


Scientific Writing in English: Techniques and Tools



Corpus Linguistics in Scientific Writing Part IV

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Questions

- What makes a phrase or text sound natural?
- How to recognize a natural vs. an unnatural phrase/text?
- How to write natural/fluent text?
- What computational tools does Corpus Linguistics offers us?
 - Write better?

Language

- Made up of prefabricated "chunks"
 - Fixed or semi-fixed
 - combinations of words
 - Master them
 - language sounds
 - natural
 - fluent

Types of “Chunks”

- Colligations
- Collocations

Colligations

- **Combinations of words**
 - in grammatical categories
 - e. g., verb, noun, preposition

Examples

1. LOOK + preposition

- He was **looking at** component
- He was **looking for** the answer

2. BELIEVE + that clause

- He **believed that** he would survive

3. TRY + to infinitive

- He **tried to** run the marathon

Collocations

- Words “strung” together as units
 - Will sounds “right” to native speaker
 - E. g., “dream + about/of”
(instead of “dream + with”)

Types of Collocations

- Verbal
- Nominal
- Adjectival
- Adverbial

Example: Verbal

└─ Nouns can be subject or object of verb

1. N + V

“The **team identified** the problem...”

2. V + N

“Our group has done the research..”

Example: Nominal

└ Nouns as compounds

1. N + N

“There is little **research data** related to obesity and THR”

2. N + of + N

“From the patient's **point of view**, they are likely to have little expectation that you can solve their problem”

Example: Adjectival

└ Adjectives combine with certain nouns

1. Adj + N

“They conducted a **longitudinal study** of 54 children from first through fourth grades”

“The **present/current study** employed both elicited and spontaneous language measures”

Example: Adverbial

- Verbs and adjectives combine with certain adverbs
- Order is usually fixed

“He had a **fairly extensive** knowledge of the colonies and their operation”

“Although **widely acknowledged** among traditional cultures, sleep paralysis is one of the most ...”

Exception: Order NOT Fixed

- Areas with overlapping high values could be **carefully studied** through risk assessment.
- The team **carefully studied** every part of the virus.
- I'm **carefully studying** my setup and becoming very familiar with it.
- This material should be approached with an open mind, **studied carefully** and critically considered.
- The question would have to be **studied carefully** first.

Binomials

- Two words belonging to same grammatical category
- For example, verbs, nouns, adjectives, linked by conjunction or preposition

Order?

- Reversible = order can be inverted
*social or political or
political or social*
- Irreversible = order is fixed
*come and go or
better or worse*

Corpus Linguistics

- Based on assumption that language is probabilistic
 - certain combinations of words have higher probability of occurring than others, although these other ones may be perfectly grammatical

Examples

- Why should *increase or decrease* be more recurrent than *decrease or increase*?
- Why is *results suggest* much more frequent than *results suggested* in academic language?
- Why is *fill the gap* preferred to *bridge the gap* in academic discourse although latter is recurrent in everyday language?


Corpus of Contemporary American English (COCA)

- Corpus with over 460 million words, with texts ranging from 1990 to the current year (they are updated annually)
- Covered genres: from spoken language and fiction to journalistic and academic
- www.americancorpus.org

Using COCA

- Main tool available on both sites is a **concordancer**
 - Brings you ALL occurrences in corpus of the word you are studying
 - Called KWIC (Keyword In Context) concordance, because word is shown in context

Let's use it!

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- **Sample words**
 - **Suggestions**
 - **See tutorials**

Resources for you

- **Scientific writing one-stop-shop**

<http://sciwrite1stopshop.blogspot.com.br/>

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