

Beyond intuitions, algorithms, and dictionaries: Historical semantics and legal interpretation

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Origins and kinds of meaning and interpretation

original (public) meaning, original intent, textualism, historicism, common law constitutionalism

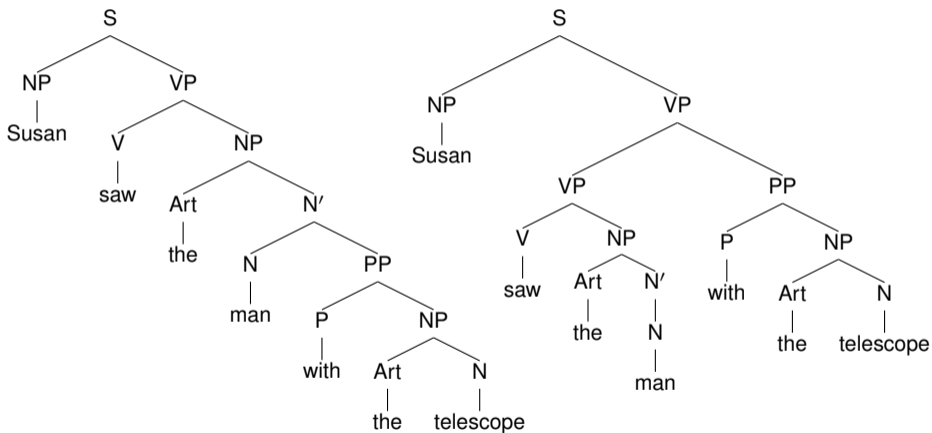
Three major questions of linguistics:

- (1) a. What do we know when we know a language? (What is knowledge of language?) Chomsky's I-language (vs. E-language)
- b. How is this knowledge acquired?
- c. How is this knowledge used?

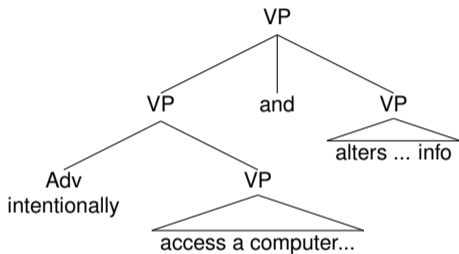
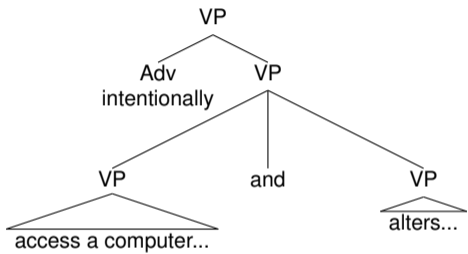
- (2) What do we know when we know a language?
- a. What the words mean
 - b. How words can be combined into phrases (including sentences)
 - c. And more ...



(3) Susan saw the man with the telescope.

