

# Making Open the Norm: Advancing Open Access Through Language

Melissa H. Cantrell, University of Colorado Boulder  
Lauren B. Collister, University of Pittsburgh



University Libraries  
UNIVERSITY OF COLORADO **BOULDER**



Center for Research Data & Digital Scholarship  
UNIVERSITY OF COLORADO **BOULDER**



University of  
**Pittsburgh** | Library System

Slides: <https://bit.ly/ucbs1119>

# Where it started

Original inquiry:

Why is there so much variation in definitions of Open Access?

## **ProQuest:**

Open Access is a term used to describe content that a reader can access free of charge

## **SPARC:**

Open Access is the free, immediate, online availability of research articles coupled with the rights to use these articles fully in the digital environment

## **ACRL:**

Open Access literature is digital, online, free of charge, and free of most copyright and licensing restrictions

Our first paper:

## “The Status Quo Bias and the Uptake of Open Access”


Status Quo Bias: people’s tendency to “favor existing and longstanding states of the world” (Eidelman & Crandall 2012)

Which is triggered through...

Cognitive Load: “the effort and mental activity imposed on a person’s ability to process information” (Hagedoorn & Hesen 2009)

Eidelman, S. & Crandall, C.S. (2012). Bias in favor of the status quo. *Social and Personality Psychology Compass* 6(3), 270–281.  
DOI: 10.1111/j.1751-9004.2012.00427.x

Hagedoorn, J. & Hesen, G. (December 2009). Contractual complexity and the cognitive load of R&D alliance contracts. *Journal of Empirical Legal Studies*, 6 (4), 818-847. DOI: 10.1111/j.1740-1461.2009.01161.x

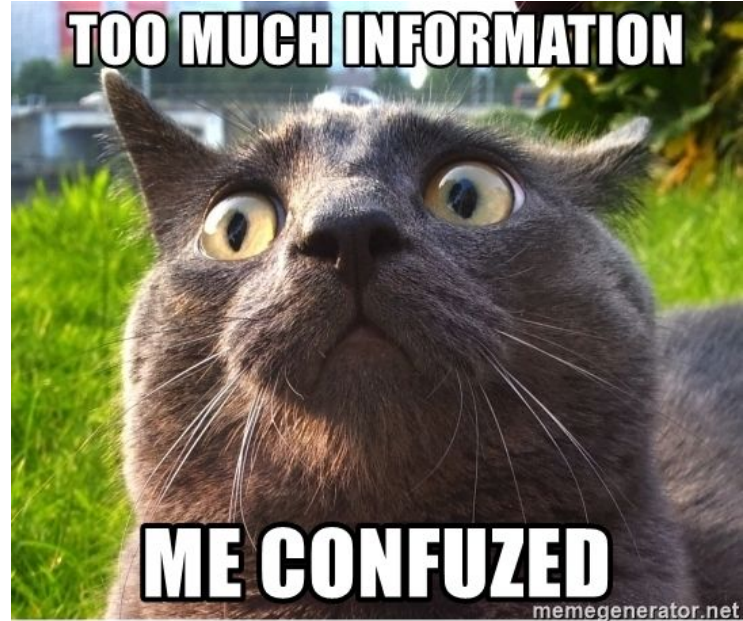


I'm experiencing  
increased  
cognitive load

I'm sticking  
with my  
usual -  
"status quo!"

# Contributors to Cognitive Load (and thus, status quo bias)

1. Complexity of language
2. An abundance of choices and alternatives
3. Conflicting information



# Testing for complexity

We used the **textstat** package in Python to test for complexity of texts gathered from open access information pages from publishers, libraries, and advocacy organizations.

All data and code are available at <https://github.com/parnopaeus/oalanguage/>

```
In [66]: import textstat
```

```
In [67]: for (pubname, pub) in publist_cleaned:
          print(pubname+",", textstat.lexicon_count(pub, removepunct=True),",", textstat.sentence_count(pub))
```

```
ACRL, 3085 , 52
BOAI, 8889 , 255
BRILL, 2219 , 94
ELSEVIER, 6547 , 111
SPRINGER, 4147 , 86
SAGE, 2921 , 122
IOP, 2228 , 49
CAMBRIDGE, 1586 , 59
```

Source	SMOG Index	Flesch Reading Ease Score	Combined Grade Level
ACRL	24.6	-115.6	25
CORNELL U.	24	-11.6	24
DEGRUYTER	Invalid	-212	22
SHERPA	18.9	-22.6	27
RIGHT TO RESEARCH	25.4	-22.2	17
WIKIPEDIA	21.9	2.3	24
SPRINGER	20.1	14.1	23
OASIS	19.5	-14.2	20
WILEY	Invalid	-14.7	20
IOP	18.6	25.3	21
NATURE	18.2	22.6	18
OXFORD	17.1	10.1	18

