<table>
<thead>
<tr>
<th>Title</th>
<th>佐野健 &quot;English Expressions in the Articles of Physical and Occupational Therapies&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>佐野健</td>
</tr>
<tr>
<td>Citation</td>
<td>長崎大学医療技術短期大学部紀要 = Bulletin of the School of Allied Medical Sciences, Nagasaki University. 1999, 12, p.1-5</td>
</tr>
<tr>
<td>Issue Date</td>
<td>1999-03-02</td>
</tr>
<tr>
<td>URL</td>
<td><a href="http://hdl.handle.net/10069/18279">http://hdl.handle.net/10069/18279</a></td>
</tr>
</tbody>
</table>

NAOSITE: Nagasaki University’s Academic Output SITE
http://naosite.lb.nagasaki-u.ac.jp
English Expressions in the Articles of Physical and Occupational Therapies

Kenji SONODA

Abstract The aim of this study is to explore English expressions that are made characteristic use of in the articles of physical and occupational therapies published in the U.S. and the U.K. The articles examined are taken from journals of physical and occupational therapies that were published in the U.S. and the U.K. in 1998, and the number of articles amounts to 40. This paper contains 13 entries. Most of them have to do with English expressions, but explanations of grammatical problems are also included. The entries that appear here are mainly like the following: although and though, based on and on the basis of, because and as, compared with and compared to, despite and in spite of, due to and because of, during, he or she, the split infinitive, the subjunctive, that and which, whereas and while, and whether and if.

Key Words : English Expressions, Physical Therapy, Occupational Therapy

1. Introduction

This article aims to examine English expressions that appear characteristically in the articles of physical and occupational therapies. The articles dealt with here are taken from Physical Therapy and AJOT (The American Journal of Occupational Therapy), and Physiotherapy and The British Journal of Occupational Therapy. The former two are published in the U.S. and the latter two in the U.K., which makes it easier to compare AmE with BrE. All of the articles chosen here were published in April, May, June, and July in 1998, and 10 articles are chosen from each of these journals, and a total number of articles examined here amounts to 40: 20 from the American journals and 20 from the British ones. And the articles chosen are confined only to original articles, and thus case reports, book reviews, etc. are excluded. And besides the authors whose articles are examined here are only American or British, and no other nationalities are included.

2. English Expressions Preferred in the Articles of Physical and Occupational Therapies

2.1 Although and though

When although and though are used as conjuncts, although is more frequently used than though in the articles of both American and British physical and occupational therapies. In the American articles although is used in 80 instances, whereas though is used in only five instances; in the British articles although is used in 62 instances, whereas though is used in only eight instances.

With regard to the position of the although-clause in a sentence, since normally emphasis is placed on the latter clause, it may be imprudent to judge the position of the although-clause in a sentence without regard to the context, but in the U.S. the although-clause often comes before the main clause (68 instances before the main clause), and this clause is less frequently used after the main clause, or parenthetically in the middle of a sentence (nine instances after the main clause; three instances parenthetically). In the U.K., the clause preceded by although comes a little more frequently before the main clause than after it (34 instances before the main clause; 25 instances after the main clause).

Normally although is more formal than though, which may explain the frequent use of although in the U.S. and the U.K.

2.2 Based on (upon) and on the basis of

Based on (upon) is one of the expressions one frequently encounters in the articles of physical and occupational therapies. It is used with "be" (1a), or adverbially (1b), or as an adjective phrase (1c):

(1) a. ... conclusions are based on the opinions and views of selected experts ...
   (AJOT, April 1998)
   b. Based on the results, it appears that practice...
Based on (upon) is one of the expressions equally well used in the U.S. and the U.K. It is used in the U.S. in 57 instances and in the U.K. in 35 instances. In the U.S. it is most often used adverbially. In the U.S. it is used adverbially in 34 instances, in the form of “be based on (upon)” in 26 instances, and as an adjective phrase in 13 instances. In the U.K. based on (upon) is not so often used adverbially. In the U.K. it is used in the form of “be based on” in 18 instances, as an adjective phrase in 13 instances, and adverbially in 10 instances.

Based on (upon) and on the basis of would supplement each other when they are used adverbially. On the basis of is used like the following:

(2) Lean body mass was computed on the basis of percentage of body fat.

(Physical Therapy, June 1998)

On the basis of is not so often used as based on (upon). On the basis of is used in the U.S. in 14 instances, and in the U.K. five instances. Although it is used in the U.S. in three articles, in the U.K. it is used in one article.

2.3 Because, as, and since

When giving reasons, because is more often used than as or since. It is used in the U.S. in 107 instances, and in the U.K. in 49 instances. Although as in the case of although, it would be indiscreet to judge the position of the because-clause without reference to the context, in the U.S. the because-clause is used before the main clause as often as after the main clause (53 instances before the main clause; 54 instances after the main clause). In the U.K. the clause introduced by because is mainly used after the main clause (eight instances before the main clause; 41 instances after the main clause).

