Research Paper

A Parallel Learner Corpus:
Using Computers in a Humanistic Approach to Language Teaching and Research

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This paper discusses the need for greater knowledge of the lexico-grammatical features of the English of Japanese learners. It reports on the design and applications of ‘TRIO’, a parallel learner corpus of 112,000 words of university learner English writing with native and Japanese ‘translations’. TRIO can be used by learners as an electronic self-study reference tool that helps them to be inquisitive and observant about language. At the same time it is a unique resource for teachers, materials and test writers, whether they are native or non-native speaker, innovative or traditional. The research has wide-reaching implications for the reform of ELT in Japan.

Key words: English language teaching (ELT), learner corpus, learner language, Japanese learner English

パラレル学習者コーパス
——ヒューマニスティックな言語教育と言語研究のためのコンピュータ利用——
ケヴィン・マーク（明治大学）

本稿は、日本での英語教育の向上、学習者の言語および文法の特徴を詳細に集めたコーパスが不可欠であること主張し、筆者が開発したTRIOと名づけた、パラレル学習者コーパスのデザインとアプリケーションを、実際のコンピュータ画面の例を示しながら説明する。TRIOは112,000語からなる日本語学習者の英作文、各生の英語作文の3種をパラレルに比較しながら英語学習ができるソフトである。TRIOは学習者が英語に好奇心や探究心をもちながら自律的に学ぶためのリソースを提供する。また、革新的な教師・伝統的な教師の別を問わず、英語が母語か否かを問わず、教師の教育活動を豊かにし、教材やテストづくりにも豊富なリソースとして利用できる。本研究の内容は、日本での英語教育の改革に寄与できるものと考える。

キーワード：英語教育（ELT）、学習者コーパス、学習者言語、日本人学習者の英語

0. Introduction

This paper describes ‘TRIO’, a ‘parallel learner corpus’ containing 112,000 words of Japanese university learner English writing, with corresponding native and Japanese versions. The project first began to take shape five years ago, and has now reached the point where it suggests ways in which computers can be used to lay the foundations for substantial progress in the reform of language teaching in Japan. Although the work can certainly be said to belong to ‘learner corpus’ research, a new branch of corpus linguistics (see Granger, 1998), the TRIO project has evolved very gradually out of this writer’s practical teaching experience and humanistic, learner-centered approach to students, rather than from a background in corpus linguistics.

1. The need for greater knowledge of learner language

Learner corpus linguists have recognized the need for teaching materials that are informed by learner language data. As Granger says, “It is paradoxical that although it is claimed that ELT (English language teaching) materials should be based on solid, corpus-based descriptions of native
English, materials designers are content with a very fuzzy, intuitive, non-corpus-based view of an archetypal learner." (Granger 1998, p.7). Granger's comment is also applicable to the teaching of other languages, and is equally true of language curriculum design and testing.

The research described in this paper was undertaken because it was found, in the course of teaching and designing curricula within Japanese universities, that very basic information and materials that would be useful for these tasks have never been produced. There is no comprehensive and systematic knowledge of the written and spoken language produced by Japanese university learners. There have of course been many academic studies of specific aspects of Japanese learner English, but these are scattered throughout the academic literature. What would be most useful for university teachers would be lists of the language typically produced by learners of different levels when they are communicating about particular topics. What do they typically say, and what is the language that a native speaker might use to express the same thing? When they are writing a report, for example about a book that they have read, what are the linguistic features that are going to be typical of a group of students? What kinds of things are the students interested in communicating when they perform particular learning tasks? These questions can just as well be asked by junior and senior high school teachers, or by teachers of adults. A learner corpus can provide easily accessible answers to them.

Existing language teaching textbooks, curricula and examinations are based on ideas of what is relevant to learners in the target language itself, without reference to the learners' own use of the target language. Textbooks of the spoken and written language do not provide teachers with examples of the language produced when learners tackle particular exercises within the book. Even 'common error' reference materials in Japan, of which there are many examples in the bookstores, are extremely limited in the help they offer. The great inadequacy of even the apparently most authoritative of these is discussed in Mark (2000).

