified the data. In order to analyze the cognitive processes of each subject, the researcher focused on the pauses made by the subjects. In this study, a pause is defined as follows:

- (1) A temporary stop by the subject, prior to and while she is speaking English.
- (2) A silent time, whether long or short, which seems to be used by the subject in order to think about something.
- (3) As including short expressions such as “ah” or “mm.” These expressions are used by the subject to indicate that she is either still thinking or is trying to avoid making long pauses.
- (4) As not including short stops for breath.

According to these criteria, 92 pauses were found in eleven conversations between the subject and the native speaker of English. Most of these pauses were used by the subjects to prepare for their utterances (Table 1).

Table 1: The frequency of the cognitive processes that occur when a learner is either listening to or speaking English

| | Cognitive processes of translation | Cognitive processes of ideas | Total number |
|-----------|------------------------------------|------------------------------|--------------|
| Listening | 1 | 2 | 3 |
| Speaking | 14 | 78 | 92 |

Two subjects used one pause for both listening and speaking, which means they tried to understand their interlocutor’s utterance first, and then started preparing for their utterances in the same pause. Another subject used both a translation and an idea in the same pause. Therefore, the total number of cognitive processes in Table 1 is 95, three greater than the number of pauses. In almost all of the cases, the subjects could easily understand the utterances of the native speakers while they were conversing with them. Here, the subjects did not have to make pauses in order to comprehend. However, in terms of speaking, the subjects often paused and attempted to produce their own output. In preparation for speech, in 78 out of 92 cases, the subjects used ideas or images during the pause. Six subjects occasionally tried to produce English sentences by first thinking of the

Japanese and then trying to translate these original sentences into English. Three subjects, in particular, had some difficulties in translating their Japanese sentences into English, and this made them make long or frequent pauses.

In addition, details of the cognitive processes for speaking demonstrate that although the subjects were engaged in the process of confirming their own English knowledge, in half of the cases, they were thinking about what they were going to say in the following utterances (Table 2).

Table 2: The frequency in which the different classifications of cognitive processes for speaking occur (N = 103)

| Classifications | Number |
|---|--------|
| Thinking about content | 52 |
| Lexical search | 13 |
| Searching for an appropriate expression | 7 |
| Thinking about how to express | 7 |
| Applied a grammatical rule | 15 |
| Translation | 7 |
| Pronunciation | 2 |

In 11 out of 92 pauses in which the subjects prepared for speech, they were engaged in two different cognitive processes in one pause. This explains why the total number in Table 2 is 103. The subjects were paying attention to various aspects of English such as grammar, vocabulary, expressions, pronunciation, etc. It can be said that the subjects were in the process of learning the language by confirming their own knowledge. However, half of the cognitive processes involved the subject in thinking about content for the next utterance. This is possibly because priority was given to communication with their interlocutor over and above other factors such as grammar and pronunciation.

4. Discussions

The four aforementioned hypotheses will be examined in this section.

- (1) Some of the subjects first thought of Japanese sentences and then tried to translate these into English during pauses. These cognitive processes of translation sometimes made the subjects make a long pause. - Hypothesis (1) can be supported.
- (2) 91 out of 92 pauses during conversations were used as preparation for the next utterances. - Hypothesis (2) can be supported.
- (3) Out of 103 pauses in preparation for speech, 15 pauses were used to apply

grammatical rules and 7 pauses to search for appropriate expressions. In these cases, the subjects were confirming their own knowledge of English while producing utterances. - Hypothesis (3) can be supported.

- (4) Some of the subjects used several set phrases successfully and as a result were able to continue their utterances. However, it was difficult to define which phrase was a subject's acquired phrase by asking her using only the think-aloud method. Furthermore, there is no direct relation between the number of set phrases they used and the quantity of their utterances. - Hypothesis (4) cannot be supported in this study.

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<Appendix> An example of conversation

NS = a native speaker of English

NNS = a Japanese senior high school learner of English (a subject)

[] = a pause made by the subject

NS: What do you like to do in your free time?

NNS: I like to do, I like to listen to music [] and reading books.

NS: What kind of music do you like?

NNS: I like Beatles.

NS: The Beatles. What is your favorite song?

NNS: [Ah] I can't decide which is my favorite song because
[ah] my favorite song changes day [] every
day so [] I like most of their songs, so I can't decide.

NS: How about what kind of books do you like to read?

NNS: I like to read [ah] novels [] and
magazines [] especially music magazines.

NS: Music magazines, so how often do you listen to the Beatles?

NNS: Almost every day.

NS: Oh, really. How many CDs do you have of them?

NNS: I don't know because I haven't [ah].

A Corpora-based Study of Discourse: Picture-Card Elicitation

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Abstract

This study analyzed spoken EFL discourse using five sets of four picture-cards. The subjects were 10 third-year public high school students with elementary English speaking skills. The experiment relied on two recording samples in Japanese and in English. First, the subjects were shown one set of picture-cards and asked by their teacher to narrate a story. The subjects then related a story in Japanese that was simultaneously recorded. After this, the subjects also expressed themselves in English relative to the same task. These spoken data were similarly recorded. After the experiment, the English and Japanese data were analyzed as follows: First, the spoken rates of the English discourse were compared with those in the Japanese, based on the syllable count. Second, unreflected bits of discourse (my definition of chunks) were sifted out from the English data. Finally, the defining cognitive characteristics of those chunks were identified.

The results of this study demonstrate that students with elementary English speaking skills construct stories with very few syntactic chunks. These are very basic bits of one or two words. It follows that the more chunks the students acquire, the more fluently they will relate events in English. Accordingly, increasing basic and useful chunks enables the students to enhance their spoken English abilities.

1. Introduction

The purpose of this study was (1) to investigate what kinds of chunks EFL learners have access to in explaining the four-scene picture sets and (2) to define an operational starting point on the structure of EFL corpora.

2. The Study

2.1 Subjects

The subjects were 10 Japanese EFL students. All of them were in their third year at a public high school in Tokyo. Their English abilities, while low relative to the national level, were in the top percentile of English students at their own school. In fact, they willingly participated in the present study.

2.2 Materials

This study used five sets of picture-cards (Appendix), an audio tape recorder and a microphone. The subjects were first given a set depicting four scenes. In order to make the

subjects familiar and comfortable with the story-telling context, the picture-cards were drawn by one fellow student. Then, as they told a story about the picture-cards, their voice was recorded using the tape recorder and microphone.

2.3 Procedures

There were three steps in this study. First, the subjects thought silently for one minute about a story for the picture-cards which were randomly given to them. Next, the subjects told a story about the picture-cards in Japanese in around two minutes. Finally, the subjects told a story on the same picture-cards in English within about two minutes. The five sets were evenly distributed among the 10 students.

2.4 Theoretic Parameters

- 1) This study follows the example of the WordSmith corpus in using a basis of four-word clusters.
- 2) Clusters were identified by the presence of one of the five most frequent word-classes.
- 3) Clusters were determined by the cognitive function these word-classes serve in the story-telling mode of EFL discourse.

3. Results and Discussions

3.1 Comparing English corpora with Japanese corpora

Table 1 shows the results of the English corpora and Japanese corpora.

| | English | | | Japanese | | |
|--------|----------------|----------------|--------------------|----------------|----------------|--------------------|
| | syllable count | length of time | syllables per sec. | syllable count | length of time | syllables per sec. |
| Stu. A | 103 | 1:36 | 1.1 | 119 | 0:27 | 4.4 |
| Stu. B | 31 | 0:20 | 1.6 | 69 | 0:18 | 3.8 |
| Stu. C | 31 | 1:09 | 0.5 | 86 | 0:19 | 4.5 |
| Stu. D | 34 | 1:17 | 0.4 | 109 | 0:26 | 4.2 |
| Stu. E | 34 | 1:00 | 0.6 | 76 | 0:37 | 2.1 |
| Stu. F | 31 | 2:27 | 0.2 | 117 | 0:34 | 3.4 |
| Stu. G | 40 | 1:25 | 0.5 | 63 | 0:12 | 5.3 |
| Stu. H | 27 | 0:41 | 0.7 | 63 | 0:16 | 3.9 |
| Stu. I | 37 | 0:43 | 0.9 | 70 | 0:20 | 3.5 |
| Stu. J | 43 | 1:47 | 0.4 | 94 | 0:28 | 3.4 |
| Means | 41 | 1:14 | 0.7 | 86 | 0:23 | 3.9 |

Table 1: Comparison of English and Japanese corpora

On average, the number of English syllables was half that of Japanese syllables. For example, student J used 43 syllables telling a story in English, while using 94 syllables in Japanese.

The length of English speech time, however, was three times that of Japanese

speech time. In other words, it took far more time for the subjects to tell a story in English than to tell a story in Japanese. For example, student D used one minute 17 seconds telling a story in English, but used only 26 seconds in Japanese.

This shows us that the subjects told a story in English with half the syllables used in Japanese. However, it took then about three times longer.

3.2 Five most frequent words

Table 2 displays the results of the Top 5 words frequently used in the subjects' talks.

| | | |
|-------------|-----------|----------------|
| is | 22 | (7.7%) |
| she | 18 | (6.3%) |
| and | 13 | (4.6 %) |
| with | 12 | (4.2%) |
| her | 11 | (3.9%) |

Table 2: First 5 words in frequency from 110 words in 10 students' corpora

The subjects' speech samples totaled 110 different words: *is* was used 22 times (7.7%), *she* 18 times (6.3%), *and* 13 times (4.6%), *with* 12 (4.2%), and *her* 11 times (3.9%). These five word-classes are very familiar to EFL learners, especially Japanese junior and senior high school students. There is a tendency in the authorized textbooks to over-emphasize these forms. As a result, they are so accustomed to these words that they use these words as a natural consequence of the story-telling activity.

3.3 Four-word clusters from the five most frequent words

3.3.1 *is*

Table 3 shows the four-word clusters containing *is*. From these corpora obtained from the 10 subjects, the elements fall into four patterns: (1) Subject(S) + *is** + Verb(V), (2) S + *is** + Noun(N), (3) S + *is* ~ing, and (4) S + *is* Complement(C). In pattern (1), for example, student A uttered “*Michiko is wake up...” and student I said “*Mika is washes her...” These two utterances were clearly ungrammatical. There were other examples. Both student C and student D answered “*Yuka is headache...” The correct formulation is “Yuka has a headache.” Hence, these two students made a mistake in structuring sentences.

Student G pronounced “Naomi is thinking about...” Student H said “She is studying in...” in looking at the same picture card as that of student G. They used the progressive forms: “is thinking” and “is studying”, stating them very naturally. Student A used “Michiko is late late...” and student E said “Yuko is very happy.” These sentences take the S + *is* + C's form. We can suppose that such a sentence form as ‘S + *is* + C’, while very simple, is also therefore very familiar to the subjects.

Examining such kinds of patterns, we can see that the subjects have two chunks relative to *is*. One is a chunk ‘S *is*’, and the other is ‘S *is* ~ing’. These two patterns are basic

constituents of their EFL story-telling chunking abilities.

| Students | Four-word clusters | Patterns |
|----------|-------------------------------------|----------|
| A | *Michiko is wake up... | 1 |
| A | *Michiko is wake up... | 1 |
| A | *Michiko is brush her... | 1 |
| A | Michiko is Michiko have... | ? |
| A | Michiko is late late... | 4 |
| C | *Yuka is headache... | 2 |
| C | But Yuka is sick... | 4 |
| C | *Yuka is <i>hokenshitsu</i> with... | 2 |
| D | *Yuka is headache... | 2 |
| D | *Yuka is very headache... | 2 |
| E | Movie title is <i>arumagedon</i> . | 4 |
| E | Yuko is very happy. | 4 |
| G | Naomi is thinking about... | 3 |
| G | ...say "Here it is."... | ? |
| H | She is studying in ... | 3 |
| H | ...her's* answer is bad. | 4 |
| I | *Mika is washes her... | 1 |
| I | ...came come Mika is... | ? |
| I | Mika is eating lunch... | 3 |
| I | ...friend. *Mika is sleep. | 1 |
| I | ...sleep. Teacher is angry. | 4 |
| J | ...lesson, Mika is sleeping. | 3 |

Table 3: Four-word clusters of *is*

3.3.2 she

Table 4 presents the four-word clusters containing *she*. From this table, three patterns emerged: (1) repeating, (2) correcting, and (3) S + Verb Phrase (VP). In pattern (1), the subjects used the same English words repeatedly. For example, student A said "she she she she...", "she she her her..." etc. Student G said "She she she understand...", and "And she she write..." Such repetitive patterning is one means of making a connection between one word and the subsequent one.

In pattern (2), students A and F corrected a wrong word into a right one through their own speaking. This kind of corrective patterning indicates that Japanese students learning English have knowledge of pronoun use in English. They know the difference between the nominative form, *she* and the possessive form, *her*. However, when they speak English, they cannot use the right form spontaneously. They tend to say more readily accessible words, such as *she* rather than *her*. The nominative form of personal pronoun like 'she' is a chunk.

Moreover, we realize that some subjects could use the sentence pattern, S + VP (pattern (3)). For example, student F said “she bought a* tickets.” and student G “...she understand this problem.” We can also suppose that the subjects obtain the sentence pattern like she + VP, if the sentences are short and are made of simple words. We can also see ‘she + VP’ as a chunk.

| <u>Students</u> | <u>Four-word clusters</u> | <u>Patterns</u> |
|-----------------|---------------------------------|-----------------|
| A | Because she she she... | 1 |
| A | ...she she she she... | 1 |
| A | ...she she she her... | 1 |
| A | ...she she her her... | 1 |
| A | ...she her her brush... | 2 |
| A | She she her and... | 1 |
| F | ...she her and her... | 2 |
| F | She bought a* tickets. | 3 |
| G | She she she understand... | 1 |
| G | ...she she understand this... | 1 |
| G | ...she understand this problem. | 3 |
| G | She say* “ Here it...”. | 3 |
| G | And she she write... | 1 |
| G | *...she write a blackboard. | 3 |
| H | She is studying in... | 3 |
| H | She answered answered. | 3 |
| H | She wrote answers on... | 3 |

Table 4: Four-word clusters of *she*

3.3.3 and

Table 5 presents the four-word clusters containing *and*. There were three patterns within the clusters of *and*. Namely, *and* was used as (1) conjunction for words or phrases, (2) repeater for thinking about what the subjects wanted to say, and (3) conjunction for sentences. In relation to the pattern (1), student E said “Kumi and Yuko are...”, and student F stated “...her* and her friends...” In pattern (2), student A repeated *and* such as “...and and miso soup...”, “...miso soup and and...”etc. Also in pattern (3), students G and J utilized *and* to join a sentence to a sentence, such as “And she she write...”, and “And we eat lunch...”

From these examples, we can infer that the subjects understand how to use a conjunction *and*. That is to say, they can use this conjunction *and* to connect words, phrases, or sentences. ‘NP and NP’ is considered as a chunk.

| <u>Students</u> | <u>Four-word clusters</u> | <u>Patterns</u> |
|-----------------|---------------------------|-----------------|
| A | Michiko eat rice and... | 1 |

| | | |
|---|---|---|
| A | ...and and miso soup... | 2 |
| A | ...miso soup and eat... | 2 |
| A | ...miso soup and and... | 1 |
| A | ...and and Japanese <i>yakizakana</i> ... | 2 |
| A | And Michiko ia late... | 3 |
| A | ...her teeth and her* has... | 3 |
| D | ...very headache and but... | 3 |
| D | ...and but and <i>hokenshitsu</i> ... | 3 |
| E | Kumi and Yuko are... | 1 |
| F | ...her* and her friends... | 1 |
| G | And she she write... | 3 |
| J | And we eat lunch... | 3 |

Table5: Four-word clusters of *and*

3.3.4 with

Table 6 indicates the four-word clusters containing *with*.

| Students | Four-word clusters | Patterns |
|----------|---|----------|
| A | ...6:45 with with cat. | 1 |
| A | ...with with cat. Michiko... | 2 |
| A | ...teeth with cat slowly. | 1 |
| A | ...breakfast with cat slowly. | 1 |
| A | ...Japanese <i>yakizakana</i> with cat. | 1 |
| C | ...is <i>hokenshitsu</i> with friend. | 1 |
| C | ... <i>hokenshitsu</i> with my friend. | 1 |
| I | ...hand with her friend. | 1 |
| I | ...lunch with her friend. | 1 |
| J | ...washing with washing hand... | 3 |
| J | ...hands with a friend. | 1 |
| J | ...lunch with a friend. | 1 |

Table 6: Four-word clusters of *with*

The clusters fall into three patterns: (1) with + Object (O) [animate], (2) repeating, (3) with + ~ing. Each of the second and third classifications ((2) repeating, (3) with + ~ing) had only one example respectively: "...with with cat. Michiko...", and "...washing with washing hand..."

The pattern "with + O [animate]" was predominantly used by the subjects. Student A said the phrase "with cat" five times in her story telling. Students C, I and J used the phrase "with (det. (=determiner)) friend" in their utterances. The subjects realize the meaning of the word *with* as "(doing something) together" and, moreover, they understand

the word order *with + O* (not *O + with*). Therefore, we can consider the phrases 'with + (det.) + cat' and 'with + (det.) + friend' as chunks of *with*.

3.3.5 her

Table 7 shows the four-word clusters containing *her*. The patterns of phrases containing *her* were 'her + Noun(N)' except for 'misusage'. Student A spoke the phrase "her teeth" twice in her discourse. Students F and I said the phrase "her friend(s)". Student I also used the phrase "her hand". The phrases: *her + body part* "her teeth/hand" and the phrase: *her + her relative person* such as "her friend(s)" are chunks.

| Students | Four-word clusters | Patterns |
|----------|------------------------------|----------|
| A | ...brush her teeth with... | 1 |
| A | ...she her* her* brush... | 2 |
| A | ...her* brush her teeth... | 2 |
| A | ...brush her teeth and... | 1 |
| A | ...and her* has breakfast... | 2 |
| F | ...she her* and her... | 2 |
| F | ...her friends are going... | 1 |
| F | * Her friend's Yuko happy. | 1 |
| I | ...washes her hand with... | 1 |
| I | ...hand with her friend. | 1 |
| I | ...lunch with her friend. | 1 |

Table7: Four-word clusters of *her*

4 Conclusions and Preliminary Definition

The present study analyzed spoken EFL discourse using picture-cards to compile some corpora on elicited verbal data of 10 high-school students. Through the corpora, two major findings were drawn: First, the students on an elementary level of English in the secondary school have limited numbers of chunks constituted of one, two or three words. Second, the students having more kinds of chunks tended to be better at putting a story together in English. While the number of subjects was too small to generalize the results of this study, it has yielded some information about spoken EFL discourse.

This study first determined the five predominant word-classes used by the subjects. These were *she*, *is*, *and*, *with* and *her*. Examining these in the four-word cluster adopted from the WordSmith model, certain patterns emerged and were identified as 'chunks'.

However, it remains to define why these one, two, or three word bits are 'elemental' to elementary level students. While there is evidence that these forms are in fact over-emphasized in the authorized Japanese textbooks, this still doesn't explain why these forms appeared in the context of this study.

If we look at the basic function of narration, it is to relate about something to

somebody. In this study, "she" is the initial 'frame' that draws the listener's attention and demands qualification. "Is" acts the initiator of qualification the student could emphasize either the quality (adj.) or the action (verb). "Is" also marks the existence of the initial reference formed by "she". "And" is a functional extension that serves a connector of qualities and actions. "With" is elemental in that it signifies a symmetric relation between a subject and object. In this sense, "with" is an elemental chunk. Finally, "her" marks the ability to distinguish the pronoun forms (she vs. her).

Chunks are the elements that establish reference and frame for qualification (she), establish existence and initiate qualification (is), connect qualities (and), signify subject-object relationships (with) and identify the pronoun form (her).

Acknowledgements

I thank my co-worker Raymond Nault for his valuable corrections, observations, and contributions to these findings.

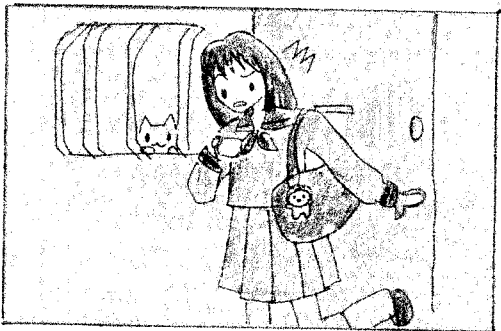
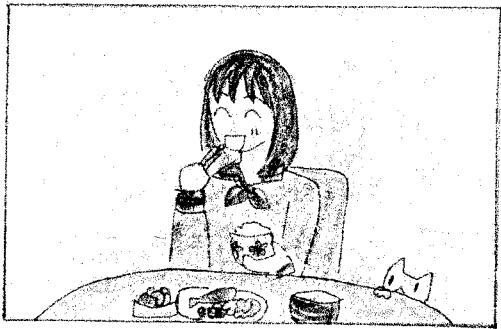
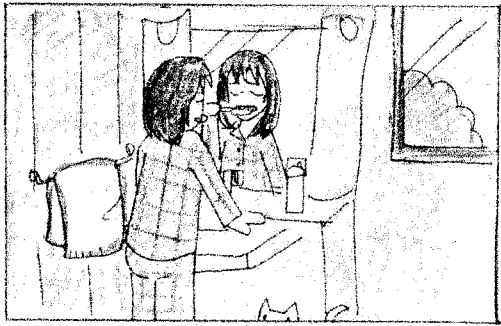
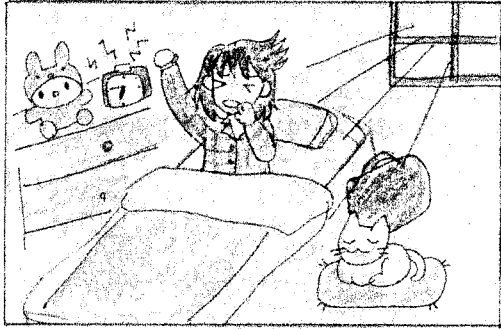
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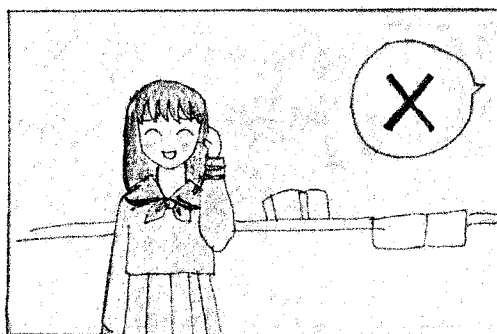
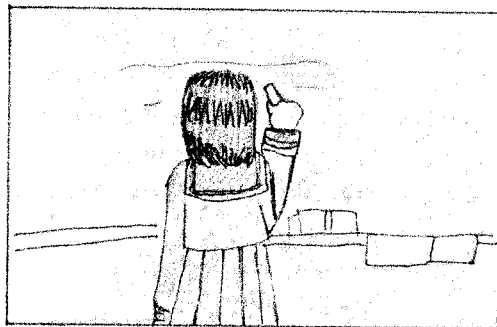
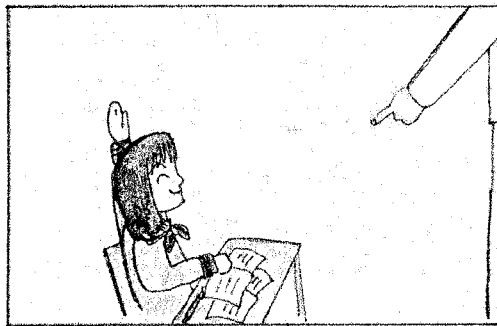
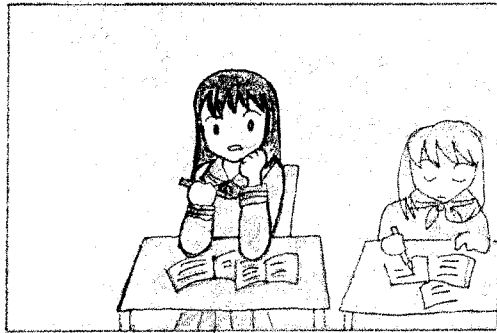
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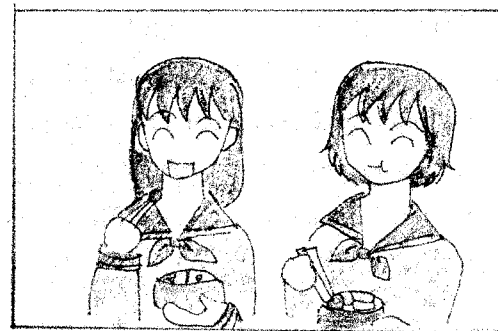
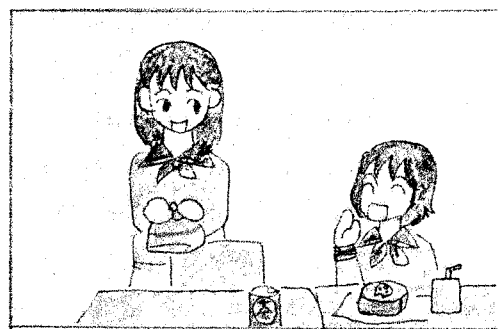
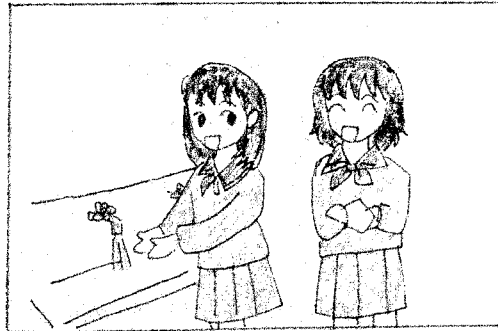
Appendix

<Picture 1>

Michiko







A Study of Textbook Analyses

(1): Readability Scores and Lexical Development

Yoshiro HAMAOKA
Graduate School of Education
Waseda University

1. Introduction

The purpose of this paper is to examine English course books for junior high schools and senior high schools in Japan by estimating readability scores and by computing word frequency.

In Japan, textbooks are compiled, following the course of study enacted by Ministry of Education. There are three graded textbooks for junior high school. Senior high school also has three textbooks for each grade. In these textbooks, grammatical complexity is taken into account and the topics for passages are carefully selected. They are arranged according to the developmental sequence within a textbook and within a series of textbooks. However, it does not seem that readability of the passages is not taken into consideration when they are compiled. Vocabulary of each passage in those textbooks depends on the topic, therefore, it does not seem to follow a learner's developmental sequence.

This paper attempts to reveal whether the passages are arranged in the order of Readability Scores and whether the passages are arranged according to the size and difficulty level of lexical items. Four different kinds of textbooks for junior high schools and three major textbooks for senior high schools are analyzed. The formula employed to estimate readability scores is Harris and Jacobson(1982), that is enhanced by one of the authors. The difficulty level of each vocabulary is determined by the method in Hindmarsh(1980).

2. Textbooks

Textbooks on Table 2 are analyzed. Market shares of the textbooks are take into consideration in choosing them so that the sample represents the larger part of the textbooks that students use.

3. Techniques and Procedures

3.1. Readability Score

Harris –Jacobsons Readability formula was chosen to estimate the readability of the texts, because it was the newest formula when the writer set the system to calculate readability scores in the computer. It is based on the list of words with flexion, and, therefore its reliability is higher than other formulae without a wordlist.

Three numbers are used to calculate the Raw Score. Firstly the words in a text which are found in the list are deleted. The rest of the words in the text are counted. This is the number of hard words

(B). The other numbers are the number of words in the text(A) and the number of sentences (C). The V1 score and V2 score are obtained by the following formulae;

$$V1=B/A \times 100 \text{ and } V2=A/C.$$

Then the Raw Score is calculated by the following; $V1 \times 0.245 + V2 \times 0.160 + 0.642$.

The Raw Score is found in the table and then the corresponding Readability Score is also found. The Readability Score shows the grade level in the United States schools.

3.2. Lexicon Grade Level

Cambridge English Lexicon is a word list which contains 4470 lexical items in 5 grades, which is based on a number of vocabulary lists, frequency counts and commonly used series of readers of simplified English. The levels, total number of the words and cumulative total are in table 1.

Table 1

| Level | Total | Cumulative total |
|-------|-------|------------------|
| 1 | 598 | 598 |
| 2 | 617 | 1215 |
| 3 | 992 | 2207 |
| 4 | 1034 | 3241 |
| 5 | 1229 | 4470 |

3.3 Procedure

All the texts are put into a computer then analyzed with software compiled by the writer.

All the counts of the numbers of word are on the bases of tokens. For example, live and lived are counted two words.

Most of the texts have lexical items that are not found in Lexicon; in that case they are not counted. Some of them are inflections of the words in Lexicon and others are proper nouns. However, as total amount of the texts is too large to take care of them.

4. Results

Results are all shown in the form of charts and graphs. The files of text are arranged in the order of learning in the same kind of material. Some books have listening part or reading parts in them. A line that shows a central tendency of regression is put into each graph of readability.

Junior high school textbooks are generally flat. Almost all of the texts in one book or in a series of books have similar readability scores. Some of the books contain one or two texts that score very high readability. One of the causes is the list for the formula does not contain names of months. Many of textbooks for junior high school students deal them in book 1. Difficult words in a short passage scores high readability.

Textbooks for senior high school can be divided into two groups. One which is difficult and the texts' readability scores gradually go up in the course of study and the other which is easy and the texts' readability scores go steady or go down sometimes.

From the viewpoint of words, numbers of words for each grade seems to depend mainly on the length of the texts. Books for higher grade tend to show clear separation of the lines.

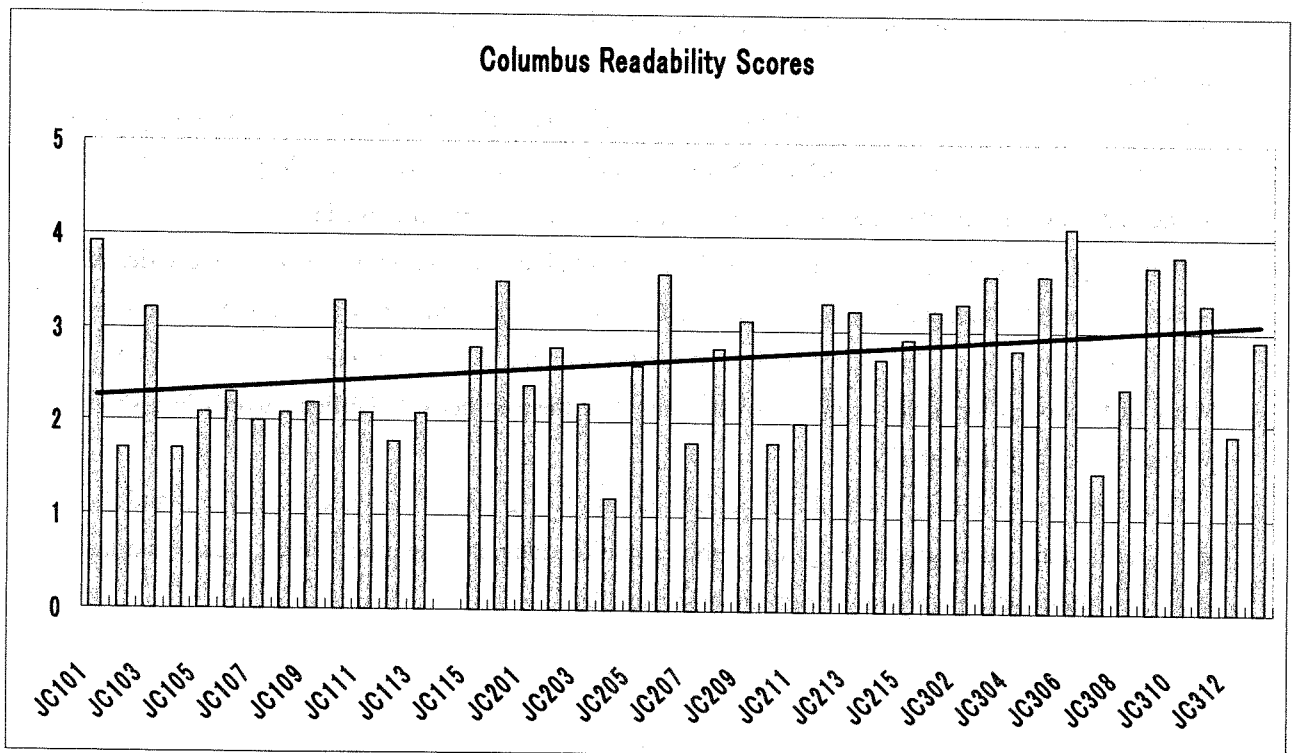
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|--------------|--------------|--|----------|-------------|-------------|---------------|
| 1 | Senior | CLIPPER ENGLISH COURSE 1 [REVISED EDITION] | CI1 | 3.1 | | |
| 2 | Senior | CLIPPER ENGLISH COURSE 2 | CI2 | | 2.6 | |
| 1 | Senior | ENGLISH NOW I [REVISED EDITION] | EN1 | 3.3 | | |
| 2 | Senior | ENGLISH NOW II | EN2 | | 2.6 | |
| 1 | Senior | Genius English Course I [Revised] | GN1 | 3.1 | | |
| 2 | Senior | Genius English Course II | GN2 | | 3.3 | |
| R | Senior | Genius ENGLISH READINGS | GN3 | | | 4.1 |
| 1 | Senior | Go, English! I | GO1 | 4.1 | | |
| 2 | Senior | Go, English! II | GO2 | | 2.6 | |
| 1 | Senior | MILESTONE English Course I | ML1 | 4.8 | | |
| 2 | Senior | MILESTONE English Course II | ML2 | | 5.2 | |
| 1 | Senior | POWWOW | PW1 | 4.6 | | |
| 2 | Senior | POWWOWII | PW2 | | 5.1 | |
| 1 | Senior | Spectrum | SP1 | 2.9 | | |
| 2 | Senior | Spectrum II | SP2 | | 3.4 | |
| R | Senior | Spectrum Reading | SP3 | | | |
| 1 | Senior | unicorn | UN1 | 8.8 | | |
| 2 | Senior | unicorn II | UN2 | | 10.3 | |
| R | Senior | unicorn R | UN3 | | | 5.5 |
| Total | | | | 34.7 | 35.1 | 9.6 |
| 1 | Junior | Clumbos English Course 1 | JC1 | | | |
| 2 | Junior | Clumbos English Course 2 | JC2 | | | |
| 3 | Junior | Clumbos English Course 3 | JC3 | | | |
| 1 | Junior | Everyday English 1 | EV1 | | | |
| 2 | Junior | Everyday English 2 | EV2 | | | |
| 3 | Junior | Everyday English 3 | EV3 | | | |
| 1 | Junior | New Crown 1 | NC1 | | | |
| 2 | Junior | New Crown 2 | NC2 | | | |
| 3 | Junior | New Crown 3 | NC3 | | | Not Available |
| 1 | Junior | New Horizon 1 | NH1 | | | |
| 2 | Junior | New Horizon 2 | NH2 | | | |
| 3 | Junior | New Horizon 3 | NH3 | | | |
| 1 | Junior | Sunshine English Course 1 | SN1 | | | |
| 2 | Junior | Sunshine English Course 2 | SN2 | | | |
| 3 | Junior | Sunshine English Course 3 | SN3 | | | |
| 1 | Junior | Total English 1 | TT1 | | | |
| 2 | Junior | Total English 2 | TT2 | | | |
| 3 | Junior | Total English 3 | TT3 | | | |