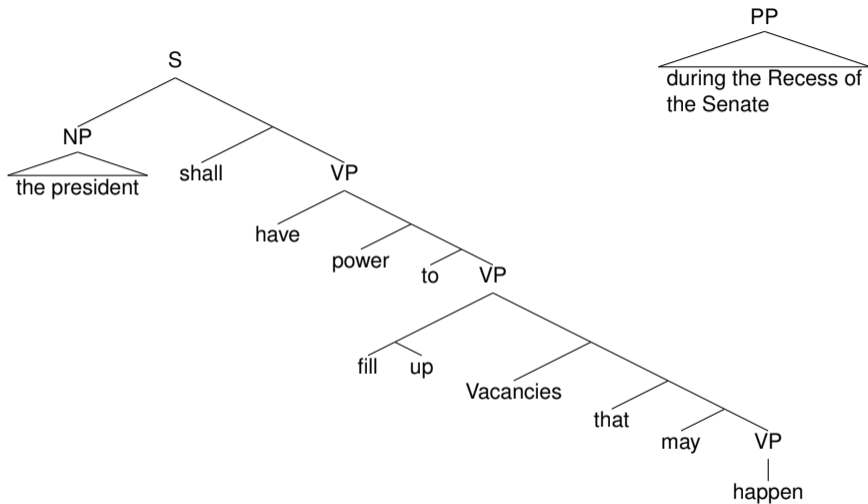


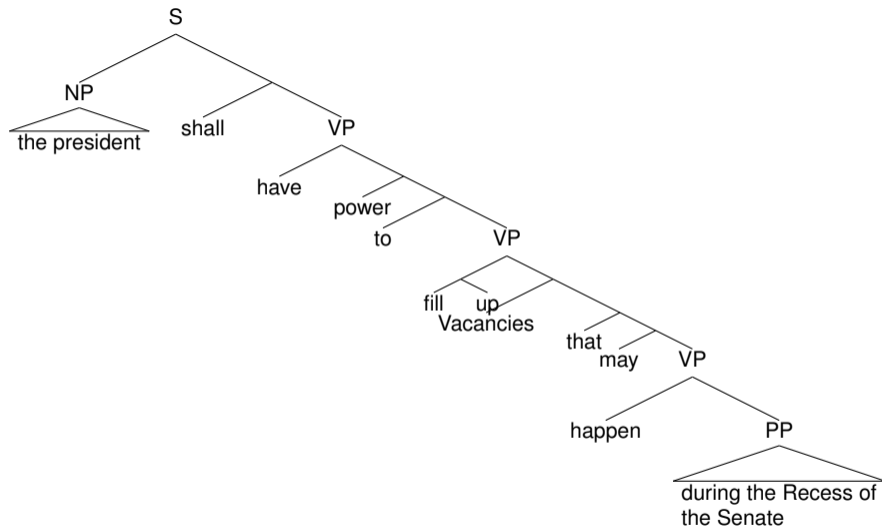
- (4) “this crime covers anyone who *intentionally* accesses a federal computer without authorization, and by means of one or more instances of such conduct alters, damages, or destroys information”
18 U.S.C. 1030(a)(5)(A) debated in *United States v. Morrison* (1991).
- a. Adverb [VP and VP]: **defense**
 - b. [Adverb VP] and [VP]: **prosecution**

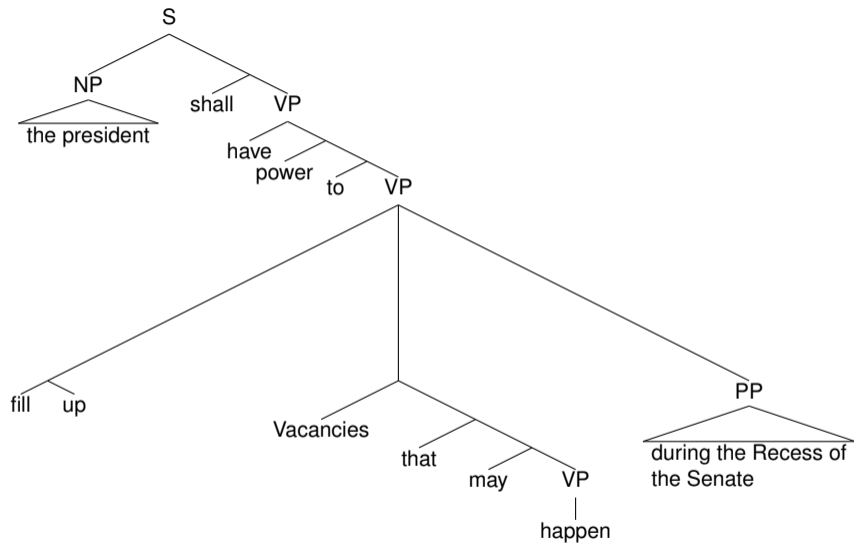


- US Constitution, Art.II, sect.2, clause 2:

*“He [the President] shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two thirds of the Senators present concur; and he shall nominate, and by and with the Advice and Consent of the Senate, shall appoint Ambassadors, other public Ministers and Consuls, Judges of the supreme Court, and all other Officers of the United States... The President shall have Power to fill up Vacancies that may happen **during the Recess of the Senate**, by granting Commissions which shall expire at the End of their next Session.”*





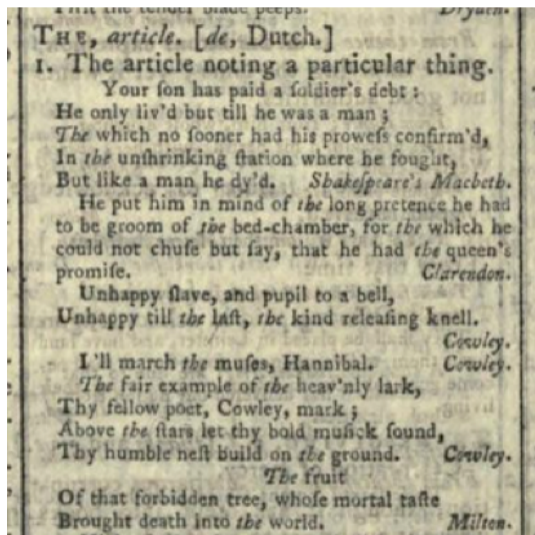


A clue to resolving the structural ambiguity:

