

Evolving senses in dictionaries and corpora: a case study *avalanche*, *browse* and *flag*

Janet DeCesaris, Universitat Pompeu Fabra

Anna Tudela Isanta, Universitat Pompeu Fabra

Starting point

- A principal goal of lexicological and lexicographic research is to understand the mechanisms by which words change in meaning and how the resulting polysemy is represented in dictionaries
- Availability of data from large corpora has improved dictionaries, but by and large has not changed many of the fundamental characteristics of comprehensive monolingual dictionaries
- Methodologically, there is a place for case studies of a small number of words in corpus linguistics

Some characteristics of our view of the lexicon (Patrick Hanks, 2013)

- Words in isolation do not have meaning but rather meaning potential, which is borne out by corpus evidence.
 - As noted by Michael Rundell (*Macmillan English Dictionary*), this poses a serious challenge to traditional dictionary representation.
- Words often have secondary patterns of use that may usefully be categorized as metaphorical.
- Conventional metaphorical patterns can be recognized in corpora and contrasted with other uses of these words that are not metaphorical.

Possible ways of how to recognize a conventional metaphor (Hanks 2006)

1. Semantic class
2. Salient cognitive (or perceptual features)
3. Resonance
4. Collocation
5. Register and domain
6. Frequency

Words that are the object of study in this paper

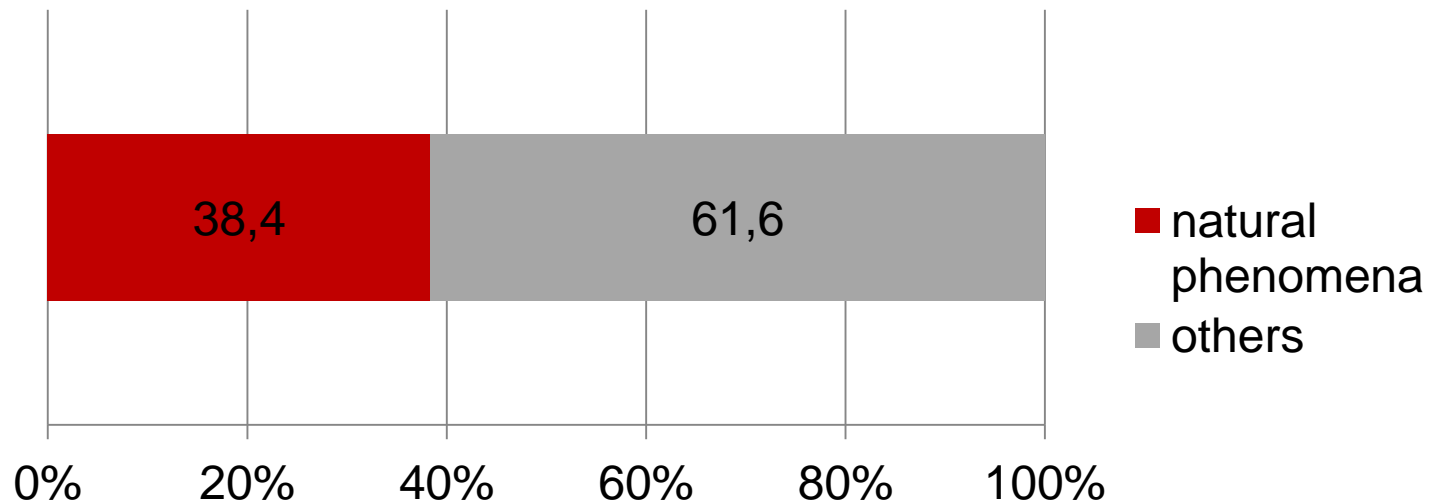
- avalanche
- browse
- flag

Methodology

Corpora	Dictionaries
COCA COHA EnTenTen	<i>American Heritage Dictionary</i> <i>Oxford Reference</i> <i>Merriam Webster</i> Merriam Webster Lerner's dictionary <i>The American College</i> <i>Dictionary</i> <i>Webster's Seventh New</i> <i>Collegiate Dictionary</i>

Avalanche (n). COCA

○ 2,246 tokens (COCA)



Avalanche of. COCA

- 491 tokens (COCA)
- Mostly related to documents, papers, emails, books, information or people.
 - Apparently not, judging by the *avalanche of applications* we received...
 - The 40th anniversary of The Rolling Stones has seen an *avalanche of publicity*...
 - The scattered *avalanche of rocks* shook trees...