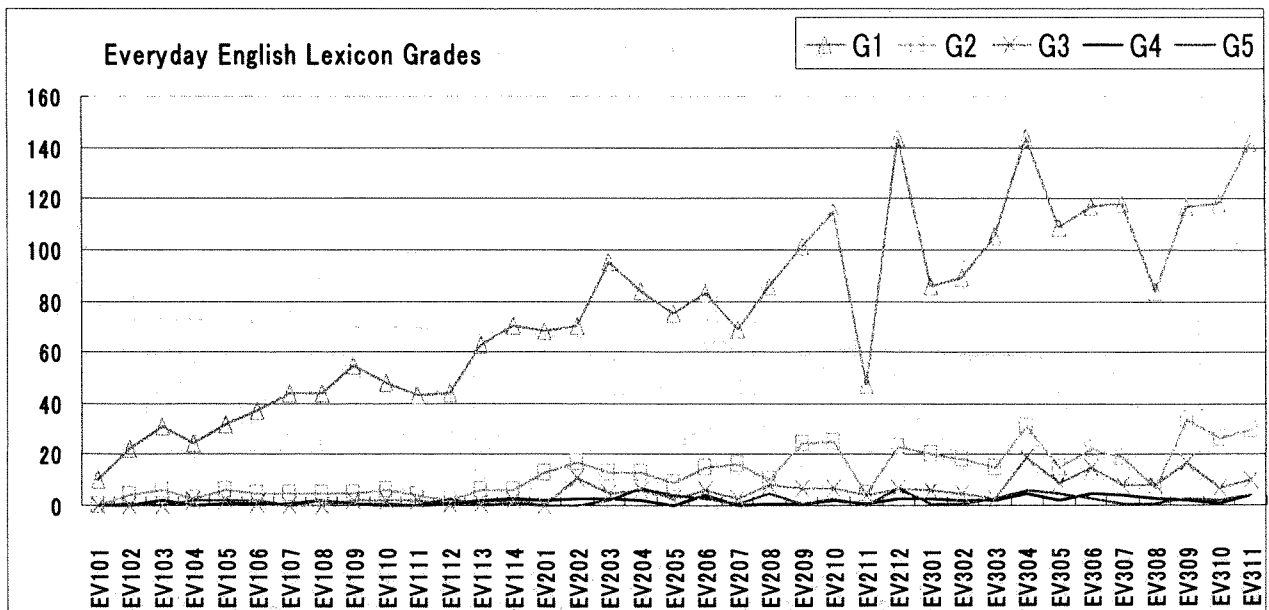
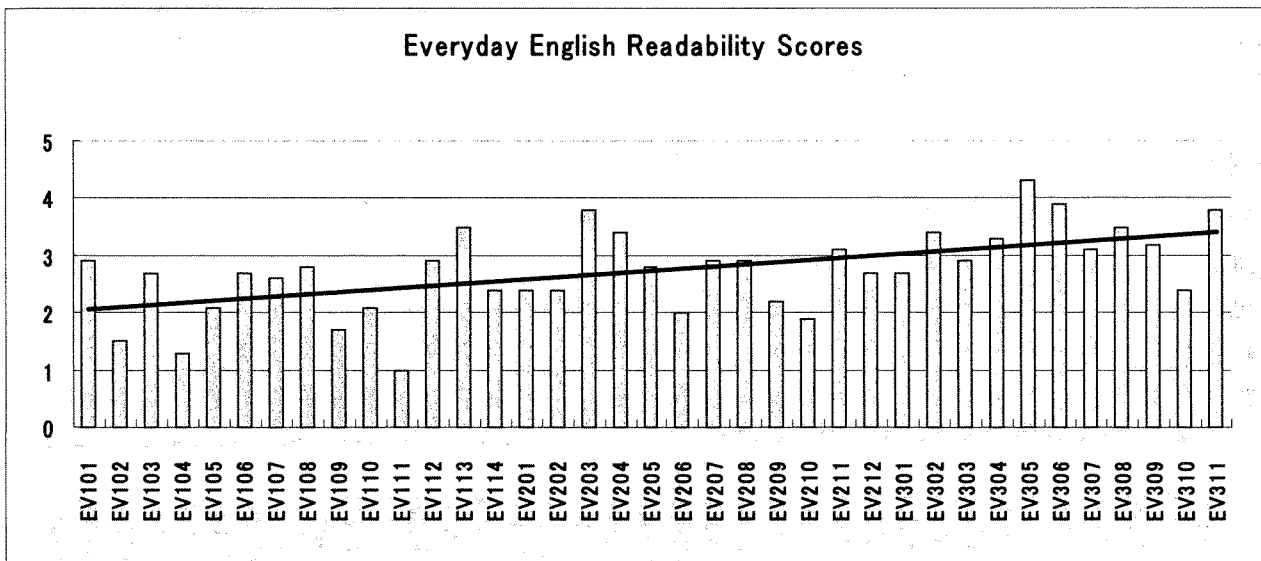
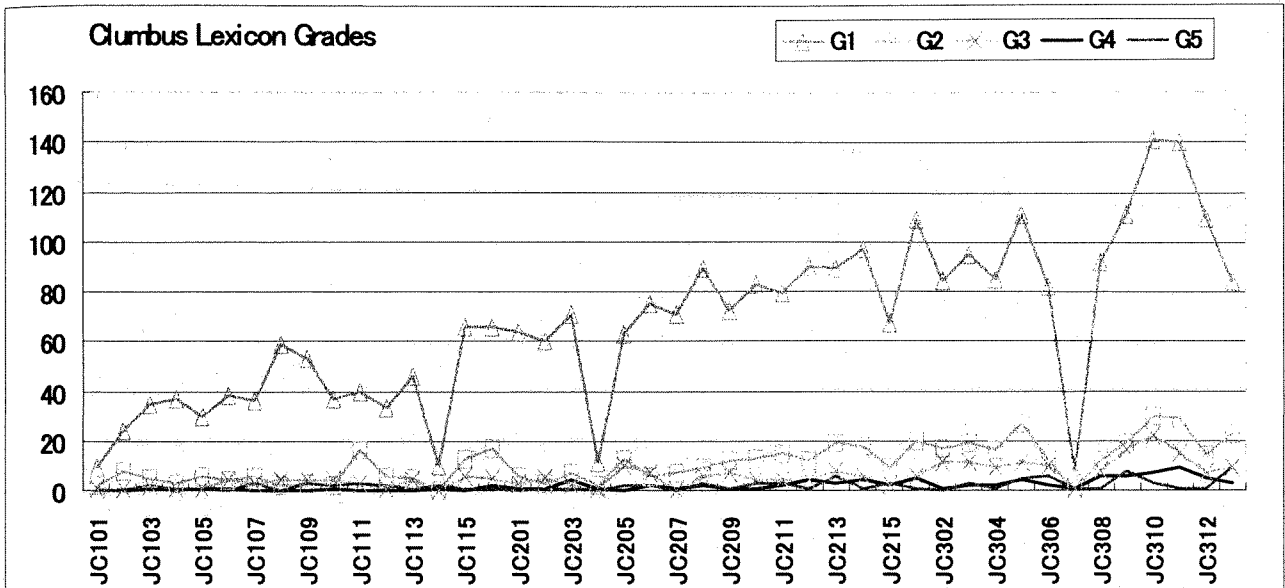
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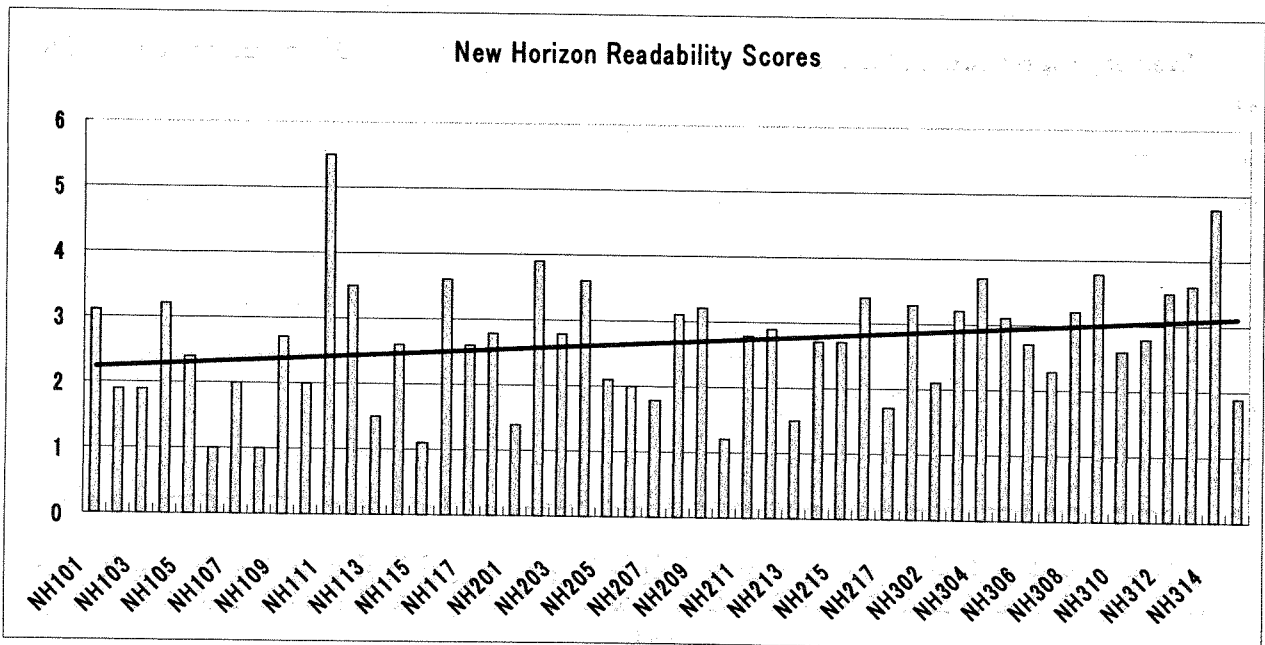
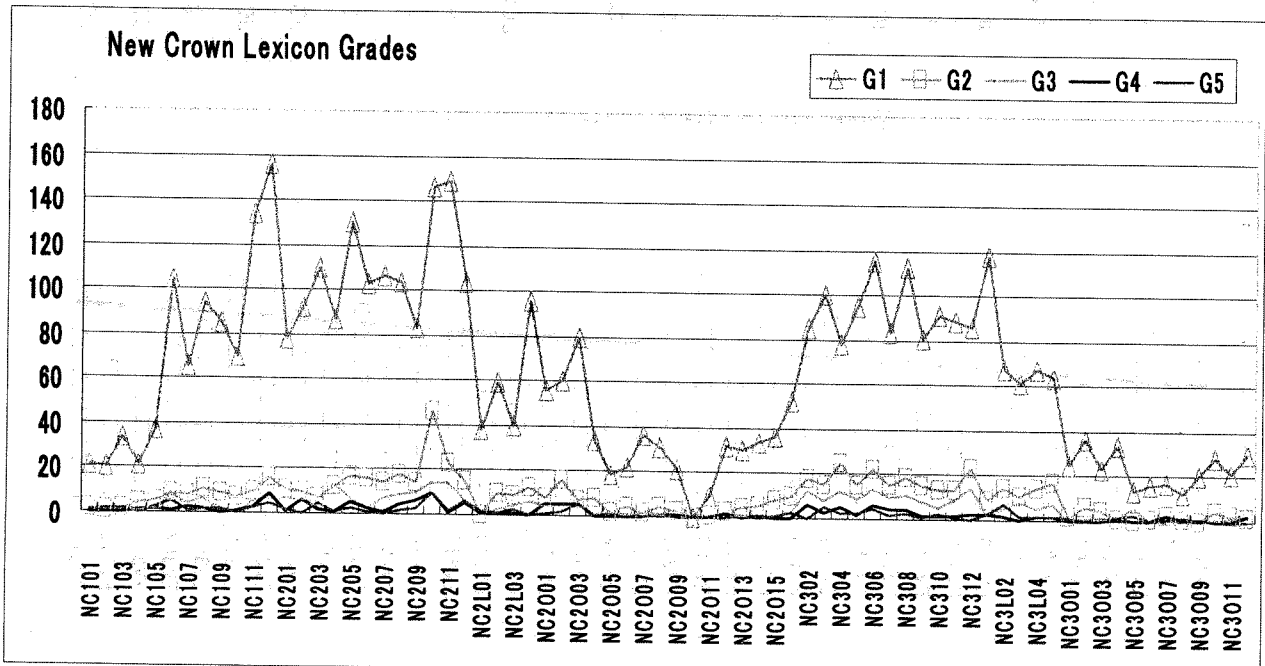
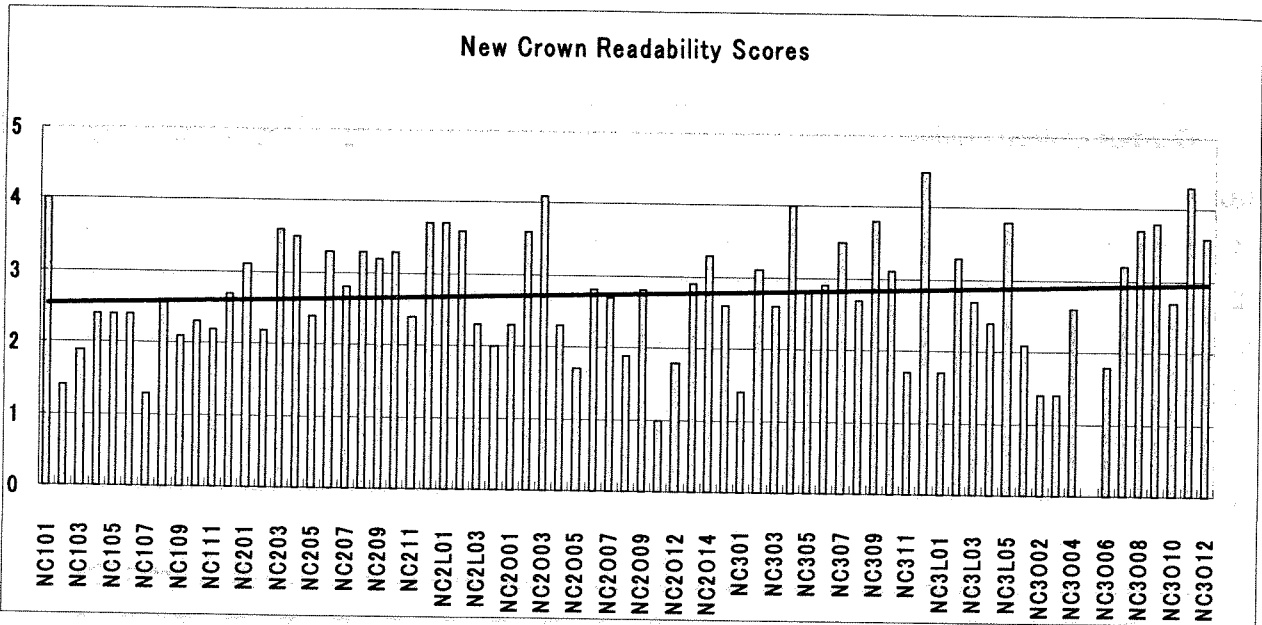
The List of Textbooks

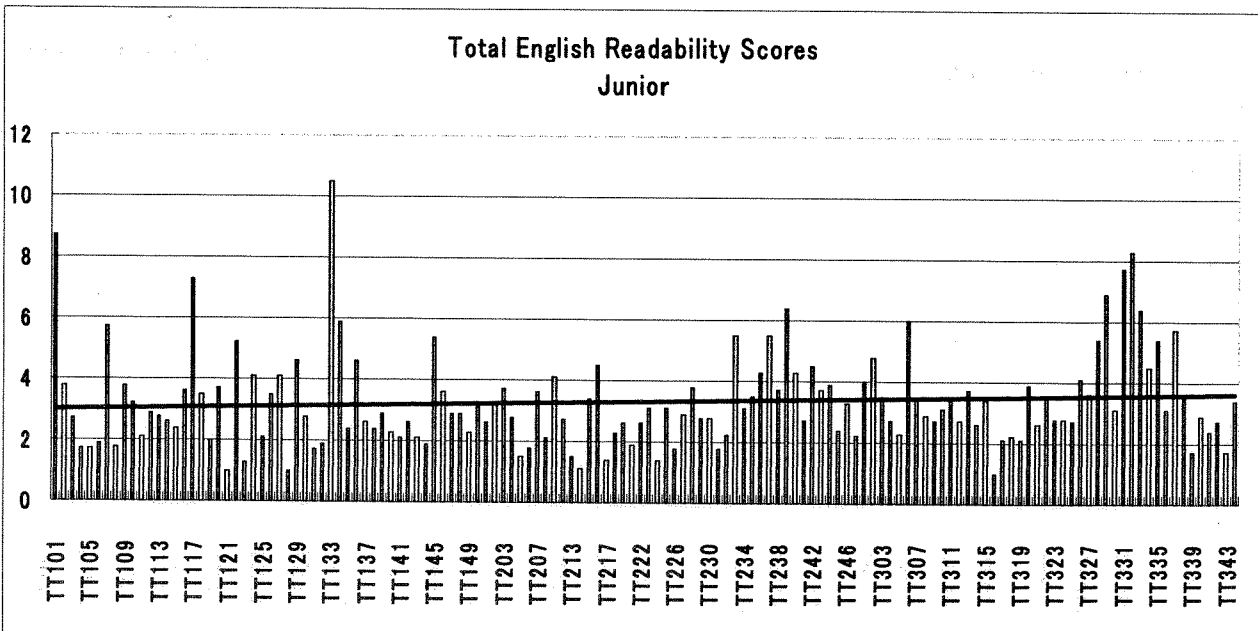
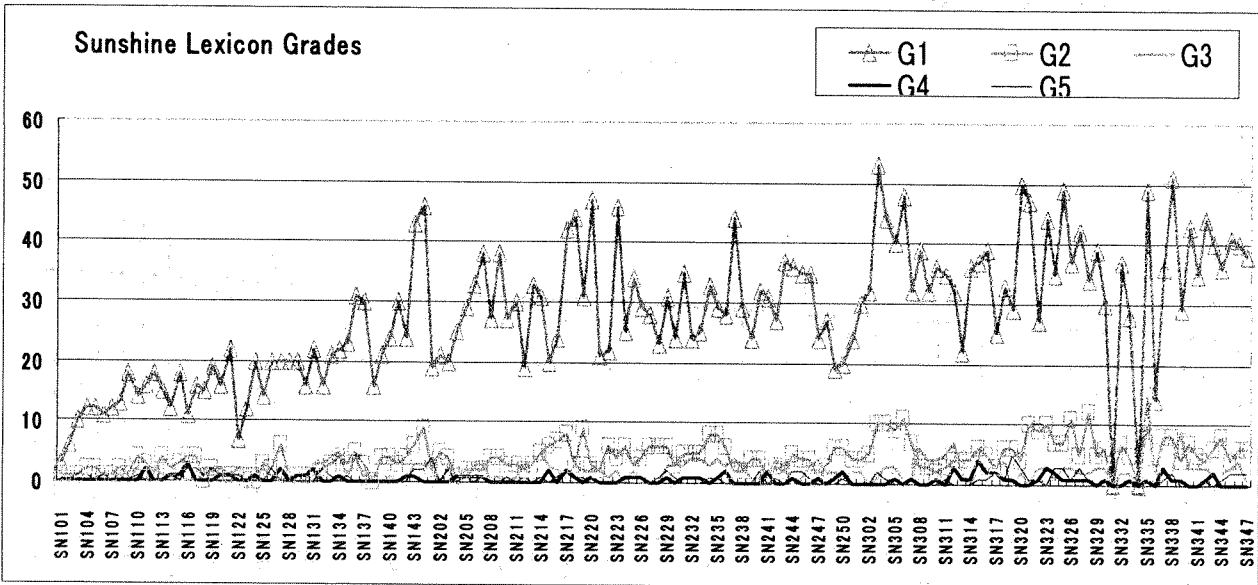
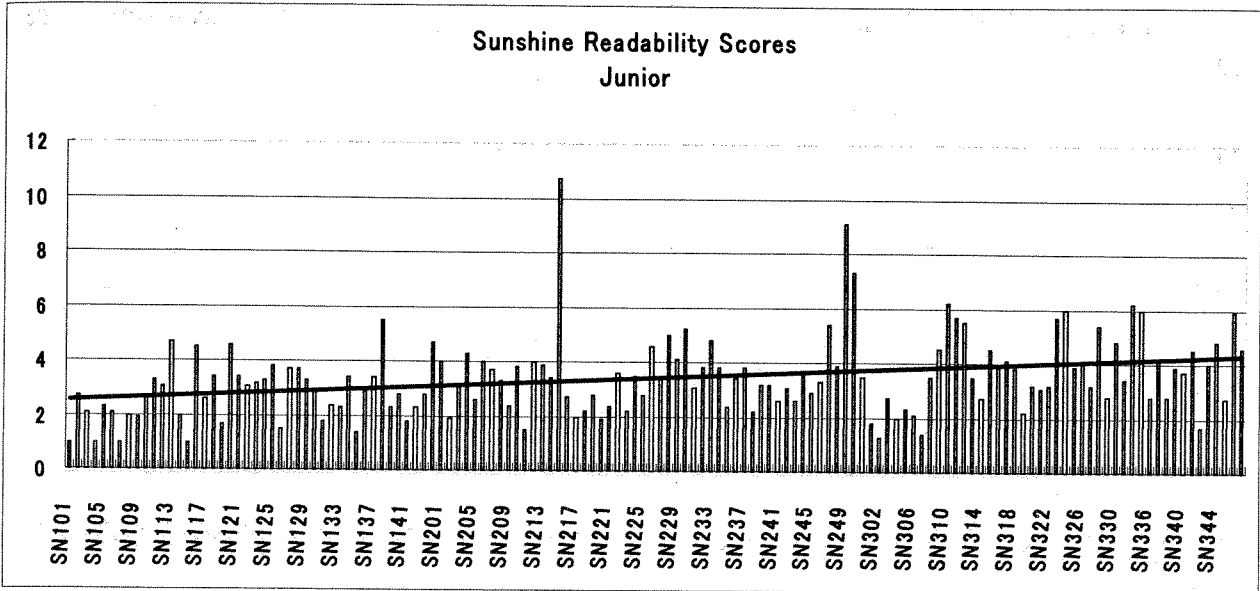
These are the textbooks that are analyzed this time. They are chosen so that selection of the books cover larger market share, which means more students are using them. The filenames are shown here for the convenience of referring to other tables and figures.

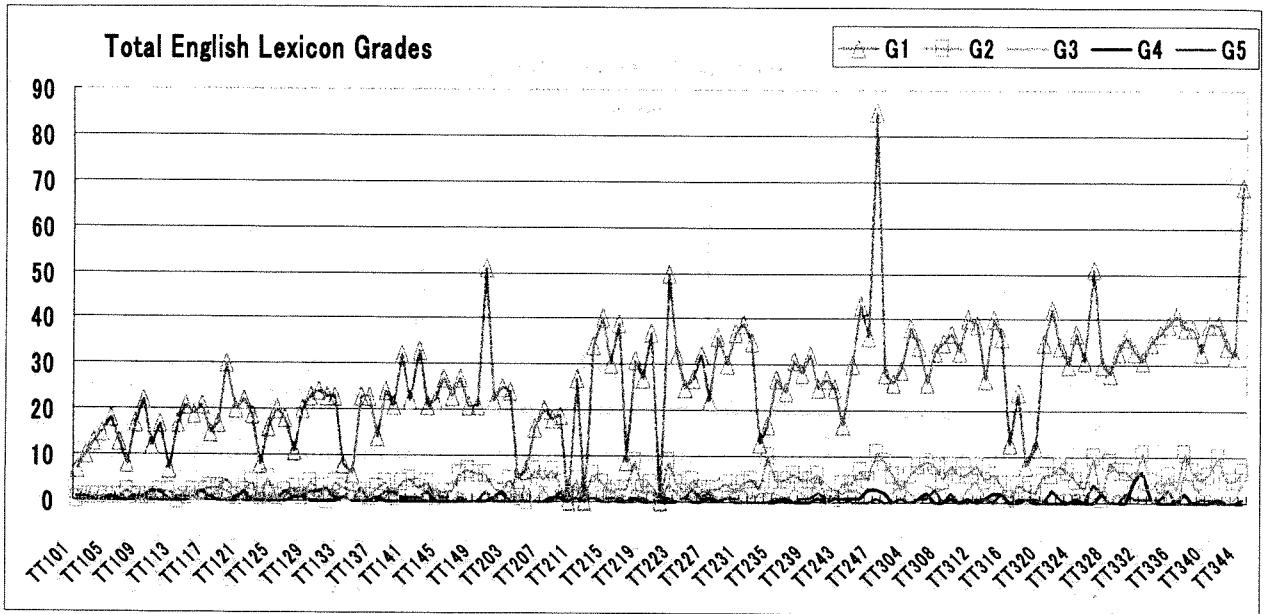
Junior High School Textbooks



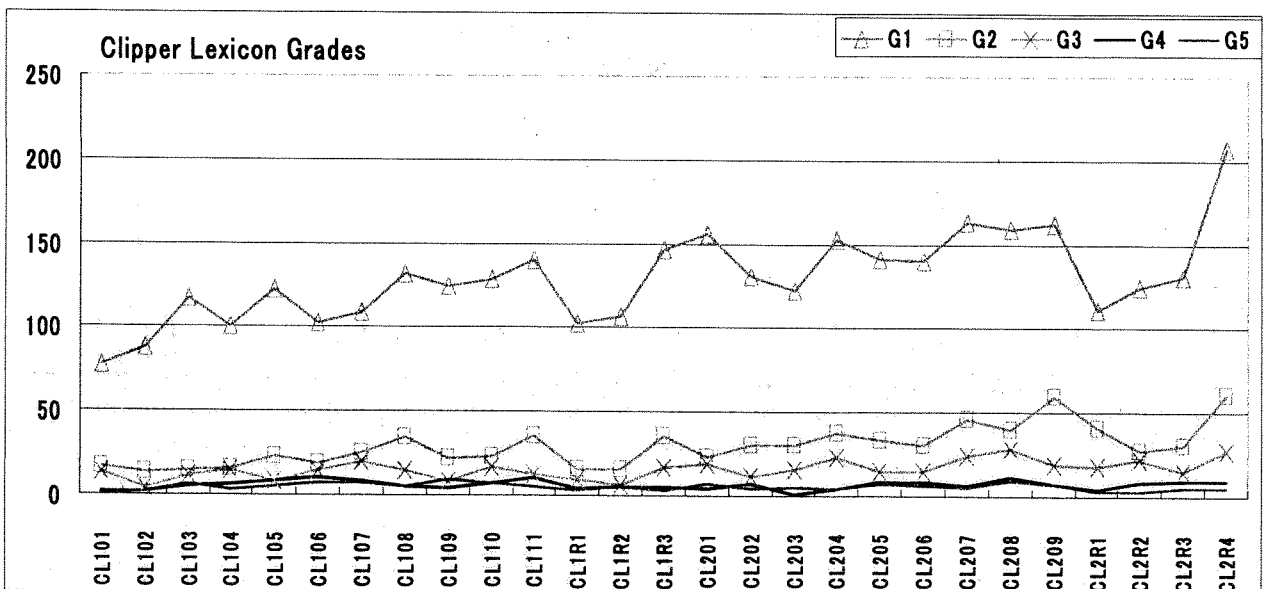
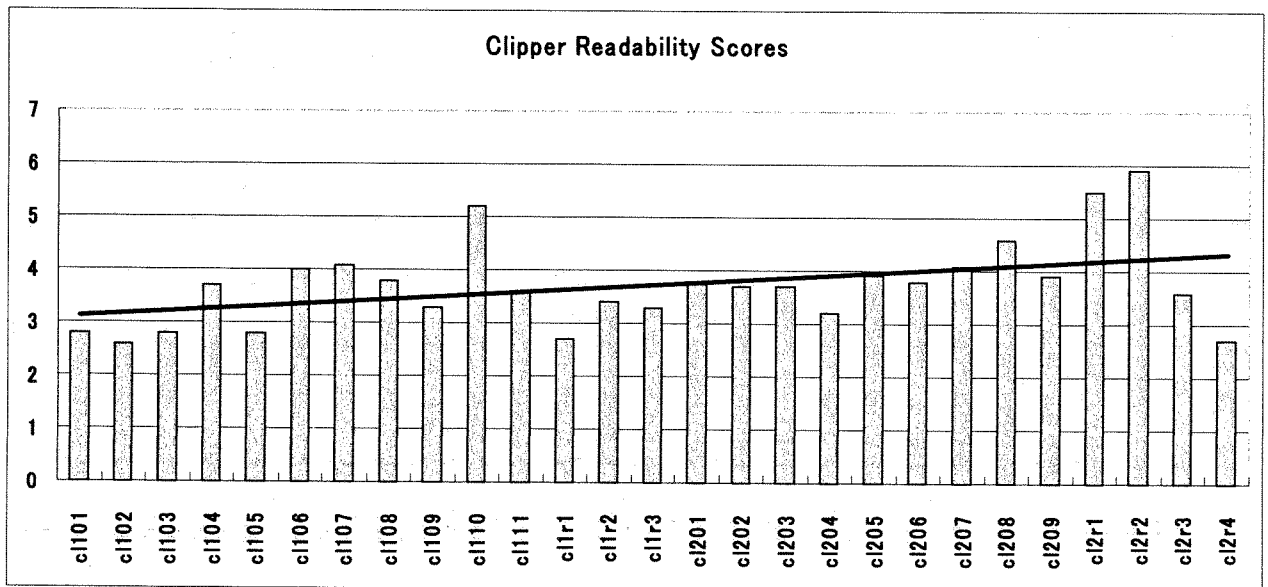


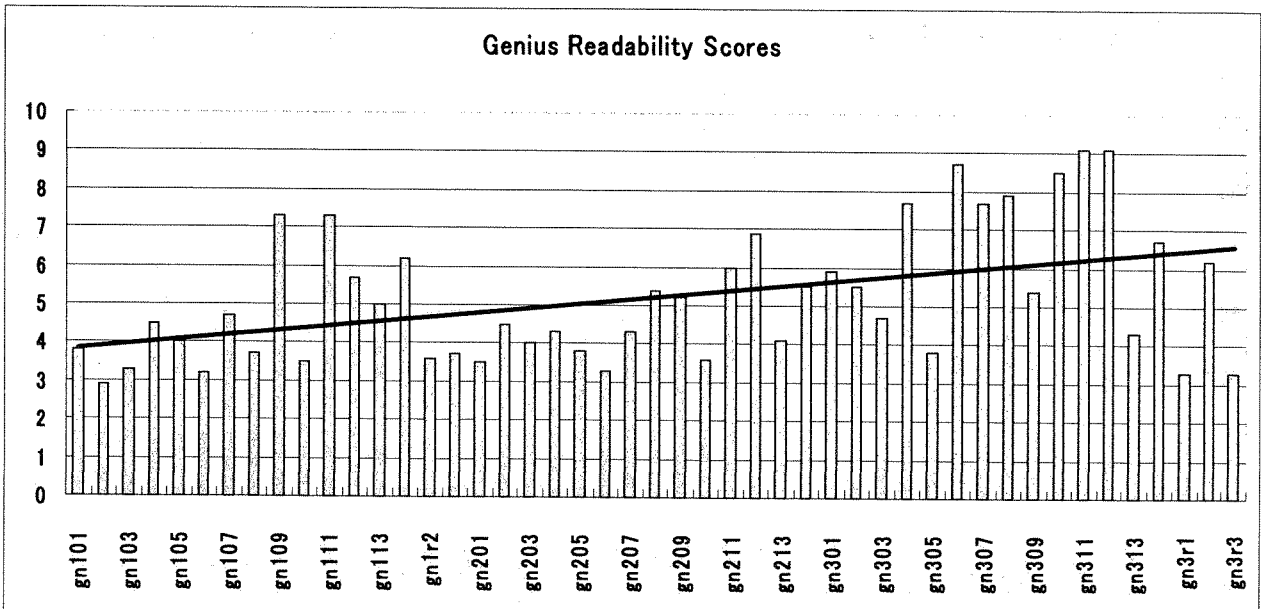
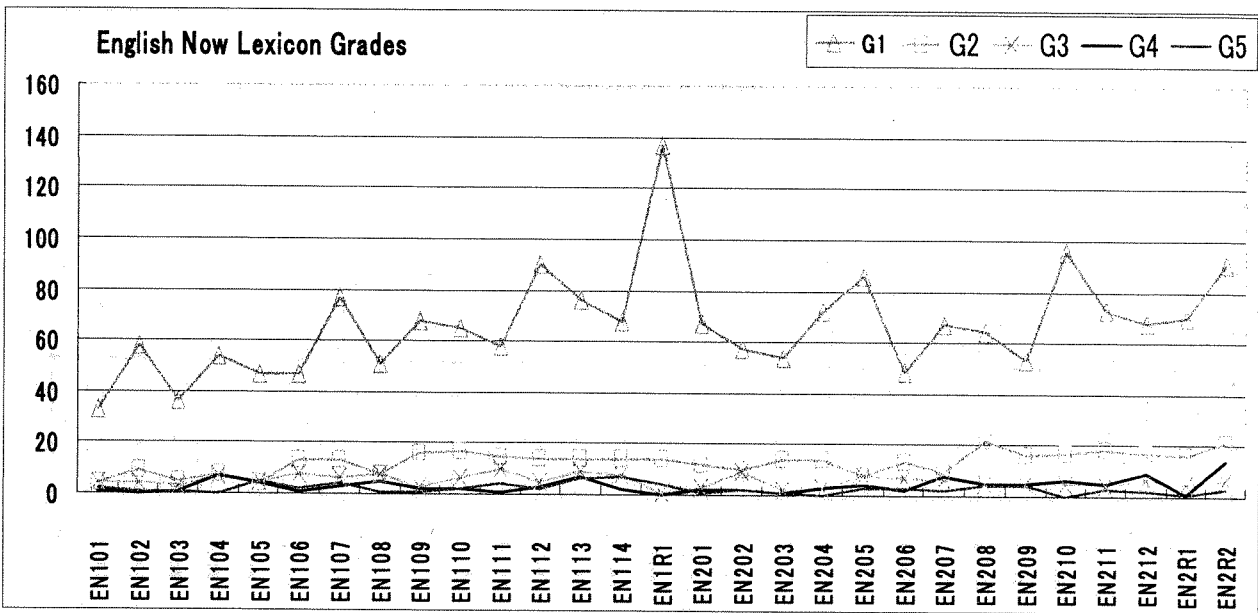
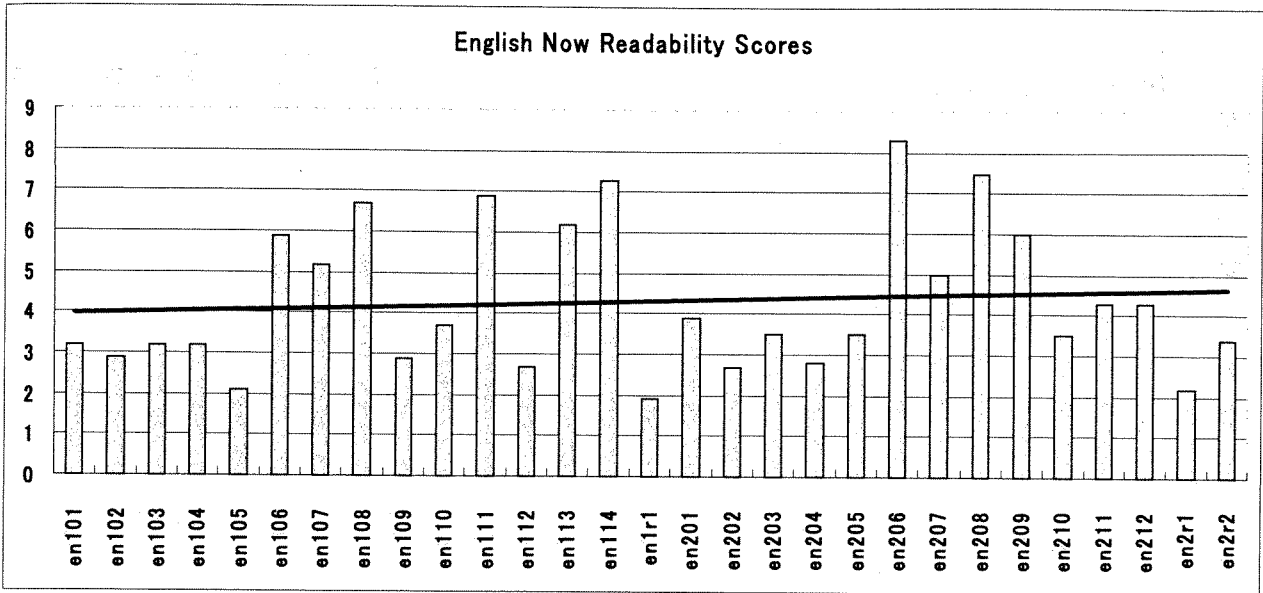


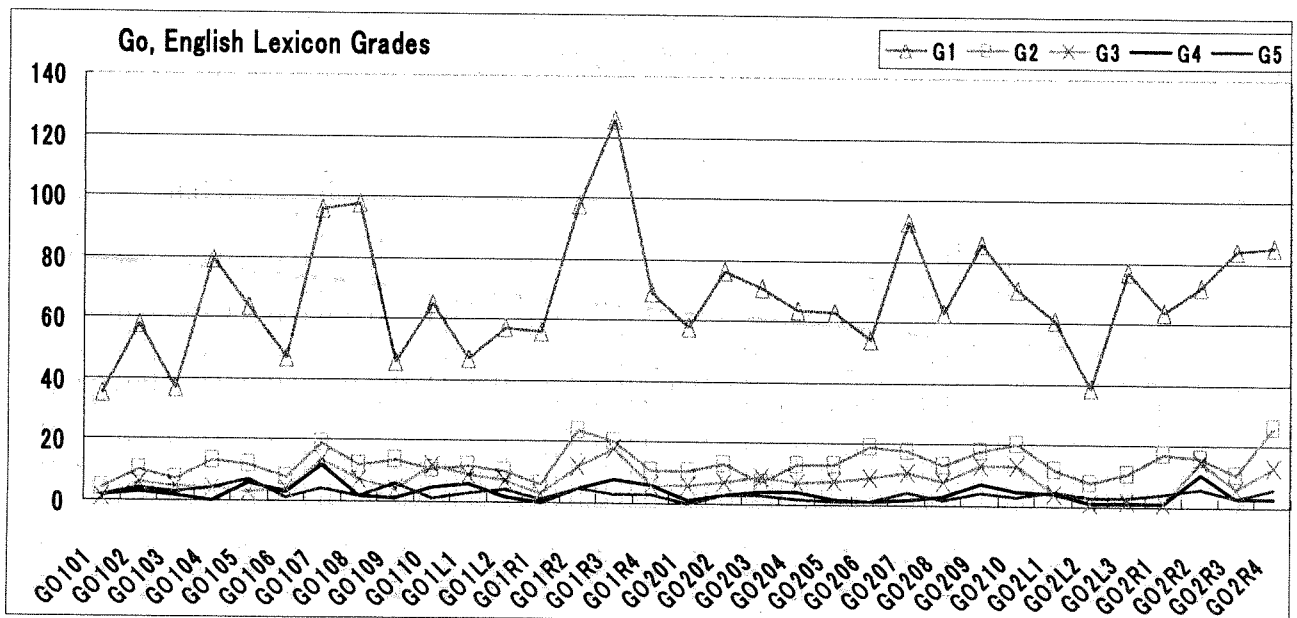
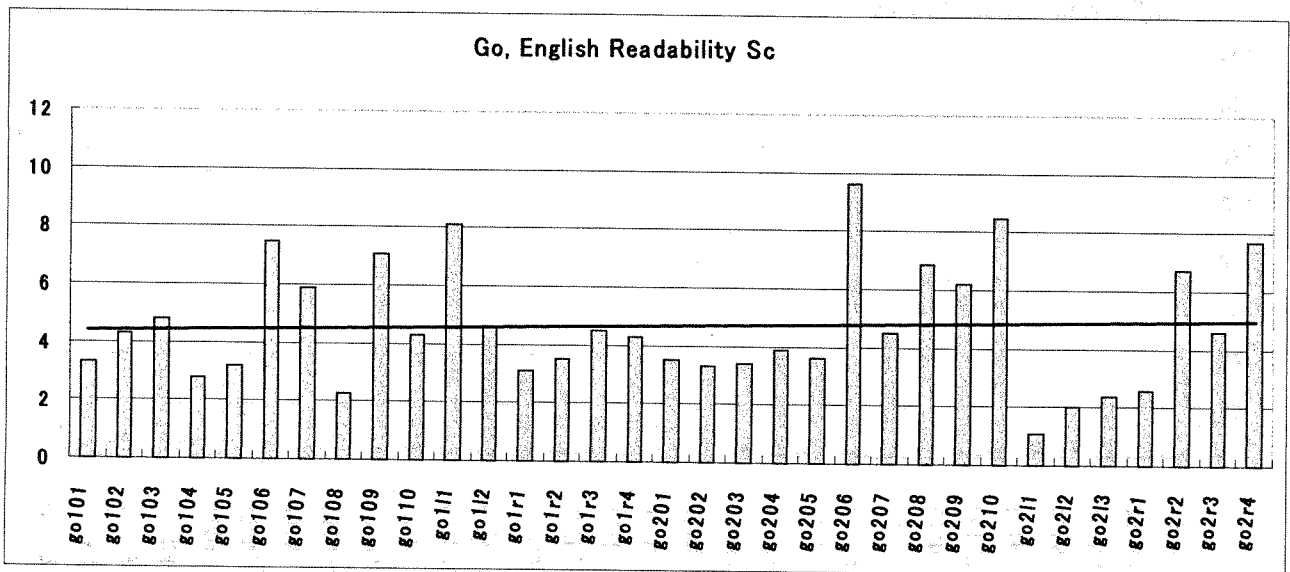
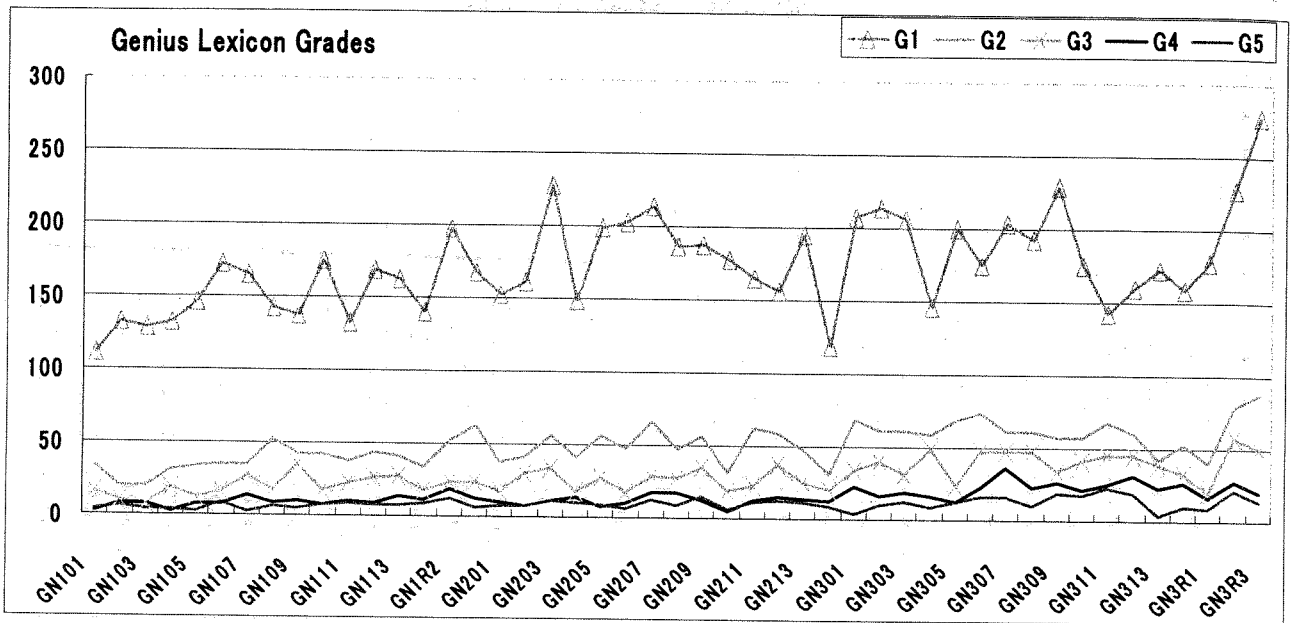




