# Lingüística de corpus

Max Carey

Introducción a la lingüística aplicada

*"You shall know a word by the company it keeps"*
- J.R. Firth (1957:11)

23 de octubre de 2017

# Esbozo

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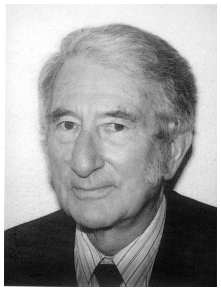
# J.R. Firth

J.R. Firth
Lingüísta inglés
1890-1960

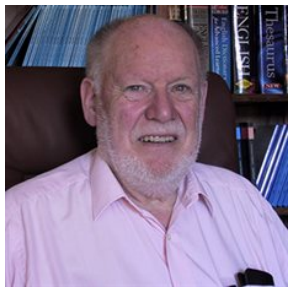
- Cabré and Lorente (2003): fundador del funcionalismo lingüístico
  - Incorporó las ideas del antropólogo Mainowski quien dijo: *"'el lenguaje no es un sistema en sí mismo (posición estructuralista extrema) sino que evoluciona por las demandas de la sociedad y su contexto"'* (11).
  - Se le atribuye ser el primero en estudiar colocaciones (Bartsch & Evert, 2014)

# Antecedentes históricas

J.R. Firth
Lingüísta inglés
1890-1960

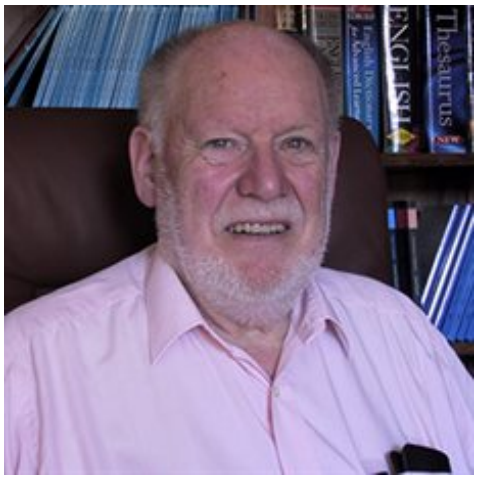


Michael Halliday
Fundador de la gramática sistémico funcional
1925-



John McHardy Sinclair
Fundador de la lingüística de corpus
1933-2007

# Sinclair




John McHardy Sinclair
Fundador de la lingüística de corpus
1933-2007

- Fundador del proyecto **COBUILD** (Collins and Birmingham University International Language Database)
  - Revolucionó la lexicógrafia (Fontenelle, 2011, p. 58)
- Famoso por dos principios de la lingüística de corpus
  - *the open choice principle*
  - *the idiom principle* Sinclair and Carter (2004)

# The Open Choice Principle

- [El libro de fonología variable de México]$_{\text{FN}}$ está sobre la cama.
  - que fue escrito por el lingüísta X
- [El libro de fonología introductoria]$_{\text{FN}}$ está sobre la cama.
  - que leímos para la clase de Fonética
- [El libro de fonología de las lenguas indígenas de México]$_{\text{FN}}$ está sobre la cama.
  - que se publicó en el Colegio de México

# Kahoot Question 1: The Idiom Principle

- Words tend to co-occur, so our lexicon is really composed of 'lexical bundles'.
  - Sinclair (39) calls these structures compound lexical items and he identifies the following component parts:
    - Collocation
    - Colligation
    - Semantic preference
    - Semantic Prosody
- Kahoot 1
- Let's run through Sinclair's analysis of the *true feelings* with the Corpus of Contemporary American English

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# True Feelings (Sinclair's Example p.35)

**Let's check out *True Feelings* with the Corpus of Contemporary American English**

- start with collocation: [true feelings]$_{\text{semantic core}}$
- List most frequent words that occur at n-1
  - [poss. adj.]$_{\text{colligation}}$ + [true feelings]$_{\text{s.c.}}$
- List common verb collocations in range n-4
  - [verb of expression]$_{\text{semantic preference}}$+ [poss. adj.]$_{\text{colli.}}$ + [true feelings]$_{\text{sc}}$
- Use KWIC to get semantic prosody
  - Semantic Prosody: Negative/Reluctance

**Final Lexical Bundle:**

[[[v. exp.]$_{\text{sem. pref.}}$+ [poss. adj.]$_{\text{colli.}}$ + [true feelings]$_{\text{sc}}$]$_{\text{sem pros: neg/rel.}}$]]