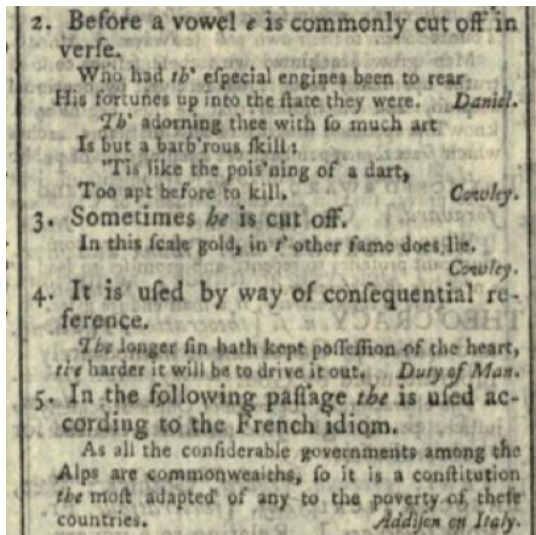
Compare Art. I sec. 3.2:

and if Vacancies happen by Resignation, or otherwise, during the Recess of the Legislature of any State, the Executive thereof may make temporary Appointments until the next Meeting of the Legislature, which shall then fill such Vacancies

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- US Court of Appeals DC in Noel Canning v. National Labor Relations Board (1115 DC Circuit 17, 27 (2013):
Contemporaneous dictionaries treated “the” as “noting a particular thing” Samuel Johnson, A Dictionary of the English Language 2041 (1755)



Samuel Johnson, *A Dictionary of the English Language* (1755)



Samuel Johnson, *A Dictionary of the English Language* (1755)

- Even if 'particular' = 'specific', specificity is neither necessary nor sufficient: definiteness \neq specificity (or exhaustivity, exclusivity, universal quantification, etc.).

Generics use definite articles:

- 1 The lion is a fearsome animal.
- 2 The madrigal is a polyphonic compositional form.
- 3 During the day, I allow my daughter to wear socks; at night, I don't.
Compare:
- 4 *During day, I allow my daughter to wear socks; at the night, I don't.

Bertrand Russell, “On denoting”, *Mind* (1905):

- (5) **The** king of France is bald =
 $\exists x[(KingOfFrance(x) \& \forall y(KingOfFrance(y) \rightarrow x = y)) \& Bald(x)]$

Table 1 Alternative lexical meanings for singular *the*

Label	Definition	Author(s)
$THE_{(et,et)}^{WF}$	$\lambda P . \lambda x . [\partial(P \leq 1) \wedge P(x)]$	Coppock and Beaver (2012b, here)
$THE_{(et,et)}^R$	$\lambda P . \lambda x . [P = 1 \wedge P(x)]$	Winter (2001), Fara (2001)
$THE_{(et,et)}^F$	$\lambda P . \lambda x . [\partial(P = 1) \wedge P(x)]$	Winter (2001)
$THE_{(et, \langle et,t \rangle)}^R$	$\lambda P . \lambda Q . [P = 1 \wedge P \subseteq Q]$	e.g. Partee (1986)
$THE_{(et, \langle et,t \rangle)}^F$	$\lambda P . \lambda Q . [\partial(P = 1) \wedge P \subseteq Q]$	e.g. Barwise and Cooper (1981)
$THE_{(et,e)}^F$	$\lambda P . \iota x P(x)$	Partee (1986), Elbourne (2012)
$THE_{(e,e)}$	$\lambda x . x$	Löbner (1985, 2011)

(6) What do these words mean?

a. ***peripatetic*** (rank order: 36555; 0.0000351%; 1 in 3.5 million words)

Example: “Little empirical data is available about the evolution and development of peripatetic communities, but it appears that many contemporary peripatetics evolved from hunter-gatherers, or nomadic pastoralists”

b. ***pecuniary*** (rank order: 22108; frequency: 0.000139%; 1 in 1 million words)

Example: “I will not protract these remarks on the subject of Mr. Micawber’s pecuniary affairs.”