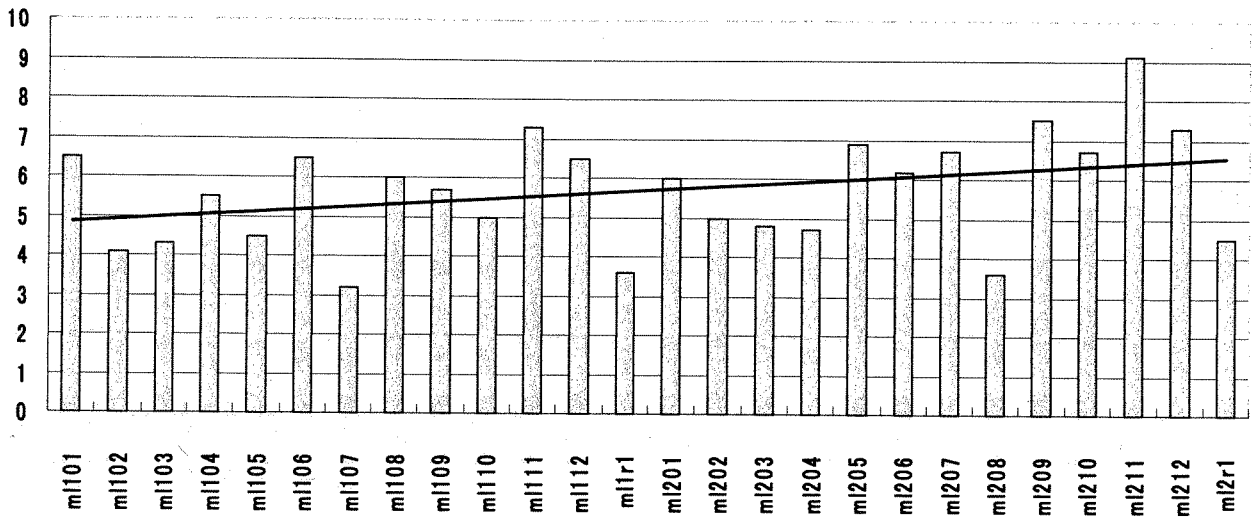
High School Textbooks



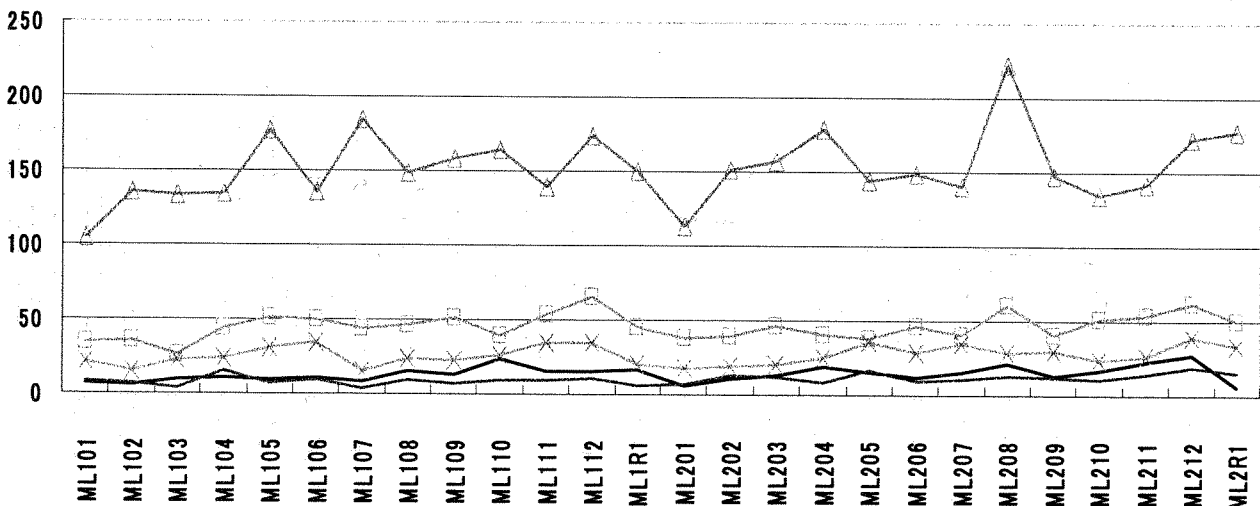




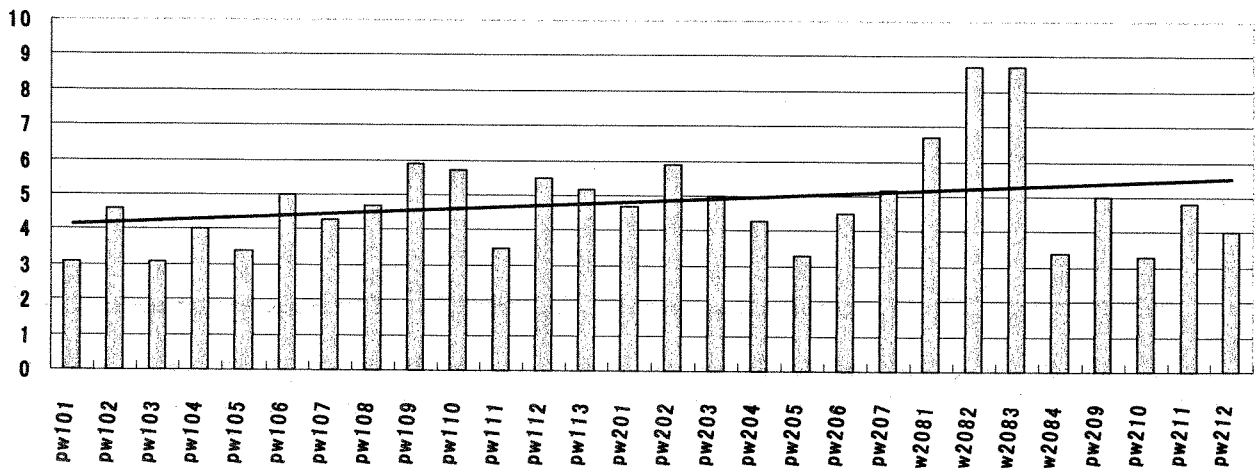
Milestone Readability Scores

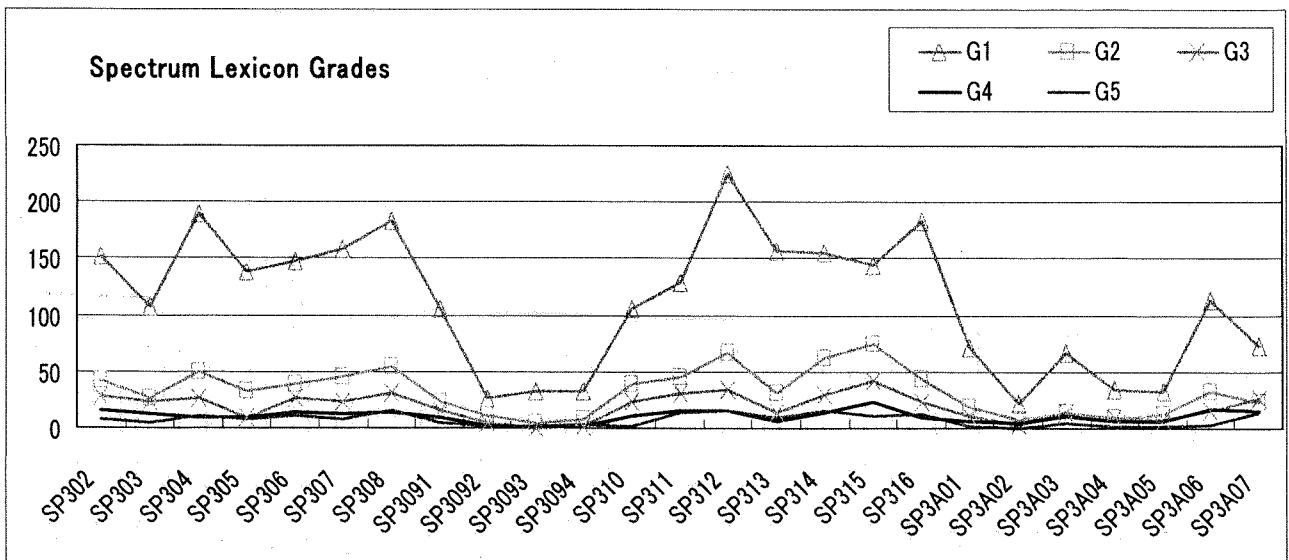
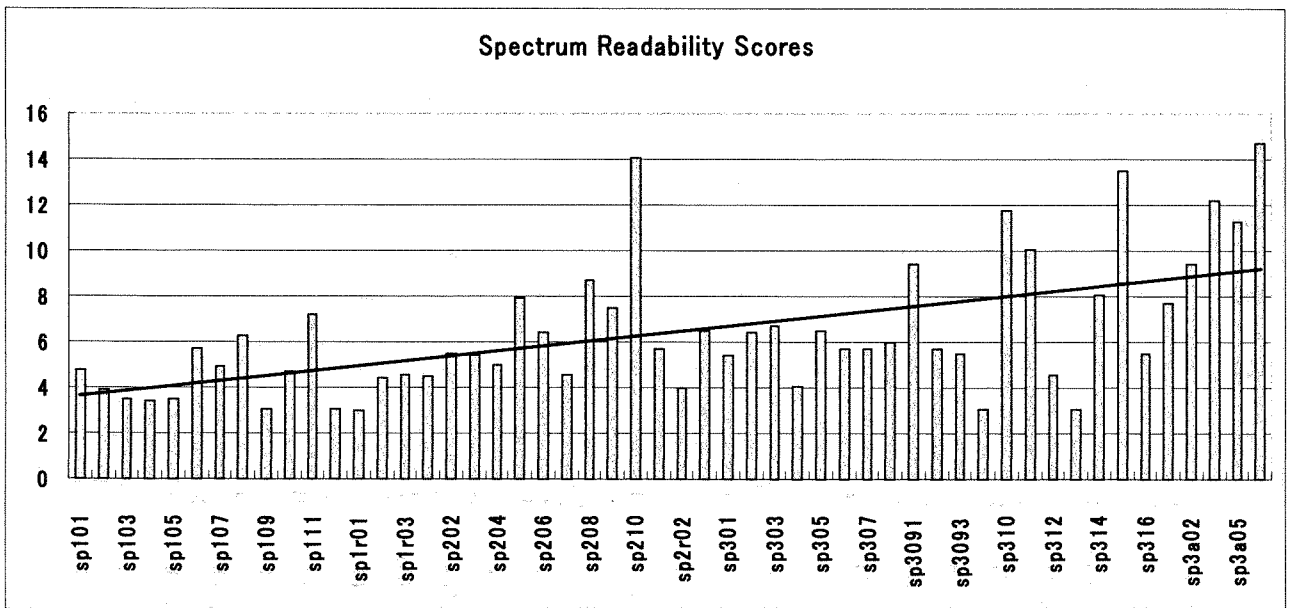
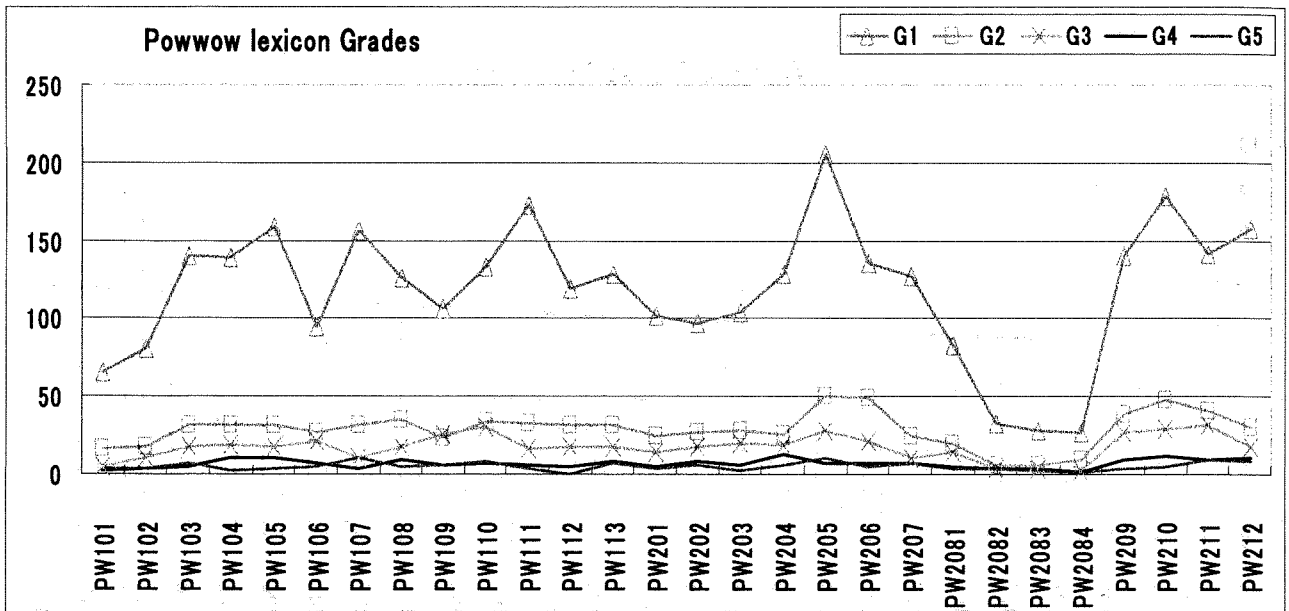


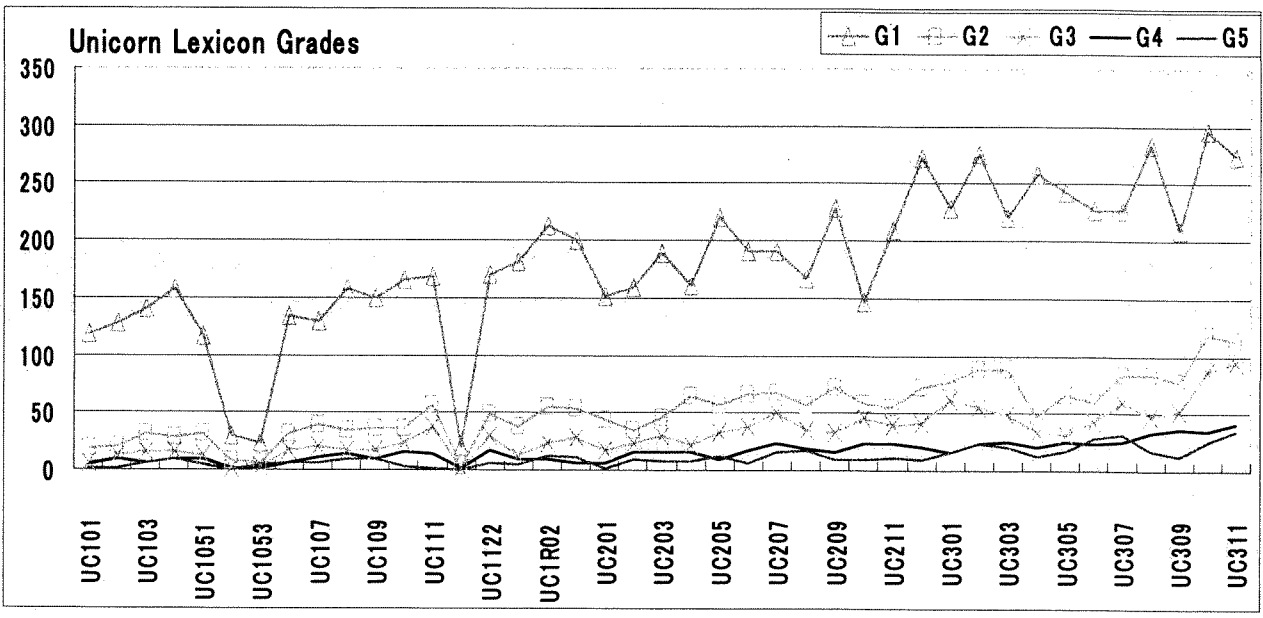
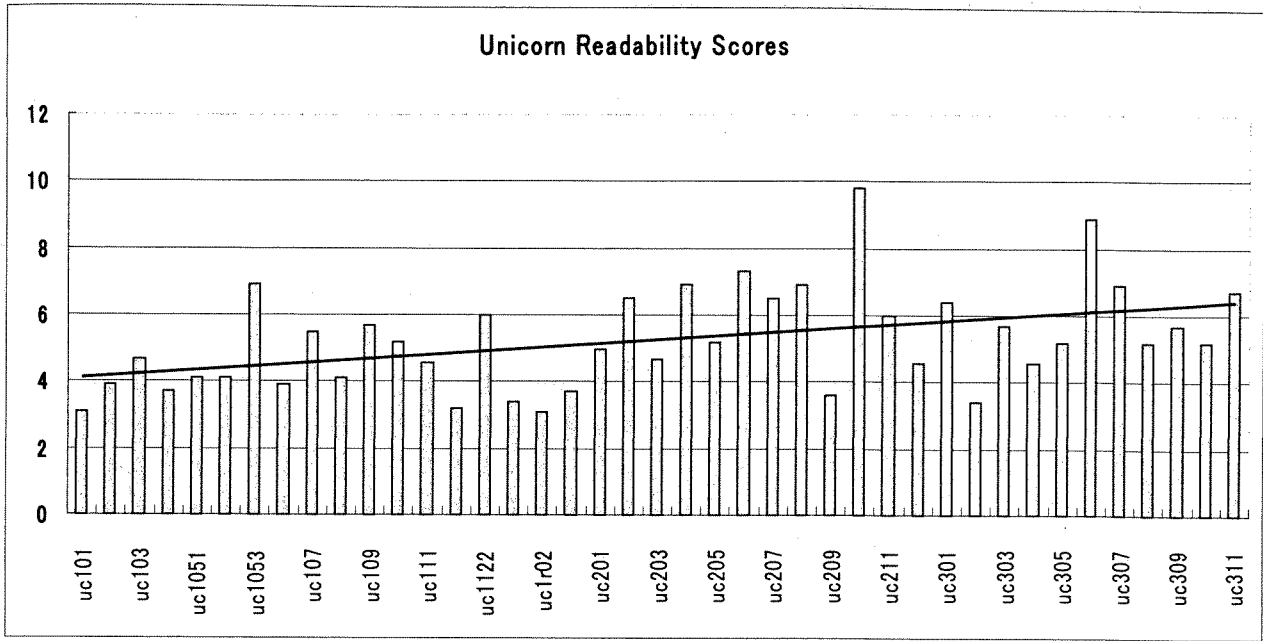
Milestone Lexicon Grades



Powwow Readability Scores







A Study of Textbook Analysis (2): ‘Thanking’, ‘Apologies’, ‘Requests’, and ‘Offers’ in Japanese Junior High School Textbooks

Owada, K.; Ishikawa, K.; Miyasaka, N.; Miyabo, S; Ueda, N.; Yamazaki, T.; Ohya, M.; Nakano, M.

1. Aim:

The aim of this research is to find out how many and what kind of expressions called formulaic expressions or lexical phrases are used as input in the junior high school textbooks in Japan. Formulaic expressions are very useful for language learners in the real conversational situations. And also textbooks can be considered to be important input for second language learners. That is why we do this research. In this research, we choose and analyze four kinds of formulaic expressions: ‘thanking,’ ‘apologies,’ ‘requests,’ and ‘offers.’

2.

2.1.

In this research, we use the notion of lexical phrases based on the definition of Nattinger and DeCarrico (1992). Nattinger and DeCarrico define lexical phrases as follows:

1. chunks of language of varying length.
2. an idea unit which can be exploited for language teaching
3. prefabricated language chunks
4. ritualized bits of language

In Ajimer (1996), we can find the typical patterns of the lexical phrases. We use the categories of ‘thanking’ and ‘apologies’ in Ajimer to analyze the data. The examples for ‘thanking’ and ‘apology’ in Ajimer (1996) are as follows:

Table 1: The categories of ‘Thanking’ in Ajimer (1996).

- | |
|----------------------|
| 1. THANK YOU |
| 2. THANKS |
| 3. Subject THANK YOU |

Table 2: The categories of ‘Apologies’ in Ajimer (1996)

- | |
|--------------------------|
| 1. (I AM) (WE'RE) SORRY |
| 2. (I BEG YOUR) PARDON |
| 3. EXCUSE (ME) |
| 4. APOLOGIZE (APOLOGIES) |

In the case of ‘offers’ and ‘requests,’ Ajimer (1996) just shows the categories, not the examples. So, we think of the possible expressions for ‘offers’ and ‘requests’ according to the categories Ajimer proposes.

Table 3: The categories of 'Requests' and 'Offers' in Ajimer (1996)

| | | |
|----|---|-----------------------|
| A. | Asking about the hearer's ability to do something | [ABILITY] |
| B. | Asking about the possibility of the desired act happening | [CONSULTATION] |
| C. | Asking whether the hearer is willing to do something or has any objection to doing something | [WILLINGNESS] |
| D. | Expressing a wish that the agent should do something | [WANT] |
| E. | Expressing a need or desire for (non-verbal) goods | [NEED] |
| F. | Stating that the hearer is under the obligation to do the desired action | [OBLIGATION] |
| G. | Stating that it is appropriate that the hearer performs the desired action | [APPROPRIACY] |
| H. | Asking an idiomatic wh-question | [WH-QUESTION] |
| I. | Referring to a hypothetical action | [HYPOTHESIS] |
| J. | Expressing that one would appreciate, be pleased, feel gratitude if a hypothetical desired action were realized | [APPRECIATION] |
| K. | Asking for permission to do something | [PERMISSION QUESTION] |
| L. | Asserting that it is possible for the hearer to do something | [POSSIBILITY] |
| M. | Referring to the speaker's opinion that something is preferable | [PREFERENCE] |
| N. | Referring explicitly to the act of requesting | [PERFORMATIVE] |
| O. | Referring to a state of the world which needs to be changed | [STATE] |
| P. | Naming the object requested | [NAMING] |
| Q. | Checking the availability of the desired object, etc | [EXISTENCE] |
| R. | Other | |

According to the frames above, we examine the formulaic expressions especially about:

1. What kind of expressions is used in the textbooks of each grade.
2. What chunks are most used in all the textbooks.

2.2. Materials:

21 junior high school textbooks published in Japan are analyzed:

Sunshine English Course 1, 2, 3

New Crown English Series 1, 2, 3

Everyday English 1, 2, 3,

New Horizon English Course 1, 2, 3

One World English Course 1, 2, 3

Columbus English Course 1, 2, 3

Total English 1, 2, 3

2.3 Method:

All the data from the textbooks are analyzed on the chunks such as 'thanking,' 'apologies,'

'requests,' and 'offers' by *WordSmith Ver.3* according to the categories of Ajimer (1996).

3. Results and Analysis

3.1 The Result of 'Thanking'

Many other subcategories were found in Table4, but the main categories, 'Thank you' is the most frequently used in all the textbooks and also in those of each grade. Some categories in Ajimer (e.g. Thank you again for Ving.) cannot be found in the data.

Table 4: The Results of Analysis of the Formulaic Expressions for 'thanking.'

| | Columbus | | | Everyday | | | New Crown | | | New Horizon | | | One World | | | Sunshine | | | Total | | | total | |
|------------------------------|----------|---|---|----------|---|---|-----------|---|---|-------------|---|---|-----------|---|---|----------|---|---|-------|---|---|-------|---|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | | |
| Thank you | 5 | 1 | 2 | 2 | 1 | | | 2 | 1 | 5 | 3 | | 1 | 4 | 2 | 7 | 2 | 1 | 5 | 3 | 4 | 51 | |
| Thank you for NP | | | | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | 4 | |
| Thank you for Ving | | | | | | | | | | | | 1 | 1 | 1 | | | | | | | | 4 | |
| Thank you for Ving, prn. | | | | | | | | | | | | | | | 1 | 1 | | | | | | 2 | |
| Thank you very much | | | 1 | | | | 1 | 1 | 1 | 1 | 2 | | | 2 | | | | | | | 2 | 11 | |
| Thank you very much, prn. | | | | | | | | | | | | | | | | 1 | | | | | 1 | 2 | |
| Thank you very much for NP | | | 1 | | | | | | 1 | | | | | | 1 | | | | | | | 3 | |
| Thank you very much for Ving | | | 1 | | | | | | | | | | | | | | | | | | | 1 | |
| Thank you again | | | | | | | | | | | 1 | | | | | | | | | | | 1 | |
| Thank you again for NP | | | | | | | | | | | | | | | | 1 | | | | | | 1 | |
| Thank you again for Ving | | | | | | | | | | | | | | | | | | | | | | | |
| Thank you, prn. | | | 1 | | 1 | | | | 1 | | | | 1 | 1 | 1 | 1 | 1 | | | | 1 | 8 | |
| Thank you so much for NP | | | | | | | | | | | | | | | | 1 | | | | | | 1 | |
| Thank you so much for Ving | | | | | | | | | | | | | | | | | | | | | | | |
| Thanks | 7 | 1 | | | | | 2 | 1 | | | 2 | 1 | | | 1 | | | | | | 6 | 21 | |
| Thanks again | | | | | | | | | | | | | | | | | | | | | | | |
| Thanks very much | 1 | | | | | | | | | | | | | | | | | | | | | 1 | |
| Thanks for NP | | | | | | | | | | | | 1 | | | | | | | | | | 1 | |
| Thanks for Ving | | 1 | | | | | | | | | | | | | | | | | | | | 1 | |
| Thanks, prn | | 1 | | | | | | 1 | | | | | | | | | | | 1 | 2 | | 5 | |
| prn. thanked | | | | | | | | | | | | | | | | | | | | 2 | | 2 | |
| prn. thanks us | | | | | | | | | | | | | | | | | | | | | 1 | 1 | |
| No, thanks | | 1 | | | | | | | | | | | | | | | | | | | 1 | 1 | 3 |
| Oh, yes, thank you | | | | | | | | | | | | | | | | | | | | | 1 | 1 | |
| Okey, thanks | | | | 1 | | | | | | | | | | | | | | | | | 1 | 2 | |
| Yes, thanks | | | | | | | | | | | | | | | | | | | | | 1 | 1 | |
| Fine, thank you | | | | 3 | | | 1 | | 2 | | | | 2 | | | 1 | 1 | | | | | 10 | |

Table 7: The Results of Analysis of the Formulaic Expressions for 'Offers'

| | Columbus | | | Everyday | | | Crown | | | New Horizon | | | One world | | | Sunshine | | | Total | | | Total | |
|-------------------|----------|---|----|----------|---|---|-------|---|---|-------------|---|----|-----------|---|----|----------|---|----|-------|---|----|-------|---|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | | |
| Would you like NP | | | | | | | | | | 1 | | | | 1 | | | 1 | | | | | 3 | |
| Would you like to | | | | | | | | | | | | | | | | 1 | | | | | | 1 | |
| Shall I V | | | 1 | | | | | | | | | | | 1 | | | 1 | | | | | 3 | |
| What shall I V | | | | | 2 | | | | | | | | | | | | | | | | | 2 | |
| Do you want NP | | 1 | | | | | | | | | | | | | | | | | | 1 | | 2 | |
| Do you want to V | | 1 | | | | | | | | | | | | | | | | | | | | 1 | |
| May I help you? | | | | | | | | | 1 | | 1 | | | | | | | | | | 1 | 2 | 5 |
| May I V | | | | | | | | | | | | | | | | 1 | | | | | 1 | 2 | |
| Person, may I V | | | | | | | | | | | | | | | | | 1 | | | | | 1 | |
| You can V | | | | | 1 | | | | | | | | | | | | | | | | | 1 | |
| Can I V ? | | | | | | | | | | | 1 | | | | | | | | | | | 1 | |
| Can I help you? | | | | | | 1 | | | | | | | | | | | 1 | | | | | 2 | |
| Can I help? | | | | | | | | | | | | | | 1 | | | | | | | | 1 | |
| Let's | 11 | 6 | 1 | 4 | | | 3 | 3 | 2 | 7 | 7 | 2 | 6 | 7 | 7 | 7 | 2 | 6 | | | 5 | 86 | |
| Total | | | 21 | | | 8 | | | 9 | | | 19 | | | 25 | | | 19 | | | 10 | 111 | |

3. Conclusion

From the results, we can say two things:

1. The basic expressions of 'Thanking,' 'Apologies,' 'Request' and 'Offer' are found in all the textbooks. Hence, in this point, textbooks give enough input to the students in Japan.
2. But, there are few variations found in all the textbooks.

We can think much of the fact that the basic expressions of 'Thanking,' 'Apologies,' 'Request' and 'Offer' are used in all textbooks. However, if we consider the textbooks as the main input in early stage of acquiring the second language, we should introduce more various expressions into the textbooks.

References

- Ajimer, K. (1996). *Conversational Routines in English: Convention and Creativity*. Addison Wesley Longman.
- Nattinger, J. R. and DeCarrico, J. S. (1992). *Lexical Phrases and Language Teaching*. Oxford University Press.

A Study of Textbook Analyses (3): 'Thanking', 'Apologies', 'Requests', and 'Offers' in Japanese High School Textbooks

Ano, K; Saito, N.; Miyake, A.; Ueda, N.; Miyasaka, N.; Yamazaki, T.; Ohya, M.; Nakano, M.

1. Aim

The aim of this research is to find out how many and what kind of expressions called formulaic expressions or lexical phrases are in the high school textbooks in Japan. The definition of lexical phrases (Nattinger, J. R. and J. S. DeCarrico 1992) is as follows:

1. chunks of language of varying length.
2. an idea unit which can be exploited for language teaching
3. prefabricated language chunks
4. ritualized bits of language

In this research, especially formulaic expressions for 'thanking,' 'apologies,' 'requests,' and 'offers' are analyzed. For this, we use the data from the textbooks in Japan titled Aural/Oral Communication A. According to the Ministry of Education, the objectives of this subject are stated in the Course of Study as follows:

To develop students' abilities to understand a speaker's intentions and express their own ideas etc. in spoken English in everyday situations, and to foster a positive attitude toward communicating in English.

Thus, the textbooks for Aural/Oral communication A are suitable for this study.

2.

2.1.

In Ajimer (1996), we can find the typical patterns of the lexical phrases. We use the categories of 'thanking' and 'apologies' in Ajimer to analyze the data. The examples for 'thanking' and 'apology' in Ajimer (1996) are as follows:

Table 1: The categories of 'Thanking' in Ajimer (1996).

- | |
|---|
| <ol style="list-style-type: none">1. THANK YOU2. THANKS3. Subject THANK YOU |
|---|

Table 2: The categories of 'Apologies' in Ajimer (1996)

- | |
|---|
| <ol style="list-style-type: none">1. (I AM) (WE'RE) SORRY2. (I BEG YOUR) PARDON3. EXCUSE (ME)4. APOLOGIZE (APOLOGIES) |
|---|

In the case of 'offers' and 'requests,' Ajimer (1996) just shows the categories, not the examples. So, we think of the possible expressions for 'offers' and 'requests' according to the categories Ajimer proposes.

Table 3: The categories of 'Requests' and 'Offers' in Ajimer (1996)

- | | | |
|----|---|-----------------------|
| A. | Asking about the hearer's ability to do something | [ABILITY] |
| B. | Asking about the possibility of the desired act happening | [CONSULTATION] |
| C. | Asking whether the hearer is willing to do something or has any objection to doing something | [WILLINGNESS] |
| D. | Expressing a wish that the agent should do something | [WANT] |
| E. | Expressing a need or desire for (non-verbal) goods | [NEED] |
| F. | Stating that the hearer is under the obligation to do the desired action | [OBLIGATION] |
| G. | Stating that it is appropriate that the hearer performs the desired action | [APPROPRIACY] |
| H. | Asking an idiomatic wh-question | [WH-QUESTION] |
| I. | Referring to a hypothetical action | [HYPOTHESIS] |
| J. | Expressing that one would appreciate, be pleased, feel gratitude if a hypothetical desired action were realized | [APPRECIATION] |
| K. | Asking for permission to do something | [PERMISSION QUESTION] |
| L. | Asserting that it is possible for the hearer to do something | [POSSIBILITY] |
| M. | Referring to the speaker's opinion that something is preferable | [PREFERENCE] |
| N. | Referring explicitly to the act of requesting | [PERFORMATIVE] |
| O. | Referring to a state of the world which needs to be changed | [STATE] |
| P. | Naming the object requested | [NAMING] |
| Q. | Checking the availability of the desired object, etc | [EXISTENCE] |
| R. | Other | |

According to the frames above, we examine the formulaic expressions especially about:

1. What kind of expressions is used in the textbooks of each grade.
2. What chunks are most used in all the textbooks.

2.2. Materials

, 17 textbooks of various kinds for Aural/Oral Communication A are published by 15 companies in Japan. The following 5 textbooks for this subject were selected among the top ten in the list of books ordered by frequency of the number of copies adopted by high schools (Naigai kyoiku [Inside and Outside of Education] 1999).

- Express
- Hello there
- Progress
- Select
- Crown

2.3. Method:

All the data from the textbooks are analyzed on the chunks such as ‘thanking,’ ‘apologies,’ ‘requests,’ and ‘offers’ by *WordSmith Ver.3*. Then, two things are examined:

1. What kind of expressions is used in each textbook.
2. What chunks are most used in the textbooks.

3. Results and Analysis

3.1. The Result of ‘Thanking’

As can be seen in Table 4, 34 subcategories were found. (19 subcategories for ‘THANK YOU’ and 11, for ‘THANKS’) The Category, ‘Subject THANK YOU’ was not found.

‘Thank you’ is the most frequently used in all the textbooks (35sentences in total)

‘Fine, thank you’ is the second frequently used, and ‘Thank you very much’ and ‘Thanks’, the third frequently used.

Different from ‘Thank you.’ ‘Fine, thank you’ and ‘Thank you very much’ are not found in all the textbooks.

Table 4: The Results of Analysis of the Formulaic Expressions for ‘thanking’.

| | Crown | Expressway | Hello | Progressiv | Select | Sum |
|------------------------------|-------|------------|-------|------------|--------|-----|
| Thank you | 10 | 5 | 6 | 2 | 8 | 31 |
| Thank you, but st. | | 1 | | | | 1 |
| Thank you for NP | | | 1 | | | 1 |
| Thank you for Ving | | | | 1 | | 1 |
| Thank you for Ving, pro. | | | 1 | | | 1 |
| Thank you very much | 1 | | 3 | 3 | 2 | 9 |
| Thank you very much prn. | | | | | | |
| Thank you very much for NP | | | | | | |
| Thank you very much for Ving | | | | | | |
| Thank you again | | | | | | |
| Thank you again for NP | | | | | | |
| Thank you again for Ving | | | | | | |
| Thank you, prn. | 1 | 1 | 1 | | | 3 |
| Thank you so much for NP | | | | | | |
| Thank you so much for Ving | | | | | | |
| Thanks | 6 | 4 | | | | 10 |
| Thanks again | | | | | | |
| Thanks very much | | | | | | |
| Thanks for NP | | | | | | |
| Thanks for Ving | | | 1 | | | 1 |
| Thanks prn. | | | 2 | | | 2 |
| prn. thank | | 1 | | | | 1 |
| prn. thanked | | | | | | |
| prn. thanks us | | | | | | |
| Thanks a lot | | 1 | 1 | 2 | 2 | 6 |
| Oh, thank you | 1 | 1 | | | | 2 |

| | | | | | | |
|-------------------------------|----|----|----|----|----|----|
| Oh, thank you very much, prn. | | | 1 | | | 1 |
| Fine, thank you | | | 1 | 1 | 8 | 10 |
| Fine, thanks | | 1 | 1 | 1 | 3 | 6 |
| I'm fine thank you | | | 1 | | | 1 |
| No, thanks | | | | | 4 | 4 |
| OK, thanks | | | | | 1 | 1 |
| OK, thanks anyway | | | | | 1 | 1 |
| OK, thank you | | | | | 1 | 1 |
| Thank God | | | | | 1 | 1 |
| Yes, thank you | | | | | 1 | 1 |
| | 19 | 15 | 20 | 10 | 31 | 95 |

3.2. The Result of 'Apologies'

11 subcategories were found. (2 subcategories found for 'EXCUSE ME'; 1 subcategory, for '(I BEG YOUR) PARDON'; and 8 subcategories, for '(I AM) (WE'RE) SORRY')

Other categories than 'EXCUSE ME' '(I BEG YOUR) PARDON' '(I AM) (WE'RE) SORRY' were not found. The expression, 'excuse me,' is the most frequently used, and is found in all of the textbooks except one.

'(I AM) SORRY' is used the second frequently, but not found in all the textbooks.

'(I AM) (WE'RE) SORRY' and its subcategories are found in all the textbooks.

Table 5: The Result of Analysis of Formulaic Expressions for 'Apologies'.

| apology | express | Hello there | progress | select | Crown | total |
|-------------------|---------|-------------|----------|--------|-------|-------|
| Excuse me, prn. s | 1 | 0 | 0 | 0 | 0 | 1 |
| Excuse me, snt. | 1 | 0 | 0 | 1 | 0 | 4 |
| Excuse me, but sn | 0 | 0 | 0 | 0 | 0 | 1 |
| Excuse me. | 2 | 3 | 2 | 1 | 1 | 14 |
| Excuse me? | 0 | 0 | 0 | 0 | 0 | 1 |
| Pardon me, sir. | 0 | 0 | 1 | 0 | 0 | 1 |
| Pardon? | 0 | 4 | 1 | 0 | 0 | 8 |
| I beg your pardon | 0 | 0 | 0 | 0 | 1 | 1 |
| I'm sorry. | 1 | 0 | 0 | 0 | 1 | 2 |
| I'm sorry to . | 1 | 0 | 0 | 0 | 0 | 1 |
| I'm sorry snt. | 0 | 0 | 1 | 0 | 2 | 4 |
| I'm sorry, I can' | 0 | 0 | 2 | 0 | 0 | 2 |
| Sorry. | 0 | 0 | 0 | 0 | 1 | 1 |
| Sorry, prn. | 1 | 0 | 0 | 0 | 0 | 1 |
| Sorry, snt. | 0 | 1 | 0 | 1 | 1 | 5 |
| Sorry. snt. | 0 | 0 | 0 | 0 | 0 | 1 |
| Sorry snt. | 0 | 0 | 0 | 0 | 1 | 1 |

3.3. The Result of 'Requests'

As can be seen in Table 6, 'PLEASE' is most frequently used in almost all the textbooks. 'CAN (I) (YOU)' is the second most frequently used.