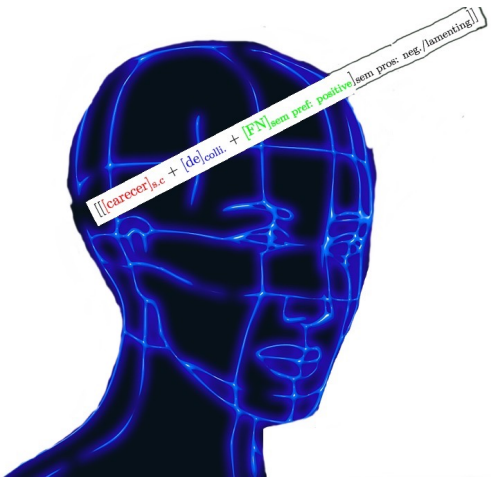
# Carecer - own analysis

**Vamos a analizar *carecer* con el Corpus de Español**

- Start with colligation/collocation: [carecer]$_{\text{semantic core}}$ + [de]$_{\text{colligation}}$
- List frequent noun collocations occurring in the range (n + 3)
  - [carecer]$_{\text{s.c}}$ + [de]$_{\text{colli.}}$ + [FN]$_{\text{semantic preference: something positive}}$
- What is the semantic prosody?
  - Kahoot Question 2

**Final Lexical Bundle:**

[[[carecer]$_{\text{s.c}}$ + [de]$_{\text{colli.}}$ + [FN]$_{\text{sem pref: positive}}$]$_{\text{sem pros: neg./lamenting}}$]]




- In academic blog post *Why Chomsky was wrong about corpus linguistics* Wallis (2016) explains theoretical clash with Sinclair.
  - Chomsky = I-language (linguistic competence) **not E-language**(linguistic performance)
  - Siclair: Build grammar from the **"bottom-up".**
- Today, few linguists rely on introspection and value-judgments; few applied linguistics lack theory in their analysis .

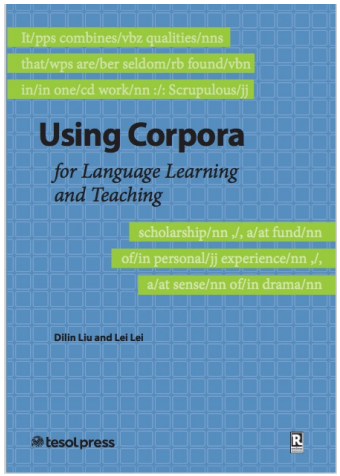
# Esbozo

# Types of Corpora

Table 1: Some Types of Corpora Listed By Adolphs (2011)

| **Type** | **Example** |
|---|---|
| Historical | Corpus diacrónico del español (CORDE) |
| Monitor | COCA, Corpus de Español |
| Learner | The International Corpus of Learner English |
| Parallel | Linguee.com |

# Language Teaching




Using Corpora for Language Learning and Teaching

(Liu & Lei, 2017)

- **Inductive** vs. **Deductive** Corpora Use in the Classroom
  - Inductive: Students "discover" the language patterns for themselves, engage in deep-learning
  - Deductive: Confirming or reinforcing what you already know (Come up with a small worksheet that students can fill out, completing some kind of information that they have)

# Language Teaching - Example 1

**Table 3.1 Common Collocations of *Make, Take, Do,* and *Have***

| Make | Take | Do | Have |
|---|---|---|---|
| *Make a case* | *Take a bath* | *Do business* | *Have an affair* |
| *Make a change* | *Take a break* | *Do chores* | *Have an accident* |
| *Make a choice* | *Take a bus/taxi* | *Do dishes* | *Have an argument* |
| *Make a commitment* | *Take a chance* | *Do drugs* | *Have a conversation* |
| *Make a contribution* | *Take a look* | *Do errands* | *Have difficulty* |
| *Make a decision* | *Take a nap* | *Do exercises* | *Have a dream* |
| *Make a difference* | *Take an offer* | *Do harm* | *Have experience* |
| *Make an effort* | *Take a rest* | *Do homework* | *Have a feeling* |
| *Make a living* | *Take a phone call* | *Do laundry* | *Have fun/a good time* |
| *Make a mistake* | *Take a shower* | *Do research* | *Have a look* |
| *Make a phone call* | *Take a test* | *Do things* | *Have a problem* |
| *Make progress* | *Take a walk* | *Do work* | *Have trouble* |

Table reproduced from (Liu & Lei, 2017, p.39)

- Is it easier to *make* or *take* something?
- Which verb is used with routines?
- What about have? Can you replace these verbs with another verb?