Avalanche (n). Merriam-Webster's

¹ avalanche 

noun | av·a·lanche | \ 'a-və-ˌlanch \

Simple Definition of AVALANCHE

Popularity: Bottom 50% of words

: a large amount of snow and ice or of dirt and rocks that slides suddenly down the side of a mountain

: a sudden great amount of something

Full Definition of AVALANCHE

1

1 : a large mass of snow, ice, earth, rock, or other material in swift motion down a mountainside or over a precipice

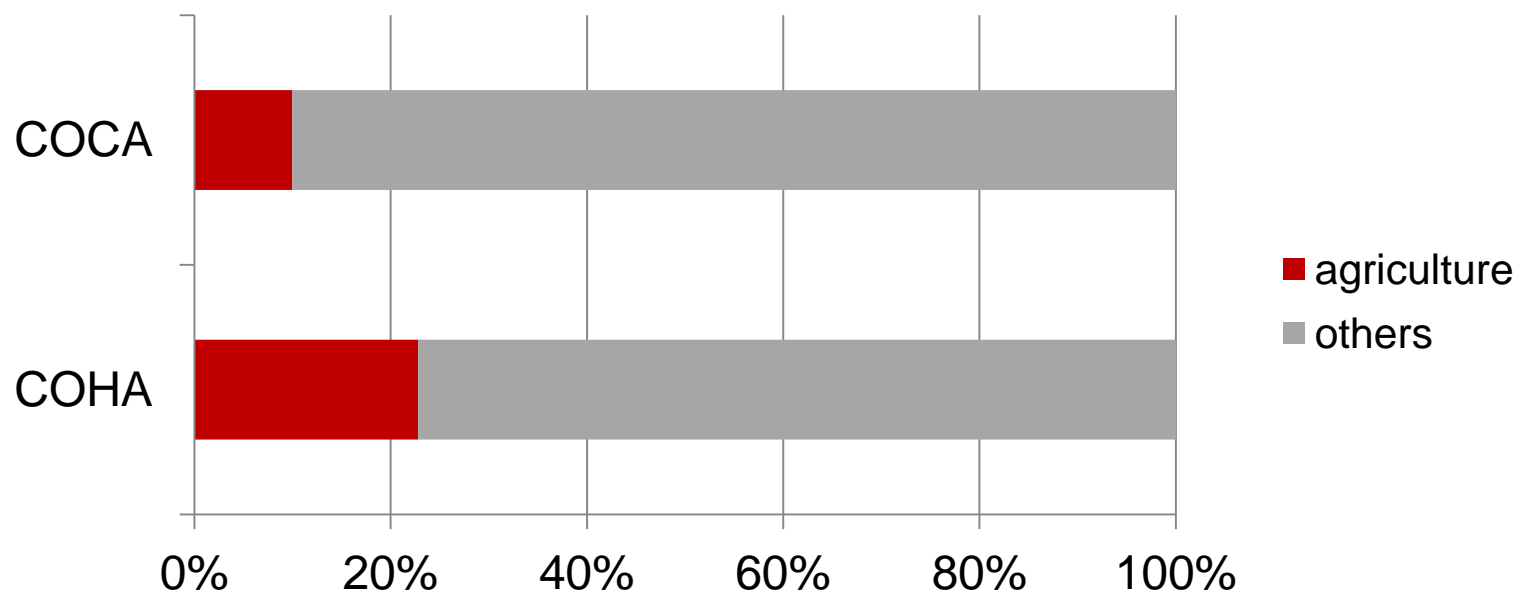
2

2 : a sudden great or overwhelming rush or accumulation of something <hit by an *avalanche* of paperwork>