(7) What do these words mean?

a. **bank** (rank order: 538; frequency: 0.0058%; 1 in 20,000 words)

Examples: “the tree was on the river’s left bank”, “she put her money in the bank”

b. **set** (rank order: 189; 0.033%; 1 in 3300 words)

Examples: “set theory”, “a desk set”, “game, set, match”, “set the table”, “ he was set up”, “he set the papers on the desk”, “a TV set”

c. **the** (rank order: 1; frequency: 5.0306%; 1 in 20 words)

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Historical patterns in the use of the definite article: Data from Google's n-gram corpus



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without the consent of
without consent of



with the consent of
with consent of



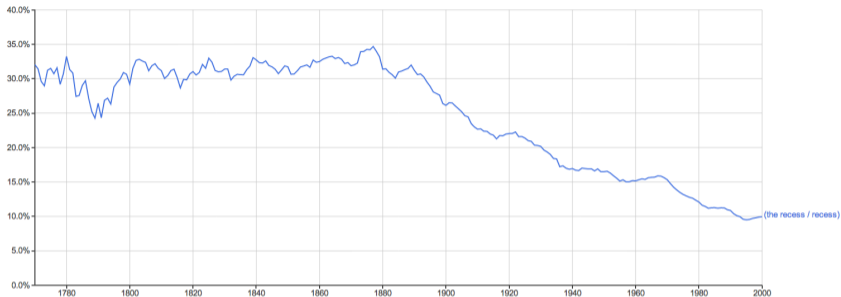
for the love of
for love of



during the recess
 during recess



Proportion of occurrences of 'during the recess' to all occurrences of 'during (the) recess'



Proportion of occurrences of 'the recess' to all occurrences of 'recess'

Therefore, the appellate court's opinion regarding the meaning and use of 'the' may rest on a serious descriptive error.

Higher stakes:

- D.C. v. Heller 2008
- McDonald v. Chicago 2010

2nd Amendment:

- (10) A well regulated militia being necessary to the security of a free state, the right of the people to keep and bear arms shall not be infringed.

Questions:

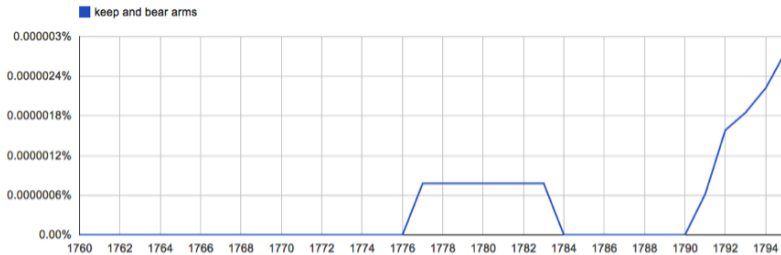
- (11) a. Is 'bear arms' an idiom?
b. Can other objects appear with 'bear'?
c. Does the subject of 'bear arms' always have to denote a collectivity?
d. Does the subject always have to be plural?

2nd Amendment:

(12) A well regulated militia being necessary to the security of a free state, the right of the people to keep and bear arms shall not be infringed.

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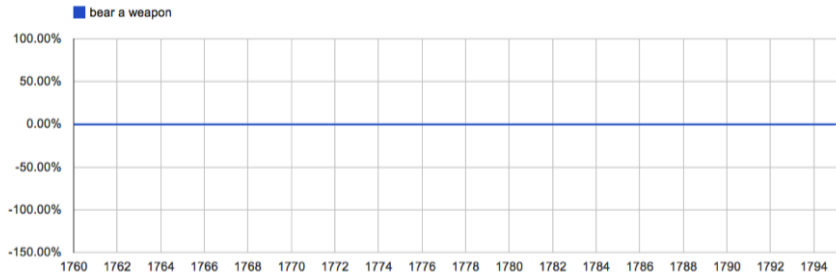
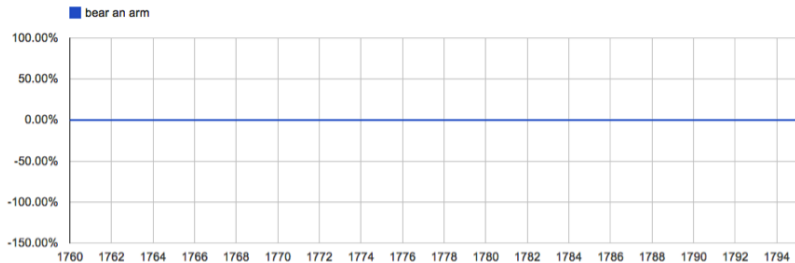
- (13)
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Graph these comma-separated phrases: case-insensitive

between and from the corpus with smoothing of [Search lots of books](#)





