

# Perspectives on Corpus Research : An Investigation of Adverbs of Manner

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This paper will discuss a corpus-driven research project focusing on a specific grammatical structure. However, the motivation for the investigation did not come from a theoretical query, but rather from a question which arose in the classroom. In other words, the original aim of the investigation was to address a practical classroom issue with the hope of finding insights which the teacher (the author of this paper) could utilize to clarify the point and contribute to a better understanding of the structure by the students.

Although the focus of the investigation began as practical ‘action-research,’ once the process began I was soon drawn into unanticipated areas. This may be attributed to an initial under-estimation of the task ahead due to an expectation that the answers to the questions were ‘out there somewhere;’ consequently, it would just be a matter of finding the reference grammar which contained the needed explanations. As the process continued, it became apparent that it was necessary to go beyond reference grammars which, in turn, led to utilizing corpus data in search of answers.

Thus, this paper will focus on the research process, rather than the specific results of the research, though the general results will be referred to. In particular, this paper will examine how a corpus can be used for this type of grammatical structure query. It will then look at the specific strengths and limitations this researcher found in the results based on the corpus data and conclude with some general comments about the use of corpus-based research.

### The Context and Initial Inquiries

The context was an English essay writing course for third-year Japanese university students. The textbook used in the course, *Significant Scribbles* (2005), included consecutive units dealing with using two or more adjectives and manner adverbs (MAs) in a sentence. For example,

- 1.a Henry lives in a strangely-shaped Western house. (ibid : 6)
- 1.b I sat down slowly and painfully in the hot bathwater. (ibid : 10)

Reference grammars provide a generally accepted neutral order of multiple adjectives, as seen in the following examples, adapted from *The Cambridge Grammar of English* (2006 : 450) :

- 2.a You need one of those wonderful, strong, round, Swedish, wooden bathing tubs.
- 2.b\* You need one of those strong, wonderful, Swedish, round, wooden bathing tubs.

Sentence 2.a follows the general rule : evaluation (*wonderful*)-physical quality (*strong*)-shape (*round*)-origin (*Swedish*)-material (*wooden*)-purpose (*bathing*). However, the position of the first four adjectives in sentence 2.b violates the rule and thus would be judged as incorrect.

While acknowledging that there can be a degree of flexibility in the order, teachers and students alike have a convenient rule for reference. This led me to ask whether a similar type of rule could explain the acceptability or preference in the order of manner adverbs (as seen in 1.b) in the following sentences :

- 3.a She spoke clearly and calmly.
- 3.b She spoke calmly and clearly.

Since the course textbook did not comment on this specific point, various

reference grammars were consulted but they offered only indirect references to the point in question. The *Collins COBUILD English Grammar* (2005) includes several sentences of MAs in the target structure, as does *The Cambridge Grammar of English*, however in both cases, the discussion focuses on different perspectives other than the preferred order of the two manner adverbs in the pattern.

Given this situation, it was decided to pursue the matter further through a corpus search in order to address these two questions :

- Q.1 Do manner adverbs in the target pattern occur equally (by chance) in either position ?
- Q.2 If the adverbs do not occur equally, does the data suggest possible explanations to account for the order ?

### **The Method**

The corpus research was based on results from random samples from the British National Corpus (BNC). The BNC is a “100 million word collection of samples of written and spoken language designed to represent a wide cross-section of British English from the later part of the 20<sup>th</sup> century” (BNC website home page).

The BNC primarily draws its data from written English (90%), but since the investigation was aimed at written English, the BNC was regarded as a suitable resource. ‘Suitability’ of the corpus one chooses to use will be dealt with briefly in the conclusion to this paper.

The ‘Simple Search’ function of the BNC was used to collect data. The Simple Search feature is a free service which does not allow full access to the data base, but provides 50 samples of sentences in which the key words one enters are found. However, subsequent searches result in a different set of 50 samples, if they exist in the corpus, so even the Simple Search can provide satisfactory data for initial inquiries.

In order to get samples of the MAs in the target structure, a manner adverb before and after the conjunction *and* was entered: i.e. *quickly*

*and*; *and quickly*. The Simple Search does not allow one to limit the inquiry to only those sentences which contain the MA in the target pattern, so it is necessary to extract only those sentences which are relevant to the investigation.

After performing preliminary inquiries on approximately 50 MAs, a final group of 16 MAs for further analysis were chosen. The general results from the data for this group follow.