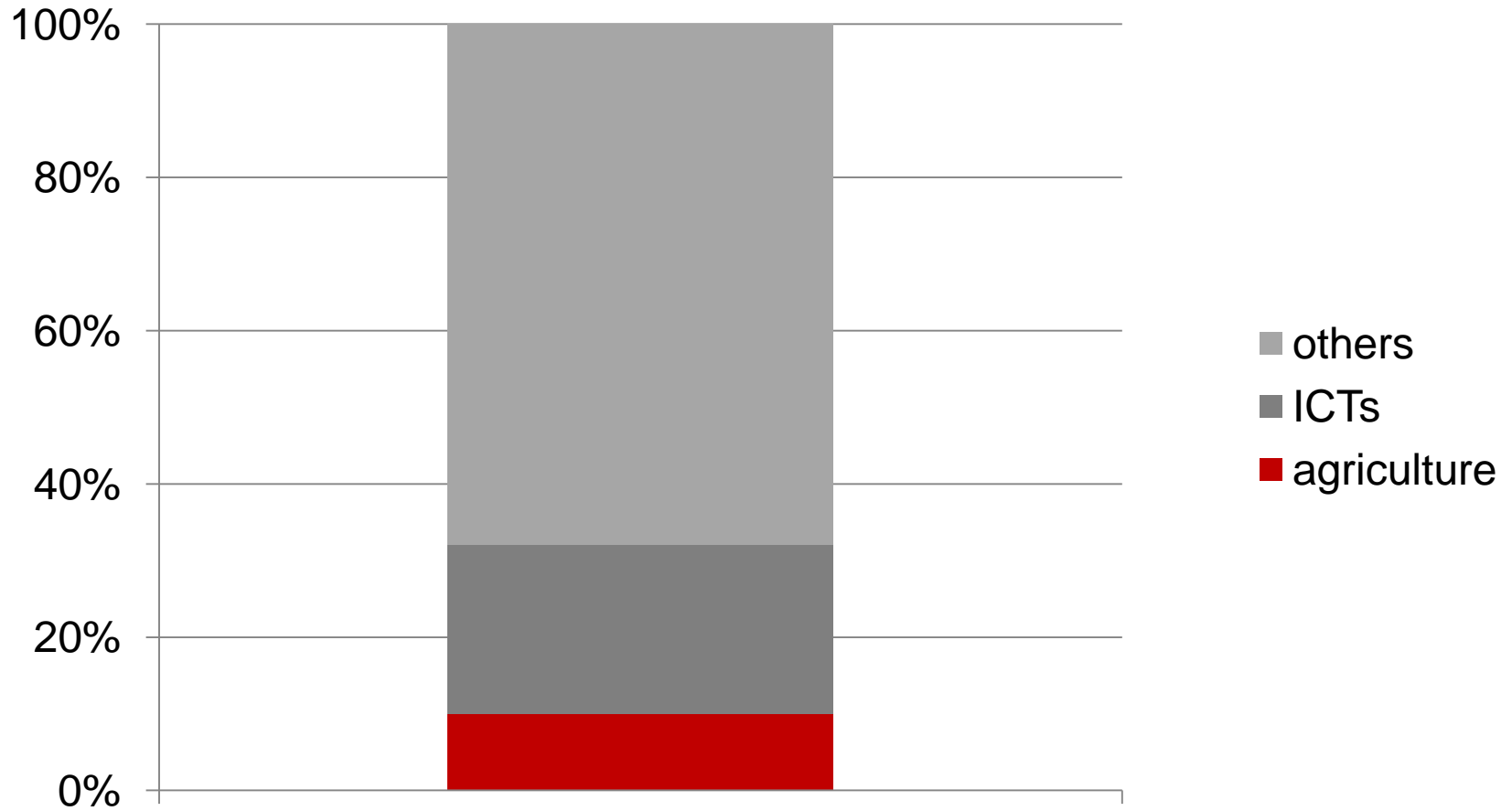
3 : a cumulative process in which photons or accelerated charge carriers produce additional photons or charge carriers through collisions (as with gas molecules)