Likewise 0% for

- (14) a. bear a rifle
- b. bear a musket
- c. bear a pistol
- d. bear a weapon
- e. bear a knife
- f. bear rifles
- g. bear muskets
- h. bear pistols
- i. bear weapons

Other uses of *arms*:

- (15) a. Put me under arms = make me a soldier
- b. be under arms = be in a militia/army
- c. be at arms = be armed/be equipped for military duty
- d. take arms against (a sea of troubles)

Google Books search 1 Jan 1760-31 Dec 1795: 181 results

We classified by hand each text in the selections as either showing a militia/collective use or an individual use or undeterminable (*C* vs *I* vs *U*). We also counted the number of plural vs singular subjects, or undeterminable (*p* vs *s* vs *u*). A last category was for heraldic uses (*H*).

1. Common sense; addressed to the inhabitants of America [by T. ...
<http://books.google.com/books?id=1YhbAAAAQAAJ&pg=PA93&dq=%22bear+arms%22&hl=en&sa=X&ei=BucQU5SIdoTW2gXm7oDYDw&ved=0CC0Q6wEwADhk>
books.google.com/books?id=1YhbAAAAQAAJ
Thomas Paine - 1776 - [Read](#) - [More editions](#)
Wherefore, if ye really preach from conscience, and mean not to make a political hobby-horse of your religion, convince the world thereof, by proclaiming your doctrine to our enemies, for they likewise **bear arms**. Give us proof of your sincerity ...
Cp
2. The New Universal Traveller: Containing a Full and Distinct ...
<http://books.google.com/books?id=WK8-AAAAcAAJ&pg=PA551&dq=%22bear+arms%22&hl=en&sa=X&ei=BucQU5SIdoTW2gXm7oDYDw&ved=0CDMQ6wEwAThk>
books.google.com/books?id=WK8-AAAAcAAJ
Jonathan Carver - 1779 - [Read](#) - [More editions](#)
In this town is a barrack for two companies of foot; and at the arrays in 1746, here were a thousand protestants fit to **bear arms**. Four miles from Youghal stands Killeigh, a small village, where was a nunnery of canonesses, founded by St.
Cp

The History of Great Britain, from the First Invasion of it by the Romans, 2nd edition, 1788, Volume 4, p. 142, by Robert Henry (Collective Singular):

Slaves not
permitted
to bear
arms.

As the bearing of arms was esteemed the most honourable of all employments by the Anglo-Saxons, and all the other nations of Europe in this period, their numerous slaves were excluded from that honour, and from all military services, except in cases of the greatest national distress and danger¹¹³. But when a slave was made free, a spear was put into his hand as one mark of his freedom, and he was thenceforward permitted to bear arms, and subjected to military services¹¹⁴.

Settlements in America, 1779, p. 175 (Collective Singular):

SETTLEMENTS IN AMERICA. 175

nence, he is exposed to the scorching heat of the sun, the intense frosts of the night, or the bloody stings of insects, he would be declared incapable and unworthy to bear arms. Are our militias and armies formed in this manner? On the contrary, what a mournful and ominous ceremony is ours! Men who have not been able to save themselves, by flight, from being pressed into the service, or could not pro-

7. → [The Works of the English Poets: With Prefaces, Biographical ...](#)



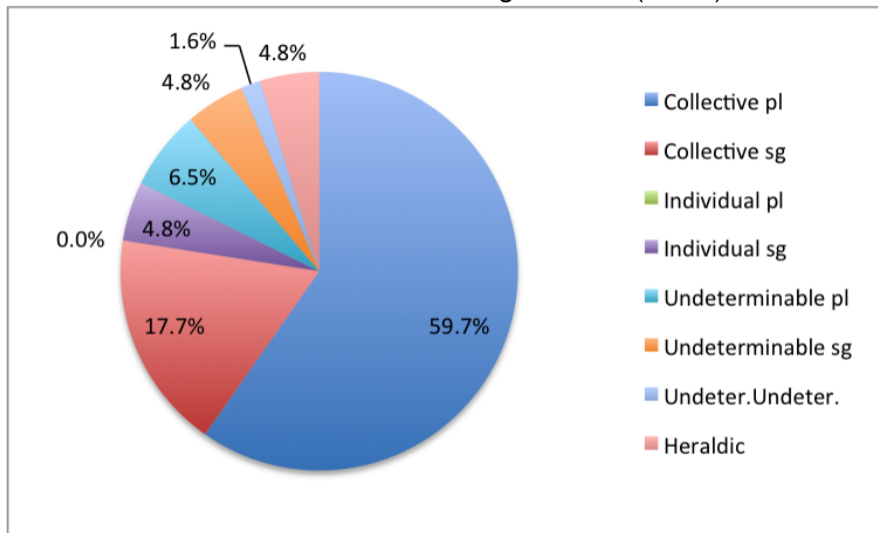
books.google.com/books?id=GWroQteiSZ4C

Samuel Johnson -- 1779 -- [Read](#) -- [More editions](#)