Whether in Japan or elsewhere, a corpus of learner language can serve the interests of teachers of diverse teaching styles, from the most traditional to the most progressive, whether they are native or non-native speakers. In a strongly communicative, educationally 'progressive' or humanistic style of teaching, where teachers focus on being motivators and on interacting personally with learners, opportunities are needed for the learners to attend systematically to form. For this, learners and their teachers need materials relevant to the particular topic or activity in which they are engaged. In a classroom or self-study environment that emphasizes form, learners and teachers can easily fall into a depressingly dull mode that discourages inquisitiveness and exploration. If they are going to be successful, learners need to be observant not only of the language they are studying themselves, but also of their own use of the target language. Textbooks and reference materials should be helping in this regard by providing lexico-grammatical information about learner language and their equivalent native versions, organized according to specific language learning tasks and learner levels.

2. The field of learner corpus studies

Corpus studies in learner language are very much in their infancy. Leech, in his preface to Granger's authoritative work outlining this new field, identifies second language research and language teaching as the two areas that will benefit from learner corpus research. He feels that "we may claim that the concept of a learner corpus is an idea 'whose hour has come'." (Leech, 1998)

The view that language teaching materials should be informed by learner corpus data is clear in projects such as those reported on by Kaszbuski (1998), Horváth (2000) and Milton (1998). Milton reports on an impressive learner corpus project that has already led to the use, by Cantonese learners, of electronic English self-study tools. Certainly the field of learner corpora will lead to the further development of many such tools, and the TRIO corpus is itself one such example.

Japanese learner corpus studies have been underway for some time, but results so far have been preliminary, exploratory and tentative, as in Asao (1998), Tono and Aoki (1998) and Tono (2000).
Tono is researching the JEFLL corpus, which consists of the English of junior and senior high school learners. His project is both very ambitious and technically oriented. It aims to identify those features of Japanese learner interlanguage which are L1 influenced and to distinguish them from those which are inherent in the L2 developmental process. It promises to be useful to language teaching in identifying the optimal order for items to be included in junior and senior high school textbooks and can also be expected to make a contribution to the important field of learner dictionaries.

TRIO differs from other Japanese learner corpus projects in that it is not seeking to clarify the processes of second language acquisition, but rather to be directly applicable to pedagogy. It appears to be unique among all learner corpus studies in that it offers easily-accessed and direct comparisons between small units of learner language, the target language and the learners’ L1, each viewable in its original context. It is thus a 3-way parallel learner corpus, and the name ‘TRIO’ is intended to reflect this.

The TRIO project is also unique in that it has these functions:
1. It can be used directly as a tool by learners, either in independent study or directed learning.
2. It can be used by teachers without applied linguistic expertise, as well as by materials writers, curriculum planners, test writers and researchers.
3. Designed to facilitate the continuing collection and processing of learner data, it is a ‘corpus-building’ tool.

3. The structure of the TRIO learner corpus

The learner English in TRIO is a corpus of 112,000 words produced by Japanese university learners of English for 1420 course writing assignments. Most of these are short informal essays, typically 150 words in length, on general topics such as ‘Mobile Phones,’ ‘What I like about being a university student’, ‘A problem I am having in my daily life’ and so on. Students are of an intermediate level, with TOEFL scores ranging from around 400 to 580. All of the learner words in TRIO have been carefully rewritten to sound native-like, and when possible students have also been asked to produce Japanese versions of their writing.

Written language data has been used at this stage because of the comparative ease with which it can be gathered, but language that has been identified as helpful for developing writing skills can also be made use of in speaking and listening exercises. At a future stage of development, spoken language data will be incorporated into TRIO, but with some of the “messy” features of authentic spoken language omitted in order to allow a clear focus on lexico-grammatical features.

4. Viewing the data in TRIO

These three versions or separate ‘corpora’: LE (learner English) NE (native English) and Japanese - are stored in a specially developed Filemaker Pro database as a single 3-way parallel corpus. The separate ‘units’ of each version of a composition (a unit is typically one sentence, but often more or less), can be compared side by side with the corresponding versions, as well as with reference to the entire passage from which they have been taken (FIGURE 1). However, the database also allows users to switch to views (not shown here) of the entire learner English or Japanese versions. It also allows for searches that produce lists of specific language items (FIGURE 2).

4.1 The Japanese component of TRIO

For two thirds of the writing assignments it was possible to ask learners to provide their own Japanese versions of the writing, and in many cases it is necessary to refer to the Japanese in order to be sure of what the learner is trying to communicate. TABLE 1 shows that although it might be possible to guess the meaning, it is necessary to check.