Browse (v). COHA & COCA

- COHA: 329 tokens
- COCA: 1,301 tokens



Browse (v). COCA



IVACS Symposium January 22nd, 2016

IVACS Symposium

Browse (v). enTenTen

archive
net
Internet
catalog
web
catalogue
Web
archives
aisle
Tag

Browse (v). Merriam-Webster's

¹ browse 

verb | \ˈbraʊz\

Simple Definition of BROWSE

Popularity: Bottom 50% of words

- 1 : to look at many things in a store, in a newspaper, etc., to see if there is something interesting or worth buying
- 2 : to use a special program (called a browser) to find and look at information on the **Internet**
- 3 **of an animal**: to eat grass, plants, etc.

Browse (v). Oxford Dictionary of English

browse

▶ verb [no obj.]

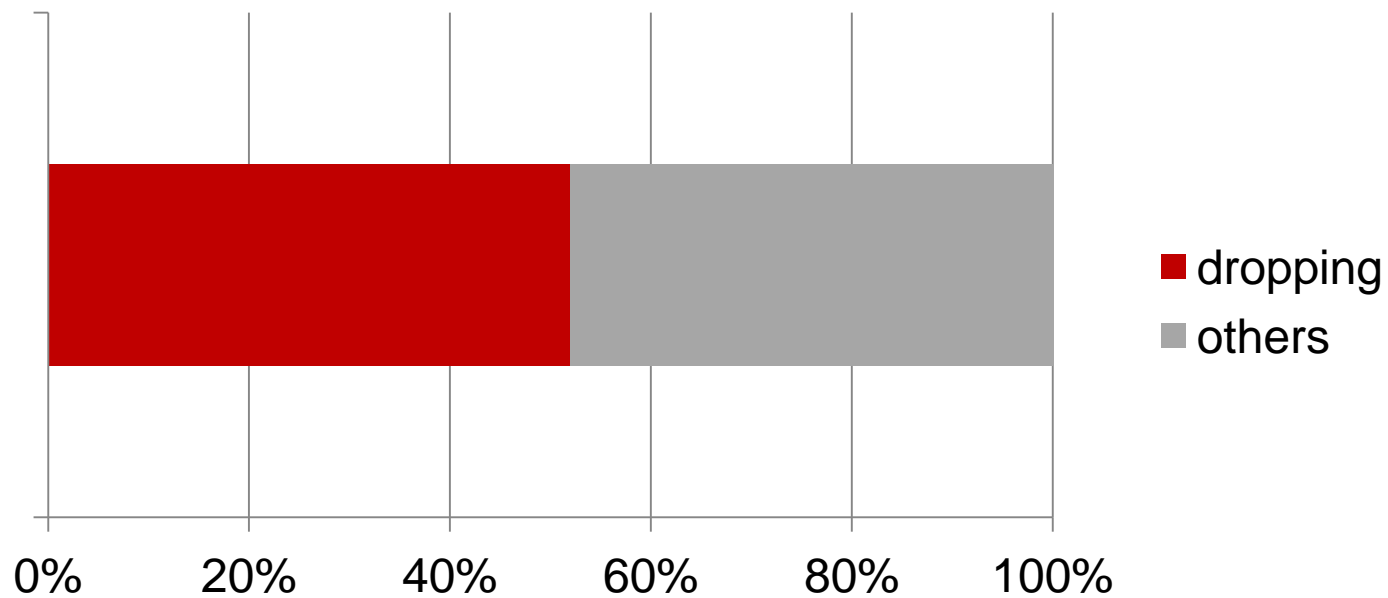
1 survey goods for sale in a leisurely and casual way: *he stopped to **browse around** a second-hand bookshop.*

- scan through a text, website, or collection of data to gain an impression of the contents: *she **browsed through** the newspaper* | [with obj.] : *I decided to spend the night browsing the Internet.*

2 (of an animal) feed on leaves, twigs, or other high-growing vegetation: *they reach upward to **browse on** bushes.*

Flag (v). COCA

○ 486 tokens



IVACS Symposium January 22nd, 2016

IVACS Symposium

Flag (v). Merriam-Webster's

⁴flag

verb

Definition of FLAG

flagged flag·ging

intransitive verb

- 1 : to hang loose without stiffness
- 2 **a** : to become unsteady, feeble, or spiritless
b : to decline in interest, attraction, or value <flagging stock prices>