# Language Teaching - Example 2

- According to (Cowan, 2008) some phrasal verbs are separable: *set up, hand in, look up*
  - I set up [the machine]$_{\text{NP}}$
  - I set [the machine]$_{\text{NP}}$ up
- What can the following data tell us about separable phrasal verbs?

Table 2: set up + NP

| Rank | Example | Hits |
|---|---|---|
| 1 | SET UP THE TENT | 24 |
| 2 | SET UP THE SYSTEM | 20 |
| 3 | SET UP THE EQUIPMENT | 19 |
| 4 | SET UP THE MEETING | 18 |
| 5 | SET UP THE CAMERA | 17 |
| 6 | SET UP THE TELESCOPE | 10 |
| 7 | SET UP THE CONDITIONS | 9 |
| 8 | SET UP THE COURSE | 9 |
| 9 | SET UP THE GAME | 9 |

Table 3: set (NP) up

| Rank | Example | Hits |
|---|---|---|
| 1 | SET IT UP | 618 |
| 2 | SET ME UP | 241 |
| 3 | SET HIM UP | 235 |
| 4 | SET THEM UP | 194 |
| 5 | SET YOU UP | 185 |
| 6 | SET HER UP | 114 |
| 7 | SET HIMSELF UP | 110 |
| 8 | SET US UP | 87 |
| 9 | SET YOURSELF UP | 84 |

# Example 2 - All Data

## Table 4: set up + NP

| Rank | Example | Hits |
|---|---|---|
| 1 | SET UP THE TENT | 24 |
| 2 | SET UP THE SYSTEM | 20 |
| 3 | SET UP THE EQUIPMENT | 19 |
| 4 | SET UP THE MEETING | 18 |
| 5 | SET UP THE CAMERA | 17 |
| 6 | SET UP THE TELESCOPE | 10 |
| 7 | SET UP THE CONDITIONS | 9 |
| 8 | SET UP THE COURSE | 9 |
| 9 | SET UP THE GAME | 9 |

## Table 5: set + NP + up

| Rank | Example | Hits |
|---|---|---|
| 1 | SET THE CAMERA UP | 7 |
| 2 | SET THE LEVEL UP | 3 |
| 3 | SET THE COURSE UP | 3 |
| 4 | SET THE BATHROOM UP | 2 |
| 5 | SET THE BOAT UP | 2 |
| 6 | SET THE CONTRAPTION UP | 2 |
| 7 | SET THE COMPUTER UP | 2 |
| 8 | SET THE COMPANY UP | 2 |
| 9 | SET THE DOCTOR UP | 2 |

## Table 6: set + prn. + up

| Rank | Example | Hits |
|---|---|---|
| 1 | SET IT UP | 618 |
| 2 | SET ME UP | 241 |
| 3 | SET HIM UP | 235 |
| 4 | SET THEM UP | 194 |
| 5 | SET YOU UP | 185 |
| 6 | SET HER UP | 114 |
| 7 | SET HIMSELF UP | 110 |
| 8 | SET US UP | 87 |
| 9 | SET YOURSELF UP | 84 |

## Table 7: set + up + prn.

| Rank | Example | Hits |
|---|---|---|
| 1 | SET UP SOMETHING | 21 |
| 2 | SET UP EVERYTHING | 14 |
| 3 | SET UP YOU | * |
| 4 | SET UP HIMSELF | * |
| 5 | SET UP ONE | * |
| 6 | SET UP IT | * |
| 7 | SET UP I | * |
| 8 | SET UP WE | * |
| 9 | SET UP ANYTHING | * |

# Esbozo

# Building a local corpus

- You want your corpus to be representative
- Corpus can be scientific or practical
- Differences between Online and Offline Corpus

Table 8: Pros and Cons of Using a Local Corpus

| **Pros** | **Cons** |
|---|---|
| Flexibility, complex queries | Requires technical skill to preprocess data: |
| Control over data | Website owns data |
| Free | Pay for Premium Features |

# Software from Laurence Anthony

AntFileConverter

AntWordProfiler

AntConc

- Let's create our own corpus from PDF Files
- And see a practical application of AntConc

# Esbozo

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