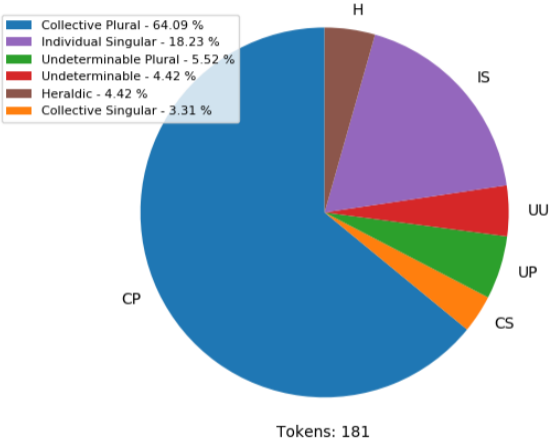
I'll fire his blood, by telling what I did When I was strong, and able to bear arms.

Is

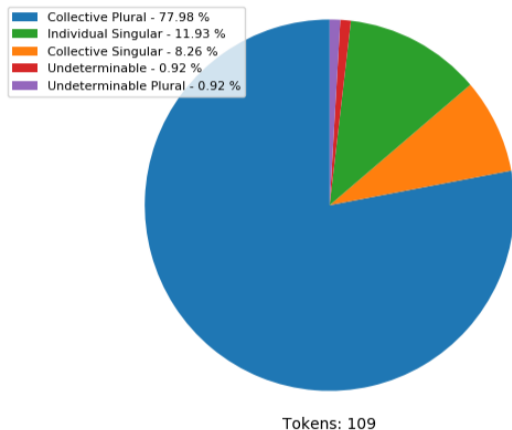
Uses of 'bear arms' 1781-1788 in Google Books (N=62)



Uses of 'bear arms' 1760-1795 in Google Books (N=181)



Newspaper corpus, 1760-1795 (sampled from 1013 tokens)



America's Historical Newspapers (Readex)

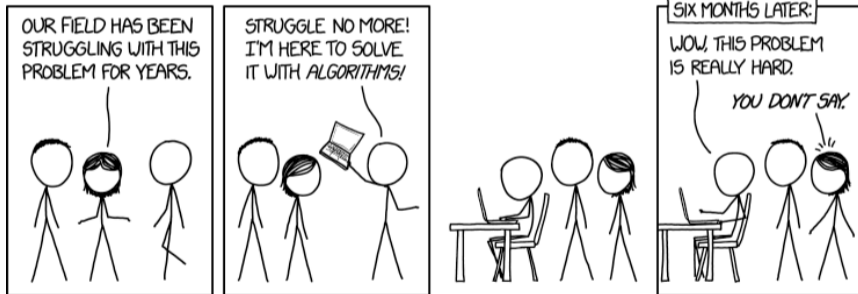
The ineluctability of interpretation

tools and their limits

the illusion of authority

automaticity of decision

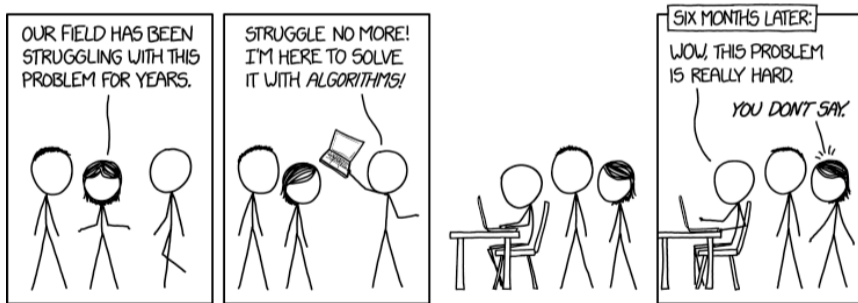
the algorithmic umpire remains a myth:



Mouseover text: She: "We told you it was hard." He: "Yes, but now that I'VE tried it, we KNOW it's hard."

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