The most important advantage offered by the Japanese versions is that it is useful for learners and teachers to make searches in the database using Japanese search items. Thus a search for 楽し（い）will, for example, generate the list given in TABLE 2.
(FIGURE 1)

I used to work as a tutor at what we call a "juku." One of my old teachers at the school recommended the job to me. I didn't need to have an interview, and the pay was pretty good too. It was 3000 yen an hour. I decided to accept the offer on the spot, I'd never had any experience of teaching before, but I thought I would be able to do it well. I couldn't have been more mistaken. All together it took me more than 6 hours to teach the whole alphabet to these students who were learning English for the first time. I found it very frustrating to have to keep explaining the infinite hundreds of times. BUT I WAS ABLE TO BUILD UP TRUST BETWEEN MYSELF AND MY STUDENTS. I think this was the best part of what I got from the experience.

(FIGURE 2)

I learned the problem of increasing students' birth rate in sociology and the development of the human psychology class. I learned about the development of mammals. (NE)

They don't put what they have learned. (LE)

It was difficult for me to spend weekends all alone. I can enjoy my alone holidays now, and I learned to make my own time by myself. (LE)

I stayed there for only two weeks, but I learned a lot; not only speaking English, but also some things which I can't express. (LE)

I also learned the importance to cooperate the members through this club. Nobody quit the club at my grade. (LE)

I could read easy some articles in newspapers because I learned a lot of vocabularies in some field. (LE)
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### (TABLE 1)

<table>
<thead>
<tr>
<th>JAPANESE</th>
<th>LEARNER (LE)</th>
<th>REFORMULATED (NE)</th>
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<tbody>
<tr>
<td>昨日の時点では行けると思ってました。 いけないことを友達に電話しました、とても行きたかったのにな。</td>
<td>I thought I could be there yesterday. I called my absence. I wish I were there.</td>
<td>Yesterday I thought I would be able to go to the party, but I had to call to say I wouldn’t be able to make it. I really wished I could go.</td>
</tr>
</tbody>
</table>

### (TABLE 2)

<table>
<thead>
<tr>
<th>JAPANESE</th>
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<tr>
<td>実際に暮らしていた人から聞く異国の話は凄く興味深く、楽しかったです。私は多くの外国人人の先生に会えて、私は時々、楽しかった経験ーイタリアに旅行したことを思い出す。</td>
<td>A speech made from the foreign teachers were very interesting and pleasant for me.</td>
<td>I used to really enjoy hearing about these things from people who had actually lived in these countries.</td>
</tr>
<tr>
<td>明大を応援する人みんなが、一緒になって歌ったりエールを送るのはとても楽しかった。試合も、見ていると楽しかった。</td>
<td>Sometimes I remember my enjoyable experience that I traveled to Italy.</td>
<td>Sometimes I find myself remembering a very enjoyable trip I once made to Italy.</td>
</tr>
<tr>
<td>私の卒業した高校の文化祭は本当に楽しかった。つい昨日も文化祭が行われ、忙しかったけれども楽しく働けた。</td>
<td>The festival of the high school I graduated was very fun.</td>
<td>The festival at the high school I went to was a lot of fun.</td>
</tr>
<tr>
<td>ついても文化祭が行われ、忙しかったけれども楽しく働けた。</td>
<td>The other day the Izumi Festival is held and I could worked busily and I enjoyed it.</td>
<td>The festival was held only the other day, and although I was very busy I was able to enjoy working on it.</td>
</tr>
</tbody>
</table>
The next stage of TRIO will ensure that there is a Japanese version for every piece of learner writing. However, there are three serious methodological issues associated with this:

1) Learners cannot be relied on to give accurate translations.
2) The process is time-consuming and learners therefore need to see a purpose in this activity.
3) From a pedagogical point of view it is probably better, in most cases, for students to first compose their writing in English.

It now seems desirable to ask learners to produce a Japanese version some time after the English version has been produced, and to make this exercise a part of the learning process itself. This can be done with one student translating another’s writing into Japanese and then checking with the author to ensure accuracy. This will give an added stimulus to students at the English writing stage, by making them aware that their peers will read the material. It will also emphasize to students the need for clarity in writing. Although the process is likely to improve accuracy, it will always be necessary to check the translations carefully, and there will inevitably be times when the original student author must be consulted.