As shown above, in the U.K. because is less frequently used than in the U.S. In the U.K., when giving reasons, as and since seem to be used more often. In the U.S. at least this time there is no instance of since and in giving reasons as is used in only a few instances, whereas in the U.K. as is used in 21 instances and since in 10 instances. In the U.K. as appears in almost all articles. And in the U.K. the as-clause is used a little more often after the main clause than before the main clause (nine instances before the main clause; 12 instances after the main clause).

Since as has a number of meanings, it can often give rise to ambiguity: there are often times when one wonders whether as means reason or time or manner. Certainly in the articles of the U.S. as often appears, but in most cases its meanings are ambiguous and it is often unclear whether it means reason or time or manner. In (3), it is not clear at first glance whether as means reason or time:

(3) ... infants should be observed as they move about freely. (Physical Therapy, May 1998)

In the U.S. there are at least 25 instances where the meaning of as is unclear. In this way although as is used relatively often in the articles of the U.S. and the U.K., it should be avoided: when giving reasons, because should be used.

2.4 Compared with, compared to, as compared with,
when compared with, and in comparison with

Although as compared with and when compared with are slightly different in meaning from compared with and compared to, in that the meaning of time is somewhat stronger in the former two than in the latter two, when giving comparisons compared with is most often used in the U.S. (20 instances), followed by as compared with (13 instances), in comparison with (two instances) and when compared with (two instances). Compared to is used in the same meaning as compared with, but in the U.S. there is no instance of compared to or as compared to. In the U.K. although the number of instances is relatively few, compared to is most often used (eight instances), followed by compared with (three instances), as compared with (three instances), and as compared to (two instances). In comparison with is seen only in the U.S. (two instances).

2.5 Despite and in spite of

Despite and in spite of can be used interchangeably, and both of them can be followed by a noun or gerund. However, despite is more often used than in spite of in the U.S. and the U.K. In the U.S. despite is used in 12 instances and in spite of is not used, whereas in the U.K. despite is used in 10 instances and in spite of in two instances.

Despite is more formal than in spite of, which may largely explain the reason for the frequent use of despite.

2.6 Due to, because of, and owing to

Of these three expressions, due to is most often used. In the U.S. due to is used 31 times, and in the
Due to seems to be more often used adverbially like (4a) (in this use 31 instances in the U.S. and the U.K.) than with the verb “be” like (4b) (in this use 18 instances in the U.S. and the U.K.).

(4) a. Due to financial constraints such extravagant getaways were not feasible for the elderly persons in our groups.

b. This may be due to a lack of recognition of the potential value of delegation ....

Due to can also be used as an adjective phrase like (5), but this is less frequently used (five instances altogether in the U.S. and the U.K.).

(5) Persons with a hip implant due to rheumatoid disease ... were not selected.

During is mainly used like the following:

(6) during comfortable walking, during treadmill training, during the stance phase, during actual locomotion, during ambulation, during the swing phase, during running, etc.

In the articles of the physical and occupational therapies, during is most often used like (6), which suggests that during is an expression peculiar to physical therapy. In the U.S. although during appears only 30 times in AJOT, in Physical Therapy it appears as many as 228 times. In the U.K., in The British Journal of Occupational Therapy, during appears 14 times, whereas in Physiotherapy it appears 50 times. That suggests that during is a word that is favored by physical therapists, especially by American physical therapists.

He or she is thus equally used both in the U.S. and the U.K., but this seems to be an expression preferred not by physical therapists, but by occupational therapists, in both countries. In the U.S. although he or she appears in Physical Therapy in eight instances, it appears in AJOT in 39 instances. In the U.K. although it is used in Physiotherapy in only four instances, it is used in The British Journal of Occupational Therapy in as many as 83 instances.

Popular as he or she seems to be among occupational therapists, it is an expression still stilted and awkward. And it should be used sparingly. If it is used too often, the whole article will begin to look ludicrous.

In a split infinitive, normally a single adverb comes between to and a verb like (8a), yet only occasionally two or more words come between them like (8b) and (8c):

(8) a. ... patients were able to effectively use assistive devices upon return home.

b. In order to more thoroughly understand the overall biomechanics of using a cane ....

c. ... enabling the participants to actively and strategically select an individualized pattern of....
American physical and occupational therapists, above all by American occupational therapists. In the U.S. there are eight instances of the split infinitive in *Physical Therapy* and 15 instances of it in *AJOT*, whereas in the U.K. there are only two instances of it in *Physiotherapy*, and in *The British Journal of Occupational Therapy* there is no instance of it.

Although split infinitives have been in use since the 14th century and have a long history, there are some who still consider them informal, incorrect, or careless. As long as the rhythm of the sentence is not ruined or as long as an unintended meaning is not created, split infinitives should not be used.

### 2.10 Subjunctive

In the articles of physical and occupational therapies, two forms of the subjunctive are used, that is, the present subjunctive like (9a), and the past subjunctive like (9b):

- (9a) The federal regulations ... mandate that these services be education related.
- (9b) If that were not sufficient as a reason for our challenge, the therapy part of occupational therapy is performed by ... the patient.