Table 6: The Result of Analysis of Formulaic Expressions for 'Requests'.

| Request | Crown | Express | Progressiv | Hello | Select | <i>total</i> |
|----------------------|-------|---------|------------|-------|--------|--------------|
| Can I V? | 2 | | 2 | 2 | | 6 |
| Can you help me V? | 2 | | | | | 2 |
| Can you V ? | 2 | 2 | | 2 | | 6 |
| May I V | | | | 1 | 2 | 3 |
| S, please. | | 2 | 1 | 2 | 2 | 7 |
| please (person) | | | 1 | | | 1 |
| Please V. | | 3 | 3 | 1 | 1 | 8 |
| N, please. | | 1 | 1 | 2 | 1 | 5 |
| Adv, please. | | 2 | 1 | 2 | | 5 |
| I want to V. | 1 | | | | | 1 |
| We want to V. | | | 1 | | | 1 |
| Why don't you V? | 2 | | | | | 2 |
| Will you V | 1 | | | | 1 | 2 |
| Would you like to V? | | | | 3 | | 3 |
| Would you please V? | 1 | | 1 | | | 2 |
| | 11 | 10 | 11 | 15 | 7 | 54 |

3.4. The Result of 'Offer'

In Table 7, 15 frames can be found. The expression, 'Let's' is the most frequently used in all the textbooks. 'MAY I...' is the next most frequently used.

Table 7: The Results of Analysis of Formulaic Expressions for 'Offers'.

| | Crown | Expressway | Hello | Progressive | Select | <i>Total</i> |
|--------------------------------|-------|------------|-------|-------------|--------|--------------|
| Can I help you? | | | 1 | | | 1 |
| Can I take a message? | | | | 1 | 1 | 2 |
| Do you need any help? | 2 | | | | | 2 |
| Do you want to V? | | | 1 | | | 1 |
| Do you want me to V? | 1 | | | | | 1 |
| Won't you have one? | | 1 | | | | 1 |
| How can I help you? | | 1 | | | | 1 |
| May I help you? | 1 | 1 | 2 | 2 | 1 | 7 |
| May I take your order? | | | 1 | | | 1 |
| What shall I do | | 1 | | | | 1 |
| Shall we V ? | | | 2 | | | 2 |
| Want a NP? | | 1 | | | | 1 |
| Would you like something to V? | | | | | 1 | 1 |
| Would you like to V? | | | | 2 | | 2 |
| Let's | 4 | 3 | 3 | 5 | 1 | 16 |
| | 8 | 8 | 10 | 10 | 4 | 40 |

4. Conclusion

From the results, we can say two things:

1. 'Thanking' and 'Apologies' are used frequently in all the textbooks.
2. 'Offers' and 'Requests' are not found so much compared with 'Thanking' and 'Apologies.'

References

- Ajmer, K. (1996). *Conversational Routines in English: Convention and Creativity*. Addison Wesley Longman.
- Nattinger, J. R. and DeCarrico, J. S. (1992). *Lexical Phrases and Language Teaching*. Oxford University Press.

A study of Textbook Analysis (4): The Frequency of Verb Patterns in Junior High School Textbooks

Ueda,N.; Owada,K.; Takei,H.; Miyabo,S.; Yukina,K.; Yamazaki,T.; Miyasaka, N.; Ohya, M.

1. Aim

No one questions that textbook materials form a major portion of language input for junior high school students in Japan. Therefore, we must look into what kinds of syntactic expressions the learners receive as input because these expressions form part of the students' syntactic knowledge.

The aim of this research is to examine:

1. What kinds of syntactic expressions the Japanese junior high school students receive as input from the textbooks in Japan.
2. How different the input is from the one that native speakers got in their early stage of language learning.

2.

Materials

7 kinds of textbooks (including first through third year) are published by each company in Japan. 21 textbooks in all are entered into the computer for corpus-based analyses.

18 verbs are chosen to analyze, which are all included in the List of the Course of Study for Lower Secondary School Foreign Languages (507 words) in order to compare how different input second language learners of English get is from that of native speakers of English.

Method:

All the finite verbs and the verbs after auxiliary verbs in the data (the auxiliary-like expressions such as 'be going to' and 'have to' are included.) from the textbooks are analyzed according to the syntactic frames (Naigles, L. and Hoff-Ginsberg, E. 1995).

The syntactic frames are based on Transformational Grammar and the subcategorization frames are the sister nodes to the verb under the verb phrase node.

Table 1: The Syntactic Frames in Naigles, L. and Hoff-Ginsberg, E. (1995)

| | |
|-------------------------------|---------|
| Verb final (=utterance final) | example |
| # | Come! |

| | |
|--|---|
| # (Wh-NP) | What kind of juice do you want? |
| #(p) | Up you go! |
| #(LOC) | Here you go! |
| #(AdjP) | How pretty you look! |
| Participles (P) immediately follow the verb | |
| P LOC | Go around outside go over here. |
| P NP | Give up the box. |
| P | Come out, go in, put in, run away. |
| P Adv | Come out quickly. |
| P [conj] S | Come out and look, it goes in where you put it. |
| P PP | Go down to the basement. |
| P (Wh-NP) | What are you looking at? |
| P NP [conj] S | Sit down this way until I tell you. |
| Prepositional phrases (PP) immediately follow the verb | |
| PP | Go to the store. |
| PP PP | Go to the store in the morning, sit in the chair like this. |
| PP Adv | Go to the store today. |
| PP LOC | Go with the dolly here. |
| PP [conj] S | Go to the store and then we'll eat lunch. |
| Noun phrases (NP) immediately follow the verb NP | |
| NP | Drop the call, move the chair. |
| NP PP | Push the box under the chair, open the door like this. |
| NP LOC | Push the box here. |
| NP P | Push the box around, take this apart. |
| NP P PP | Push the box around like this. |
| NP Adv | Push the button twice. |
| NP NP | Give me the box. |
| NP (Wh-NP) | Which box did you give her? |
| NP P Adv | Put it down right now. |
| NP LOC S | Put it right there so it won't fall. |
| NP P [conj] S | put it away and go to sleep. |
| NP PP [conj] S | Put the doll in the box and go to sleep. |
| NP P LOC | Put it over there. |
| NP (SVI) | Goes the bear, there goes the bear. |
| NP [conj] S | Like it when you're happy. |
| NP P (Wh-NP) | What did you put this in. |
| NP AdjP | Want you clean and tidy. |
| NP Adv [conj] S | Let's put a big pile together then you can scoop them up. |
| Sentences (S) immediately follow the verb | |
| S (Wh-NP) | Who do you think is going to the store. |
| S | Let's see if granny's home, I know that you like this. |

| | |
|---|---|
| Locatives, adverbs, adjectives, sounds, follow the verb | |
| Adv | Go slow, fall asleep, take forever, open wide. |
| AdjP | You look pretty. |
| LOC PP | You went there on an airplane. |
| LOC Adv | No, we're not going outside if you don't put your pants on. |
| LOC [conj] S | You can't go outside if you don't put your pants on. |
| LOC | Come home, go night-naight, go potty. |
| Sound | Go clang-clang |
| Verb final (=utterance final) | |
| # | Come! |
| # (Wh-NP) | What kind of juice do you want? |
| #(p) | Up you go! |
| #(LOC) | Here you go! |
| #(AdjP) | How pretty you look! |
| Participles (P) immediately follow the verb | |
| P LOC | Go around outside go over here. |
| P NP | Give up the box. |
| P | Come out, go in, put in, run away. |
| P Adv | Come out quickly. |
| P [conj] S | Come out and look, it goes in where you put it. |
| P PP | Go down to the basement. |
| P (Wh-NP) | What are you looking at? |
| P NP [conj] S | Sit down this way until I tell you. |
| Prepositional phrases (PP) immediately follow the verb | |
| PP | Go to the store. |
| PP PP | Go to the store in the morning, sit in the chair like this. |
| PP Adv | Go to the store today. |
| PP LOC | Go with the dolly here. |
| PP [conj] S | Go to the store and then we'll eat lunch. |
| Noun phrases (NP) immediately follow the verb NP | |
| NP | Drop the call, move the chair. |
| NP PP | Push the box under the chair, open the door like this. |
| NP LOC | Push the box here. |
| NP P | Push the box around, take this apart. |
| NP P PP | Push the box around like this. |
| NP Adv | Push the button twice. |
| NP NP | Give me the box. |
| NP (Wh-NP) | Which box did you give her? |
| NP P Adv | Put it down right now. |
| NP LOC S | Put it right there so it won't fall. |
| NP P [conj] S | put it away and go to sleep. |
| NP PP [conj] S | Put the doll in the box and go to sleep. |

| | |
|---|---|
| NP P LOC | Put it over there. |
| NP (SVI) | Goes the bear, there goes the bear. |
| NP [conj] S | Like it when you're happy. |
| NP P (Wh-NP) | What did you put this in. |
| NP AdjP | Want you clean and tidy. |
| NP Adv [conj] S | Let's put a big pile together then you can scoop them up. |
| Sentences (S) immediately follow the verb | Who do you think is going to the store. |
| S (Wh-NP) | Let's see if granny's home, I know that you like this. |
| S | |
| Locatives, adverbs, adjectives, sounds, follow the verb | |
| Adv | Go slow, fall asleep, take forever, open wide. |
| AdjP | You look pretty. |
| LOC PP | You went there on an airplane. |
| LOC Adv | No, we're not going outside if you don't put your pants on. |
| LOC [conj] S | You can't go outside if you don't put your pants on. |
| LOC | Come home, go night-naight, go potty. |
| Sound | Go clang-clang |

The result are compared with that of Naigles, L. and Hoff-Ginsberg, E. (1995) in Table 2, which researched what kinds of verb frames are used by native-speaker-of-English mothers.

3.Result and analysis

In Naigles, L. and Hoff-Ginsberg, E. (1995), 45 syntactic frames are used, but in this research we add 21 frames to it, because we can't deal with the data by the frame of Naigles, L. and Hoff-Ginsberg, E. The reason is that the data of Naigles and Hoff-ginsberg is from the children at the early stage of first language acquisition.

Table 2: Frames of Verbs from rewritten Naigles, L. and Hoff-Ginsberg, E. (1995)

| | com e | fall | give | go | hear | kno w | like | liste n | look | need | open | put | run | see | sit | take | thin k | want |
|------------|----------|------|------|----|------|----------|------|------------|------|------|------|-----|-----|-----|-----|------|-----------|------|
| # | + | + | | + | | + | + | | + | + | + | | + | + | + | + | + | + |
| #(wh-NP) | | | | + | + | + | + | | | + | + | | | + | | | + | + |
| # (P) | + | + | | + | | | | | | | | | | | | | | |
| # (LOC) | + | | | + | | | | | + | | | | | | | | | |
| # (AdjP) | | | | + | | | | | + | | | | | | | | | |
| P LOC | + | | | + | | | | | | | | | | | + | | | |
| P NP | + | | + | + | | | | | + | | + | | | | | + | | |
| P | + | + | | + | | | | | | | + | | | | + | + | | + |
| P Adv | + | | | + | | | | | + | | | | | | + | | | |
| P [Conj] S | + | + | | + | | | | | + | | | | | | + | | | |
| P PP | + | + | | + | | | | | + | | | | | | + | | | |

| | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P (Wh-NP) | + | | | + | | | | | | | | | | | | | | |
| P NP [Conj] S | | | | | | | | + | | | | | | + | | | | |
| PP | + | + | | + | | + | | + | | | | | + | + | + | | + | + |
| PP PP | | | | + | | | | + | | | | | | | + | | | |
| PP LOC | | | | + | | | | + | | | | | | | + | | | |
| PP [Conj] S | | + | | + | | | | + | | | | | | | | | | + |
| NP | | | + | + | + | + | + | | + | | + | | + | + | + | | | + |
| NP PP | + | | + | | | | + | | + | | + | | + | + | + | | | + |
| NP LOC | | | | | | | | | | | | | + | | | | | + |
| NP P | | | | | | | | | | | + | | | | | + | | + |
| NP P PP | | | + | | | | | | | | | | | | | | + | |
| NP Adv | + | | + | | | | + | | | | | | + | | + | | | + |
| NP NP | | | + | | | | + | | + | | | | | | | + | | |
| NP (Wh-NP) | | | + | | | | | | + | | | | | | | | | |
| NP P Adv | | | | | | | | | | | | | | | | | + | + |
| NP LOC S | | | | | | | | | | | | | | | | | | |
| NP P [Conj] S | | | | | | | + | | + | | + | | | | | + | | + |
| NP PP [Conj] S | | | | | | | | | | | | | | | | | | |
| NP P LOC | | | | | | | | | | | | | | + | + | + | | + |
| NP (SVI) | + | | | + | | | | | | | | | | | | | | |
| NP [Conj] S | + | | | | | | | | + | | | | + | | | + | | |
| NP P (Wh-NP) | | | | | | | | | | | | | | | | | | |
| NP AdjP | | | | | | | | | | | | | | | | | | |
| NP Adv [Conj] S | | | | | | | | | | | | | | | | + | | + |
| S (Wh-NP) | | | | + | | | | | | | | | | | | | | |
| S | + | + | | + | + | + | + | | + | + | | + | | + | | | + | |
| Adv | + | + | | + | | | + | | | | | + | + | + | + | + | + | |
| AdjP | | | | | | | | + | | | | | | + | | | | |
| LOC PP | + | | | + | | | | | | | | | | | | + | | |
| LOC Adv | + | | | + | | | | | | | | | | | | | | |
| LOC (Conj) S | + | | | + | | | | | | | | | | | | + | | |
| LOC | + | | | + | | | | + | | | | | | | | + | | |
| Sound | | | | + | | | | | | | | | | + | | | | |

Table 3: Frames found in the data.

| | | | | | | | | | | | | | | | | | | |
|--|------|------|----------|----|------|----------|------|------------|----------|----------|------|-----|-----|-----|-----|------|-----------|------|
| | come | fall | giv e | go | hear | kno w | like | liste n | loo k | nee d | open | put | run | see | sit | take | thin k | want |
|--|------|------|----------|----|------|----------|------|------------|----------|----------|------|-----|-----|-----|-----|------|-----------|------|

| | | | | | | | | | | | | | | | | | |
|-----------------|----|---|----|----|----|----|-----|----|----|----|----|----|----|---|----|----|----|
| # | 7 | | 2 | 22 | 2 | 46 | | 11 | 42 | | | 11 | 29 | 2 | | 4 | |
| #(wh-NP) | | | | | | 1 | 7 | | | | | | | | | 5 | 1 |
| # (P) | | | | | | | | | | | | | | | | | |
| # (LOC) | 1 | | | 2 | | | | | | | | | | | | | |
| # (AdjP) | 1 | | | | | | | | | | | | | | | | |
| # 受動態 | | | 1 | | | | | | | | | | | | | | |
| # [conj] S | 16 | | | 9 | | | | | | 2 | 3 | | | | | | |
| # (S) | | | | | | | | | | | | | | | | 6 | |
| Particles (P) | | | | | | | | | | | | | | | | | |
| P NP PP | | | | | 1 | | | | | | | | | | | | |
| P LOC | | | | 1 | | | | | 1 | | | | | | | | |
| P NP | 2 | 3 | 1 | 9 | 6 | 3 | | 11 | 81 | | 6 | 3 | | | 10 | 11 | |
| P | 35 | 7 | 6 | 12 | | | | 1 | | | | | 9 | 4 | | | |
| P Adv | 3 | 1 | | 6 | | | | 1 | 1 | | | | | | 1 | | |
| P [Conj] S | 3 | | | 5 | | | | 1 | 2 | | | | | | 1 | | |
| P PP | 9 | 3 | | 16 | | | | | 5 | | 3 | | | | | | |
| P (Wh-NP) | 1 | | | | | | | | 3 | | | | | | | | |
| P NP [Conj] S | 1 | | | 2 | | 1 | | | 6 | | | | | | | | |
| P Adjunct | | | | 2 | | | | | | | | | | | | | |
| P NP Adj | | | 1 | | 1 | | | | | | | | | | | | |
| P P | | | | | | | | | | | | | | | | | |
| PP (Wh-NP) | 1 | | | | | | | 1 | | | | 1 | | | | 8 | |
| PP | 33 | 3 | | 52 | | 2 | | 1 | 11 | | 1 | 10 | 3 | 4 | 3 | 2 | 2 |
| PP+PP | 9 | 1 | 3 | 41 | | | | | 1 | | | | | 1 | | | |
| PP + LOC | | | | | | | | | | | | | | 1 | | | |
| PP [Conj] S | 9 | | | 8 | | | | | | | 2 | 1 | | | 1 | | |
| PP + Adv | 3 | | | 11 | | | | | | | | | | | | | |
| PP Adjunct | 3 | | | 2 | | | | | | | | | | | | | |
| NP | | | 2 | | 23 | 41 | 108 | | 25 | 16 | | 1 | 56 | | 47 | | 19 |
| NP PP | | | 18 | | 6 | 9 | 4 | | 8 | 3 | 27 | 1 | 35 | | 50 | | 2 |
| NP LOC | | | | | | | 3 | | | | | | 6 | | 1 | | |
| NP P | | | | | | | | | | | | | | | 1 | | |
| NP Adv | | | 1 | | 2 | 2 | 41 | | | | 2 | | 18 | | 2 | | |
| NP NP | | | 32 | | | 2 | | | | | | | | | | | |
| NP (Wh-NP) | | | | | | | | | 2 | | | | | | | | |
| NP P Adv | | | | | | | | | | | | | | | | | |
| NP LOC S | | | | | | | | | | | | | | | | | |
| NP P [Conj] S | | | | | | | | | | | | | | | | | |
| NP PP [Conj] S | | | | | | | | | | | 1 | | 2 | | | | |
| NP P LOC | | | | | | | | | | | | | | | | | |
| NP (SVI) | 1 | | | | | | | | | | | | | | | 1 | |
| NP [Conj] S | | | 1 | 1 | 1 | 1 | 4 | | | 2 | | 7 | | 5 | | 2 | |
| NP P (Wh-NP) | | | | | | | | | | | | | | | | | |
| NP Adjphrase | | | | | | | 2 | | | | | | | | 1 | | 1 |
| NP Adj [Conj] S | | | | | | | | | | | | | | | | | |
| Wh-NP | | | | | | | 1 | | | | | | | | | | |
| S (Wh-NP) | | | | | | | 12 | | | | | | | | | | |
| S | | | | | 5 | 42 | 33 | | 8 | | | 2 | | | 55 | 92 | |
| , S | | | | | | | | | | | | 1 | | | | | |

A study of Analog/Digital copying

Yoshimoto Ryo

Introduction

This paper will give us detailed instructions on how to transfer and duplicate sound data from Digital AudioTapes (DAT) to computers. It is often with the case with listening perception tests, we must transfer and duplicate the same sound for other perception tests. The sound will be degenerated every time we duplicate the sound when we use the sound recorded on to a compact cassette tape. In that case, fidelity of the machine, hiss noise, and other noise caused by surging or switching are the main culprit. This study will solve the problem of the degeneration when we transfer and duplicate the sound data from DATs to computers or from computers to DATs, for optimizing our research.

Transferring sound data; two ways to transfer sound data

When we want to duplicate sound data from a DAT to a computer, there are two ways to take; Analog transfer and Digital transfer. Both of the two method have advantages and disadvantages.

Analog transfer

The advantage of analog transfer is that the wiring of the analog transfer is easy to set up. A 1/8" stereo audio connector known as an ordinary audio cable is used between the DAT's headphone jack and the computer's analog line-in jack. Figure 1. shows a 1/8" stereo audio connector.

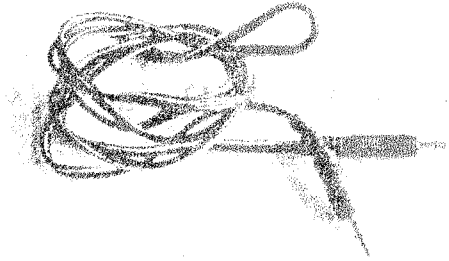


Figure 1.

One end of the cable will be jacked into line-out or headphone jack of a DAT. The other end of the cable will be jacked into line-in jack of a computer. Both of the analog-in and -out jacks are equipped with every DAT or computer; we do not have to be bothered by preparing other stuffs. Figure 2. illustrates how to connect from a DAT deck to a computer.

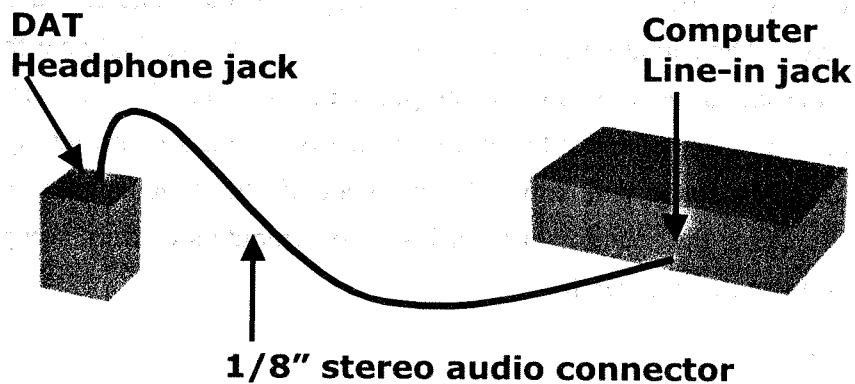


Figure 2.

There is another cable called RCA pin jack cable (Figure 3.).

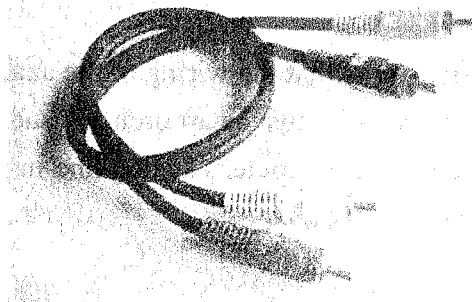


Figure 3.

Different from 1/8 inch stereo audio connector, a RCA pin jack cable has two pins on one

end; each pin is assigned to right or left channel. The advantage of the RCA pin jack cable compared to 1/8" stereo audio connector is that the RCA pin cable is free from cross-talk phenomenon. Cross-talk phenomenon result in the unwanted sound hindered by the other channel's sound. Shared by right and left ground signal (-) simultaneously, 1/8" stereo audio connector employs only three metallic cables for transferring four signals. One ground signal cable convey the two different channel, then both channel effect on each other channel. Figure 4. illustrates how electric currents will flow when we use 1/8" stereo audio connector or a RCA pin cable

When a vast sound is on the right channel, we can hear the right channel's sound on the left channel even if the channel is supposed to be silent.

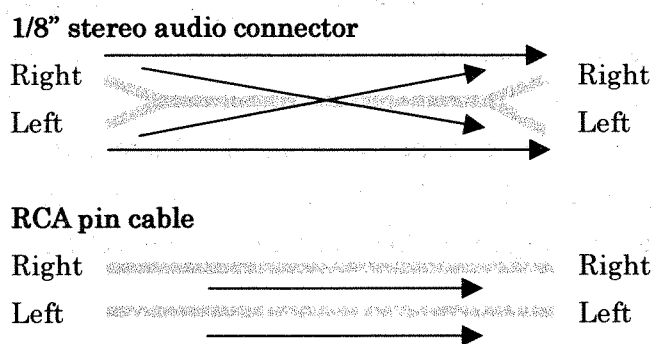


Figure 4. How cross talk occurs.

The other drawback of analog transfer is that the sound data will be converted twice:

1. digital to analog conversion when the sound will be transmit from a DAT
2. analog to digital conversion when the sound will be received by a computer

Conversion will degenerate the sound as multiple photocopies will dim an image data.

Figure 5. shows how analog or digital conversion will round the sound wave. The amplitude of the second wave in original sound wave is apparently lower than the first sound wave. Owing to the wide threshold, the maximum point of the first and the second sound wave is assigned in the same matrix. After the sampling the two maximum point will be reproduced the same amplitude.

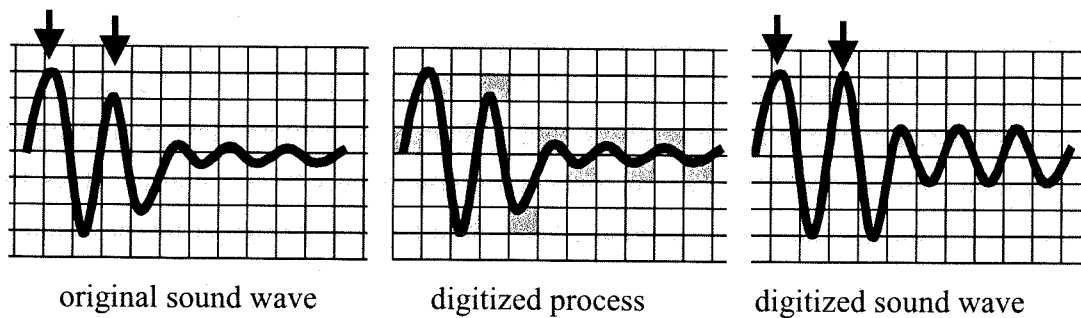


Figure 5.

Digital transfer

The advantage of digital transfer is that digital copying is supposed to duplicate the same sound as original sound, for the sound data will be transferred without any conversion. When we want to transfer the sound data without analog conversion, DATs and computers must be equipped with digital I/O interfaces. Suppose both of a DAT and a computer had digital I/O interfaces, the sound data will be transferred without a loss or noise. Figure 6. illustrates how to connect from a DAT deck to a computer.

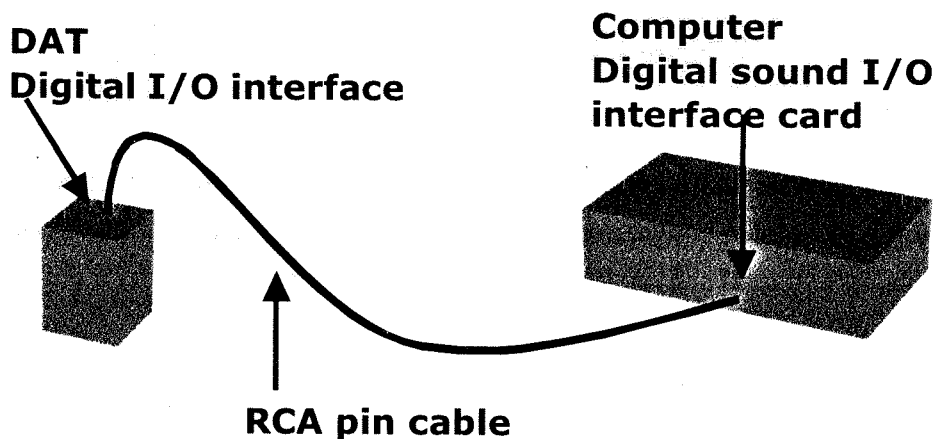


Figure 6.

The drawback is that the digital I/O interface is rarely equipped with consumer DATs or ordinary computers.

DAT deck's side

Before we buy DATs, we have to choose the DATs which have digital I/O interface. Our DAT, SONY TCD-D100 has a 7-pin digital I/O interface which is intended to

connect with digital I/O box. The digital I/O box, SONY RM-D100K has coaxial digital I/O which can be connected by a RCA pin cable shown above and optical digital I/O interface.

We can also choose a professional DAT that is free from copy protection, called Serial Copy Management System (SCMS). SCMS prohibits duplicating from CDs or copy-protected media, if the duplication is more than three generations.

Here is the list of DATs equipped WITHOUT digital I/O interface.

| | |
|----------------------|----------------------------|
| SONY TCD-D8, TCD-D10 | (portable) |
| SONY WMD-DT1 | (portable, play back only) |
| PIONEER D-C88 | (portable) |

Here is the list of DATs equipped with digital I/O interface.

| | |
|-----------------------------|-------------|
| SONY TCD-D100 | (portable) |
| SONY DTC-ZA5ES, ZE700, A8 | (component) |
| PIONEER D-HS5, D-05, D-9601 | (component) |

Computer's side,

Since computers are not equipped with digital I/O interface ordinary, we have to install a digital sound I/O interface sound card onto a PCI bus on computer's mother board. After installing the card, both the DAT I/O interface and computer's digital I/O card are plugged by a coaxial RCA cable.

Here is the list of digital sound I/O interface card available now.

- CREATIVE SoundBlasterLive!PRO
- CREATIVE SoundBlasterLive! Digital Entertainment
- CREATIVE SoundBlasterLive! DA/AV
- YAMAHA CBX-D5
- YAMAHA SoundTrack Digital-XG

Another solution

There is a new standard called IEEE1394 that is especially invented for transferring digital sound and imaging data. Though IEEE1394 interface cards are sold separately like digital sound cards mentioned before, the number of digital videos and computers which include IEEE1394 interface is increasing and will replace the

market share of the digital sound I/O cards. Figure 7 shows 6-pin 4-pin IEEE 1394 cable. The large end contains 6-pin connector and the small end contains 4-pin connector.

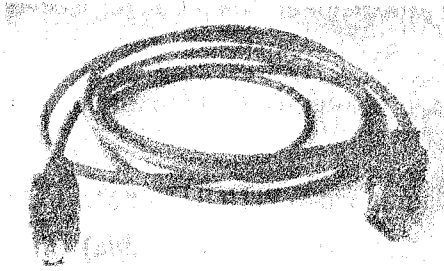


Figure 7.

Here is the list of equipment, which have IEEE1394 interface.

| | |
|--------------|--|
| computer | Apple PowerMacG3 series |
| computer | Apple PowerMacG4 series |
| computer | sgi VisualWorkStation series |
| computer | SONY VAIO PCV-R70 |
| computer | SONY VAIO XR series |
| mother board | ASUS P3B1394 |
| PCI card | RATOC REX-PCIFW1 |
| PCI card | IODATA GV-DVC/PCI |
| PC card | REX-CBFW1 |
| VCR | SONY DCR series, DHR-1000, WV-D series |
| VCR | Victor GR-DV series |

OUR SYSTEM

In our case, we used a DAT called SONY TCD-D100. By adding a digital I/O box, we can transfer digital data but cheaper DATs are not equipped with digital I/O interface.

RM-D100K is the digital interface box. The box converts from the unique digital I/O pins to ordinary coaxial I/O pins. When we bought the digital I/O box, RM-D100K was the latest solution, but newly released RK-DA10P is replacing RM-D100K.

SoundBlasterLive! series are the most popular Digital I/O card for windows computers with PCI bus. The card has analog I/O jacks and digital coaxial I/O

jacks.

Experiment

Followed experiment was held to see the effect of A/D, D/A converting.

Procedure

Digital transfer

Digital sound data /soom-moos/ were transmit from a digital interface box of a DAT to computer digital interface card via a coaxial RCA cable.

To enhance the result, the sound was reciprocated ten times between a DAT and a computer.

Analog transfer

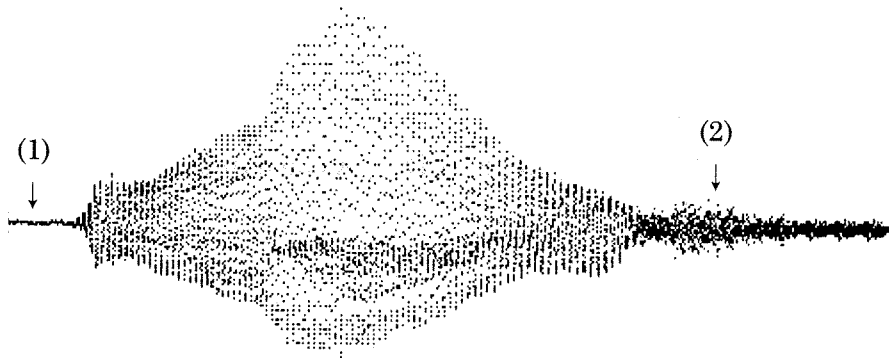
Sounds /soom-moos/ were transmit from a headphone jack of a DAT to a line-in jack of a computer via an audio cable.

To enhance the result, the sound was reciprocated ten times between a DAT and a computer.

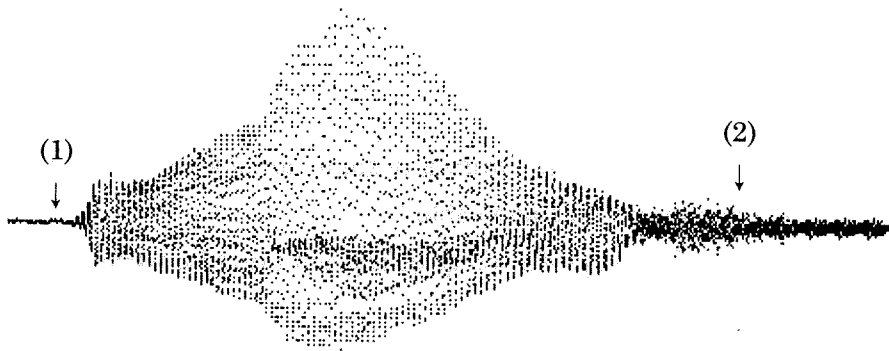
Result

Apparently the digital transfer sound was identified to the original sound.

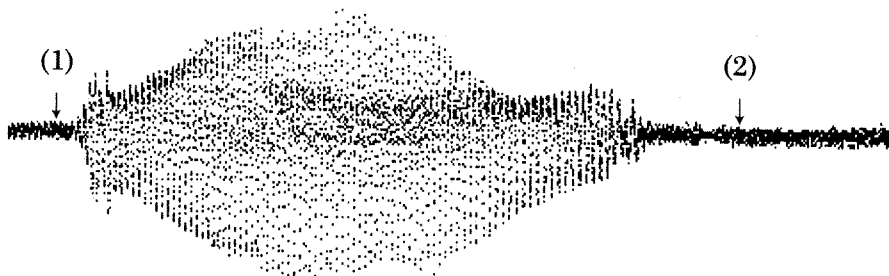
Shown next page are the sound waves.



Original sound wave



Digital transferred sound wave



Analog transferred sound wave

We can spot two differences among three sound waves.

White noise (1) is seen in analog-transferred sound wave where was silence in original and digital sound wave.

Weak /s/ sound (2) was disappeared into white noise in analog transferred sound, though digital transferred sound wave was identified with original sound wave.

Conclusion

It is clear that digital transfer is superior to analog transfer. The draw back of the complicated equipment is becoming an old story by recent digital movements; the price is starting to fall and the equipment is sold at any retail shop. Other than digital sound I/O cards, IEEE1394 systems are becoming popular for digital video users. The transfer rate of the IEEE 1394 port also called "i-link" or "fire-wire" is over 400MB per second, which can be used by data-storage streaming as well as digital video or audio decks.

A study of videoconferences

Yoshimoto Ryo

Introduction

This paper will give some investigation on the limitation of videoconferencing system considered from the viewpoint of data transfer rate. Videoconferencing is the most useful purpose for networked computers but not so popular up to now. The slow and unreliable network streaming, and expensive computers and peripherals have hindered the growth of videoconferences. Today, the demand for videoconferencing has led to new technological enhancements. Owing to high-speed networks and sophisticated compression-decompression techniques, image and sound can be transmitted via fast network. I would like to introduce what kind of type and physical media are available now when we want to use videoconferencing system.

Type of videoconferencing

There are about three types of videoconferencing.

1. **Point-to-point** connections involve two sites, with each sending and receiving video.
2. **Multipoint** involves multiple sites, with all sites both sending and receiving video.
3. **Multicast** connections consist of one site broadcasting video, with multiple sites receiving. With this type of connection, there is no interaction between sites. One site is actively sending and all others are passively receiving.

The quality of a videoconference depends on the performance of the host computer and the speed of the network. The host computer determines how fast sound and image can be digitized, encoded, and sent to each participant. The speed of the network affects performance because no matter how fast the host is, the network can only transfer data at a specific rate. A slow computer or connection can cause

dropped frames or interrupted audio.

Figure 1. illustrates the three types of videoconferencing.

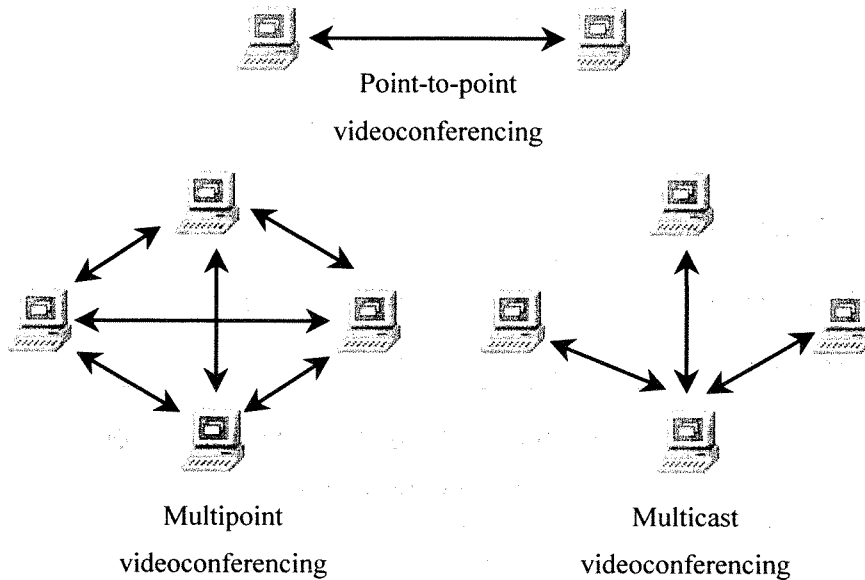


Figure 1.

Media

Before we consider the speech quality, it is natural to verify the transfer rate of the physical media. When the transfer rate is under the requirement of the image and sound, it will result in jerky images and intermittent sound. Chart 1. shown below is the media and transfer rate. Figure 2. illustrates the transfer rate in a bar graph.

| Media | Transfer rate | Note |
|-------|---------------|---|
| Modem | 28K-33,6K | Telephone line |
| ISDN | 115K | Sustained rate |
| CATV | 500K | Speed vary depend on Internet Service Providers |
| T1 | 1,500K | for large companies or schools |
| T3 | 8,500K | for Internet Service Providers |
| ATM | 150,000K | for Internet Service Providers |

(K=Kilo bits per second)

Chart 1.

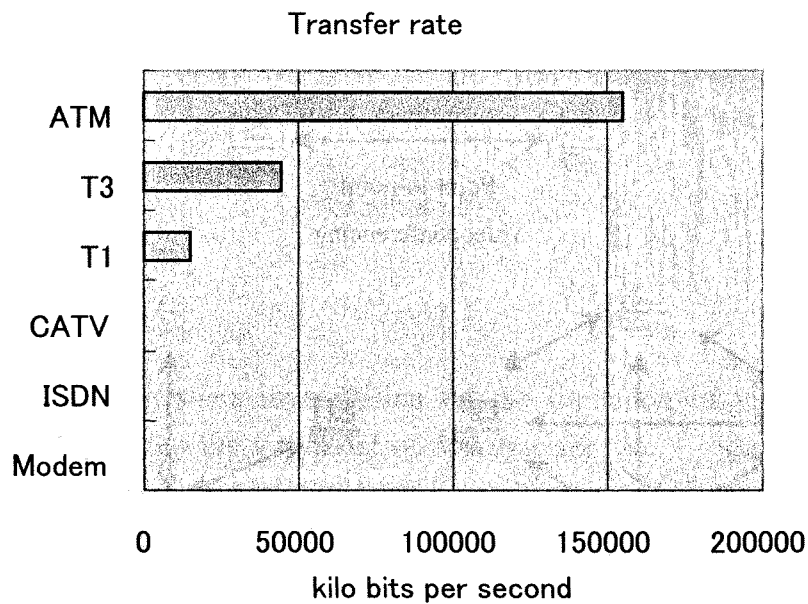


Figure 2.