In order for learners to see the value of the Japanese versions, they need to be fully aware of the nature of the project as a whole. The students who have contributed so far have benefited from more teacher attention than is usual in a university class, but it would be better for them to be more concretely aware of the aims and outcomes of the research. There are potentially great educational benefits for students to experience that in the process of studying English they are also participating in research that will lead to materials for use by themselves and other learners.

The production of Japanese versions is, of course, an extremely time-consuming process, and there is a faster way of gathering similar data that should be combined with the above approach. This is to ask learners to translate into English a number of selected learner-written Japanese passages that are representative of the kind of writing desired. This means that multiple learner English versions corresponding to a small number of target language texts will be available for comparison with a single Japanese text and a single native version. Of course this process will be at the price of a degree of authenticity of learner writing. The next stage of TRIO will incorporate both types of data, appropriately tagged in order to distinguish them from each other in the corpus.

4.2 The process of reformulating the learners’ English: methodological considerations

The learner language in TRIO has been ‘reformulated’ rather than ‘corrected’. The difference between these two terms, within the context of the TRIO project, resembles that between a strict translation and one that aims to capture the spirit of the original without being tied to form. In order to achieve naturalness, a reformulated version will sometimes change learners’ language when it is ‘correct’. Section 4 shows how this can be used to the advantage of learners.

Each piece of learner English has been rewritten and then edited numerous times. This task is all the more lengthy because it is difficult to rewrite a composition in a single session: inevitably one finds one’s own English being unduly influenced by the learner’s choice of words and structure. For example, in the case of the learner’s use of ‘because’, in TABLE 3, a more pleasing effect is achieved by omitting it in the reformulated version, but it was included in an earlier draft: in this case ‘because’ and other forms expressing reason have already been used, making it redundant at this point in the writing. Because it is difficult to maintain such stylistic sensitivity when one is also concentrating on accurately interpreting learner writing, it is necessary to ‘distance’ oneself from one’s initial reformulation of it.

One obvious limitation of TRIO so far is that all the reformulations have been carried out by one person. Inevitably there are stylistic preferences of one’s own which are arbitrary, and it would enrich the corpus to have the reformulations of other native speaker writers. In future, groups of three such researchers might do well to work together in such a way that researcher A writes the first draft of a reformulation with close reference to both the learner original and the Japanese; researcher B then edits the first draft without reference to either the learner original or the Japanese, and researcher C
マーク：パラレル学習者コーパス

(TABLE 3)

<table>
<thead>
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<th>JAPANESE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>もう一つには、仕事に対する熱意がなく、それを楽しんでいたわけでもない。なぜなら、私はお金をためだけに働いたのですから。</td>
<td>For another I didn't have any motive for doing that job and didn't enjoy it.</td>
<td>For another, I didn't have any real motive for doing that job and wasn't enjoying it. I was just working for the money.</td>
</tr>
</tbody>
</table>

edits this second draft referring to both the original and the Japanese versions. This system is likely to work best if the respective roles are changed regularly.

Of course the 'shortcut' described in section 3.2 will avoid this lengthy reformulation process. When this method is employed, a small number of native versions will normally be used as target language equivalents of the single Japanese passage, to ensure a variety of target language comparisons.

4.3 TRIO as a study tool: the concept of 'feedback'

Johnson (1988), suggests that the most useful feedback to learners may be when they select from the reformulation "those areas of mismatch ... (which)...they themselves are able to identify, because these will accord with the stage of their skill (or interlanguage) development." This view is also implicit in, for example, Lewis' influential book, "The Lexical Approach" (Lewis, 1993). The native speaker reformulations in TRIO are 'feedback' in the sense that they give, to learners who are using TRIO as a study tool, information about the kind of language produced by learners similar to themselves. Students can freely explore the database or be directed by their teacher to find points relevant to a particular learning task.

The next stage of development of TRIO will add an analytical dimension to the holistic feedback already provided by the reformulated versions. There will be an 'Evaluation' window (FIGURE 3), which shows a score of 0 to 5 for each 'segment' of a unit. A zero score indicates an error so serious as to be incomprehensible, while 5 indicates a native-like choice of words.