(9a) can also be paraphrased by using *should* like (10a) or by using the indicative like (10b):

- (10a) The federal regulations ... mandate that these services should be education related.
- (10b) The federal regulations ... mandate that these services are education related.

Of the three forms, the subjunctive, *should*-constructions, and the indicative, the subjunctive seems to be more often used in the U.S. than in the U.K.

In the U.S. there are altogether 10 instances of the subjunctive and in the U.K. seven instances. The *should*-constructions and the indicative are used more often in the U.K. than in the U.S. In the U.K. there are 21 instances in which *should* is used like (10a) and 10 instances in which the indicative is used like (10b), whereas in the U.S. there is one instance in which *should* is used, and there is no instance of the indicative in the U.S.

In the subjunctive, the present subjunctive seems to be more often used than the past subjunctive in both countries. In the U.S. there are seven instances of the present subjunctive, and three instances of the past subjunctive, while in the U.K. there are five instances of the present subjunctive and two instances of the past subjunctive.

In the present subjunctive, the verb that is most often used in the main clause in both countries is *recommend* (four instances). *Advocate, demand, mandate, require, and urge* are used once. *Criteria, principle, and important* are also used once in the main clause in the present subjunctive.

#### 2.11 That and which

In restrictive relative clauses, when the antecedents are things, *that* or *which* can be used as a relative pronoun. In the U.S. *that* is used exclusively in such a case: in the U.S. *that* is used 242 times as a restrictive relative pronoun and *which* only once. The following is the only instance where *which* is used as a restrictive relative pronoun in the U.S.:

(11) The environment is not only that which currently surrounds the person but also includes the past, embedded in memory as history, and the future .... (*AJOT*, May 1998)

In (11) if *which* is used in place of *that*, the antecedent *that* is followed by another *that*, and *that* is repeated twice, which becomes awkward. That is why *which* is used instead of *that* here.

In the U.K. although *that* is certainly used more frequently than *which*, *that* is not predominantly used as in the U.S. In the U.K. *which* is still used in many cases as a restrictive relative pronoun.

That is, in the U.K. *that* is used in 182 instances (58%), and *which* in 134 instances (42%).

#### 2.12 Whereas and while

*Wh...
to the context, in the U.S. and the U.K. the subor-
dinate clauses headed by whereas seem to come more
often after the main clause (in this use, 25 in-
stances) than before the main clause (in this use, 
five instances). On the other hand the clause intro-
duced by while seems to come a little more frequently
before the main clause (in this use, 14 instances)
than after the main clause (in this use, 10 instances).

2.13 Whether and if

Whether and if can be used after ask, know, find
out, etc, and at the start of a clause or before an
infinite that expresses or suggests a choice between
two alternatives. Of whether and if, however, in
the U.S. and the U.K. whether is overwhelmingly
used in such a situation. In the U.S. whether is used
in 44 instances and if in one instance, whereas in
the U.K. whether is used in 12 instances and if in
four instances.

With regard to the verbs that are used before
whether, determine is predominantly used in the U.S.
It is used in 34 instances in the U.S., of which 29
instances are found in Physical Therapy, and five
instances in AJOT. In the U.K. too, determine is
used a little more often than other verbs: it is used
in five instances in the U.K.

Other verbs that are used before whether in both
countries are examine (three instances), assess (two
instances), consider (two instances), know (two in-
stances). Confirm, decide, demonstrate, establish,
investigate, see, and verify are used once, respec-
tively.

The verbs that are used with if are ask, investi-
gate, see, and test.

Whether is more formal than if, which may be
one of the reasons why whether is predominantly
used in the U.S. and the U.K.

3. Conclusion

Thirteen entries one often encounters in the arti-
cles of physical and occupational therapies have been
discussed here. It will be seen from the above de-
scriptions that there are some expressions that are
used in the U.S. as often as in the U.K., that there
are some expressions that are used more frequently
in the U.S. than in the U.K. and vice versa, and
that there are some expressions that are more pref-
erably used in physical therapy than in occupational
therapy and vice versa. Although the English ex-
pressions that seem to be characteristically related
to physical and occupational therapies are picked
out and discussed here, they are, of course, not ex-
haustive. That makes it necessary to delve into this
problem further in the future.

NOTES

1. The journals examined here are as follows:

Physical Therapy, April 1998, May 1998, June
1998.


Physiotherapy, April 1998, May 1998, June 1998,

The British Journal of Occupational Therapy,

REFERENCES

London: Longman.


Association.

Berube, Margery S. ed. 1996. The American Heritage

International Committee of Medical Journal Editors.
1993. "Uniform Requirements for Manuscripts Sub-
mitted to Biomedical Journals." 4th ed. JAMA 269,
2282-86.

of the English Language. London: Longman.

Oxford: Oxford University Press.