### **Results**

Of the 16 manner adverbs, only one was almost equally distributed into either position (*carefully*; 48%-52% in positions before and after the conjunction, respectively). All others had what might seem to be a preference for one position over the other. However, when a statistical analysis (a one sample t-test between percents) was performed, only 5 had statistically significant differences, meaning that the other 11 MAs appeared in a position merely by chance.

### **Reaction to the Results**

The results did not produce the rule that I was hoping to find as a teacher, but as a researcher the results were very illuminating in terms of not only the linguistic data, but also the strengths and limitations of what a corpus search of this kind provides.

Perhaps the single greatest contribution to language pedagogy by corpus data is that teacher/researcher is able to see empirical evidence which shows how a word or phrase is really used. Although a teacher's intuition is often quite accurate, relying totally on intuition has its risks for even very experienced and knowledgeable teachers. Ashcroft (2010) conducted a survey to gain data to evaluate the reliability of teacher intuition concerning the differences in the use of *actually* and *in fact*. The results indicated that the teachers were quite accurate concerning the function of the two items (providing contrast or introducing bad news), but their analysis lacked details about other aspects of usage, such as frequency, register, collocations and sentence pat-

terns, all of which can be gained from corpus data.

The results of Ashcroft's survey were not and should not be interpreted as a criticism of teachers, but rather the results verify the valuable role corpus data can play in providing teachers with information to complement and expand their intuitive 'hunches.' As Thornbury (2002 : 69) stresses, by utilizing a corpus "We can show learners not what someone thinks they should say, but what users of the language actually do say."

Although there is no question that corpus information is a tremendous resource for teachers and researchers, care must be taken not to rely totally on corpus data. Thornbury (ibid : 69) fully endorses the use of corpus data but his position "... does not deny the value of intuitions ... or mean that corpus information should be used uncritically." In other words, teachers/researchers must still "select, adapt and supplement raw data" (ibid : 69) to make the data truly useful or relevant.

This last point certainly applied to the situation this author encountered after analyzing the data of the 16 manner adverbs in the target pattern. From one perspective, the results might have seemed to be disappointing since empirical evidence for a tentative effort to formulate a rule could only be applied to 5 of the 16 MAs. However, the results could also be taken in a more positive light in that there was a statistical preference for some MAs but not for all. Either way, it was clear that more 'digging' was needed to gain further insights. At that stage, a decision had to be made as to how that information would be obtained.

An obvious step would have been to expand the corpus search by gaining full access to the BNC corpus in order to get more samples of the MAs in the target pattern. However, it was felt that a more productive option at that stage would be to seek other avenues of investigation to "supplement the raw data" as suggested by Thornbury. In the end, the decision was made to design a questionnaire to be given to native-speakers of English (NES) to obtain data about their preferences in the ordering of MA pairs. The results of that survey revealed that the NES had statistically significant preferences of order in 8 out of 10 items on the questionnaire, and also indicated that the

semantic qualities of the adverbs, such as adverbs which describe the speed at which something was done, may influence the choice of a one order over another.

### **Conclusion**

In what began as a ‘rather mundane task’ to find a grammatical rule, this teacher went on a fascinating journey which would have been impractical, if not impossible, for all but a few linguists some 30 years or so ago. Due to the recent development of numerous corpora and the availability of many of them to the general public, educators, researchers and students now have the ability to utilize corpus data in a variety of ways, from the theoretical to the practical aspects of our knowledge about language and language learning.

In the course of the investigation, corpus data from the initial searches formed the basis of further research by other means. Furthermore, other avenues of investigation might not have considered without that corpus data. So credit must be given where credit is due, but one has to approach corpus research carefully so as not to fall into the trap of “uncritical use” (ibid : 69) of corpus information or rushing into a corpus study without proper planning. It is beyond the scope of this paper to go into these issues in detail, but let us look at one fundamental example referred to earlier in this paper — suitability.

Given the great choice of corpora to choose from, it is incumbent that the selected corpus is appropriate for the goals of the inquiry. The choice of the BNC, which as mentioned previously is primarily based on samples of written English, was suitable in that a formal, written structure was the subject of investigation. In contrast, if the research had been focused on the spoken usage of a word, phrase or structure, the BNC would not have provided sufficient data or may have provided inappropriate information (written versus spoken usage).

Corpus research has given us the ability to access vast amounts of information quickly, but it only provides data, not ready-made answers. The relevance and value of the data ultimately depends on careful planning, thorough analysis and accurate interpretations by teachers and researchers.

### References

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