This scoring system makes available to learners quite sophisticated information. Even when their own English is native-like they sometimes see native alternatives in the reformulated version. They are also able to notice the presence or absence of words in the corresponding segments. For example, learner questions about the absence of 'And' in the NE reformulation or the subtle question of the absence of 'to have to' in the LE version are dealt with in such a way that the students can make their own inferences about them before going to a further window which provides an explanation in English and Japanese. This 'explanation' feature of the database reduces the pressure on teachers to provide explanations themselves. In the sense of Johnson's quotation above, it is anticipated that learners will be able to make use of this feedback when it is appropriate for them. Certainly this promises to be rich reference material for both learners and non-native speaker teachers, and one that takes learners beyond a simple 'right/wrong' approach to learner language, a theme that was explored in Mark (1988).

On the basis of the scores given to each segment of a unit, an overall score for the unit as a whole will be given. This makes it possible for users of the database to sort the data in terms of language level, and it is expected that this feature will be of particular use to test writers and curriculum developers interested in defining levels of ability.

As in the case of the reformulation process, there is some subjectivity in 'scoring' language, and it will therefore be important to have a team of
researchers working together in order to ensure standardization. This will probably work well if three people score each unit individually and then meet to sort out the inevitable discrepancies between them.

5. Applying data analysis of TRIO to materials design and testing

Analysis of the data in TRIO opens the way to designing materials that can make both strongly communicative and form-focused approaches to teaching more relevant to learners' actual needs. The examples below give a sense of how this is possible.

5.1 Organizing the data for topic-related tasks

When a course of study is divided into topic units, lists can be compiled of language associated with particular words or phrases that are typically used when writing on such a topic. These lists can be used for a variety of pedagogical tasks, including the making of listening exercises.

For a composition course including a writing assignment on a title related to the topic 'Study' or 'Learning', for example, the various forms of the verb 'learn' can be one of many useful words to focus on. Of the 164 NE occurrences of 'learn' in the current version of TRIO, 8 are presented in TABLE 4. This list indicates a pattern of under-use by learners of phrases with 'a lot' and 'help'. The use of NE 'you' (examples 2 and 8) is also worth noticing. Examples 2 and 6 indicate a well-known tendency for Japanese speakers to overuse nouns in English and to underuse verb phrases. This kind of 'language transfer' problem has been documented in a general way, as in, for example, Swan and Smith (1987). However, there does not appear yet to be any work done to link such usage to particular topics or particular lexical items. A focus on the word 'how' in the NE (Table 5) and its absence in the LE versions gives further insights into learner grammatical patterns. It is difficult to see how, without a learner corpus such as TRIO, learners or language teaching professionals can gain insights into links between such patterns and particular lexical items.

A focus on words more readily associated with grammar can also be fruitful. For example, in order to focus learners' attention on the present...
### (TABLE 4)

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<th>JAPANESE</th>
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<th>REFORMULATED (NE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 前回出来なかったことなどだと</td>
<td>I learned many things which I couldn't do last time so I'm going to</td>
<td>I learned a lot of techniques which I couldn't do last time, but which I will</td>
</tr>
<tr>
<td>くさん習いました、次に試そうと思います。</td>
<td>try next time.</td>
<td>try to do when I next go.</td>
</tr>
<tr>
<td>2. テストは嫌だけど、テストがあるから勉強して学ぶこともたくさんある。</td>
<td>I don't like examinations, but sometimes the study for the exam give us much knowledge, I think.</td>
<td>I don't like exams, but you often learn a lot by studying for them.</td>
</tr>
<tr>
<td>今思えば、我ながらよくこんなに沢山暗記が出来たかと思う。</td>
<td>Now I do not know how I could learn such many things by heart.</td>
<td>Now, when I think back on it, I wonder how I managed to do such a lot of learn by heart.</td>
</tr>
<tr>
<td>4. 私はそんな彼女の好きで、自分も見習いたいと思う。</td>
<td>I like her very much, and I want to learn many things from her.</td>
<td>I like her very much, and feel that there is a lot I can learn from her.</td>
</tr>
<tr>
<td>5. 人に教えることによって私は多くのことを学べると思います。</td>
<td>I think I can learn many things by teaching someone.</td>
<td>I think I will be able to learn a lot by teaching people.</td>
</tr>
<tr>
<td>6. 私はこの部活で、集中力を身につけ、自分に厳しくなったと思う。</td>
<td>Owing to it, I got the concentration ability, and became strict to myself.</td>
<td>This is what helped me to learn how to concentrate and to be self-disciplined.</td>
</tr>
<tr>
<td>7. そこではみんなが日本の会社の事を少しずつ教えてくれます。</td>
<td>There, people teach me about Japanese company little by little.</td>
<td>The people there have been helping me to gradually learn, little by little, about Japanese companies.</td>
</tr>
<tr>
<td>8. 私は失敗こそが習う一番の秘訣だと思う。</td>
<td>I think make a mistake helps learning something the most.</td>
<td>In fact, I think that making mistakes is what helps you learn the most.</td>
</tr>
</tbody>
</table>