To connect distant locations in order to connect to the Internet requires a T1, T3, T4, ISDN, ATM, or other telecommunication link. A T1 is the most common media for World Area Network (WAN) link. It provides a 1.5Mbps connection between two locations. It consists of 24x64K channels, each of which may carry data. A modem provides access to another computer or network system when the user is not physically connected to the Local Area Network (LAN) or WAN. With the requirement of high speed for videoconferencing, consumer-type modems currently can only handle 33,6Kbps. This severely limits the quality of videoconferencing that can be used with a modem.

Though ISDN has been popular recently in Japan, large number of people still use network via telephone line. It is a relatively inexpensive alternative to modem links, which operate at a maximum of 28-33,6Kbps. An ISDN connection running at 115 Kbps may only be able to support a point-to-point connection, while an ATM connection may be able to support ten simultaneous connections displaying at 640x480 dots and running at 30frames per second. T1, T3, and ATM are not for consumer, but for enterprises.

Another media, satellite based transferring is becoming popular. We can receive data at 15,000Kilo bits per second via satellite dish, but we can transmit data at the

rate of 28Kilo bits per second via telephone line. The protocol is ideal for broadcast on Internet, because the consumer never transmit data. Figure 3. illustrates how host computer transmit the data to the client, and how client request the data.

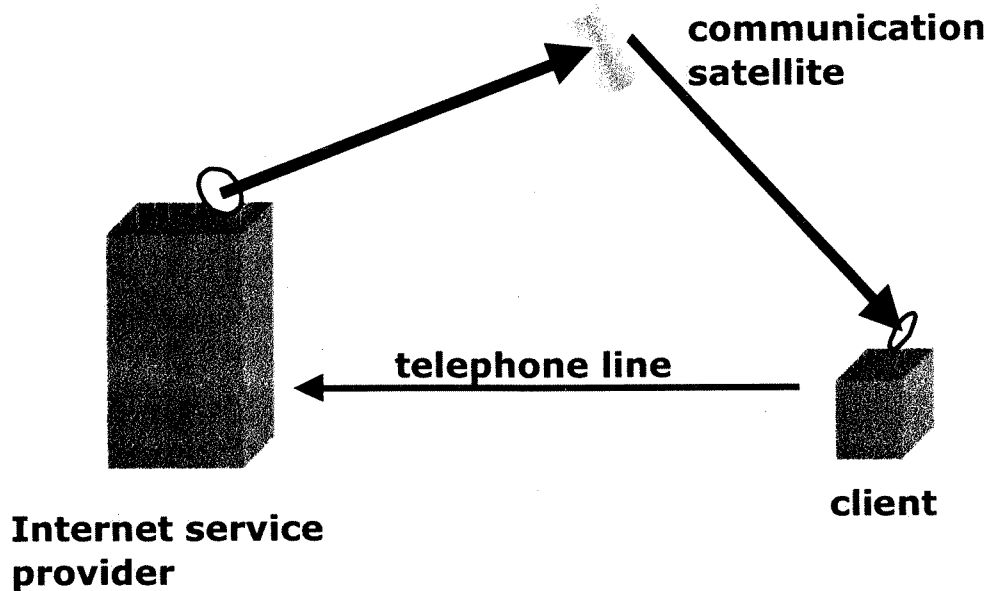


Figure 3.

Sound quality and transfer rate

We also have to examine the transfer rate from the view point of speech and image quality. As mentioned before, transfer rate must surpass the transfer rate required or we will be bothered by jerky images and interrupted sound. Chart 2. and Figure 4. shows the speech quality and the requirement.

| Quality | Transfer rate | Note |
|------------------|---------------|----------------|
| Cell phone | 6K | Half-rate |
| Land-lined phone | 12K | |
| AM radio | 22K | Monoral |
| FM radio | 72K | Stereo |
| CompactDisk | 180K | Stereo 44.1KHz |

Chart 2.

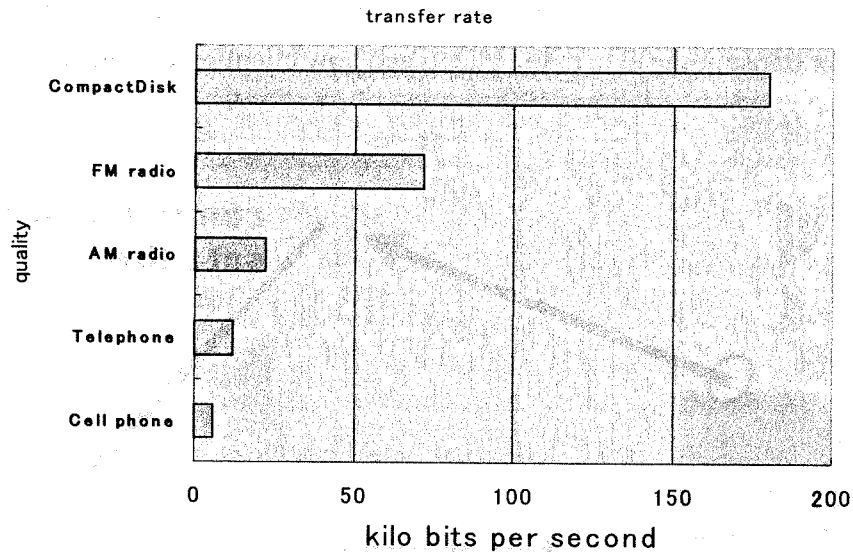


Figure 4.

In my master thesis, the bottom line of the transfer rate for English education is about 44 Kbps. The transfer rate of ISDN is superior to the transfer rate required for transmitting FM radio sound quality. So far so good, even if we use telephone line. We also have to consider the requirement of transfer rate for transferring image data.

Image quality and transfer rate

From the view point of Imaging quality, transfer rate required for transferring imaging data is shown below. Chart 3. shows the image size, quality, and requirement.

| Video Resolution | Frame Rate | Colors | Bytes per Second |
|---------------------|--------------|---------|------------------|
| 320x240(1/4 VGA) | 15 | 256 | 1,152K |
| 640x480(VGA jerky) | 15 | 256 | 4,608K |
| 640x480(VGA normal) | 30 | 16.7mil | 27,648K |
| 1024x768 | 30 | 16.7mil | 70,778K |
| (dots) | (per second) | | |

Chart 3.

Figure 5. illustrates the transfer rate and the transfer rate required.

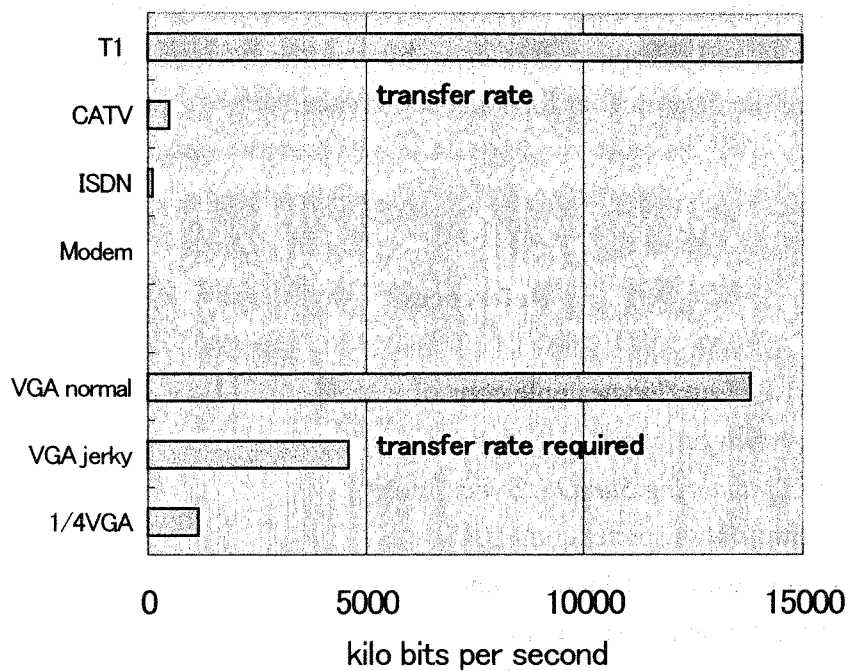


Figure 5.

As shown above, ISDN can not afford to transmit only 1/4 VGA imaging. Only T1 can transfer image data but we can not afford to employ T1 media.

Conclusion

In my master thesis, it was found that 22KHz-16bit sampling m-law compression is the bottom lime for English education. Though the transfer rate of ISDN is superior to the requirement of the bottom line, the requirement of 1/4VGA (320x240 dots) image is beyond the limitation of ISDN's transfer rate. That is why ISDN transferred point to point videoconferencing can not satisfy our demand for smooth imaging. From the stand point of digital imaging, we feel jerky when the frame rate of movie begin to fall under 20 frame per second.

With the consideration of quality for English education, it was found that ISDN is used for point to point videoconferencing with jerky framing images. ATM can transfer perfect VGA quality images and education-quality sound data, but ATM transferring is out of touch with reality up to now.

The first electronic messaging systems were developed for internal use, but they soon became a business-to-business information delivery tool. Likewise, videoconferencing technology will become the means to connect companies,

government agencies, academic institutions, and homes. The average consumer today can not afford faster network. But have no fear: as time goes on, technology will get better, faster, and cheaper. It is desirable that the infrastructure will surpass the requirements of the data transfer for videoconference.

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 Jeff, Horan (1993). *Mastering Sun OS*. Sybex Inc.
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RealAudio URL=<http://www.realaudio.com/>
VoxWare URL=<http://www.voxware.com/>

APPENDIX

| Product | Vendor | fps | user | Network | Platform |
|-------------------------------|--------------------------------|-----|----------------|-------------------------------------|----------------|
| BeingTherePro | Intelligence At Large, Inc. | 10 | 4 | Token Ring, Ether, ISDN | Mac |
| Communique! | Insoft | 30 | 10 | TCP/IP | Win, Unix |
| Connect 918 | NUTS Technology | 30 | 3 | Analog, AppleTalk ISDN, Ethernet | Mac, Win |
| CU-SeeMe | Cornell University | 30 | 8 | Ethernet | Mac, Win |
| LIVE Personal Conferencing | PictureTel | 15 | 240 bridged | ISDN | Win |
| MINX NVS | Datapoint | 30 | 54 | Analog, ISDN | Win, Mac, Unix |
| Personal Video 1300 | AT&T | 30 | 24 | ISDN, Ether, Token Ring | Win |
| Person to Person | IBM | 15 | 8 | Ether, ISDN | OS/2, Win |
| ProShare | Intel | 15 | 2 | NetBIOS, ISDN Novell | Win |
| PSVC | Paradise Software | 30 | 4 | Ether, ATM, SMDS | Unix |

| | | | | | |
|------------------------|-------------------------------------|----|----|--------------------------------|----------|
| QuickTime Conferencing | Apple | 30 | 8 | Ether, ISDN, TCP/IP, AppleTalk | Mac, Win |
| Share View Plus | Creative Labs | 30 | U | Analog | Mac |
| ShareVisionPC300 | Creative Labs | 15 | 8 | Analog | Dos, Win |
| TeleView4000 | Video Conferencing24 Communicationw | 24 | 4 | Ether, ISDN | Dos, Win |
| VidCall | MRA Associates | 7 | 10 | Ether, Novell | Win |
| VISIT Video | Northern Telecom | 15 | 2 | Analog, ISDN | Mac, Win |

Videoconferencing products

**A Study of EFL Discourse Using Corpora(3):
An Analysis of Written Data by Japanese Junior High School Students**

Katsura Ishikawa, Tae Yamazaki, Hiroyuki Takei, Sachiko Miyabo

1. Abstract

The purpose of this research is to analyze the English diaries written by Japanese junior high school students. In this study, the following verbal errors were observed: **We are went to the pool,* **We weren't enjoy the movie,* and **I was played TV games.*

A written test was given to 413 students to determine whether these errors were common to most Japanese junior high school students. An analysis of the diary data, written test shows the following criteria.

- (1) 'Be' is used as tense markers or agreement markers.
- (2) The interference from Japanese grammar leads to these errors.
- (3) These errors are caused because the students recognize a subject and 'be' as a chunk.
- (4) The learners make errors more often when they compose a negative and interrogative sentence than affirmative one.
- (5) The students recognize these 'be' as a copula or an auxiliary.
- (6) These errors are related to whether or not the verbs are often used in school textbooks and in their diaries.
- (7) These errors tend to be caused in the particular kinds of verbs because of the students' lack of knowledge to distinguish verbs from adverbs.

2. Purpose

The purpose of this research is (1) to analyze the English diaries, written by Japanese junior high school students, (2) to determine the errors that need correction and (3) to examine the factors producing those errors .

3. Methods

3.1. Diaries

3.1.1. Subjects

Data was collected in two stages. First, diary data was collected from

105 second grade students (age 13 to 14) of a Japanese public junior high school as a part of their homework during summer vacation. They have learnt English for 1 year and 4 months. The level of writing ability of each student is different. Then, diary data was collected from the same students as their homework during winter vacation.

3.1.2. Procedures

The students were told to write about any 4 days of their choice during each vacation. Prior to writing the summer diary, they had just learnt to use the past tense. Prior to writing the winter diary, they had learnt auxiliary verbs 'will' 'be going to' and 'must', infinitives and gerunds in the previous semester. Since they learnt to use the past tense 4 months ago, we might argue that they were more accustomed to using the past tense at that time. They were also told to write their new year's resolution.

3.1.3 Result and Discussions

The tokens and types of each diary are in Table 1.

Table 1. Tokens and Types of Diaries

| | Summer Diary | Winter Diary | School Textbook (New Crown: Course 1 and 2) |
|-------------------|--------------|--------------|--|
| Tokens | 14,738 | 15,040 | 5,247 |
| Types | 1,053 | 1,129 | 540 |
| Type/Token Ratios | 7.14 | 7.51 | 10.29 |
| Ave. Word Length | 3.7 | 3.63 | 3.95 |

Even though the students could monitor their writing, many errors were observed in the diaries. Those were omissions of article, number disagreement, wrong use of tense, wrong word order and syntactic errors.

Most errors were comprehensible and some of them were mistakes, that is, the students know the grammatical rules but they "slipped-up". There were, however, syntactically wrong errors. It is possible to say that those errors are aspects of interlanguage as steps of acquiring the language. According to Johansson(1973), priority ranking of errors are decided with the comprehensibility and conformity. In addition, the frequency of the error is also important. Through the point of gravity of errors, the following

verbal errors are considered to need correction such as ‘*We weren’t enjoy the movie.’ In those errors, *be*’ is inserted between the sentential subject and the verb. Without knowing the correct use of copula and verbs, it is difficult to understand the usage of progressive and passive. Therefore those verbal errors were picked up from the diaries.

In the summer diary, there were 29 verbal errors. There were 47 errors in the winter diary. Those errors were divided into seven categories according to error type. Table 2 shows each category.

Table 2 Error Patterns in the Diary

| Error Types in the Diary | Possible Explanation for Be |
|-----------------------------|-------------------------------|
| 1.Past be + Present Verb | agreement marker/chunk |
| 2.Past be + Past Verb | agreement marker/chunk |
| 3.Present be + Present Verb | tense marker/agreement marker |
| 4.Present be + Past Verb | tense marker/agreement marker |
| 5. Chunk | |
| 6. Interference of Japanese | translation of Japanese |
| 7. ? | |

Rechards (1979:210) regards these errors as intralingual and developmental errors which are caused by 1. over-generalization, 2. ignorance of rule restrictions, 3. incomplete application of rules, 4. false concepts hypothesised.

Most of the errors observed in the diaries were caused by over-generalization and false concepts hypothesised. For example, Table 2-1 and 2-2 shows the form *was* is interpreted as a marker of the past tense instead of using verb + ed. In Table 2-2, however, the students marked past twice on both copula and verb. Furthermore, *is* and *am* are used to describe the past behaviors in Table 2-3 and 2-4.

Table 2-1.Past be + Present Verb

| Summer Diary | Winter Diary |
|-----------------------------|---------------------------------------|
| *I was swim in the morning. | *I was not go to shrine. |
| *It was hurt. | *I was sleep all days. |
| *We were have will nothing. | *I was go for a walk. |
| *We were enjoy. | *I was prepare for school. |
| *We were enjoy. | *My cousin and I were play card game. |
| | *I was get tired today. |

| | |
|--|---|
| | <ul style="list-style-type: none"> *I and Fujioka were play computer germs. *So Masashi was very sleep. *My cousin's brother was play game boy. *We were watch the movie. |
|--|---|

Table 2-2.Past be + Past Verb

| Summer Diary | Winter Diary |
|--|---|
| <ul style="list-style-type: none"> *I was borrowed books. *We were played tag. *We were arranged a sunflower. | <ul style="list-style-type: none"> *I was got very tired. *We were enjoyed. *We were not enjoyedthe movie. *I was said "Thank you very much." |

Table 2-3.Present Be + Present Verb

| Summer Diary | Winter Diary |
|--|--|
| <ul style="list-style-type: none"> *Teacher is get angry. | <ul style="list-style-type: none"> *I am sleep. *I am sleep very much. *I am all day long sleep. *I am feel sleepy. *I am not go to Hatsuhinode. *I am refuse. *American is clean the whole house in April. *My grandmother is write calligraphy very well. *My friend is shout. *My mother and father is hit the horse race. *She is eat. *But nine sheet is fail. *My pair of glasses is die.(broken) |

Table 2-4.Present Be + Past Verb

| Summer Diary | Winter Diary |
|---|--|
| <ul style="list-style-type: none"> *I am enjoyed very much. *I'm enjoyed the movie. *We are bought clothes. *We are went to the pool. | <ul style="list-style-type: none"> *My brother is enjoied. *I slept is today. *I am slept in one day. *We are played play station. |

The possible explanations for these errors are that these 'be's are interpreted as number agreements, or the students might have recognized the sentential subject and copula as a chunk.

The effect of “chunking” is more remarkable in the constructed form as seen in Table 2-5.

Table 2-5. Chunk

| Summer Diary | Winter Diary |
|--|--|
| *It's was sunny. *It's was hot. *She's sing many songs. *She's cry. | *But I'm not get. *I'm guess. *I'm cleaned room. *I'm studied English. *I'm study harder. *I'm buy play station cassette. |

The similar performance was observed in French classroom. Myles, F., Mitchell, R.(1998) recorded how the English learners learned French verbs. In their study, the learners misunderstood the sentential subject *je* (I) for *j'ai* (I've). For example, **J'ai adore musique* (I've like music) for *J'adore musique* (I like music.) As the learners learned more verbs and other sentential subjects, most of them gradually understood the correct use of *je*. However, some learners still kept on using the wrong form. It is considered that the fossilization had occurred to them. English speakers are more easier to develop this wrong form since they have a similar expression, present perfect in their own language. The pronunciation is another factor. In this study, the learners were acquiring French through listening. As they don't put any accents on both of the sound '*je*' and '*j'ai*', it is difficult to tell the difference. So we can call the chunk as Phonological Chunk.

The same thing happen with Japanese learners when they learn English. They can not tell the different sound *I* and *I'm* and take it as one word.

Rechard (*ibid*) suggests that certain types of teaching techniques increase the frequency of over-generalized structures. Many pattern drills and transform exercises are made up of utterances that can interfere with each other to produce a hybrid structure. Neither the French learners nor the Japanese students had not had any specific exercises, however, the Japanese students had learned copula at the very beginning of the learning stage which is common in Japanese school. “*How are you?*” “*I'm fine, thank you*”, “*I'm sorry*”, and “*It's sunny*”. The students might have been also

recognized to be the sentential subjects and copula as formulaic expressions. Therefore the effect of chunking should be considered as one of the factors.

There is, of course, interference of Japanese grammar leading to the following errors. Table 2-6 shows 'be' plays a role of topic marker. In Japanese grammar, the sentential subjects are sometimes omitted and the time expressions tend to come at the beginning of the sentence. 'wa' does the same role in Japanese grammar. In those cases, the students produce English sentences one word at a time.

Table 2-6. Interference of Japanese

| Summer Diary | Winter Diary |
|---------------------------------------|--|
| *Today was boring. | *Today is look forward day. |
| *Today was over. | *Tomorrow is begin school. |
| *Today is tennis tournament of Tokyo. | *Tonight I am cold night enjoy. |
| *Today is club's tournament. | *We went there is to get on Fujiyama (jet coaster) |
| *Today is made newspaper of homework. | *This year is always play tennis. |
| *Today is went to a hot spring. | |
| *Hotel is big bath. | |
| *Night is thunder. | |
| *But the next game is win. | |
| *Spider is hurry escape. | |

Lastly, there were some errors that were not comprehensible even from the context.

Table 2-7.?

| Summer Diary | Winter Diary |
|-------------------|-------------------------------------|
| *The sea is swim. | *Go by car is Tokyo. |
| | *Back to home is makes better time. |
| | *My room is enjoy. |
| | *It's have a home. |

There were some verbs often used with these errors; *enjoy* 8 times, *sleep* 7 times, and *play* 6 times. Table 3 shows the verbs which highly frequently used in the diaries. These verbs had been used extensively in the diaries, therefore it seems natural that the numbers of errors would increase. Even though the learners are accustomed to use these verbs, the

errors often occurs. From Table 3, we might argue that there were some verbs specially cause these errors.

Table 3. High-frequency main verbs used in the diaries and School Textbook

| | Summer Diary | | Winter Diary | | School | Textbook |
|---------|--------------|-------|--------------|-------|--------|----------|
| | raw | error | raw | error | past | present |
| was | 477(1) | 7 | 287(2) | 9 | 16(1) | 136(1) |
| went | 436(2) | 2 | 327(1) | 0 | 8(3) | 12(9) |
| got | 129(3) | 0 | 153(3) | 3 | 3(7) | 0 |
| played | 108(4) | 2 | 53(9) | 4 | 3(7) | 5 |
| enjoyed | 102(5) | 4 | 29(13) | 4 | 0 | 2 |
| ate | 96(6) | 0 | 146(4) | 1 | 0 | 5 |
| had | 56(7) | 1 | 28(14) | 0 | 2 | 36 |
| watched | 49(8) | 0 | 102(5) | 1 | 0 | 2 |
| came | 44(9) | 0 | 42(10) | 0 | 5(4) | 10(12) |
| slept | 37(10) | 0 | 28(14) | 6 | 0 | 0 |
| were | 24(11) | 5 | 34(11) | 5 | 5(5) | 65(2) |
| swam | 23(12) | 2 | 0 | | 0 | 0 |
| visited | 22(13) | | 7 | | 5(4) | 5 |
| stayed | 19(14) | | 7 | | 1 | 3 |
| talked | 19(14) | | 10 | | | |
| cleaned | 2 | | 30(12) | 1 | 6(4) | |
| wrote | 9 | | 29(13) | | 2 | 8 |
| said | 6 | | 13 | 1 | 9(2) | |
| asked | 0 | | 6 | | 3(7) | |
| go | 0 | | 70(6) | | | |
| want | 6 | | 59(7) | | | |
| study | 10 | | 55(8) | 2 | | 3 |
| like | 17 | | 6 | | | 33(3) |
| see | 3 | | 3 | | | 19(5) |
| I'm | 14 | 1 | 17 | | | 18(7) |
| look | 8 | | 8 | | | 15(8) |

(rank)

We would like to examine whether or not there are any effects relating to the verbs.

Furthermore, sentential subjects in the diaries tend to be 'I' and 'We' as a characteristic of diary, as we can see in Table 4.

Table. 4 Frequency of Sentential Subject and Following Verbs

| Summer Diary | | | | | |
|--------------|------|-----------|----------------|---------------|-------|
| | verb | copula be | aux be+ ing/ed | verbal errors | total |
| I | 1438 | 81 | 15 | 9 | 1542 |
| You | 1 | 1 | 0 | 0 | 1 |
| We | 112 | 2 | 3 | 4 | 121 |
| He | 5 | 2 | 1 | 0 | 8 |
| She | 5 | 2 | 0 | 2 | 9 |
| It | 9 | 378 | 0 | 12 | 399 |
| They | 2 | 2 | 0 | 0 | 4 |

| Winter Diary | | | | | |
|--------------|------|-----------|----------------|--------|-------|
| | verb | copula be | aux be+ ing/ed | errors | total |
| I | 1546 | 155 | 30 | 20 | 1751 |
| You | 1 | 0 | 0 | 0 | 2 |
| We | 111 | 4 | 2 | 4 | 121 |
| He | 5 | 1 | 0 | 0 | 6 |
| She | 10 | 5 | 0 | 1 | 16 |
| It | 8 | 125 | 0 | 0 | 133 |
| They | 4 | 3 | 0 | 0 | 7 |

| Textbook | | | | |
|----------|------|-----------|----------------|-------|
| | verb | copula be | aux be+ ing/ed | total |
| I | 133 | 24 | 3 | 160 |
| You | 38 | 13 | 2 | 53 |
| We | 32 | 2 | 0 | 34 |
| He | 32 | 6 | 2 | 40 |
| She | 16 | 2 | 6 | 24 |
| It | 15 | 43 | 4 | 62 |
| They | 39 | 12 | 4 | 55 |

We wondered whether or not there were any effects from sentential subjects. Therefore we administered 2 tests to examine these questions from the diaries.

3.2 Test 1

3.2.1 Purpose

The test was administered (1) to clarify that these errors were common among the Japanese junior high school students and (2) to examine whether there were any effects from sentential subjects, verbs, and adjectives attributing to these errors.

3.2.2 Subjects

413 students: 80 students at a private boys' junior high school (School A); 232 students at a private girls' junior high school(School B); 38 students at a private girls junior high schools(School C); and 63 students at a public junior high school (School D) were tested. All of them are in the second grade but the proficiency levels of their English are different among the schools: The level of the students at schools A and B are relatively high, and the level of those at schools C and D are relatively low. At school A and C, teachers instruct based on grammar rules and the students are accustomed to written tests. At schools B and D, teachers adopt communicative teaching methods. Furthermore, the students have learned verbs first and then copula at school A. The students at the rest of schools have learned copula first and then verbs. Each school uses different textbooks.

Table 5. Types of Schools

| School | No | Type | Sex | Level | Textbook | Instruction |
|--------|-----|---------|----------------|-------|-----------|---------------|
| A | 80 | Private | Boys | High | Total | Grammar |
| B | 232 | Private | Girls | High | Sunshine | Communicative |
| C | 38 | Private | Girls | Low | One World | Grammar |
| D | 63 | Public | Boys and Girls | Low | New Crown | Communicative |

3.2.3 Material

The types of questions I made are based on Ohzeki(1977)'s Direct Translation Method . As the strategy of writing diary, most students first write it in Japanese and then translate it into English.

Table.6 shows the question types. There are 12 questions: three sentence types: A. affirmative sentence, B. negative sentence, and C. interrogative sentence and 4 grammatical points for each sentence type: a. present verb, b. past verb, c. present be, and d. past be.

In order to prove that these errors are common to all the sentential subjects, four pronouns (*I, You, We, It*) and two nouns (*My mother for She*

and *Jim* for *He*) are used in the test.

Table 6. Types of the Sentences Tested

| | Present Verb | Past Verb | Present Be | Past Be |
|---------------|-----------------|--------------|---------------|------------|
| affirmative | 10 | 4 | 1 | 7 |
| negative | 11 | 8 | 6 | 3 |
| interrogative | 2 | 5 | 9 | 12 |

| | Affirmative Sentences | | | | Negative Sentences | | | | Interrogative Sentences | | | |
|-----|--------------------------|-----------|-----------|------------|-----------------------|-----------|-----------|------------|----------------------------|-----------|-----------|------------|
| | Pre V | Past V | Pre Be | Past Be | Pre V | Past V | Pre Be | Past Be | Pre V | Past V | Pre Be | Past Be |
| I | | 4 | | | | | 6 | | | | | |
| You | | | | | | | | | 2 | | 9 | |
| He | 10 | | | | | | | | | 5 | | |
| She | | | | 7 | 11 | | | | | | | |
| It | | | 1 | | | | | | | | | 12 |
| We | | | | | | 8 | | 3 | | | | |

- 1.It is sunny today.
- 2.Do you play tennis?
- 3.We were not happy.
- 4.I enjoyed fishing this afternoon.
- 5.Did Jim watch TV yesterday?
- 6.I am not a student.
- 7.My mother was a teacher.
- 8.We didn't enjoy the movie.
- 9.Are you happy?
- 10.Jim watches TV every day.
- 11.My mother doesn't play tennis.
- 12.Was it sunny yesterday?

The verbs and adjectives which appear most frequently in their diaries are selected and used in the test. The reason for this is that by the time of this experimental test, the learners have already been familiar with those words. Table 7 shows the adjectives frequently used in the diaries. The

raw numbers shows the appearance in the diaries and the rank is in the blank.

Table 7. Frequency of adjectives used in the diaries and School Textbook

| | Summer Diary | Winter Diary | School Textbook |
|-------------|--------------|--------------|-----------------|
| sunny | 169(1) | 225(1) | 0 |
| cloudy | 98(2) | 64(5) | 2 |
| rainy | 59(3) | 0 | 2 |
| fine | 53(4) | 68(4) | 11(2) |
| good | 36(5) | 38(8) | 21(1) |
| hot | 33(6) | 5 | 0 |
| tired | 29(7) | 35(9) | 0 |
| hard | 18(8) | 41(6) | 4(7) |
| beautiful | 14(9) | 7 | 3(10) |
| delicious | 12(10) | 39(7) | 0 |
| nice | 12(11) | 4 | 9(4) |
| interesting | 10(12) | 16 | 5(7) |
| long | 10(12) | 8 | 4(9) |
| difficult | 7(13) | 11 | 1 |
| happy | 7(13) | 157(2) | 9(4) |
| new | 3 | 100(3) | 11(2) |
| cold | 0 | 25(10) | 1 |
| different | 0 | 0 | 4(9) |
| popular | 0 | 0 | 4(9) |

(rank)

3.2.4. Result

Figure 1-1 ~ 1-12 shows that these errors often occur among most Japanese junior high school students, but School A is an exception.

A lot of errors observed in the diary also occurred in Test 1: Those were errors as markers of number agreement, errors as tense marker, and chunk.

There were fewer mistakes in affirmative sentences, following interrogative, lastly negative sentences. In the interrogative and negative sentences, we might argue *be* is recognized as auxiliary. Makino(1974) investigated that progressive is early acquired by Japanese junior high school students. By over generalizing the progressive rule, the students used *be* instead of using auxiliary *do* and *does*.

Figure 1-2 and 1-6 show the students made errors especially in question 4 and 8 that contain the verb *enjoy*. As we had expected, there are not only frequency but also any other factors to cause the errors. We might

argue here that the students recognize the verb *'enjoy'* as an adjective.

It is remarkable in Figure 1-3 that there are no errors in the question 1, expect that there were some no answers in school D. Expect the answer "Today is sunny," most students used constructed form *It's sunny today*. It seems that whole the sentence is recognized as a chunk because it is quite common in English classroom in Japan to start the lesson with the questions such as "*What day is it today?*" and "*How is the weather today?*" However, the same type of question 12, interrogative sentence, the least students could answer to the question. As it is not natural to ask the question 12, they have not heard the expression before. So we can recognize the importance of a big influence of input on the students' performance.

More than our expectations that the form *be plus verb stem* will occur a lot for only a verb stem needed, verb stem also occurred when only copula is needed as seen in Figure 1-4, 1-7, 1-8, 1-11 and 1-12 even though they are not so much as the case of *be plus verb stem*.

3.3 Test 2

3.3.1 Purpose

An analysis of the diary suggests that there is interference from Japanese grammar. Copula 'be' plays a role of topic maker and 'wa' does the same role in Japanese. In addition, copula is often translated into Japanese '*desu/masu*', which show politeness. Therefore the test intends to examine that the students made errors whether or not Test 1 include expressions 'wa' and '*desu/masu*', comparing with Test 2 without those expressions, which is acceptable in casual conversation in Japanese.

3.3.2 Subjects

Test 2 was administered among the students of school C and D.

3.3.3 Materials

12 test questions were completely the same meaning of Test 1 except there were no expression 'wa' and '*desu/masu*' in Japanese. Test 2 was administered one month after Test 1.

3.3.4 Result

Even though the students had taken the same test one month before

and had been given an explanation for the correct answers, Figure 2-1 and 2-2 suggest that there were still a lot of errors in Test 2. In school C, some students were able to correct the errors that they had mistaken last time, more errors occurred in the question 10. In school D, the students lost their concentration on the same test because it was just before the summer vacation. The number of the students who did not answer to the question increased. Consequently the error rate would be unreliable. In any case, there was no clear evidence for the influence of 'wa' and 'desu/masu' on the result of this translation test.

4. Conclusion

An analysis of the diaries and the written tests shows that there are many factors leading to those verbal errors. It is very difficult to correct these errors because each factor related to others, however, correction remains an important issue.

As the source of input, textbooks also plays an important role. The students have very limited input, mostly from their textbook.

From my experience as a teacher at junior high school, these errors occur more often in speaking rather than in writing. Further study is needed to examine both in speaking and in writing. It is also need to investigate the effects of formulaic expression for the performance of the students.

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A Study of EFL Discourse Using Corpora (4): An Analysis of Written Data by Japanese High School Students

Kazuharu Owada, Norifumi Ueda, Akiko Miyake, and Kouichi Ano

1. Purpose

The purpose of this preliminary research is (1) to find out about the forms of unaccusative, unergative and transitive verbs actually used in English compositions by Japanese high school students and (2) to compare the learner data with the textbook data.

2. The data and the verb types used

2.1. The learner data

605 essays written by high school students from various levels of high school were all entered into computer files and analyzed by using WordSmith Tools (Ver.3.0).

Table 1 The analysis of the student essays by WordSmith Tools

| | |
|-------------------------------|--------|
| Tokens | 94,911 |
| Types | 3,688 |
| Type/Token Ratio | 3.89 |
| Standardized Type/Token Ratio | 36.12 |
| (n=1,000) | |

2.2. The textbook data

First-year high school students are usually required to take English I. For English I, 52 textbooks for various levels of high school are published by 21 companies in Japan.

The five textbooks (*COSMOS*, *ENGLISH 21*, *GENIUS*, *MILESTONE*, and *VISTA*) were selected among the top eleven in the list ordered by frequency of copies adopted by high schools (*Naigai Kyoiku* 1999). The selection was made by one experienced Japanese high school teacher so that the five textbooks would include two advanced-level, two intermediate-level, and one lower-level books.

Table 2 The analysis of the five textbooks by WordSmith Tools

| | |
|-------------------------------|--------|
| Tokens | 29,257 |
| Types | 2,176 |
| Type/Token Ratio | 7.26 |
| Standardized Type/Token Ratio | 40.33 |
| (n=1,000) | |

2.3. Verb types used in this study

Verbs used in this study were tentatively categorized into five classes based on previous studies on verb acquisition by Japanese learners of English (e.g., Shomura 1996, Hirakawa 1997, Tomita 1998).

- A: Alternating unaccusatives (13 verbs)
boil bounce break burn close dry fly grow hang move open roll sink
- B: Non-alternating unaccusatives (14 verbs)
appear arise arrive come die disappear emerge erupt exist fall go happen live stay
- C: Unergatives (11 verbs)
cry dance jump laugh play sing sleep smile speak swim work
- D: Unergatives which have transitive uses (3 verbs):
play sing speak
- E: Transitive verbs that allows direct omissibility (6 verbs)
drink eat lose paint read win

3. Results and Discussion

3.1. A: Alternating unaccusatives

Table 3 shows that 9 out of the 13 verbs, i.e., *break*, *burn*, *close*, *dry*, *fly*, *grow*, *move*, *open*, *sink*, occurred in both texts. Of those, transitive forms were more frequent than intransitive forms for *break*, *burn*, *close*, and *open* in both texts, whereas the reverse was true for *grow*. We can say that there is a relatively strong agreement between both texts in this class of verbs. In 3.6. we will look at the breakdown of *move*.

Table 3 The results of alternating unaccusatives

| | Learner | | | Textbook | |
|--------------|---------------|--------------|-----------|------------|--------------|
| | Transitive | Intransitive | Unclear | Transitive | Intransitive |
| boil | 0 | 0 | 0 | 1 | 0 |
| bounce | 0 | 0 | 0 | 0 | 1 |
| break | 12 | 4 | 1 | 6 (2) | 3 |
| burn | 2 | 1 | 1 | 5 (3) | 2 |
| close | 2 | 1 | 1 | 5 (1) | 2 |
| dry | 1 | 1 | 0 | 3 (2) | 0 |
| fly | 1 (1) | 13 | 1 | 2 | 2 |
| grow | 4 (2) | 63 | 12 | 4 (1) | 10 |
| hang | 2 | 0 | 0 | 0 | 0 |
| move | 15 (9) | 17 | 0 | 11 (6) | 11 |
| open | 17 | 3 | 4 | 10 | 1 |
| roll | 0 | 0 | 0 | 1 | 3 |
| sink | 0 | 2 | 1 | 0 | 1 |
| Total | 56(12) | 105 | 21 | 14 | 36 |

3.2. B: Non-alternating unaccusatives

The top two of the most frequently used verbs *come* and *go* in the learner data corresponded to those in the textbook data although the ranking was not in the same order. We will look at the breakdown of *come* and *go* in 3.7. and 3.8., respectively.

Table 4 The results of non-alternating unaccusatives

| | Learner | | | Textbook |
|-----------|------------|--------------|---------|--------------|
| | Transitive | Intransitive | Unclear | Intransitive |
| appear | 0 | 21 | 2 | 8 |
| arise | 0 | 2 | 0 | 0 |
| arrive | 0 | 13 | 3 | 11 |
| come | 0 | 186 | 1 | 89 |
| die | 5 (1) | 29 | 0 | 20 |
| disappear | 0 | 3 | 0 | 0 |
| emerge | 0 | 0 | 0 | 0 |
| erupt | 0 | 1 | 0 | 0 |
| exist | 1 | 8 | 1 | 0 |
| fall | 0 | 26 | 1 | 15 |
| go | 0 | 595 | 30 | 75 |
| happen | 0 | 45 | 0 | 21 |
| live | 0 | 143 | 0 | 44 |
| stay | 0 | 38 | 2 | 14 |
| Total | 6(1) | 1110 | 40 | 297 |

Our learners made errors in *die* and *exist* by transitivizing both verbs as follows (e.g., Zobl 1989):

A pigeon is died. (wrong passive)

Elvis Presley who was the king of rock music was died twenty years ago. (wrong passive)

Megu was died for throwing by a post. (wrong passive)

Many soldiers were died. (wrong passive)

So I hope to spread right knowledge and die discrimination. (wrong transitive)

In the past it was existed. (wrong passive)

Contrary to our expectations, we did not find any examples of *fall* and *happen* being used ungrammatically as passives. We will talk about this point by focusing on *fall* in 3.9.

3.3. C: Unergatives

Table 5 reveals that the top three of the most frequently used verbs *cry*, *sleep*, and *work* in the learner data corresponded to those in the textbook data.