Flagging economy

Google Books Ngram Viewer

Graph these comma-separated phrases:

case-insensitive

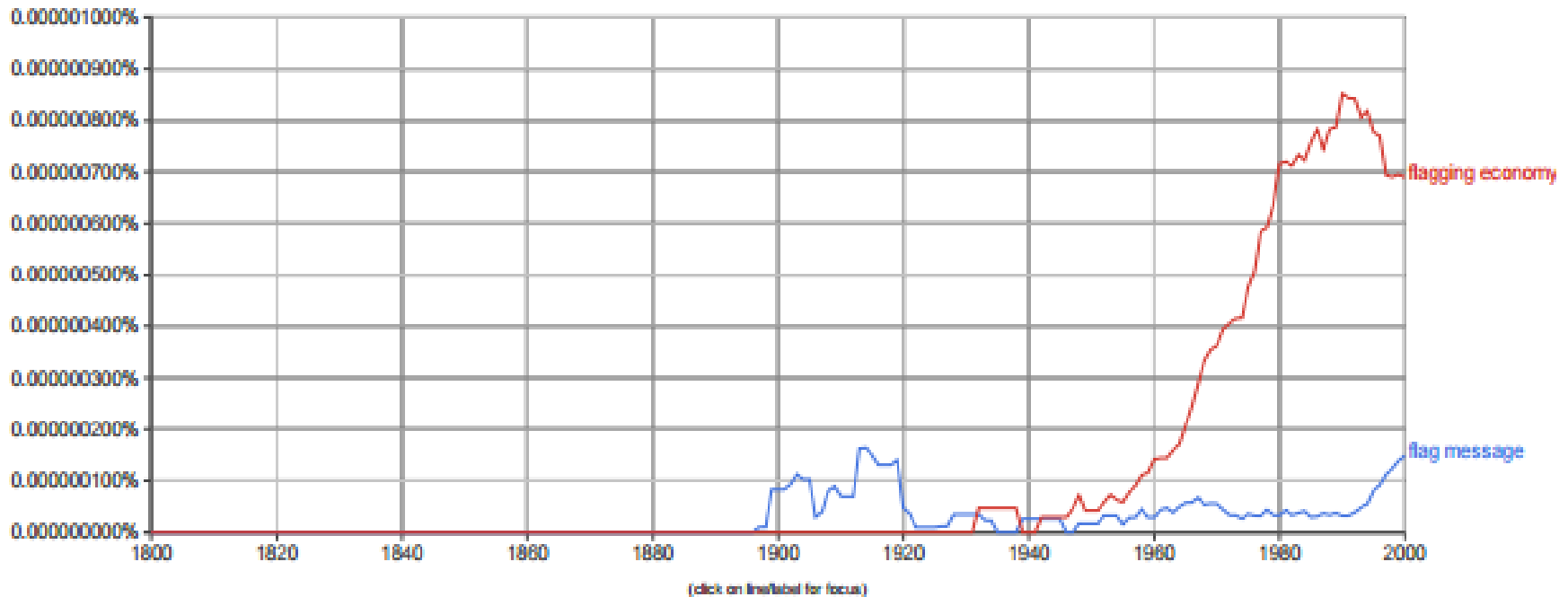
between and from the corpus with smoothing of

[Search lots of books](#)

[G+](#) [Compartils](#) [D](#)

[Tweet](#)

[Embed Chart](#)



IVACS Symposium January 22nd, 2016

Conclusions

- Some information we know is missing from the dictionaries
- Better semantic grouping needed
 - Especially of complements
- Explanation of extended senses in something other than a list
- Possibilities:
 - Metaphor boxes, like in *Macmillan English Dictionary*
 - Usage Notes, like in *American Heritage Dictionary*
 - Visual representation, like in Visual Thesaurus®
layered screens
 - Make the relationship between senses more explicit
- Consider homophony as opposed to polysemy

Thank you!