Perfect for the 'Study' or 'Learning' topic, one needs to list the verbs that are associated in the corpus with the topic, and then search for all units which include 'have' or 'have been', and then pick out the most useful of these for study.

5.2 Analysis of the TRIO data applied to syllabus specification and to testing
The data illustrated above indicate that a parallel learner corpus offers, to a much greater extent than is at present possible, opportunities to
identify the most important lexical and grammatical points that should be targeted as syllabus and test items for a particular course of study. The ‘scoring’ of each unit of language discussed in section 4 will aid this process. Each piece of writing will also record the scores achieved by the writer on examinations such as the TOEFL, TOEIC or Eiken, as discussed in Mark (1999).

5.3 Researching the use of TRIO by students

It is anticipated that students will use TRIO mainly in three ways. First, it will be a kind of dictionary to be used in completing writing assignments. Secondly, students will be assigned worksheet tasks using TRIO to help them become aware of its potential as a self-study tool. Thirdly, it will be possible for them to use the database freely for self-study. It will be important to conduct a study of students’ attitudes and actual use of the database within each of these three modes. While their responses to worksheet tasks will offer one way of doing this, it seems reasonable to assume that a longitudinal, interview-based approach will be helpful in understanding and improving the effectiveness of TRIO as a tool for students.

6. The TRIO project as a humanistic approach

The basic approach of the TRIO project can be said to be independent of any teaching methodology in that insights from the corpus can inform any teaching approach. It is also ‘humanistic’, in two very broad senses. First, the word is used in this study in the sense of ‘learner-centered’, since the study assumes that teaching materials and activities should take account of what it is that learners want to communicate and of the language that they actually produce. While no corpus can ever contain exactly the language that a particular learner wishes to produce, TRIO does offer extensive examples of language produced by Japanese university learners of English. Its development represents a serious attempt, therefore, to ‘listen’ to this group of students by recording their language and working with it in order to better to meet their
learning needs. The second main way in which the project can claim to be humanistic is that it offers the possibility of encouraging students to develop an independent and exploratory approach to study by using TRIO as a new kind of learner dictionary. The empowering potential of this kind of 'data-driven learning' has been written about in relation to students' use of corpora of the target language, as in Tribble (2000) and Gavioli and Aston (2001), but the TRIO project appears to be the first study to extend the concept to a parallel learner corpus.

7. Further possibilities suggested by the TRIO project

Although no research has been done in this area, it may well be that the principles of TRIO can be helpful to students learning how to translate from English into Japanese. For this purpose, a corpus consisting of the English source text, a model translation into Japanese and multiple learner translations would be used. It is also possible that a 2-way parallel corpus of writing by young Japanese with more 'mature' versions could be used for the purpose of heightening their awareness of Japanese.

8. Conclusion

TRIO offers a new perspective on the English used by Japanese university students. The TRIO project can now be used to create a new kind of general English writing course for Japanese university learners of English. The corpus database can be used by teachers, materials writers, curriculum designers and test writers, and also by students as an electronic self-study reference tool. Further expansion of the corpus, including spoken language data, can lead to improvements in all areas of university English language studies. Furthermore, there is no reason why the principles of this study cannot be used with other learner groups, such as junior/senior high school learners and adult learners. They can also be applied to the teaching of other languages.

At a time when there is a hunger for improvement in English teaching in Japan, and a sense that computers should be put to good use in this regard, the principles of the TRIO project offer the possibility of establishing a new and solid foundation for language teaching reform in this country.

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