Table 5 The results of unergatives

| | Learner | | | Textbook |
|-------|------------|--------------|---------|----------|
| | Transitive | Intransitive | Unclear | |
| cry | 0 | 22 | 0 | 12 |
| dance | 1 | 2 | 1 | 2 |
| jump | 0 | 8 | 0 | 3 |
| laugh | 0 | 16 | 0 | 0 |
| sleep | 0 | 20 | 0 | 17 |
| smile | 0 | 15 | 0 | 8 |
| swim | 1 | 13 | 3 | 5 |
| work | 2 | 76 | 0 | 28 |
| Total | 4 | 172 | 4 | 75 |

3.4. D: Unergatives which have transitive uses

Table 6 indicates that the use of the intransitive form of *speak* is more frequent than that of the transitive in both texts. However, there is a disagreement on the use of *play* between them in the choice of transitivity. We will discuss this in 3.10.

Table 6 The results of unergatives that have transitive uses

| | Learner | | | Textbook | |
|-------|------------|--------------|---------|------------|--------------|
| | Transitive | Intransitive | Unclear | Transitive | Intransitive |
| play | 101 | 67 | 13 | 14 | 17 |
| sing | 7 | 7 | 0 | 6 (1) | 5 |
| speak | 15 | 29 | 0 | 9 | 11 |
| Total | 123 | 103 | 13 | 29(1) | 33 |

3.5. E: Transitive verbs that allow direct object omissibility

Table 7 shows that there is a strong agreement between both texts in the choice of transitivity. All of these verbs except *drink* (which does not appear in the textbook data) were used transitively more often than intransitively in both texts.

Table 7 The results of transitive verbs that allow direct object omissibility

| | Learner | | | Textbook | |
|--------------|---------------|--------------|----------|--------------|--------------|
| | Transitive | Intransitive | Unclear | Transitive | Intransitive |
| drink | 19 | 2 | 1 | 0 | 0 |
| eat | 55 (3) | 6 | 4 | 12 (1) | 4 |
| lose | 24 (1) | 6 | 1 | 10 (3) | 1 |
| paint | 8 (1) | 1 | 0 | 13 | 7 |
| read | 13 (1) | 5 | 1 | 26 | 7 |
| win | 16 | 4 | 0 | 7 | 5 |
| Total | 135(6) | 24 | 7 | 68(4) | 24 |

3.6. Move

The most frequently used meaning of *move* in both texts was 'to change place', as in Table 8. However, there were more intransitive uses than transitive uses in the learner data, while the reverse was true in the textbook data.

Table 8 The breakdown of *move*

Learner

| | Transitive | Intransitive | Total | Percentage |
|------------------------|---------------|--------------|-----------|--------------|
| move (change place) | 7 (4) | 6 | 13 | 59.1 |
| move (new house) | 0 | 5 | 5 | 22.7 |
| move (strong feelings) | 4 (3) | 0 | 4 | 18.2 |
| Total | 11 (7) | 11 | 22 | 100.0 |

Textbook

| | Transitive | Intransitive | Total | Percentage |
|------------------------|------------|--------------|-----------|--------------|
| move (change place) | 4 | 11 | 15 | 46.9 |
| move (strong feelings) | 11 (9) | 0 | 11 | 34.4 |
| move (new house) | 0 | 6 | 6 | 18.8 |
| Total | 15 | 17 | 32 | 100.0 |

3.7. *Come*

When we look at the breakdown of the actual uses of *come* in both texts as in Table 9, we can see that the top three patterns are the same.

Table 9 The breakdown of *come*

| Learner | Total | Percentage |
|----------------|------------|--------------|
| come | 90 | 48.4 |
| come back | 24 | 12.9 |
| come from NP | 15 | 8.1 |
| come home | 13 | 7.0 |
| come true | 12 | 6.5 |
| come back home | 7 | 3.8 |
| come on | 5 | 2.7 |
| come to V | 4 | 2.2 |
| come out | 3 | 1.6 |
| come Ving | 3 | 1.6 |
| come up | 3 | 1.6 |
| come up to | 2 | 1.1 |
| OTHERS | 5 | 2.7 |
| Total | 186 | 100.0 |

| Textbook | Total | Percentage |
|----------------|-----------|--------------|
| come | 40 | 44.9 |
| come from NP | 20 | 22.5 |
| come back | 9 | 10.1 |
| come out | 4 | 4.5 |
| come out of NP | 3 | 3.4 |
| come up | 3 | 3.4 |
| come home | 2 | 2.2 |
| OTHERS | 8 | 9.0 |
| Total | 89 | 100.0 |

3.8. *Go*

When we look at the breakdown of the actual uses of *go* in both the texts as in Table 10, we can see that the top three patterns are the same.

Table 10 The breakdown of *go*
Learner

| | Total | Percentage |
|---------------|------------|------------|
| go | 451 | 75.8 |
| go home | 20 | 3.4 |
| go on | 18 | 3.0 |
| go out | 18 | 3.0 |
| go Ving | 18 | 3.0 |
| go abroad | 13 | 2.2 |
| go back home | 7 | 1.2 |
| go back | 6 | 1.0 |
| go down | 5 | 0.8 |
| go back to | 5 | 0.8 |
| go through | 5 | 0.8 |
| go around | 4 | 0.7 |
| go away | 3 | 0.5 |
| go by | 3 | 0.5 |
| be gone | 2 | 0.3 |
| go to sleep | 2 | 0.3 |
| go along with | 2 | 0.3 |
| go to bed | 2 | 0.3 |
| go for it | 2 | 0.3 |
| go up | 2 | 0.3 |
| go off | 2 | 0.3 |
| OTHERS | 5 | 0.8 |
| Total | 595 | 100 |

Textbook

| | Total | Percentage |
|--------------|-----------|--------------|
| go | 44 | 58.7 |
| go on | 5 | 6.7 |
| go home | 3 | 4.0 |
| go back | 3 | 4.0 |
| go to sleep | 3 | 4.0 |
| be gone | 2 | 2.7 |
| go away | 2 | 2.7 |
| go to bed | 2 | 2.7 |
| go out | 2 | 2.7 |
| OTHERS | 9 | 12.0 |
| Total | 75 | 100.2 |

3.9. *Fall*

From the breakdown of *fall* in the learner data in Table 11, we can say that high school learners have fixed expressions, or favorite easy-to-use chunks such as *fall down* and *fall in love*. Thanks to this fixedness, many high school students may have avoided a pitfall of using the unaccusative *fall* transitively (or passively). That is, memorization of fixed phrases including error-prone unaccusative verbs may have guided the learners toward avoiding using ungrammatical forms of these verbs.

Table 11 The breakdown of *fall*

| Learner | | |
|--------------|-----------|--------------|
| | Total | Percentage |
| fall | 8 | 30.8 |
| fall down | 7 | 26.9 |
| fall in love | 5 | 19.2 |
| Others | 6 | 23.1 |
| Total | 26 | 100.0 |

| Textbook | | |
|--------------|-----------|--------------|
| | Total | Percentage |
| fall | 8 | 72.7 |
| fall in love | 1 | 9.1 |
| fall asleep | 1 | 9.1 |
| fall silent | 1 | 9.1 |
| Total | 11 | 100.0 |

3.10. *Play*

Table 12 presents the breakdown of *play*. Two points need to be made here. First, the most frequently used meaning ‘to participate in the game’ in the textbook data did not appear in the learner data. Second, the learners used the prototypical meanings of *play* frequently. According to Ueda (1998), Japanese university students learning English have in their mind the meanings, i.e., ‘to amuse oneself’, ‘to do sport’ (play [sports] in our terms), and ‘to produce sound by musical instrument’ (play [musical instrument] in our terms) as prototypical meanings. Our learner data also showed that the high school learners used the verb *play* with its prototypical meanings most of the time because these three prototypical meanings amounted to 75% (126 /168) of the total uses of *play*.

Table 12 The breakdown of *play*

Learner

| | Transitive | Intransitive | Total | Percentage |
|---------------------------|------------|--------------|-------|------------|
| play (to amuze oneself) | 0 | 67 | 67 | 39.9 |
| play [sports] | 46 | 0 | 46 | 27.4 |
| play [game] | 17 | 0 | 17 | 10.1 |
| play firework | 13 | 0 | 13 | 7.7 |
| play [musical instrument] | 11 | 0 | 11 | 6.5 |
| play surfing | 5 | 0 | 5 | 3.0 |
| play ski | 3 | 0 | 3 | 1.8 |
| play pool (swimming pool) | 2 | 0 | 2 | 1.2 |
| play a role | 2 | 0 | 2 | 1.2 |
| OTHERS | 2 | 0 | 2 | 1.2 |

| | | | | |
|-------|-----|----|-----|-------|
| Total | 101 | 67 | 168 | 100.0 |
|-------|-----|----|-----|-------|

Textbook

| | Transitive | Intransitive | Total | Percentage |
|-----------------------------------|------------|--------------|-------|------------|
| play (to participate in the game) | 0 | 12 | 12 | 38.7 |
| play [sports] | 7 | 0 | 7 | 22.6 |
| play (to amuze oneself) | 0 | 5 | 5 | 16.1 |
| play [a game] | 2 | 0 | 2 | 6.5 |
| play catch | 2 | 0 | 2 | 6.5 |
| play [musical instrument] | 1 | 0 | 1 | 3.2 |
| play a record | 1 | 0 | 1 | 3.2 |
| play a role | 1 | 0 | 1 | 3.2 |

| | | | | |
|-------|----|----|----|-------|
| Total | 14 | 17 | 31 | 100.0 |
|-------|----|----|----|-------|

4. Conclusion

Three findings can be drawn from this study.

First, we found a general agreement on most of the intransitive verbs between the learner data and the textbook data. This result suggests a possible effect of textbook materials upon the learners. We will follow up on this issue by looking more closely at the relationship between the materials actually used and the learner output.

Second, the learners may have a tendency to use verbs with their prototypical meanings, as we saw in the case of *play*.

And thirdly, we suggested that memorization of fixed phrases, i.e., chunks which contain error-prone unaccusative verbs such as *fall* might have guided the learners toward avoiding using ungrammatical forms of these verbs.

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A Study of Textbook Analysis (5): The Frequency of Verb Patterns in High School Textbooks

Kazuharu Owada, Jae-Keun Lee, Norifumi Ueda, Masanori Oya , Naoki Miyasaka, Tae Yamazaki, and Hiroyuki Takei

1. Purpose

No one questions that textbook materials form a major portion of language input for high school students in Japan. Therefore, we need to look into what kinds of syntactic expressions the learners receive as input because these expressions form part of the students' syntactic knowledge.

2. The Analysis

2.1. Materials

The Course of Study by the Ministry of Education offers the following seven subjects for English classes at high school level: English I, English II, Aural/Oral Communication A, Aural/Oral Communication B, Aural/Oral Communication C, Reading, and Writing.

Among them, Aural/Oral Communication A is the subject which focuses on 'spoken English in everyday situations' (*The Course of Study for Upper Secondary School Foreign Languages*).

Therefore, it can be expected that high school students have a lot of exposure to the English expressions used in the textbooks for this subject by listening to the model dialogues in the tapes or spoken by instructors.

The eight textbooks (*Birdland, Crown, Echo, Expressways, Hello there!, Interact, Progressive, and Select*) for this subject were selected among the top ten in the list of books ordered by frequency of the number of copies adopted by high schools (*Naigai kyoiku* [Inside and Outside of Education] 1999).

These textbooks were all entered into computer files and analyzed by using WordSmith Tools (Ver.3.0) as follows:

Table 1 The analysis of the eight textbooks by WordSmith Tools

| | |
|--|--------|
| Tokens | 12,986 |
| Types | 995 |
| Type/Token Ration | 7.66 |
| Standardized Type/Token Ratio (n=1,000) | 36.72 |

2.2. Verbs Used in This Study

We focused on the following intransitive verbs (some of which have transitive counterparts) for this study. We wanted to find out about what kind of input high school students receive in terms of intransitive verbs in comparison with transitive verbs that are said to represent canonical sentence schemas (Agent-verb-Patient).

- A: Alternating unaccusatives (13 verbs were selected for this class)
boil bounce break burn close dry fly grow hang move open roll sink
- B: Non-alternating unaccusatives (14 verbs were selected for this class)
appear arise arrive come die disappear emerge erupt exist fall go happen live stay
- C: Unergatives (7 verbs were selected for this class)
cry dance jump laugh sleep smile work
- D: Unergatives that have transitive uses (3 verbs were selected for this class)
play sing speak
- E: Transitive verbs which allows direct omissibility (6 verbs were selected for this class)
drink eat lose paint read win

2.3. Method

Both the finite verbs and the verbs that come after central modals, marginal modals, modal idioms and semi-auxiliaries (Quirk *et al.* 1985) in the textbooks are analyzed according to the syntactic frames that are based on X-bar syntax with some adaptations (Naigles and Hoff-Ginsberg 1995).

3. Results

Table 2 presents the results of the analysis.

Table 2 The results of the analysis

| Verb final | A | | B | | | C | | D | | E | | | | | Total |
|-----------------|-------|-------|------|------|-----|-------|------|------|-------|-------|-----|------|------|-----|-------|
| | break | close | come | fall | go | smile | work | sing | speak | drink | eat | lose | read | win | |
| # | 2 | | 1 | | 10 | 1 | 1 | | | 6 | 1 | 1 | | 1 | 24 |
| #(wh-NP) | | | | | | | | | | | | | | | |
| #(P) | | | | | | | | | | | | | | | |
| #(LOC) | | | | | | | | | | | | | | | |
| #(AdjP) | | | | | | | | | | | | | | | |
| #(passive) | | 1 | | | | | | | | | | | | | 1 |
| # [conj] S | | | | | | | | | | | | | | | |
| P LOC | | | | | | | | | | | | | | | |
| P NP | | | | | 1 | | | | | | | | | | 1 |
| P | | | 2 | 1 | | | | | | | 2 | | | | 5 |
| P Adv | | | | | | | 1 | | | | 2 | | | | 3 |
| P [Conj] S | | | | | | | | | | | | | | | |
| P PP | | | | | 2 | | | | | | | | | | 2 |
| P (Wh-NP) | | | | | 1 | | | | | | | | | | 1 |
| P + NP [Conj] S | | | | | | | | | | | | | | | |
| PP | | | | | | | | | | | | | | | |
| PP (Wh-NP) | | | | | 1 | | | | | | | | | | 1 |
| PP | | | 2 | | 22 | | 5 | 1 | | | 1 | | | | 31 |
| PP + PP | | | 3 | | 65 | | | | | | | | | 1 | 69 |
| PP + Adv | | | | | 9 | | | | | | | | | | 9 |
| PP + LOC | | | | | 1 | | | | | | | | | | 1 |
| PP [Conj] S | | | | | 2 | | | | | | | | | | 2 |
| NP | | 1 | | | | | | 2 | 8 | | 4 | 1 | 2 | | 18 |
| NP PP | | | | | | | | | | | | | 2 | | 2 |
| NP LOC | | | | | | | | | | | | | | | |
| NP P | | | | | | | | | | | | | | | |
| NP Adv | | | | | | | | | | | | | | | |
| NP NP | | | | | | | | | | | | | | | |
| NP (Wh-NP) | | | | | | | | | | | | | | | |
| NP P Adv | | | | | | | | | | | | | | | |
| NP LOC S | | | | | | | | | | | | | | | |
| NP P [Conj] S | | | | | | | | | | | | | | | |
| NP PP [Conj] S | | | | | | | | | | | | | | | |
| NP P LOC | | | | | | | | | | | | | | | |
| NP (SVI) | | | | | | | | | | | | | | | |
| NP [Conj] S | | | | | | | | | | | | | | | |
| NP P (Wh-NP) | | | | | | | | | | | | | | | |
| NP Adiphrase | | | | | | | | | | | | | | | |
| NP Adj [Conj] S | | | | | | | | | | | | | | | |
| Adv | | | | | 17 | | | | 1 | | | | | | 18 |
| Adj phrase | | | | | | | | | | | | | | | |
| LOC PP | | | | | 1 | | | | | | | | | | 1 |
| LOC Adv | | | | | | | | | | | | | | | |
| LOC (Conj) S | | | | | | | | | | | | | | | |
| LOC | | | | | 1 | | | | | | | | | | 1 |
| Sound | | | | | | | | | | | | | | | |
| Adjunct | | | | | 7 | | | | | | | | | | 7 |
| Adjunct P | | | | | 1 | | | | | | | | | | 1 |
| Adjunct Adv | | | | | 2 | | | | | | | | | | 2 |
| Adjunct PP | | | | | 4 | | | | | | | | | | 4 |
| Adjunct (Wh-NP) | | | | | 1 | | | | | | | | | | 1 |
| Adjunct NP | | | | | | | | | | | | | | | |
| S (Wh-NP) | | | | | | | | | | | | | | | |
| S | | | | | | | | | | | | | | | |
| Total | 2 | 2 | 8 | 1 | 148 | 1 | 7 | 3 | 9 | 6 | 10 | 2 | 4 | 2 | 205 |

(adapted from Naigles and Hoff-Ginsberg 1995)

Among the 13 alternating unaccusatives, only two verbs *break* (twice) and *close* (once) were found. These were all used transitively, leaving learners no opportunity to get enough input that these verbs alternate between transitives and intransitives. This lack of input might mislead some advanced Japanese learners of English into believing that the verbs *break* and *close* have no intransitive counterparts.

Among the 14 non-alternating unaccusatives, only three verbs, i.e., *come*, *fall*, and *go*, appeared. Among them, the motion verb *go* occurred much more frequently than the motion verb *come*. Although the frequency of these two verbs was different, we can see that *go* appeared in various syntactic forms than *come*. We need to examine whether this disparity of syntactic input has an effect upon these motion verbs learner produce.

Japanese English learners at the elementary level are said to have problems with the verb *come* because of L1 interference. We can say that this may be attributable to the 'poverty of input' found in this study as well as the meaning difference between *come* and *kuru* in Japanese.

Among the three unergatives that have transitive uses, two verbs *smile* and *work* were found. For *work*, it is interesting to note that the form with the verb final occurred once, while P Adv (once) and PP forms (five times) appeared more often. We will follow up on this point at a later date to find out about the relationship between the input and the learners' production data.

Among the six transitive verbs that allow direct omissibility, five verbs *drink*, *eat*, *lose*, *read*, and *win*, were found in the corpus. While *drink* and *win* were used intransitively, *eat*, *lose*, and *read* were found both transitively and intransitively.

4. Conclusion

Although one can argue that the data in this study is limited in scope because of the small size of corpus (12, 986 tokens) and that the selection of verbs is rather arbitrary, we can state tentatively that the syntactic input provided by the textbooks for Aural/Oral Communication A is not quite satisfactory for the acquisition of some intransitive verbs, especially for alternating unaccusatives.

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A Study of EFL Discourse using Corpora (6):

An Analysis of Discourse Completion Tasks

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1. Purpose

Our purpose is to analyze the discourse completion data with reference to four speech functions (thanking, apology, request, and offering) in order to find out the strategies or some fixed forms Japanese learners seem to prefer.

First, we compare Japanese learners' lexical resources with those obtained by the native speakers of English stored in London-Lund Corpus of Spoken English. This analysis is carried out by partly using the data in Aijmer (1996), which reports that native speakers of English have various utterance forms to achieve the speech functions mentioned above.

Secondly, we compare Japanese learners' lexical resources with those found in 12 English textbooks used in junior and senior high schools in Japan. Through this comparison, we will observe similarity or difference of expressions used among discourse completion task (hereafter, DCT) data, junior high school textbooks and high school textbooks.

2. Method

2.1 Subjects

The subjects for this study are 378 Japanese university students who attend four different universities. They are in the first year or the second year.

2.2 Material

The DCT consists of 62 questions. They are extracted from three randomly selected junior high school textbooks. We draw expressions of thanking, apologies, requests and offers by using *Concord* involved in *WordSmith Tools* (Ver.3.00), and then select discourses that are thought to be suited for DCT.

2.3 Procedure

The subjects are asked to fill out a short background questionnaire and then to answer DCT (see Appendix 4). All the answers are stored in a computer and are processed by *Concord* of *WordSmith Tools*. Each speech function is analyzed separately.

Our analysis is carried out based on thanking strategies, apologizing strategies and requestive strategies presented in Aijmer (1996). We will present those strategies in results and discussion section in detail.

3. Results and Discussion

3.1 Thanking

We pick up the answers that are appropriate to the context, and then classify them into eight categories according to Aijmer (1996:37). These categories appear in Appendix 1. Besides, the items which are not appropriate to the context are also considered afterward.

Table 1 Types of thanking strategies in DCT

| Strategies | Raw | Percentage |
|------------|------|------------|
| A | 5418 | 87.1 |
| B | 1 | 0.0 |
| C | 28 | 0.5 |
| D | 455 | 7.3 |
| E | 0 | 0.0 |
| F | 2 | 0.0 |
| G | 303 | 4.9 |
| H | 13 | 0.2 |
| Total | 6220 | 100 |

Table 1 shows that the frequency of each thanking strategy. This indicates that the thanking strategies used by Japanese learners of English are limited. They use strategy A for the most cases (87.1%), and sometimes use strategy D and G (7.3 % and 4.9% respectively).

We listed the distribution of the items belonging to strategy A in Table 2. This indicates that almost all gratitude expressions used by Japanese learners consist of 'thank you,' 'thank you very much' and 'thanks' (99.8% combined), while NS use various types of expressions.

Table 2 Relative frequency of (direct) apology expressions in the LLC and DCT

| Realization | | LLC | % | JPN | % |
|--------------|-----------------------------------|-----|-------|------|-------|
| (A)THANK YOU | <i>thank you</i> | 134 | 45.1 | 4605 | 85.0 |
| | <i>thank you very much</i> | 73 | 24.6 | 401 | 7.4 |
| | <i>thank you very much indeed</i> | 17 | 5.7 | 0 | 0.0 |
| | <i>thank you so much</i> | 2 | 0.7 | 10 | 0.2 |
| Subtotal | | 226 | 76.1 | 5016 | 92.6 |
| (B)THANKS | <i>thanks</i> | 33 | 11.1 | 390 | 7.2 |
| | <i>thanks very much</i> | 28 | 9.4 | 1 | 0.0 |
| | <i>thanks very much indeed</i> | 5 | 1.7 | 0 | 0.0 |
| | <i>thanks awfully</i> | 2 | 0.7 | 0 | 0.0 |
| | <i>thanks a lot</i> | 2 | 0.7 | 11 | 0.2 |
| | <i>many thanks</i> | 1 | 0.3 | 0 | 0.0 |
| Subtotal | | 71 | 23.9 | 402 | 7.4 |
| Total | | 297 | 100.0 | 5418 | 100.0 |

Among the answers that are not appropriate to the context, there are three features. First, Japanese learners often use 'you are welcome' instead of 'thank you.' Secondly, Japanese learners tend to just respond to the offer (e.g. *Yes*, *OK* and *All right* etc.) instead of expressing gratitude. Thirdly, Japanese learners are likely to express how they feel to the act offered by someone in order to express gratitude (e.g. *I'm happy to hear that* and *I'm glad* etc.).

3.2 Apology

The selected answers that are appropriate to the situation are classified into thirteen categories according to Aijmer (1996:83). The types of apologizing strategies appear in Appendix 2.

Table 3 Types of apologizing strategies in DCT

| Strategies | Raw | Percentage |
|------------|------|------------|
| A | 0 | 0.0 |
| B | 0 | 0.0 |
| C | 0 | 0.0 |
| D | 681 | 42.9 |
| E | 862 | 54.2 |
| F | 0 | 0.0 |
| G | 7 | 0.4 |
| H | 0 | 0.0 |
| I | 1 | 0.1 |
| J | 39 | 2.5 |
| K | 0 | 0.0 |
| L | 0 | 0.0 |
| M | 0 | 0.0 |
| Total | 1589 | 100 |

Table 4 Relative frequencies of (direct) apology expressions in the LLC and DCT

| Realization | | LLC | % | JPN | % |
|---------------------------|--|-----|-------|------|-------|
| (A) (I AM) (WE'RE) SORRY | <i>Sorry</i> | 107 | 49.8 | 329 | 21.3 |
| | <i>very sorry</i> | | | 4 | 0.3 |
| | <i>I'm sorry (I am sorry), we're sorry</i> | 57 | 26.5 | 343 | 22.2 |
| | <i>I'm terribly sorry</i> | 4 | 1.9 | 1 | 0.1 |
| | <i>I'm very sorry</i> | 4 | 1.9 | 1 | 0.1 |
| | <i>I'm awfully sorry</i> | 1 | 0.5 | 0 | 0.0 |
| | <i>I'm so sorry</i> | 7 | 3.3 | 3 | 0.2 |
| Subtotal | | 180 | 83.7 | 681 | 44.1 |
| (B) (I BEG YOUR) PARDON | <i>I beg your pardon</i> | 8 | 3.7 | 0 | 0.0 |
| | <i>beg your pardon</i> | 1 | 0.5 | 0 | 0.0 |
| | <i>Pardon</i> | 8 | 3.7 | 0 | 0.0 |
| Subtotal | | 17 | 7.9 | 0 | 0.0 |
| (C) EXCUSE (ME) | <i>excuse me</i> | 10 | 4.7 | 862 | 55.9 |
| Subtotal | | 10 | 4.7 | 862 | 55.9 |
| (D) APOLOGIZE (APOLOGIES) | <i>I apologize</i> | 2 | 0.9 | 0 | 0.0 |
| | <i>I owe (you) an apology</i> | 2 | 0.9 | 0 | 0.0 |
| | <i>give one's apologies</i> | 2 | 0.9 | 0 | 0.0 |
| | <i>present one's apologies</i> | 1 | 0.5 | 0 | 0.0 |
| | <i>pass on one's apologies</i> | 1 | 0.5 | 0 | 0.0 |
| Subtotal | | 8 | 3.7 | 0 | 0.0 |
| Total | | 215 | 100.0 | 1543 | 100.0 |

(our data)

Table 3 shows the frequency of each apologizing strategy. It tells us that the percentage of occurrences is significantly higher in strategy D, expressing regret, and strategy E, demanding forgiveness (42.9% and 54.2% respectively). We could say that Japanese learners use quite limited variation of apologizing expressions. Table 3 clearly shows this tendency.

Table 4 tells us that Japanese learners seldom use intensifiers (e.g. *terribly*, *very*, *awfully* and *so*). It is possible that they recognized 'I'm sorry' as a chunk, and hesitate to put intensifiers between 'am' and 'sorry'. There is room for further investigation.

When we look through the answers that are not appropriate to the situation, we can find the following two salient features.

1. It seems that two apologizing expressions, 'I'm sorry' and 'excuse me' are easy to be confused. We can find many learners who use the apologizing expression 'I'm sorry' even in the situation in which 'excuse me' seems to be proper (e.g. opening of conversation). The confusion might be caused by the negative transfer from Japanese. In Japanese, we use a phrase, *sumimasen*, for both the opening of conversation and apologizing. The learner, therefore, might use this expression in both cases.

In addition, when we consider the fact that few learners use 'excuse me' in the situation in which 'I'm sorry' seems appropriate, it is likely that the Japanese apologizing expression *sumimasen* closely links to the English expression, 'I'm sorry', for the Japanese learners.

2. Some learners suddenly explain their own things or situations (e.g. *I'm lost* in Q.28) without using any apologizing expression. This tendency was also found in the analysis of the occurrence of thanking ('expressing their feelings').

3.3 Requests

The answers appropriate to the context are classified into eighteen categories according to the criteria appearing in Aijmer (1996:132-133). These criteria are shown in Appendix 3.

Table 5 Types of requestive strategies in the LLC and DCT

| | LLC | | JPN | |
|---|-----|------------|-----|------------|
| | RAW | Percentage | Raw | Percentage |
| A | 132 | 29.3 | 340 | 35.7 |
| B | 9 | 2.0 | 2 | 0.2 |
| C | 37 | 8.2 | 309 | 32.4 |
| D | 80 | 17.7 | 2 | 0.2 |
| E | 5 | 1.1 | 90 | 9.4 |
| F | 17 | 3.8 | 1 | 0.1 |
| G | 3 | 0.7 | 1 | 0.1 |
| H | 9 | 2.0 | 0 | 0.0 |
| I | 18 | 4.0 | 0 | 0.0 |
| J | 6 | 1.3 | 0 | 0.0 |
| K | 80 | 17.7 | 208 | 21.8 |
| L | 12 | 2.7 | 0 | 0.0 |
| M | 15 | 3.3 | 0 | 0.0 |
| N | 5 | 1.1 | 0 | 0.0 |
| O | 5 | 1.1 | 0 | 0.0 |
| P | 14 | 3.1 | 0 | 0.0 |
| Q | 4 | 0.9 | 0 | 0.0 |

| | | | | |
|-------|-----|-------|-----|-------|
| Total | 451 | 100.0 | 953 | 100.0 |
|-------|-----|-------|-----|-------|

(our data)

Table 5 lists the frequency of each requestive strategy used by native speakers and Japanese learners. As a whole, Japanese learners use the limited types of strategies (Strategy A, C, E and K, 99.4% combined).

Japanese learners seldom use strategy D, while native speakers use it frequently. This may be explained by considering Aijmer's (1996:141) subclassification of request markers. Request markers are classified into three types: assertive (e.g. *I want you to..., I want... etc.*), unmarked (e.g. *can you..., will you... etc.*) and tentative (e.g. *you haven't go..., is it possible for you to... etc.*). Japanese learners prefer unmarked ways of requesting, whereas native speakers seem to use assertive and unmarked types equally.

Among the answers that are not classified into eighteen categories, there is a remarkable feature. Japanese learners use the combination of imperatives and 'please' frequently. This can be attributable to L1 transfer. In Japanese, we can increase the degree of politeness by adding lexical devices such as *dohka...shite-kudasai* to imperatives. The Japanese word *dohka* can be interpreted as 'please.' Thus, Japanese learners tend to use the combination of imperatives and 'please' for requesting politely.

3.4 Offers

Criteria for classifying offering strategies are not found in Aijmer(1996). We will, then, pick up ten frequently used expressions in DCT, which are shown in Table 6.

Table 6 Relative frequency of (direct) offering expressions in DCT

| | Raw | Percentage |
|-------------------|------|------------|
| let's | 474 | 45.9 |
| Shall we | 175 | 17.0 |
| May I | 160 | 15.5 |
| Shall I | 102 | 9.9 |
| Can I | 57 | 5.5 |
| Would you like | 30 | 2.9 |
| Do you want | 19 | 1.8 |
| Imperative | 7 | 0.7 |
| How about | 6 | 0.6 |
| Do you want me to | 2 | 0.2 |
| Total | 1032 | 100.0 |

We can find that the offering expression 'let's' is used most frequently. This tendency can be a reflection of the fact that the DCT includes four questions in which 'let's' is most appropriate. However, even after taking this into account, we can say that they tend to overuse the expression 'let's' for the following two reasons. First, compared to other questions that require other offering expressions, the percentage of answering 'let's' in the questions for which 'let's' is obligatory is relatively higher (284 out of 378 respondents answer 'let's' in Q.34). Secondly, learners use 'let's' even for the test items with question marks.

4 Comparison of the DCT data with textbooks

4.1 Thanking

Table 7 shows the percentages of thanking strategies in the textbooks and DCT. According to Table 7, the percentage of using 'thanks' in DCT data is lower (7.4%) than that in the textbooks (24.1% in the junior high school textbooks and 31.4% in high school textbooks).

Table 7 Comparison of thanking strategies (%)

| | HS textbooks | JHS textbooks | DCT |
|-----------|--------------|---------------|------|
| THANKS | 31.4 | 24.1 | 7.4 |
| THANK YOU | 68.6 | 76.0 | 92.6 |
| TOTAL | 100 | 100 | 100 |

4.2 Apology

Table 8 shows the percentages of apologizing strategies in the textbooks and DCT. Expression using the word 'apologize' is not found in all three data above. While textbooks include expressions with the word 'pardon', DCT data have no such expression. This means Japanese learners fail to acquire that expression.

Table 8 Comparison of apologizing strategies (%)

| | JHS textbooks | HS textbooks | DCT |
|-----------|---------------|--------------|------|
| SORRY | 59.7 | 44.7 | 44.1 |
| PARDON | 5.2 | 18.4 | 0 |
| EXCUSE | 35.1 | 36.8 | 55.9 |
| APOLOGIZE | 0 | 0 | 0 |
| TOTAL | 100 | 100 | 100 |

4.3 Request

Table 9 shows the percentages of requestive strategies in the textbooks and DCT. The high frequency strategies used in DCT data are also found in textbooks. Apart from the strategies suggested by Aijmer(1996), the word 'please' are used frequently in DCT data. This can be the reflection of the expressions in textbooks.

Table 9 Comparison of requestive strategies (%)

| | JHS textbooks | HS textbooks | DCT |
|--------|---------------|--------------|------|
| A | 14.1 | 14.8 | 23.5 |
| B | 0 | 0 | 0.1 |
| C | 13.5 | 13 | 21.4 |
| D | 0.5 | 0 | 0.1 |
| E | 5.9 | 3.7 | 6.2 |
| F | 8.6 | 0 | 0.1 |
| G | 0 | 0 | 0.1 |
| H | 0 | 3.7 | 0 |
| K | 0.5 | 16.7 | 14.4 |
| please | 56.8 | 48.1 | 34.1 |
| Total | 99.9 | 100 | 100 |

4.4 Offers

Tables 10, 11 and 12 show the offering expressions which are used frequently. We can find that the offering expression 'let's' is most frequently used in the textbooks as well as in DCT data. Besides, other commonly used expressions in DCT data are also found in the textbooks.

Table 10 High frequency order of offering expressions
(junior high school textbooks)

| | Total | Percentage |
|----------------|-------|------------|
| let's | 86 | 77.5 |
| May I | 8 | 7.2 |
| Can I | 4 | 3.6 |
| Would you like | 4 | 3.6 |
| Shall I | 3 | 2.7 |
| What shall I | 2 | 1.8 |
| Do you want NP | 3 | 2.7 |
| You can V | 1 | 0.9 |
| Total | 111 | 100 |

Table 11 High frequency order of offering expressions
(high school textbooks)

| | Total | Percentage |
|-----------------------|-------|------------|
| let's | 16 | 40.0 |
| May I | 8 | 20.0 |
| Can I | 3 | 7.5 |
| Shall we | 2 | 5.0 |
| Do you need any help? | 2 | 5.0 |
| Would you like | 3 | 7.5 |
| Do you want me to V ? | 1 | 2.5 |
| Do you want to V ? | 1 | 2.5 |
| How can I help you? | 1 | 2.5 |
| Want a NP ? | 1 | 2.5 |
| What shall I do? | 1 | 2.5 |
| Won't you have one? | 1 | 2.5 |
| Total | 40 | 100 |

Table 12 High frequency order of offering expressions
(DCT data)

| | Total | Percentage |
|----------------|-------|------------|
| let's | 474 | 45.9 |
| Shall we | 175 | 17.0 |
| May I | 160 | 15.5 |
| Shall I | 102 | 9.9 |
| Can I | 57 | 5.5 |
| Would you like | 30 | 2.9 |
| Do you want | 19 | 1.8 |
| Imperative | 7 | 0.7 |
| How about | 6 | 0.6 |

| | | |
|-------------------|------|-------|
| Do you want me to | 2 | 0.2 |
| Total | 1032 | 100.0 |

5 Conclusion

Through this study, we can say that the Japanese learners use limited variation of thanking, apologizing, requestive and offering expressions - all four-speech functions focused on in this study. This tendency may arise from an influence of the textbooks widely used in junior and senior high schools. It suggests that it may promote the students' use of various expressions to further diversify the types of expressions used in the textbooks.

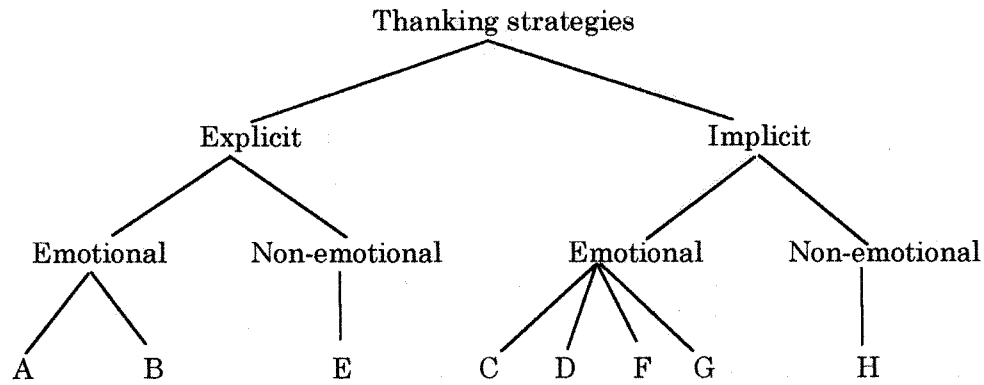
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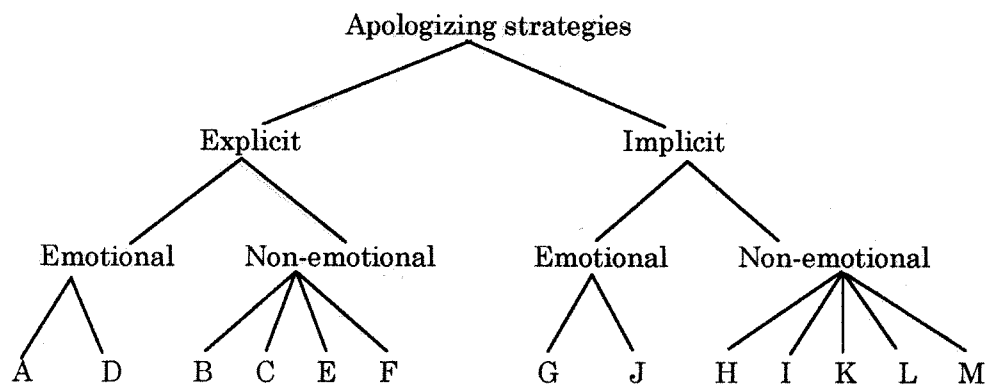
Appendix 1 Strategies of thanking



Code to strategies:

| | |
|---|--|
| (A) thanking somebody explicitly | e.g. <i>thank you, thanks</i> |
| (B) expressing gratitude | e.g. <i>I am grateful</i> |
| (C) expressing appreciation of the addressee | e.g. <i>that's kind of you, it's nice (of you)</i> |
| (D) expressing appreciation of the act | e.g. <i>that's lovely, it's appreciated</i> |
| (E) acknowledging a debt of gratitude | e.g. <i>I owe a debt of gratitude to...</i> |
| (F) stressing one's gratitude | e.g. <i>I must thank you</i> |
| (G) expressing emotion | e.g. <i>oh (thank you)</i> |
| (H) commenting on one's own role by suppressing one's own importance (self-denigration) | e.g. <i>I am an ingrate, I'm so careless</i> |

Appendix 2 Strategies of apologies



Code to strategies:

| | |
|--|--|
| (A) explicitly apologizing | e.g. <i>I apologize (for)</i> |
| (B) offering (giving, presenting) one's apologies | e.g. <i>I present my apologies</i> |
| (C) acknowledging a debt of apology | e.g. <i>I owe you an apology</i> |
| (D) expressing regret | e.g. <i>I'm sorry, I'm afraid</i> |
| (E) demanding forgiveness | e.g. <i>pardon me, excuse me</i> |
| (F) explicitly requesting the hearer's forgiveness | e.g. <i>I beg your pardon</i> |
| (G) giving an explanation of account | e.g. <i>(I'm sorry) it's so unusual</i> |
| (H) self-denigration or self-reproach | e.g. <i>how stupid of me, how awful, I ought to know this</i> |
| (I) minimizing responsibility | e.g. <i>I didn't mean to ..., I thought this was ..., I was thinking it was...</i> |
| (J) expressing emotion | e.g. <i>oh (I'm so sorry)</i> |
| (K) acknowledging responsibility for the offending act | e.g. <i>that was my fault (Fraser 1981: 263)</i> |
| (L) promising forbearance from a similar offending act | e.g. <i>I promise you that that will never happen again (Fraser 1981: 263)</i> |
| (M) offering redress | e.g. <i>please let me pay for the damage I've done (Fraser 1981: 263)</i> |

Appendix 3 Categories of Requests and Offers

| | | |
|---|---------------------|--|
| A | ABILITY | Asking about the hearer's ability to do something (e.g.) <i>can you...</i> |
| B | CONSULTATION | Asking about the possibility of the desired act happening (e.g.) <i>is it possible..., you haven't got..., would you mind..., have you...</i> |
| C | WILLINGNESS | Asking whether the hearer is willing to do something or has any objection to doing something (e.g.) <i>will you..., would you (like)...</i> |
| D | WANT | Expressing a wish that the agent should do something (e.g.) <i>I would like you to</i> |
| E | NEED | Expressing a need or desire for (non-verbal) goods (e.g.) <i>I want..., I need...</i> |
| F | OBLIGATION | Stating that the hearer is under the obligation to do the desired action (e.g.) <i>you must..., you have to...</i> |
| G | APPROPRIACY | Stating that it is appropriate that the hearer performs the desired action (e.g.) <i>you should...</i> |
| H | WH-QUESTION | Asking an idiomatic wh-question (e.g.) <i>what about..., why not..., how about..., why don't you...</i> |
| I | HYPOTHESIS | Referring to a hypothetical action (e.g.) <i>if you would..., perhaps you would...</i> |
| J | APPRECIATION | Expressing that one would appreciate, be pleased, feel gratitude if a hypothetical desired action were realized (e.g.) <i>I would be grateful if you would..., I would be glad if...</i> |
| K | PERMISSION QUESTION | Asking for permission to do something (e.g.) <i>may I..., let me...</i> |
| L | POSSIBILITY | Asserting that it is possible for the hearer to do something (e.g.) <i>you may..., you can...</i> |
| M | PREFERENCE | Referring to the speaker's opinion that something is preferable (e.g.) <i>you had better ..., the best thing to do ...</i> |
| N | PERFORMATIVE | Referring explicitly to the act of requesting (e.g.) <i>I was going to suggest ...</i> |
| O | STATE | Referring to a state of the world which needs to be changed (e.g.) <i>There are (some scented rushes)</i> |
| P | NAMING | Naming the object requested (e.g.) <i>(the next slide) please</i> |
| Q | EXISTENCE | Checking the availability of the desired object, etc (e.g.) <i>is (Mrs Davy) there</i> |
| R | | Other (e.g.) giving a justification for a request |

Appendix 4 DCT

海外経験

今までに外国に行った経験はありますか？はい、いいえのどちらかに○を付けてください。

はい いいえ

国名を () の中に記入してください。

()

滞在期間を () の中に記入してください。

()

英語学校経験

英会話学校など、中学、高校以外で英語を学んだことはありますか？はい、いいえのどちらかに○を付けてください。

はい いいえ

高校で勉強している (した) 教科書に○をつけてください。

Hello There Select Expressway Interact Echo Progressive Evergreen
Speak to the World Crown The New Age Dialog Mainstream Birdland

今まで勉強した中学の教科書に○をつけてください。

Sunshine New Horizon Everyday English New Crown One World
Columbus Total

【文章を読んで空欄を埋めて下さい】注：空欄の大きさと語数は関係がありません。

At School

Ted: (1). Are you Mrs. Ito?

Miss Ogawa: No, I'm not. That's Mrs. Ito.

Ted: Oh, (2).

Mrs. Ito: Hello.

Ted: Hello.

Mrs. Ito: Are you Ted Baker?

Ted: Yes, I am.

Mrs. Ito: I'm Mrs. Ito.

Ted: Nice to meet you, Mrs. Ito.

Mrs. Ito: Nice to meet you, too, Ted. Come this way.

Ted: (3).

In the classroom

Mika: Here you are, Ted.

Ted: What's this?

Mika: It's your school badge.

Ted: Oh, (4).

On the Way Home

Mika: Do you play the guitar, too?

Ted: No, I don't. But I play the drums.

I have drums at home. Come over sometime.

Mika: Really? (5).

Mrs. Baker: Mika, which do you prefer, juice or soda?

Mika: Juice, please.

Mrs. Baker: Here you are.

Mika: (6).

Mrs. Baker: You're welcome. This is for you, Ted.

Ted: (7).

Ted: This is my room. And these are my drums.

Mika: Hey, great! Play something for me.

Ted: OK.

Mika: Hey, you're really good, Ted.

Ted: (8).

Jiro: Hi, everyone. (9) I'm late.

Mika: Oh, that's all right, Jiro.

<会話中にドアのベルが鳴ったので席を離れるときのことば>

The door bell rings.

Mika: There's someone at the door. (10).

Mika: Where's Mr. Baker?

Mrs. Baker: He's getting some drinks for us.

Mika: (11)! I'm really thirsty.

"One evening, the Saitos invite Ms. Wilson to dinner."

Ms. Wilson: You're a good cook, Mika. It's delicious.

Mika: (12).

Judy: Did you make this tempura, too?

Mika: No, I didn't. Dad made it.

Judy: You cook very well, too, Mr. Saito.

Mr. Saito: (13).

Judy: Does anyone want some more food or drink?

Jiro: (14). I'm full.

Ted: So am I.

"One Sunday afternoon, Mika knocks on Judy's door."

Mika: (15) come in?

Judy: Sure, Mika.

Mika: Are you busy?

Judy: No, I was just reading a letter from my mother.

Mika: Any news?

Judy: Yes, my sister had a baby boy.

Mika: Oh, congratulations! I'll send a card to her.

Judy: Oh, (16), Mika. I have to send one, too.

A Class with Ms. Wilson

Ms. Wilson: Do you have any questions?

Jiro: Ms. Wilson, (17) tell us about sports in Canada?

Ms. Wilson: Sure.

"Mika arrives in London. She's met by the Bakers at the airport."

Mika: (18) for coming to meet me.

Mr. Baker: Our pleasure.

Mrs. Baker: Welcome to London!

Ted: Did you have a nice flight?

Mika: Yes, it was very good.

Ted: Give me your suitcase. I'll carry it for you.

Mr. Baker: The car's outside. (20) go?

Ted: Yes, let's.

<観光中に...>

Mika: (21) take a picture.

Ted: OK.

<Mika が学園祭に Ms. Smith たちを招待して...>

Mika: Welcome to our school. It's very nice to see you again.

Ms. Smith: Nice to see you again, too. (22) for inviting us.

Mika: Jiro, Toshio, and Keiko are going to show you around.

Ms. Smith: (23).

A: How do you say sukoshi in English?

B: A little.

A: (24)?

B: Sukoshi is "a little."

A: A little.

B: Good.

A: (25).

B: You're welcome.

<ファーストフード店で品物を渡しながら...>

店員: Here you are. That's six hundred and forty yen, please. (26).

<空港税関で>

Officer: Show me your passport, please.

Yuki: Sure. Here you are.

Officer: What's the purpose of your visit?

Yuki: Sightseeing.

Officer: How long are you going to stay?

Yuki: One week.

Officer: O.K. Enjoy your stay.

Yuki: (27).

Yuki: (28). (29) tell me the way to the cable car stop?

Woman: Sure, it's over there. Just in front of that building.

Yuki: (30).

<A Phone Call>

Brian's mother: Hello.

Koji: This is Koji. (31) speak to Brian, please?

Mother: (32), but he's out right now. (33) take a message?

Brian: I'm home.

Mother: Oh, here he is now. Brian, Koji is on the phone!

Brian: Hi, Koji.

Koji: Hi, Brian. Listen. I got two tickets for the concert tomorrow.
Can you come?

Brian: I'm free tomorrow. Sure.

Koji: Great! (34) go together.
(35) meet at my house at five.

Brian: Fine.

Koji: Good. See you then.

Brian: O. K. Goodbye.

<At the Store>

A: May I help you?

B: No, (36). I'm just looking.

<お店で>

店員: (37) show you another one?

客: Yes, please.

店員: What size do you wear?

客: I wear a size seven.

店員: What color are you looking for?

客: Do you have this in yellow? May I try it on? How much is that?

店員: It's eighty dollars.

客: O. K. I'll take it. Here's a hundred.

店員: Here's your change. (38). Have a nice day.

客: (39). You, too.

Koji: Make yourself at home.

Beth: This is a beautiful home. How long have you lived here?

Koji: We've lived here since I was seven. (40) a piece of cake?

Beth: Yes, (41).

<駅で駅員さんに...>

(42). I don't know how to buy a ticket. (43) help me?

<パーティーに友達を誘う>

Sue: Say, I'm having a pajama party at my house this Friday.

(44) come?

Pat: Sure.

【次の質問に英語で答えてください。】

Ms. Oka: That is your seat, Mary.

Mary: 何と答えますか。(45)

Sam: Hi! You have nice eyes. I like you.

Emi: 何と答えますか。(46)

Koji: Is that a ship?

Girl: Well, it's a spaceship.

Girl: 中に入りたいとき、何と言いますか。(47)

Girl: もう一度催促したいとき、何と言いますか。(48)

手紙をもらって返事を書くとき

Dear Koji,

ここに何と書きますか。(49) It arrived there days ago. I enjoyed it very much...

Nancy: What do you want with it? A cup of tea or a glass of water?

Koji: Tea, please. 次に何と言いますか。(50)

Koji: その後、何を言いますか。(51)

Mother: The TV's too loud. Turn it down a little. TURN DOWN THE TV, RIKIMARU!

Rikimaru: Mom! 力丸は何と言ったと思いますか。(52) I can't hear the TV.

Dick: When are you leaving for England, Emi?

Emi: The day after tomorrow.

Dick: Well, have a nice vacation, and Dickはこの後、何と言ったと思いますか。(53)

Emi: I will. Will you write back?

Dick: Sure. It's a promise.

Mary: I'm going to make a special card just for Koji.

Mary: ここで、MaryはEmiに何と言ったと思いますか。(54)

Emi: Sure. What shall I do?

Mary: Well, let's see... I have several ideas, but maybe this is the best. Will you cut this red paper into a heart? The heart is the most important part of all. Then cut a moon and stars out of this yellow paper. I'll draw a picture of a boy and a girl.

Urashima: Excuse me, Mr. Turtle. 浦島は亀に何と言ったと思いますか。(55)

Turtle: Why are you in such a hurry?

Reporter: Please be on our TV show. It's tomorrow at three.

Urashima: 浦島は何と言ったと思いますか。(56)

Reporter: Don't be shy. You'll like our show. Come on.

Urashima: I...浦島は何と言ったと思いますか。(57)

The stationmaster sounded worried. When Kiki got to the station, the stationmaster said, "Some famous musicians just arrived. They're going to give a concert in the park. But we forgot to take their instruments off the train! Their concert begins at three o'clock this afternoon!

ここで、駅長はキキに何と言ったと思いますか。(58) Can you catch up with the train and bring their instruments back?

"I'm not sure. But 君がキキなら、何と続けますか。(59)" answered Kiki.

Becky: What a strange garden! No trees, no grass! But it looks cool.

Koji: Shh! Don't talk so loud.

Becky: ベッキーは何と言ったと思いますか。(60)

Koji: The rocks in the garden stand for islands.

Emi: The white sand is the sea. Don't you see the waves in the sea.

Becky: Wow! Wonderful!

Becky: ベッキーは何と言ったと思いますか。(61)

Teacher: After you speech, someone may say something that hurts you. Just smile and say, "Thank you for your advice."

Student: When I finished, they all rose and gave me a big hand.

Teacher: Good! I'm glad that your speech went well. Now, aren't you looking forward to your next chance to speak?

Student: Well...anyway, ここで何と言ったと思いますか。(62)

Appendix 5 Speech functions and target answers

| Item No. | Speech function | target answers |
|----------|------------------|---------------------|
| 1 | apology hi | excuse me |
| 2 | thanking apology | thank you |
| 3 | thanking | thank you |
| 4 | thanking | thank you |
| 5 | thanking | thank you very much |
| 6 | thanking | thank you |
| 7 | thanking | thanks |
| 8 | thanking | thanks |
| 9 | apology | sorry |
| 10 | apology | excuse me |
| 11 | thanking | oh, good! |
| 12 | thanking | thanks |
| 13 | thanking | thank you |
| 14 | refusal | no, thanks |
| 15 | request | may I |
| 16 | thanking | that's sweet of you |
| 17 | request | can you |
| 18 | thanking | thanks |
| 19 | thanking | thanks |
| 20 | request offer | shall we |
| 21 | request offer | let's |
| 22 | thanking | thank you very much |
| 23 | thanking | thank you |
| 24 | apology | pardon |
| 25 | thanking | thank you |
| 26 | thanking | thank you |
| 27 | thanking | thank you |
| 28 | apology | excuse me |
| 29 | request | would you |
| 30 | thanking | thank you |
| 31 | request | may I |
| 32 | apology | sorry |
| 33 | offer | can I |
| 34 | request offer | let's |
| 35 | request offer | let's |
| 36 | thanking | thanks |
| 37 | offer | shall I |
| 38 | thanking | thank you very much |
| 39 | thanking | thanks |
| 40 | offer | would you like |
| 41 | thanking | thank you |
| 42 | apology | excuse me |
| 43 | request | could you |
| 44 | offer | why don't you |
| 45 | thanking | thank you |
| 46 | thanking | thank you |

| | | | |
|----|----------|---------|------------------------------|
| 47 | request | | let's go |
| 48 | request | | let's get into the spaceship |
| 49 | thanking | | thank you for your letter |
| 50 | thanking | | thank you |
| 51 | | | this is good |
| 52 | request | | your voice is too loud ! |
| 53 | greeting | | write to me sometime |
| 54 | offer | | will you help me, Emi ? |
| 55 | request | | can't you go faster ? |
| 56 | refusal | | no, I... |
| 57 | refusal | apology | I can't stand this bad smell |
| 58 | request | | please, please help us |
| 59 | offer | | I'll do my best |
| 60 | apology | | oh, I'm sorry.! |
| 61 | apology | | ...sorry |
| 62 | thanking | request | thank you for your advice |

**A Study of EFL Discourse Using Corpora (7):
An Analysis of E-mail Discourse and Variation of Expressions**

Nakano, M., Yamazaki, T., Miyasaka, N. and Saito, T.

1. Purpose

Our purpose of this study is to inquire into features of English written by Japanese learners. We analyze written discourse data collected via e-mail exchanges between Japanese and American university students in the following three points of view:

- 1) We compute sentence length. The mean number of words per sentences is compared with the respective mean scores among French, Dutch learners of English as well as British native speakers and American native speakers, which are found in Meunier (1998).
- 2) We list overall vocabulary patterns and high frequency verbs, and compare them with those among native speakers and western European learners of English. This analysis is based on Ringbom (1998).
- 3) We list all the occurrences of the combination of adjectives and intensifiers, and compare them with those among native speakers and German learners of English (cf. Lorenz, 1998).

2. Method

2.1 Subjects

The data were collected from Japanese university students. All the subjects were in their third year and majoring in English philology or literature.

2.2 Procedures

The written discourse data were collected via e-mail exchanges between Japanese and American university students. They exchanged what they thought of an essay entitled "cross-cultural communication," which they read beforehand individually.

The exchanges, which consist of 106,987 words, were processed by using *WordLists* and *Concord* involved in *WordSmith* tools.

3. Results and Discussions

3.1 The comparison of mean sentence length between NS and NNS

Table 1 shows the mean sentence length (MSL) of the corpora collected by American and British native speakers, and French and Dutch EFL learners.

Table 1 Sentence length analysis

| | MSL (words/sentence) |
|-------------------|----------------------|
| E2F1 intermediate | 17.25 |
| E2F1 advanced | 19.08 |
| E2D1 advanced | 17.59 |
| E1 American | 18.26 |
| E1 British | 22.36 |
| Japanese | 15.08 (Our data) |

Abbreviations:

E2F1 intermediate: first year university students, EFL learners, L1 French.

E2F1 advanced: third and fourth year university students, EFL learners, L1 French.

E2D1 advanced: third and fourth year university students, EFL learners, L1 Dutch.

E1 American: university students, L1 American English.

E1 British: university students, L1 British English.

Japanese: university students, EFL learners, L1 Japanese.

The mean sentence length (MSL) of Japanese learners of English is the shortest among five kinds of subjects. When we regard MSL as indicating the level of English proficiency, the Japanese learners of English are the lowest of all. However, American university students yield MSL of 18.26 while British university students yield that of 22.36. Thus, MSL is not necessarily an indicator of English proficiency.

3.2 The comparison of vocabulary frequencies between NS and NNS

We compare the e-mail discourse data with 7 western European learner corpora from International Corpus of Learner English (ICLE) database and the LOCNESS native speaker (British and American) corpus of argumentative essays. The results

concerning to ICLE and LOCNESS corpora are quoted from Ringbom (1998).

Table 2 The 100 most frequent words out of total vocabulary (%)

| | NS | FRE | SPA | FIN | FINSW | SWE | DUTCH | GERM | JPN |
|------------------|------|------|------|------|-------|------|-------|------|------|
| 1 (<i>the</i>) | 6.6 | 5.9 | 6.1 | 5.6 | 5.2 | 5.0 | 6.1 | 5.1 | 3.8 |
| 1~10 | 25.6 | 25.7 | 26.3 | 25.1 | 24.9 | 24.8 | 24.9 | 23.8 | 25.3 |
| 1~30 | 37.2 | 39.2 | 39.7 | 37.9 | 38.9 | 38.2 | 37.6 | 36.8 | 39.8 |
| 1~50 | 42.8 | 46.2 | 46.7 | 44.6 | 46.0 | 44.9 | 44.4 | 43.6 | 47.2 |
| 1~70 | 46.8 | 52.4 | 51.7 | 49.4 | 50.8 | 49.6 | 48.6 | 48.3 | 52.2 |
| 1~100 | 51.3 | 57.3 | 56.2 | 54.2 | 56.0 | 54.6 | 53.0 | 52.9 | 57.5 |

(Our data)

For Japanese, the most frequently used word is *I* (5.3%) instead of *the* (3.8%).

Table 2 shows the percentage of the most frequent words of the total vocabulary used in the corpora. As Ringbom (1998:42) indicates, in all corpora, the ten most frequent words account for about a quarter of the total vocabulary of a text, and the top 100 words account for about a half of the total vocabulary. The main difference between NS and NNS is that NNS overuse the words in the frequency bands from 30 to 100.

Ringbom (1998:42-43) assumes that there are more occurrences of function words in the top 100 frequent word list in all NNS corpora than in NS corpora. This tendency is also found in Japanese learners' corpora. (Appendix 1)

Table 3 Occurrences of the most frequent verbs per 10,000 words (lemmas)

| Word | NS | FRE | SPA | FIN | FINSW | SWE | DUTCH | GERM | JPN |
|-------------|-----|-----|-----|-----|-------|-----|-------|------|-----|
| <i>be</i> | 467 | 484 | 506 | 533 | 537 | 460 | 503 | 489 | 472 |
| <i>have</i> | 110 | 133 | 153 | 163 | 158 | 159 | 145 | 133 | 126 |
| <i>do</i> | 50 | 55 | 75 | 76 | 85 | 72 | 72 | 84 | 59 |
| <i>can</i> | 55 | 65 | 72 | 78 | 81 | 53 | 68 | 64 | 49 |
| Total | 682 | 737 | 806 | 850 | 861 | 744 | 788 | 770 | 706 |

(Our data)

Table 3 shows the occurrences of the most frequent verbs per 10,000 words. It lists the lemmatized forms. These high-frequency function words seem to be overused by all NNS. The rate of overuse by Japanese learners is relatively low compared to

other NNS.

Table 4 High-frequency main verb forms:

occurrences per 10,000 words

| | NS | FRE | SPA | FIN | FINSW | SWE | DUTCH | GERM | JPN |
|-------|----|-----|-----|-----|-------|-----|-------|------|-----|
| think | 6 | 21 | 21 | 22 | 30 | 30 | 16 | 22 | 58 |
| get | 6 | 7 | 18 | 18 | 16 | 16 | 14 | 19 | 17 |
| make | 14 | 12 | 16 | 15 | 17 | 17 | 12 | 10 | 11 |

(Our data)

Table 5 *I think* : frequencies per 10,000 words

| | NS | FRE | SPA | FIN | FINSW | SWE | DUTCH | GERM | JPN |
|--|----|-----|-----|-----|-------|-----|-------|------|-----|
| | 3 | 10 | 5 | 7 | 16 | 16 | 6 | 9 | 36 |

(Our data)

Table 4 lists the distribution of the most frequent main verbs per 10,000 words. It shows that while NS uses less, Japanese learners overuse 'think' most and 'I think' is used most often. (See Table 5) This may be related to the nature of e-mail exchanges: the Japanese and Americans exchanged what they thought of an essay entitled "cross-cultural communication." Therefore, they tended to say what they thought. The reason why NS uses 'make' more than French, Dutch, German and Japanese learners seems that 'make' is versatile verb and that the NNS do not have sufficient knowledge to make most of the productive power of 'make.'

Table 4 shows 'get' is often used by NNS. 'Get' is used in the contexts where 'am given,' 'am offered,' 'am sent,' 'accept,' 'borrow,' 'obtain' or 'receive' should be used. This is suggested by Table 6.

Table 6 Different uses of 'get'

| | NS | FRE | SPA | FIN | FINSW | SWE | DUTCH | GERM | JPN |
|---------------------------|----|-----|-----|-----|-------|-----|-------|------|-----|
| 1 Get + obj. | 2 | 3 | 11 | 9 | 10 | 9 | 6 | 8 | 7 |
| 2 Get + PP/adj. | 1 | 2 | 6 | 5 | 3 | 3 | 4 | 4 | 4 |
| 3 Get + adv. (phrasal) | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 5 | 2 |
| 4 Get + inf. | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 |
| 5 Get + adv. | | | | | | | | | 0 |
| 6 Get + prep. phrase | | | | | | | | | 3 |

(Our data)

Abbreviations:

obj.: a direct object

PP/ adj.: a past participle or adjective

adv.(phrasal): an adverb forming a phrasal verb

inf.: an infinitive

adv.: an adverb

prep. phrase: a prepositional phrase

We added the categories of 5 and 6 to those of 1 through 4 appearing in Ringbom (1998).

3.3 The comparison of adjective intensification strategies between NS and NNS

We focus on peculiarities in NS and NNS intensification of adjectives. In addition to the e-mail discourse written by Japanese learners of English, we refer to the corpora of British native speakers and German learners of English containing argumentative essays. All the figures about the corpora of British and German appear in Lorenz (1998).

At first we consider how often each adjective is intensified. Table 7 lists what kinds of adjectives are most frequently intensified by NNS and NS. Japanese learners of English emphasize 'important,' 'interesting,' 'difficult' and 'hard' in this order of frequency. German learners emphasize 'important,' 'good,' 'different,' 'interested' and 'interesting.' This may be interpreted as revealing stereo-typical cultural differences between Japan and Germany. 'Hard-working serious Japanese' emphasize the importance, difficulties and hardness. Japanese tend to make compliments toward

the addressee and hence use an adjective ‘interesting’ more emphatically; e.g. ‘That’s very interesting.’ On the other hand, European people are more individualistic and tend to say how the addresser sees a given event subjectively. This may be the reason why European NNS emphasize ‘important,’ ‘different,’ ‘difficult’ and ‘interested.’

Table 7 Percentage of intensified adjectives

| | NNS (German) | NS(British) | JPN |
|-------------|--------------|-------------|---------|
| important | 62.6(1) | 29.1(1) | 64.2(1) |
| good | 35.8(2) | 25.5(2) | 9.9(9) |
| different | 32.9(3) | 13.2(4) | 11.7(7) |
| difficult | 26.0(6) | 9.8(7) | 39.2(3) |
| hard | 17.9(7) | 8.0(9) | 29.5(4) |
| high | 15.8(8) | 11.7(5) | 2.4(10) |
| bad | 14.3(10) | 8.4(8) | 10.2(8) |
| interested | 32.4(4) | – | 18.3(6) |
| interesting | 31.0(5) | – | 47.4(2) |
| easy | 15.3(9) | – | 23.1(5) |
| successful | – | 14.2(3) | 0.0 |
| aware | – | 10.9(6) | 0.0 |
| ambiguous | – | 7.6(10) | 0.0 |

(Our data)

In Table 7, the figures in brackets indicate the ranks of high frequency in each subject group.

Then, we classify the adverbial intensifiers use by the Japanese learners according to the criteria of Quirk et al. (1985). The classification is shown in Table 8. Further information about the classification appears in Appendix 2.

Table 8 The types of intensifiers

| | | |
|------------|---------------|--|
| Amplifiers | Maximizers | eg. <i>absolutely, altogether, completely, quite, totally</i> etc. |
| | Boosters | eg. <i>badly, bitterly, enormously, far, greatly, very much</i> etc. |
| Downtoners | Approximators | eg. <i>almost, nearly, virtually</i> etc. |
| | Compromisers | eg. <i>kind of, sort of, rather, enough, sufficiently</i> etc. |
| | Diminishers | eg. <i>mildly, partially, partly, somewhat, in part</i> etc. |
| | Minimizers | eg. <i>barely, hardly, little, scarcely, in the least</i> etc. |

Tables 9 and 10 list what kinds of adverbial intensifiers are used by British native

speakers, German and Japanese learners of English. Table 9 shows that German learners use more intensifiers than British do. However, our data are contrary to those of German learners. Table 10 indicates that Japanese learners use much less intensifiers than British do. Especially, downtoners are seldom used by Japanese learners. Besides, the variation of intensifiers is also limited. This is suggested by Table 11. For downtoners, only 'Diminishers' are included in our data.

Table 9 Scalar category counts (NNS and NS)

| Scalar category | NNS (SF) | NS(SF) | χ^2 | NNS overuse (%) |
|---------------------|----------|--------|----------|-----------------|
| X | 163.1 | 126.7 | 4.7 | 28.7 |
| B | 858.6 | 580.2 | 53.7 | 48.0 |
| Σ amplifiers | 1021.7 | 706.9 | 57.1 | 44.5 |
| A | 35.5 | 29.4 | 0.6 | 20.8 |
| C | 157.7 | 116.3 | 6.3 | 35.6 |
| D | 25.6 | 15.6 | 2.4 | 64.1 |
| N | 98.4 | 81.1 | 1.7 | 21.3 |
| Σ downtoners | 317.2 | 242.5 | 10.0 | 30.8 |
| Σ all | 1338.9 | 949.3 | 66 | 41 |

Table 10 Scalar category counts (Japanese learners and NS)

| Scalar category | JPN (SF) | NS(SF) | χ^2 | JPN overuse (%) |
|---------------------|----------|--------|----------|-----------------|
| X | 25.2 | 126.7 | 0.0 | -80.1 |
| B | 191.6 | 580.2 | 0.0 | -67.0 |
| Σ amplifiers | 216.8 | 706.9 | 0.0 | -69.3 |
| A | 0.0 | 29.4 | - | -100.0 |
| C | 0.0 | 116.3 | - | -100.0 |
| D | 8.4 | 15.6 | 0.0 | -46.1 |
| N | 0.0 | 81.1 | - | -100.0 |
| Σ downtoners | 8.4 | 242.5 | 0.0 | -96.5 |
| Σ all | 225.3 | 949.3 | 0.0 | -76.3 |

In Tables 9 and 10, SF stands for 'rounded standardized form,' which means the value arithmetically normalized per 100,000 words.

Table 11 Variation of intensifiers

| | impor- tant | good | differ- ent | interest- ed | interest- ing | difficult | hard | high | easy | bad | ambigu- ous | Total |
|-------------------|----------------|------|----------------|-----------------|------------------|-----------|------|------|------|-----|----------------|-------|
| X:most | 15 | | | 1 | | | | | | | | 16 |
| X:quite | | | 2 | 1 | | 1 | | 1 | 3 | | | 8 |
| X:totally | | | 1 | | | | | | | | | 1 |
| X:com- pletely | | | 1 | 1 | | | | | | | | 2 |
| B:very | 31 | 17 | 6 | 10 | 32 | 27 | 30 | 1 | 4 | 4 | 1 | 163 |
| B:very much | | | | 1 | | | | | | | | 1 |
| B:more | 3 | | | | 4 | 2 | | | | | | 9 |
| B:so | 2 | 10 | 1 | 1 | 1 | 7 | 4 | 3 | 2 | 1 | | 32 |
| D:less | 1 | | | | | | | | | | | 1 |
| D:a little | | | 2 | | | | 2 | | | | | 4 |
| D:little bit | | | 1 | | | | | | | | | 1 |
| D:a little bit | | | | | | 2 | | | | | | 2 |
| D:a bit | | | | | | 1 | | | | | | 1 |
| Total | 52 | 27 | 14 | 15 | 37 | 40 | 36 | 5 | 9 | 5 | 1 | 241 |

The number of adjective intensifiers does not necessarily indicate the degree of English proficiency. However, Japanese learners can be required to expand their vocabulary concerning to adjective intensification both in the number and in the variety.

4. Conclusion

These results lead to the conclusion that:

- 1) Japanese learners of English tend to overuse high-frequency main verbs. A pedagogical treatment to increase their variety of verb uses is required.
- 2) Japanese learners of English have limited strategies of adjective intensification. It is necessary to introduce various kinds of intensifiers to learners.

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Appendix 1

Word list

| | Word | Frequency | | Word | Frequency |
|----|------------|-----------|----|------------|-----------|
| 1 | I | 5619 | 2 | the | 4041 |
| 3 | to | 3466 | 4 | and | 2772 |
| 5 | in | 2349 | 6 | a | 2013 |
| 7 | of | 2003 | 8 | is | 1934 |
| 9 | you | 1522 | 10 | that | 1357 |
| 11 | my | 1353 | 12 | it | 1319 |
| 13 | was | 1087 | 14 | we | 904 |
| 15 | have | 888 | 16 | but | 881 |
| 17 | for | 852 | 18 | so | 851 |
| 19 | are | 771 | 20 | this | 704 |
| 21 | me | 683 | 22 | about | 669 |
| 23 | very | 658 | 24 | not | 625 |
| 25 | think | 619 | 26 | with | 595 |
| 27 | school | 539 | 28 | when | 525 |
| 29 | do | 520 | 30 | on | 493 |
| 31 | am | 487 | 32 | your | 482 |
| 33 | as | 473 | 34 | from | 464 |
| 35 | will | 446 | 36 | at | 424 |
| 37 | be | 416 | 38 | or | 404 |
| 39 | English | 400 | 40 | like | 398 |
| 41 | they | 395 | 42 | there | 388 |
| 43 | people | 368 | 44 | by | 348 |
| 45 | Japanese | 345 | 46 | now | 344 |
| 47 | what | 344 | 48 | know | 326 |
| 49 | if | 325 | 50 | because | 304 |
| 51 | our | 303 | 52 | much | 300 |
| 53 | Japan | 297 | 54 | time | 295 |
| 55 | don't | 289 | 56 | had | 289 |
| 57 | which | 284 | 58 | dear | 277 |
| 59 | good | 274 | 60 | one | 271 |
| 61 | many | 266 | 62 | want | 262 |
| 63 | some | 261 | 64 | I'm | 259 |
| 65 | other | 256 | 66 | how | 254 |
| 67 | go | 247 | 68 | can | 245 |
| 69 | culture | 240 | 70 | their | 230 |
| 71 | years | 230 | 72 | understand | 224 |
| 73 | university | 224 | 74 | them | 221 |
| 75 | more | 215 | 76 | all | 210 |
| 77 | first | 210 | 78 | were | 210 |
| 79 | high | 209 | 80 | an | 207 |
| 81 | well | 200 | 82 | year | 200 |

| | | | | | |
|----|---------|-----|-----|--------|-----|
| 83 | he | 195 | 84 | could | 184 |
| 85 | friends | 184 | 86 | also | 183 |
| 87 | get | 180 | 88 | who | 179 |
| 89 | letter | 177 | 90 | way | 172 |
| 91 | after | 170 | 92 | myself | 165 |
| 93 | please | 165 | 94 | would | 165 |
| 95 | tell | 164 | 96 | read | 162 |
| 97 | club | 160 | 98 | life | 159 |
| 99 | see | 159 | 100 | others | 157 |

Appendix 2

Definition of intensifiers (Quirk et al. 1985, 589-597)

It is useful to distinguish two subsets of intensifiers:

- | | | |
|-----------------|---|---|
| (I) AMPLIFIERS | } | Maximizes (eg: <i>completely</i>) |
| | | Boosters (eg: <i>very much</i>) |
| (II) DOWNTONERS | } | Approximators (eg: <i>almost</i>) |
| | | Compromisers (eg: <i>more or less</i>) |
| | | Diminishers (eg: <i>partly</i>) |
| | | Minimizers (eg: <i>hardly</i>) |

Amplifiers scale upwards from an assumed norm: downtoners have a lowering effect, usually scaling downwards from an assumed norm....The subtypes provide nothing more than a rough guide to semantic distinctions, because (i) the varying effects of intensifiers represent a semantic gradient, which is obscured by a clear-cut division into classes; (ii) some intensifiers are sometimes used for different effects; and (iii) speakers vary in their use of intensifiers.

Intensification is realized for the most part by adverbs, but occasionally also by noun phrases and prepositional phrases.

Amplifiers scale upwards. They are divided into (a) MAXIMIZERS, which can denote the upper extreme of the scale, and (b) BOOSTERS, which denote a high degree, a high point on the scale....

Downtoners have a generally lowering effect on the force of the verb or predication and many of them apply a scale to gradable verbs. They can be divided into four groups:

- (a) APPROXIMATORS serve to express an approximation to the force of the verb, while indicating that the verb concerned expresses more than is relevant.
- (b) COMPROMISERS have only a slight lowering effect and tend, as with (a), to call in question the appropriateness of the verb concerned.
- (c) DIMINISHERS scale downwards and roughly mean 'to a small extent'.
- (d) MINIMIZERS are negative maximizers, '(not) to any extent'.

A Case Study of EFL Learning among Korean and Japanese Learners (4): Vocabulary Acquisition: The Difference in the Mental Lexicon between Native Speakers and Second Language Learners of English.

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1. Aim

The aim of this research is to examine two things from cognitive semantics:

1. Whether prototypical meanings in a polysemous word are different between native and non-native speakers of English.
2. How different the mental lexicon is between native and non-native speakers of English.

In Ueda (1997), the polysemous word *play* is used for 1, and it can be found that the mental lexicons between native and non-native speakers of English are similar. And also, about the question 2, in Ueda (1999), there are some differences between native and non-native speakers in the factors to understand the polysemous word, *play*. So, in addition to the research questions above, another main aim is to examine whether same tendency can be found in another polysemous word. In this study, polysemous word, *run*, is chosen among the basic polysemous verbs. We do three experiments for this: Experiment 1, Experiment 2, and Experiment 3.

2. Experiment 1:

Purpose

There are two purposes in Experiment 1:

1. To find out which meaning in the polysemous word, **PLAY** is recognized to be prototypical one in Subject' mind.
2. To examine whether there are some differences in the prototypes between native and non-native speakers of English.

Subjects

Second Language Learners of English (SLLE): 52 university students (10 freshmen, 42 senior students).

Native Speakers of English (NSE): 14

Method

SLLE are asked to write intuitively as many sentences as possible by using the word, *RUN*.

NSE are asked to write 5 sentences intuitively by using the word, *RUN*.

Two ways of analysis are used:

1. All the sentences produced by SLLE and NSE are analyzed according to the meaning.
2. The first and second sentences produced by SLLE and NSE are analyzed according to the meaning.

Analysis and Results

'To move at a speed faster than a walk' is the prototypical meaning to NSSE as well as to NSE.

Table 1: The analysis of the sentences produced by native speakers of English.

| Meaning | Parts of speech | Frequency | Percentage |
|---------------------------------------|-----------------|-----------|------------|
| to move at a speed faster than a walk | vi | 25 | 36% |
| to be a candidate in an election | vi | 6 | 9% |
| to escape | vi | 5 | 7% |
| to manage | vt | 5 | 7% |
| to send out a liquid | vi | 5 | 7% |
| to meet someone by chance | vi | 4 | 6% |
| to operate | vi | 4 | 6% |
| to flow | vi | 2 | 3% |

(The meanings whose percentage are less than 1% are omitted from the list.)

Table 2: The first sentences produced by native speakers of English.

| Meaning | Frequency |
|---------------------------------------|-----------|
| to move at a speed faster than a walk | 7 |
| to manage | 2 |
| to be a candidate in an election | 1 |
| to chase | 1 |
| to meet someone by chance | 1 |
| to operate | 1 |
| to use up | 1 |

Table 3: The second sentences produced by the native speakers of English.

| Meaning | Frequency |
|---------------------------------------|-----------|
| to move at a speed faster than a walk | 4 |
| to be a candidate in an election | 2 |
| to escape | 2 |
| to meet someone by chance | 2 |
| to continue | 1 |
| to move quickly | 1 |
| to send out a liquid | 1 |
| to work | 1 |

Table 4: The analysis of all the sentences produced by non-native English speakers, *Run*.

| Meaning | part of speech | | percentage |
|---------------------------------------|----------------|----|------------|
| to move at a speed faster than a walk | vi | 91 | 36% |
| to manage | vt | 29 | 11% |
| to escape | vi | 28 | 9% |
| to flow | vi | 15 | 5% |
| to use up | vi | 14 | 4% |
| to meet someone by chance | vi | 12 | 4% |
| to do have not enough | vi | 10 | 4% |

| | | | |
|--|----|---|----|
| to chase | vi | 8 | 3% |
| to be a candidate in an election | vi | 7 | 2% |
| to be hit by a vehicle | vt | 6 | 2% |
| finally | n | 5 | 2% |
| to operate | vi | 4 | 2% |
| to rush into | vi | 4 | 1% |
| to knock down | vi | 3 | 1% |
| to make someone or animal move quickly | vt | 3 | 1% |
| to brave danger | vt | 3 | 1% |
| to spread | vi | 2 | 1% |

(The meanings whose percentages are less than 1% are not included in the table.)

Table 5: Meanings in the first sentences produced by second language learners of English.

| Meaning | Parts of Speech | | Percentage |
|---------------------------------------|-----------------|----|------------|
| to move at a speed faster than a walk | vi | 37 | 71% |
| to escape | vi | 3 | 6% |
| to meet someone by chance | vi | 2 | 4% |
| to do not have enough | vi | 2 | 4% |
| to manage | vt | 2 | 4% |
| to be hit by a vehicle | vt | 2 | 4% |
| a relatively long period | adj. | 1 | 2% |
| to be a candidate in an election | vi | 1 | 2% |
| to flow | vi | 1 | 2% |
| to brave danger | vt | 1 | 2% |

Table 6: Meanings in the second sentences produced by the second language learners of English.

| Meaning | Parts of Speech | | Percentage |
|--|-----------------|----|------------|
| to manage | vt | 15 | 29% |
| to move at a speed faster than a walk | vi | 14 | 27% |
| to escape | vi | 8 | 15% |
| to meet someone by chance | vi | 2 | 4% |
| to work | vi | 2 | 4% |
| one who is running | n | 1 | 2% |
| to rush to | vi | 1 | 2% |
| to chase | vi | 1 | 2% |
| to use up | vi | 1 | 2% |
| to do not have enough | vi | 1 | 2% |
| to be a candidate in an election | vi | 1 | 2% |
| to flow | vi | 1 | 2% |
| to make someone move at a speed faster than a walk | vt | 1 | 2% |
| to operate | vt | 1 | 2% |
| to be hit by a vehicle | vt | 1 | 2% |
| to brave danger | vt | 1 | 2% |

2. Experiment 2

Purpose

The purpose of Experiment 2 is to examine how different mental lexicon is between SLLE and NSE by using the INDSCAL model in multidimensional scaling.(SPSS Ver.7. 5. 1)

Subjects

Second Language Learners of English: 22 university students. (all are sophomores.)

Native Speakers of English: 6 native speakers of English.

Method

Ss are asked to compare each pair of the sentences in the list, including 39 sentences, to rate the similarity between them on the 7-point scaling to fill the matrix for the purpose of multidimensional analysis: 1 represents identical; 2, most similar; and 7, least similar.

The ratings from the Ss are analyzed by the INDSCAL model of multidimensional scaling.

By using the results of multidimensional scaling, Spearman's Rank-order correlation is examined to find how correlated each mental lexicon of SLLE and NSE.

Table 7: Rank order of the stimuli along the 1st dimension among second language learners of English and that along 2nd dimension of native speakers of English.

| | Second language learners' 1 st Dimension | Native Speakers of English 2 nd Dimension |
|-----|---|--|
| S1 | 6 | 8 |
| S2 | 1 | 11 |
| S3 | 2 | 27 |
| S4 | 3 | 10 |
| S5 | 5 | 22 |
| S6 | 4 | 17 |
| S7 | 13 | 2 |
| S8 | 11 | 4 |
| S9 | 7 | 3 |
| S10 | 10 | 9 |
| S11 | 9 | 20 |
| S12 | 12 | 1 |
| S13 | 18 | 14 |
| S14 | 21 | 21 |
| S15 | 23 | 28 |
| S16 | 16 | 34 |
| S17 | 22 | 33 |
| S18 | 8 | 32 |
| S19 | 14 | 30 |

| | | |
|-----|----|----|
| S20 | 27 | 39 |
| S21 | 17 | 37 |
| S22 | 15 | 38 |
| S23 | 26 | 35 |
| S24 | 28 | 29 |
| S25 | 24 | 25 |
| S26 | 19 | 5 |
| S27 | 20 | 16 |
| S28 | 25 | 24 |
| S29 | 29 | 18 |
| S30 | 30 | 13 |
| S31 | 31 | 15 |
| S32 | 33 | 7 |
| S33 | 35 | 36 |
| S34 | 34 | 23 |
| S35 | 37 | 6 |
| S36 | 38 | 12 |
| S37 | 39 | 31 |
| S38 | 36 | 26 |
| S39 | 32 | 19 |

Table 8: Rank order of the stimuli along 2nd dimension among second language learners of English and that of 1st dimension among native speakers of English.

| | Second language learners' 2 nd Dimension | Native Speakers of English 1 st Dimension |
|----|---|--|
| S1 | 14 | 18 |
| S2 | 18 | 10 |
| S3 | 20 | 15 |
| S4 | 21 | 35 |
| S5 | 22 | 31 |
| S6 | 17 | 25 |
| S7 | 8 | 22 |

| | | |
|-----|----|----|
| S8 | 10 | 7 |
| S9 | 32 | 27 |
| S10 | 11 | 16 |
| S11 | 16 | 29 |
| S12 | 28 | 34 |
| S13 | 27 | 37 |
| S14 | 35 | 38 |
| S15 | 26 | 30 |
| S16 | 34 | 26 |
| S17 | 31 | 36 |
| S18 | 25 | 24 |
| S19 | 36 | 28 |
| S20 | 33 | 23 |
| S21 | 39 | 33 |
| S22 | 38 | 21 |
| S23 | 37 | 17 |
| S24 | 29 | 32 |
| S25 | 1 | 8 |
| S26 | 2 | 20 |
| S27 | 3 | 2 |
| S28 | 9 | 9 |
| S29 | 6 | 4 |
| S30 | 7 | 3 |
| S31 | 5 | 1 |
| S32 | 12 | 12 |
| S33 | 30 | 14 |
| S34 | 15 | 6 |
| S35 | 24 | 19 |
| S36 | 23 | 39 |
| S37 | 19 | 11 |
| S38 | 13 | 13 |
| S39 | 4 | 5 |

Analysis and Results

The correlation in dimension 1 is not so high.

The correlation in dimension 2 is a little high.

Dimension 1: $\rho = .419^{**}$ $p < .01$

Dimension 2: $\rho = -.64^{**}$ $p < .01$

The results of SLLE according to X coordinates are not similar to those of NSE, while the results of SLLE according to Y coordinates are a little bit similar to those of NSE.

(The reason of negative correlation in Y coordinates is the result of the rotation of the coordinate axes through the analyzing process.)

Experiment 3

Purpose:

The purpose of Experiment 3 is to examine how SLLE and NSE understand the various meanings in *RUN* by using Factor analysis.

Subjects:

SLLE: 23 Japanese university students.

NSE: 6 Native speakers of English.

Method:

From the result of Experiment 1 and 2,

Ss are asked to rate the similarity between the sentence with prototypical meaning, 'to move at the fast speed' and other sentences with other meanings.

The ratings are analyzed by factor analysis.

Results:

Three factors are found from the result SLLE.

Factor 1: Metaphor

Factor 2: Limitation

Factor 3: Temporal Motion

We fail in Factor analysis in the case of NSE. We cannot calculate factors.

Table 9: The result of Factor Analysis of SLLE.

| | Fctor 1 | Fctor 2 | Factor 3 |
|-----|----------|----------|----------|
| S2 | 0.06601 | -0.121 | 0.836 |
| S3 | 0.036622 | 0.15 | 0.627 |
| S4 | 0.173 | 0.95 | 0.145 |
| S5 | 0.383 | 0.593 | 0.137 |
| S6 | 0.526 | 0.14 | 0.119 |
| S7 | 0.746 | 0.27 | -0.00436 |
| S8 | 0.821 | 0.256 | -0.0309 |
| S10 | 0.784 | 0.02558 | -0.0403 |
| S11 | 0.803 | 0.364 | -0.0977 |
| S12 | 0.678 | 0.367 | -0.196 |
| S17 | 0.503 | 0.007462 | -0.298 |
| S18 | 0.299 | 0.308 | -0.397 |

Conclusion:

From the results of the Experiment 1, 2, and 3, we can conclude as follows:

1. Prototypical meaning is the same in the mental lexicon between native speakers of English and second language learners of English.
2. The mental lexicon between native and non-native speakers of English is similar to a certain extent.
3. There may be some possibility that the way of extension of each meaning from the prototypical meaning in the lexicon of the second language learners of English is different from the one in that of the native speakers of English.

Concerning the conclusion 3, we should discuss more, because there is some faults in gathering the data for Experiment 3, which leads to the failure of the analysis. One of the reasons would be in the fact that, compared to the

case of *play* in Ueda (1999), there are many factors in deciding which meaning is more suitable to the polysemous word in some context. We will leave this to the next research.

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Japanese Learners' Conceptualizations of Unaccusative Verbs: *open* and *close* with Special Reference to Contextual Effects

Kazuharu Owada

1. Introduction

While it has been reported in previous GB-based studies that Japanese learners of English have difficulty with the intransitive (unaccusative) form of alternating unaccusatives, this is not always the case; they sometimes behave just like native speakers, for example, in the context of describing flowers which *open* and *close*.

The purpose of this paper is to describe Japanese learners' conception of argument structures of the verbs *open* and *close* by investigating their sensitivity to context in using the intransitive (unaccusative) form of these verbs. Although this paper is not committed in any way to the Government and Binding theory (GB; often referred to as the 'Principles and Parameters' approach) and its offshoots, we will briefly review the Unaccusative Hypothesis in the GB theory to set the stage for discussion. Then, we will critically examine some of the GB-based SLA studies on the acquisition of unaccusative verbs by Japanese learners of English. And finally, we will discuss the results of an experiment on learners' conceptions of *open* and *close*.

2. Unaccusative Hypothesis in the GB theory

It has been widely recognized that intransitive verbs are classified into two classes: unergative verbs and unaccusative verbs in the literature. This classification based on some empirical motivation from Italian verbs is often referred to as the Unaccusative Hypothesis, as in (1). This hypothesis was first formulated by Perlmutter (1978) within the context of Relational Grammar and later adopted by generative linguists (e.g., Burzio 1986).

Unaccusative Hypothesis

- (1) a. Naomi worked. (unergative)
b. Naomi arrived. (unaccusative)

Contrary to the structural similarity on the surface, the subject *Naomi* in (1a)

is the Agent that is base-generated in subject position, while the subject *Naomi* in (1b) is the Theme or Patient that is base-generated in object position.

This will become more apparent when we look at the D-Structure syntactic configurations as in (2).

D-Structure syntactic configurations

- (2) a. Unergative verbs: NP [_{vp} V]
b. Unaccusative verbs: ___ [_{vp} V NP]

An unergative verb takes a D-Structure subject and no object, as in (2a). And its S-Structure is identical to the D-Structure. On the other hand, an unaccusative verb takes a D-Structure object and no subject, as in (2b). The unaccusative verb is unable to assign accusative case to its complement NP because it lacks an external argument (the underline). Therefore, at S-Structure the NP will have to move to the subject position to be case-marked.¹

Some linguists make a further distinction between alternating unaccusative verbs and non-alternating unaccusative verbs. Alternating unaccusative verbs such as *break* have transitive counterparts, as in (3b). According to Levin and Rappaport Hovav (1996), the intransitive form of an alternating verb like *break* (3a) is derived from the causative form (3b). In short the surface subject of unaccusative verbs originates in the object position. On the other hand, non-alternating unaccusative verbs such as *fall*, *arrive* and *happen* can only occur as unaccusative verbs, as in (5)-(7).

Two types of unaccusative verbs

A. Alternating unaccusatives (unaccusatives with a transitive counterpart)

- (3) a. The window broke.
b. Ken broke the window.
(4) a. The door opened.

¹ Please note that there is still considerable confusion over the terminology. Two of the widely used textbooks on the GB theory and one student grammar book may illustrate this point. Haegeman (1994) uses the term 'unaccusative' for passive verbs, raising verbs and verbs of movement and (change of) state, while one-argument verbs like *sink* are referred to as 'ergatives' (pp. 336-7). Napoli (1993) makes a distinction between 'unaccusatives' and 'middles' as follows:

unaccusative: The bottle broke when she knocked it over.

middle: Glass bottles break easily if you knock them over. (p. 293)

Collins Cobuild English Grammar (1990) defines 'ergative verbs' as follows:

Verbs which can have the same thing as their object, when transitive, or their subject, when intransitive, are called ergative verbs. (p. 156)

b. Ken opened the window.

B. Non-alternating unaccusatives (unaccusatives without a transitive counterpart)

- (5) The leaves fell.
- (6) The guests arrived.
- (7) Something happened.

3. Previous GB-based SLA studies on unaccusative verbs

Within the framework of the GB theory just mentioned, several studies have been made thus far on the acquisition of unaccusative verbs by Japanese learners of English (e.g., Shomura 1996, Hirakawa 1997, Tomita 1998). All of these studies base their arguments on the syntactic characteristics manifested in the Unaccusative Hypothesis. We will briefly look at two major studies: Hirakawa (1997) and Tomita (1998).

Hirakawa (1997), for example, classified verbs into four types: Type A (unaccusative verbs such as *break, burn, freeze, grow* and *melt*), Type B (unaccusative verbs such as *appear, arrive, come, die* and *fall*), Type C (unergative verbs such as *dance, laugh, play, sing* and *swim*) and Type D (transitive verbs such as *build, cut, hit, paint* and *wash*). She conducted two types of tests: an Elicited Production Task and a Grammatical Judgement Task.

In the Elicited Production Task her subjects (n=18) and native controls (n=10) were asked to write an intransitive form of the verb given for Types A, B and C and a passive form for Type D to fit the discourse of a story. The results on the rate of errors were: 25.6% for Type A, 4.4% for Type B and 17% for Type D, although there was only one instance of incorrect passivized error out of 90 responses (18 subjects x 5 verbs) with regard to *laugh* for Type C.

On the other hand, the Grammatical Judgment Task was intended to measure the subjects' grammatical judgement toward both the resultative construction with Types A, C and D (e.g., *Her hair grew long*, **She danced tired*, and *So I cut the rope in two*) and the pseudo-passive construction with Types B, C and D (e.g., **The stairs are often fallen down by children*, *But the studio was never sung in until yesterday*, and *When the ribbon was cut, everybody clapped*). In the former construction unaccusative verbs (Type A) can appear, whereas in the latter unergatives (Type C) can appear. The subjects and native controls were asked to circle one of the numbers from -2 (completely unacceptable) to +2 (completely acceptable) for each test item. The results were as follows:

Table 1 Mean scores on resultive constructions (from Hirakawa 1997: 22; Type names were added for ease of reference)

| | Learners (n=18) | Native Speakers (n=10) |
|--------------------------|-----------------|------------------------|
| Type C: unergative (U) | -0.96* | -1.62* |
| Type A: unaccusative (G) | 0.59* | 1.46* |
| Type D: transitive (G) | 0.81 | 0.82 |

(G=grammatical, U=ungrammatical. *p<0.01)

Table 2 Mean scores on pseudo-passive constructions (from Hirakawa 1997: 22; Type names were added for ease of reference)

| | Learners (n=18) | Native Speakers (n=10) |
|--------------------------|-----------------|------------------------|
| Type C: unergative (G) | -0.46* 0.88* | |
| Type B: unaccusative (U) | -1.14 | -1.58 |
| Type D: transitive (G) | 1.32 | 1.52 |

(G=grammatical, U=ungrammatical. *p<0.01)

Focusing on the plus and minus figures above, she states that while the Japanese subjects like native controls know which class of unaccusatives allows which construction, they tended to reject grammatical unergatives in the pseudo-passive construction more than native controls.

Based on the above discussion, she concludes:

The results obtained in the two tasks in this study suggest that learners make the unergative/unaccusative distinction and that they are generally sensitive to the syntactic properties associated with the two classes of unaccusatives. The learners appeared to have more problems with unaccusatives than unergatives, as was predicted by the UTAH². In addition, since learners could not have received instruction on the syntactic structures investigated in this study, it is suggested that universal principles are still active in second language acquisition. (Hirakawa 1997: 25).

On the other hand, Tomita (1998) classified the verbs into three types: 'ergative verbs' (both transitives and intransitives are included; both types are referred to as 'ergative'), unaccusative verbs (only

² UTAH stands for the Uniformity of Theta Assignment Hypothesis. This hypothesis assumes that 'Identical thematic relationships between items are represented by identical structural relationships between those items

intransitives are included) and unergative verbs (only intransitives are included). Then he conducted three tests: a meaning test, a grammatical judgment task and a suffix *-able* attachment task. The meaning test was conducted to see if the students could translate the English verbs into Japanese. The grammatical judgment task was the one we will explain in the following section. And the suffix *-able* attachment task was done to examine whether the students knew that they could attach *-able* to the ergative verbs.

Based on the results of the meaning test, eight verbs which had the highest rate of correct responses were selected for each verb type, that is, *change, dry, move, open, close, stand, break, and roll* for ergative verbs; *happen, live, stay, arrive, fall, appear, occur, and exist* for unaccusative verbs; *dance, smile, swim, cry, jump, sleep, speak, and work* for unergative verbs. He combined the results of the three tests and calculated the average scores for the eight verbs in each type.

The results showed that none of the ergative verbs exceeded the targeted 40% correction rate. In the case of unaccusative verbs, three verbs, i.e., *happen, live, and stay*, exceeded the targeted 40% correction rate. As for unergative verbs, the seven verbs other than *speak* exceeded the targeted 40% correction rate.

He concludes as follows:

- (1) Japanese learners acquire the syntactic properties of three types of intransitive verbs without being given any special instruction.
- (2) It is relatively difficult for Japanese learners to acquire the syntactic properties and the linking rules between semantic and syntactic properties. In other words, semantic bootstrapping does not occur easily with ergative verbs.
- (3) There are some exceptional intransitive verbs in terms of the acquisition process. It might be necessary or helpful to give explicit instruction in order to solve the fossilization of the incorrectly acquired syntactic properties. (Tomita 1998)

4. Some standing problems

Although these studies based on the GB theory use various tasks to elicit student data, there are some problems. First of all, they apparently classify the verb types based on certain syntactic features without considering the individual behaviors and semantic features of each particular verb in context. Second, they tend to rely heavily on the simple yes/no answers or Likert point scales without looking into subjects' reasoning in their grammatical judgment tests. Therefore, the data may not actually be as reliable as they first

at the level of D-structure' (baker 1988: 46).

seem to be. For example, Tomita (1998), after reviewing the previous studies in this field, still uses the Grammatical Judgment Task, as can be seen in some of his examples (8)-(13).

Table 3 Grammatical Judgment Task (Excerpts from Tomita 1998; the numbering has been changed, and the A and B headings have been added for ease of reference)

Direction: In the statements below, which verbs do you feel are correctly used? Circle "a" and/or "b".

A. Alternating unaccusative verbs ('ergative verbs' in Tomita's terms)

Correct Judgment (%)

break (Results of Meaning Test=92.31)

- | | |
|-----------------------------|-------|
| (8) a. Jane broke the vase. | 92.71 |
| b. The vase broke easily. | 9.38 |

open (Results of Meaning Test=98.08)

- | | |
|--|-------|
| (9) a. The old lady opened the window. | 99.02 |
| b. The window opened. | 42.16 |

close (Results of Meaning Test=97.12)

- | | |
|------------------------------|-------|
| (10) a. Tom closed the door. | 94.06 |
| b. The door closed. | 41.58 |

B. Non-alternating unaccusative verbs ('unaccusative verbs' in Tomita's terms)

fall (Results of Meaning Test=85.58)

- | | |
|--|-------|
| (11) a. *Mayumi fell her watch on the floor. | 30.34 |
| b. Mayumi's watch fell on the floor. | 44.94 |

arrive (Results of Meaning Test=86.54)

- | | |
|--|-------|
| (12) a. *The plane arrived Ken'ichi in time. | 76.67 |
| b. Ken'ichi arrived in time. | 94.44 |

happen (Results of Meaning Test=99.04)

- | | |
|--|-------|
| (13) a. *The boys happened a bad accident. | 67.96 |
| b. A bad accident happened. | 88.35 |

Grammatical judgment tests without varying contexts used in previous studies may be useful for checking the understanding of some other grammatical constructions in English. But in the case of

unaccusativity, these tests may be problematic on three points. First, for example, when subjects are faced with a pair such as (9) mentioned above, they may be more inclined to accept the one having two arguments including a person as the Agent, (9a), than the other having only one argument, (9b), because the former may make it easier for them to create a context in their mind. Second, some might reject *The window opened* in (9b), for instance, just because they might think that a window is highly unlikely to open by itself, at least not in the real world. Third, related to the second, we still do not know whether a certain intransitive form of a verb in the English lexicon does not exist in the subjects' mental lexicon or whether it is being judged as inappropriate in a given context in question even though their mental lexicon allows its grammaticality.

5. The study

5.1. Purpose

The grammatical judgment tests so far conducted have focused on the extent to which subjects accept or reject a particular form (intransitive, passive and transitive) of a verb without looking into the strategy they adopt. That is, not enough emphasis has been placed on the relationship between subjects' response to an intransitive form and those to a transitive (passive) form of the same verb in various contexts. While some subjects may accept both the intransitive and the transitive (passive) of the verb in question, some may accept only the intransitive or passive. Therefore, we conducted our study to describe Japanese learners' conception of argument structures of the verbs *open* and *close* by investigating their sensitivity to context in using the intransitive (unaccusative) form of these verbs. We also sought to understand the learners' reasons for accepting or rejecting a particular form in a certain context.

5.2. Subjects

Subjects for this study were 49 Japanese undergraduate students (28 males, 21 females; mean age of 18.8 years, range 18-24) enrolled in one of three sections of a year-long English grammar course at the Department of English Language and Literature at the School of Education, Waseda University. Forty-seven were freshmen, one was a sophomore, and one was a 6th-year student. Of those 49, three subjects reported having stayed in an English speaking country for 10 years, 7 years and 1 year, respectively. The experiment lasted for about 40 minutes.

As a control, we also ran five native speakers of English who were American graduate students.

5.3. Materials and procedure

The subjects were asked to take the two kinds of tests, looking at the multiframe cartoons in the test sheet (see Appendix A). First, the subjects were given the first answer sheet for Free Composition in which the subjects were asked to write English sentences so as to fit the discourse context (see Appendix B). Since no target verbs were given in this task, unlike previous studies, the subjects gave various answers to each test item.

Then, after completion, they handed in their first answer sheet and were given the second answer sheet for the Contextualized Judgment Test (see Appendix C). In this test the subjects were asked to respond to three test items in each context. The three test items were: one intransitive form, one passive form and one distracter for Contexts A, B, D, E, and F; one intransitive form, one passive form and one transitive form for Context C. For each test item, there was a three-way choice. For choices they rejected or were not sure of, they were asked to try to give reasons.

Since most of the subjects gave reasons for unsure choices in the same way as for choices of rejection, we treated both choices as a sign of rejection. In the following discussion we will focus on which forms the subjects accept in each context by looking at two or three test items in each context as a whole.

The following are the contexts to be considered in this study:

| | |
|----------------|---|
| Context A | Morning glories (which are higher in animacy ³ than doors) open (Context A-1) and close (Context A-2) by themselves. |
| Context B | The elevator doors close automatically. |
| Context C | The elevator doors are closed by someone inside. |
| Context D | The school gate, which has been closed by the guard, is already closed when the student arrives. |
| Contexts E & F | The doors of the train, which are controlled by a conductor, close (Context E) and open (Context F). |

5.4. Research questions

³ Although flowers are categorized as 'inanimate' rather than 'animate' in the linguistics literature, they are higher in animacy than doors.

The research questions in this study are stated as follows:

1. What kind of form(s) do Japanese Learners of English (JLEs) prefer in a context where native speakers (NSs) strongly prefer the intransitive form?
2. What kind of form(s) do JLEs prefer in a context where NSs strongly prefer the stative passive form?
3. Does the presence of an agent influence the form of verbs which JLEs will use?
4. Does animacy of the subject influence the form of verbs which JLEs will use?

6. Results

With the research questions in mind, we will look into the results of Free Composition and the Contextualized Judgment Test in each context. As will become clear, the responses to Free Composition vary because we have not provided our subjects with the target verb. As our research interest lies in the transitivity of the verb, we will discount spelling mistakes and choices of tense and aspect.

Context A-1 (open flowers)

Free Composition. As Table 4 shows, the most frequently used verb turned out to be not the target verb *open* but the verb *bloom* (13 JLEs). Given that the first four uses *open*, *bloom*, *blossom*, and *open up* are appropriate in this context, 25 (51 %) of JLEs responded correctly. Putting aside the judgment of appropriateness of each verb, 34 (69 %) of JLEs chose intransitive forms, whereas only 3 (6 %) of JLEs preferred passive forms.

Table 4 The results of Free Composition in Context A-1 (target verb: *open*)⁴

⁴ A few examples of 'others' in Context A-1 are: 'the flowers show its beautiful figure', 'these flowers are glorious', and 'I saw a little red and purple flowers'.

| | | JLEs (n=49) | NSs (n=5) |
|--------------|---------------------|-------------|-----------|
| intransitive | open | 8 | 3 |
| | bloom | 13 | 1 |
| | blossom | 3 | 0 |
| | open up | 1 | 1 |
| | wake up | 5 | 0 |
| | get up | 4 | 0 |
| passive | be opened | 1 | 0 |
| | be bloomed | 2 | 0 |
| | open their blossoms | 1 | 0 |
| | others | 9 | 0 |
| | NA | 2 | 0 |

The Contextualized Judgment Test. Since there are two test items excluding one distracter item in Context A-1, there should be 4 (2 x 2) response patterns: one can show either acceptance or rejection in both the intransitive and passive test items (the same holds true for Contexts A-2, B, D, E, and F). Table 5 shows the patterns of acceptance by the subjects. There were 23 (47%) of JLEs who preferred 'Intransitive Only' for *open*, just like NSs did. However, 22 (45%) of JLEs accepted the passive form of *open*, collapsing the cells 'Both Intransitive and Passive' (16; 33%) and 'Passive Only' (6; 12%), although none of the NSs did.

Table 5 The results of the Contextualized Judgment Test in Context A-1

| | Both Intransitive and Passive | Intransitive Only | Passive Only | Neither |
|-------------|-------------------------------|-------------------|--------------|---------|
| JLEs (n=49) | 16(33%) | 23(47%) | 6(12%) | 4(8%) |
| NSs (n=5) | 0(0%) | 5(100%) | 0(0%) | 0(0%) |

Context A-2 (closed flowers)

Free Composition. Table 6 reveals that 12 (24%) of JLEs used the target intransitive verb *close*. When we accept the first three items *close*, *close up*, and *wither* as appropriate, 16 (33%) of JLEs answered correctly. It is interesting to note that although 30 (61%) of the JLEs uses the intransitive form of the verb, only one JLE used the passive *be withered*. From Tables 4 and 6, we can state that JLEs preferred intransitives, just as NSs did.

Table 6 The results of Free Composition in Context A-2 (target verb: close)⁵

| | | JLEs (n=49) | NSs (n=5) |
|--------------|-------------|-------------|-----------|
| intransitive | close | 12 | 4 |
| | close up | 0 | 1 |
| | wither | 4 | 0 |
| | die | 4 | 0 |
| | sleep | 4 | 0 |
| | fall asleep | 2 | 0 |
| | shrink | 2 | 0 |
| | go to bed | 1 | 0 |
| | go down | 1 | 0 |
| passive | be withered | 1 | 0 |
| | be dead | 3 | 0 |
| | others | 13 | 0 |
| | NA | 2 | 0 |

The Contextualized Judgment Test. We can see the similarity between Table 5 and Table 7 below. Just like Table 5, Table 7 reveals that 20 (41%) of JLEs preferred 'Intransitive Only' for *close*, just like NSs did. However, more than half, 26 (53%) of JLEs, accepted the passive form of *close*, collapsing the cells 'Both Intransitive and Passive' (16; 33%) and 'Passive Only' (10; 20%), although none of the NSs did.

Table 7 The results of the Contextualized Judgment Test in Context A-2

| | Both Intransitive and Passive | Intransitive Only | Passive Only | Neither |
|-------------|-------------------------------|-------------------|--------------|---------|
| JLEs (n=49) | 16(33%) | 20(41%) | 10(20%) | 3(6%) |
| NSs (n=5) | 0(0%) | 5(100%) | 0(0%) | 0(0%) |

Context B (elevator with no one inside)

Free Composition. From Table 8 we can see that while over half of JLEs, 27 (55%), used appropriate intransitives *close* (the target verb) and *shut*, some JLEs, 10 (20%), used the passives despite the fact that none of the NSs did.

⁵ A few examples of 'others' in Context A-2 are: 'Asagao is poor', 'it ends its short life', and 'they are too shy to meet me in sun light'.

Table 8 The results of Free Composition in Context B (target verb: close)⁶

| | | JLEs (n=49) | NSs (n=5) |
|--------------|-----------------|-------------|-----------|
| intransitive | close | 20 | 5 |
| | shut | 7 | 0 |
| | go up | 1 | 0 |
| | shut up | 1 | 0 |
| passive | be closed | 6 | 0 |
| | be shut | 2 | 0 |
| | be shut up | 1 | 0 |
| | get closed | 1 | 0 |
| | close its doors | 1 | 0 |
| | others | 9 | 0 |

The Contextualized Judgment Test. When we collapse over ‘Both Intransitive and Passive’ (18; 37%) and ‘Passive Only’ (12; 24%) in Table 9, 30 (61%) of JLEs liked the passive choice, although all NSs rejected the passive.

Table 9 The results of the Contextualized Judgment Test in Context B

| | Both Intransitive and Passive | Intransitive Only | Passive Only | Neither |
|-------------|-------------------------------|-------------------|--------------|---------|
| JLEs (n=49) | 18(37%) | 16(33%) | 12(24%) | 3(6%) |
| NSs (n=5) | 0(0%) | 5(100%) | 0(0%) | 0(0%) |

Context C (elevator with someone inside)

Free Composition. Table 10 reveals that most of JLEs preferred passives (19; 39%) or transitives (18; 37%) to intransitives (3; 6%). Since NSs were divided, we cannot detect any tendency on the part of NSs due to the small sample.

⁶ A few examples of ‘others’ in Context B are: ‘that’s too bad’, ‘it refuse him’, and ‘he feels bad’.

Table 10 The results of Free Composition in C (target verb: close)⁷

| | | JLEs (n=49) | NSs (n=5) |
|--------------|------------------------|-------------|-----------|
| intransitive | close | 2 | 1 |
| | shut | 1 | 0 |
| passive | be closed | 9 | 2 |
| | be closed by Agent | 6 | 0 |
| | be shut by Agent | 1 | 0 |
| | be shut up | 2 | 0 |
| | be shut | 1 | 0 |
| transitive | Agent closes the doors | 13 | 1 |
| | Agent shuts the door | 5 | 1 |
| | others | 9 | 0 |

The Contextualized Judgment Test. Since there are three test items in Context C, there should be 8 (2 x 2 x 2) response patterns. However, there were only six patterns either JLEs or NSs adopted, as in Table 11. We can see that 32 (65%) of JLEs, whose answers categorized into the following cells: ‘Trans. & Pass.’ (22; 45%), ‘Trans. Only’ (6; 12%), and ‘Pass. Only’ (4; 8%), rejected the intransitive, while no NS rejected the intransitive.

Table 11 The results of the Contextualized Judgment Test in Context C

| | Trans., Intrans. & Pass. | Trans. & Intrans. | Trans. & Pass. | Trans. Only | Intrans. Only | Pass. Only |
|-------------|--------------------------|-------------------|----------------|-------------|---------------|------------|
| JLEs (n=49) | 15(31%) | 2(4%) | 22(45%) | 6(12%) | 0(0%) | 4(8%) |
| NSs (n=5) | 3(60%) | 1(20%) | 0(0%) | 0(0%) | 1(20%) | 0(0%) |

From the results of Contexts B and C, we can state that when an agent is present, JLEs are quite reluctant to accept an intransitive form, even though all NSs accepted it. This indicates that JLEs are sensitive to agency.

Context D (school gate)

Free Composition. Table 12 indicates that there was a strong agreement between NSs and JLEs; all

⁷ A few examples of ‘others’ in Context C are: ‘he is prevented from taking it’, ‘“fuck you!”’, and ‘he was very angry’.

NSs and most JLEs, or 21 (42 %), used the passives.

Table 12 The results of Free Composition in Context D (target verb: *close*)⁸

| | | JLEs (n=49) | NSs (n=5) |
|--------------|-----------|-------------|-----------|
| passive | be closed | 19 | 3 |
| | be locked | 0 | 2 |
| | be shut | 2 | 0 |
| intransitive | close | 2 | 0 |
| | others | 26 | 0 |

The Contextualized Judgment Test. When we collapse over ‘Intransitive Only’ (14; 29%) and ‘Neither’ (7; 14%) in Table 13, many JLEs (21; 43%), rejected the target passive choice *it is already closed*, even though they used the passive form for Free Composition. From the reasons they gave for rejecting the passive choice, we can infer that they felt the adverb *already* was incompatible with the sentence meaning. In fact 9 out of those 21, equating *already* with *sudeni* in Japanese, stated that *sudeni* which implies immediacy does not fit into the context based on the assumption that *motomoto* was the word to appropriately describe the scene. However, we have no clues as to why about the half of JLEs (24; 49%), whose answers categorized into ‘Both Intransitive and Passive’ (10; 20%) and ‘Intransitive Only’ (14; 29%), accepted the intransitive since we did not ask them reasons for acceptance.

Table 13 The results of the Contextualized Judgment Test in Context D

| | Both Intransitive and Passive | Intransitive Only | Passive Only | Neither |
|-------------|-------------------------------|-------------------|--------------|---------|
| JLEs (n=49) | 10(20%) | 14(29%) | 18(37%) | 7(14%) |
| NSs (n=5) | 0(0%) | 0(0%) | 4(80%) | 1(20%) |

Context E (train doors close)

Free Composition. Table 14 shows that some JLEs (17; 35%) seemed to like the passive, while all NSs used the intransitive.

⁸ A few examples of ‘others’ in Context D are: ‘Ken knows today is national holiday’, ‘he shouted ‘Oh, my God’’, and ‘he was disappointed’.

Table 14 The results of Free Composition in Context E (target verb: close)⁹

| | | JLEs (n=49) | NSs (n=5) |
|--------------|------------|-------------|-----------|
| intransitive | close | 16 | 5 |
| | shut | 3 | 0 |
| | shut up | 2 | 0 |
| passive | be closed | 11 | 0 |
| | be shut | 2 | 0 |
| | be shut up | 3 | 0 |
| | get closed | 1 | 0 |
| | others | 11 | 0 |

The Contextualized Judgment Test. Table 15 shows that quite a number of JLEs (14; 29%) chose 'Passive Only' by rejecting the intransitive form, while none of the NSs did. When we add to this cell 'Both Intransitive and Passive' (29; 59%), we can see that most JLEs (43; 88%) allowed the passive form.

Table 15 The results of the Contextualized Judgment Test in Context E

| | Both Intransitive and Passive | Intransitive Only | Passive Only | Neither |
|-------------|-------------------------------|-------------------|--------------|---------|
| JLEs (n=49) | 29(59%) | 5(10%) | 14(29%) | 1(2%) |
| NSs (n=5) | 2(40%) | 3(60%) | 0(0%) | 0(0%) |

Context F (train doors open)

Free Composition. Table 16 shows that some JLEs (8; 16%) seemed to like the passive, while NSs preferred the intransitive.

⁹ A few examples of 'others' in Context E are: 'the train begins to go', 'he misses the train', and 'the train started'.

Table 16 The results of Free Composition in Context F (target verb: *open*)¹⁰

| | | JLEs (n=49) | NSs (n=5) |
|--------------|------------|-------------|-----------|
| intransitive | open | 16 | 3 |
| | passive | | |
| | be opened | 7 | 0 |
| | get opened | 1 | 0 |
| | be open | 1 | 0 |
| | incopmlete | 1 | 0 |
| | others | 21 | 2 |
| | NA | 2 | 0 |

The Contextualized Judgment Test. Table 17 shows that quite a number of JLEs (14; 29%) chose ‘Passive Only’ by rejecting the intransitive form, while none of the NSs did. When we collapse this and ‘Both Intransitive and Passive’ (29; 59%), we can see that most JLEs (43; 88%) allowed the passive form.

Table 17 The results of the Contextualized Judgment Test in Context F

| | Both Intransitive and Passive | Intransitive Only | Passive Only | Neither |
|-------------|-------------------------------|-------------------|--------------|---------|
| JLEs (n=49) | 29(59%) | 5(10%) | 14(29%) | 1(2%) |
| NSs (n=5) | 2(40%) | 3(60%) | 0(0%) | 0(0%) |

It is important to note that most of the subjects who rejected intransitive uses in both Contexts E and F said that they knew the train conductor opened and closed the doors, or that the doors cannot open by themselves.

Before moving on to the next section, it is worth noting that in the Contextualized Judgment Test, 4 subjects rejected all the intransitive forms across the contexts in this experiment. Of those 4 subjects, 2 subjects stated in no uncertain terms that verbs *open* and *close* are transitive verbs and do not have intransitive uses.

7. Discussion and implications for further research

In this study we have looked at questions not directly examined in previous studies. Although previous

¹⁰ A few examples of ‘others’ in Context F are: ‘he nearly slides in the door’, ‘he sighed of relief’, and ‘he reaches the platform’.

studies have focused their attention on the verb types without considering the individual behaviors of each particular verb, we have restricted ourselves to examining each of a few verbs in several contexts. We have shown that the most JLEs have a more complex understanding of the meanings of simple verbs such as *open* and *close* than was recorded in previous studies. Only 4 of the subjects rejected the use of *open* and *close* in all contexts, while the others accepted and even produced these forms in certain contexts. Several findings can be drawn from this study.

First, in the context where NSs strongly preferred intransitives (Context A with the flowers and Context B with the apparently empty elevator), JLEs answered like NSs in Free Composition but accepted the passives at a much higher rate than the NSs in the Contextualized Judgment Test. As we did not ask the subjects to explain why they accepted the forms, we do not know why. One possibility is that they are conceptualizing the passives as adjectivals (e.g., 'the flowers are open' rather than the flowers are opened').

Second, many JLEs (21; 43%) rejected the target passive choice 'it is already closed' (Context D with the school gate). The reason for this is that the stative passive with the adverb *already* might have served as strange input for the subjects. JLEs are sensitive to adverbs, but based on their reasons for rejecting this sentence, it seems that they have an incorrect representation of the meaning of *already*. Therefore, when we construct a test, we must draw attention to the effect of adverbials on the subjects' sentence processing.

Third, when an agent is present (Context B vs. Context C), JLEs are quite reluctant to accept an intransitive form, even though NSs accepted it. This shows that JLEs are sensitive to agency. It may probably be the case that JLEs are more sensitive to agency than NSs. It is also interesting to note that JLEs rejected the intransitive when they conceptualized an implicit agent, i.e., a train conductor, in Contexts E and F, although none of the NSs rejected it in these contexts. Therefore, when we design a test, we need to keep in mind that subjects' judgments can be affected by their conceptualization of an implicit agent in the pictures.

And fourth, in the context of describing the flowers (Context A), JLEs preferred 'Intransitive Only', quite contrary to the results obtained in the context of describing the train doors (Contexts E and F). This shows that animacy somewhat influenced the form of verbs that JLEs would use.

8. Conclusion

In this study, some students showed sensitivity to the context in their use of the two verbs *open* and *close*, a fact which we would not have found out without looking into their reasoning. However, this study also showed that Japanese learners of English did not have a very complete grasp of seemingly simple verbs such as *open* and *close*.

Their conceptualizations of the intransitive (unaccusative) uses of these verbs are quite different from those of the native speakers. For example, in the Contextualized Judgment Test, four subjects rejected all the unaccusative forms across the contexts. Of those four subjects, two subjects had a mindset that these verbs are transitive verbs and do not have intransitive uses.

The reason that Japanese learners of English have some problems with the unaccusatives of these verbs may be that they have had less, if any, exposure to such uses in various contexts. As an example, a quick analysis of the verbs *open* and *close* in seven junior high school textbooks showed that only 5 out of 29 for *open* and only 1 out of 12 for *close* were unaccusative uses. The same may hold for high school textbooks.

Therefore, as a final point, in the practice of teaching, we need to explain the correct way to use these verbs and give students guided practice by specifying the contexts in which the unaccusatives of these verbs can be used. And also we should incorporate the usage of adverbials into the teaching of these verbs so as not to limit students' usage of these verbs. Otherwise, many subjects may be in the position of those students who do not allow the unaccusatives of these verbs, with no way of arriving at the correct argument structures of these verbs.

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