Beyond Post-Graduate
Post-Graduate
Graduate
College
High School

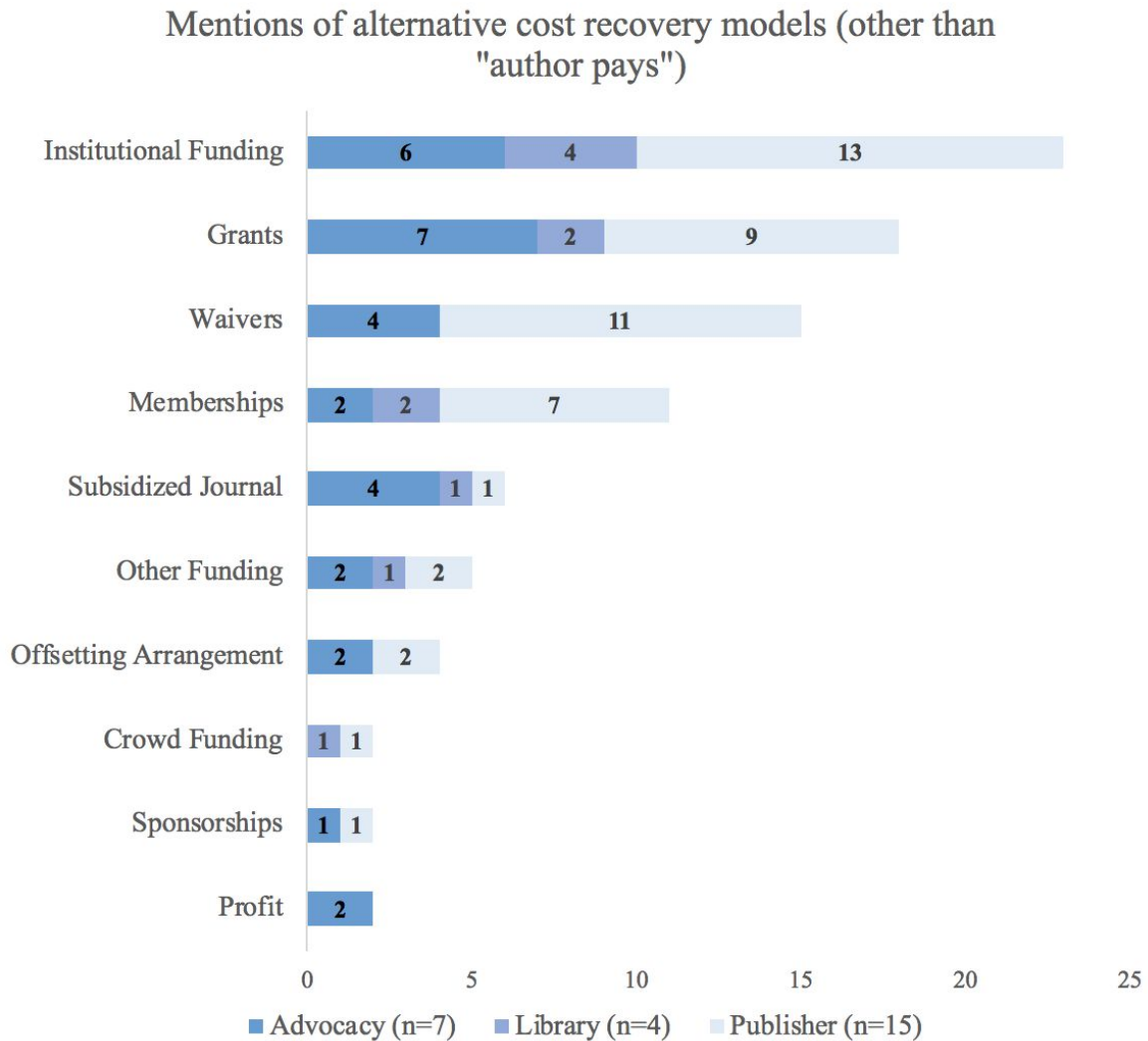
The complexity of all of the web page samples was very high.  
This image shows just the top 12 in complexity rankings.

# Choices and Alternatives

	<b>Author Always Pays</b>	<b>Author Usually Pays</b>	<b>Author Sometimes Pays</b>
<b>Choice Language Used</b>	Oxford UP Nature Wiley BMJ SAGE ProQuest	Springer Cambridge UP Taylor & Francis Brill Cornell Libraries	Elsevier IOP Publishing DeGruyter Right to Research Coalition MIT Libraries OASIS Wikipedia Harvard Libraries
<b>Choice Language Not Used</b>	Hindawi SHERPA PLoS One	ACRL	Harvard Libraries Peter Suber Overview BOAI KU Libraries



# Choices and Alternatives



As these themes emerged, a new question arose:

If language about open access can trigger the status quo bias...

What are the features of bias in the text that cause this to happen...

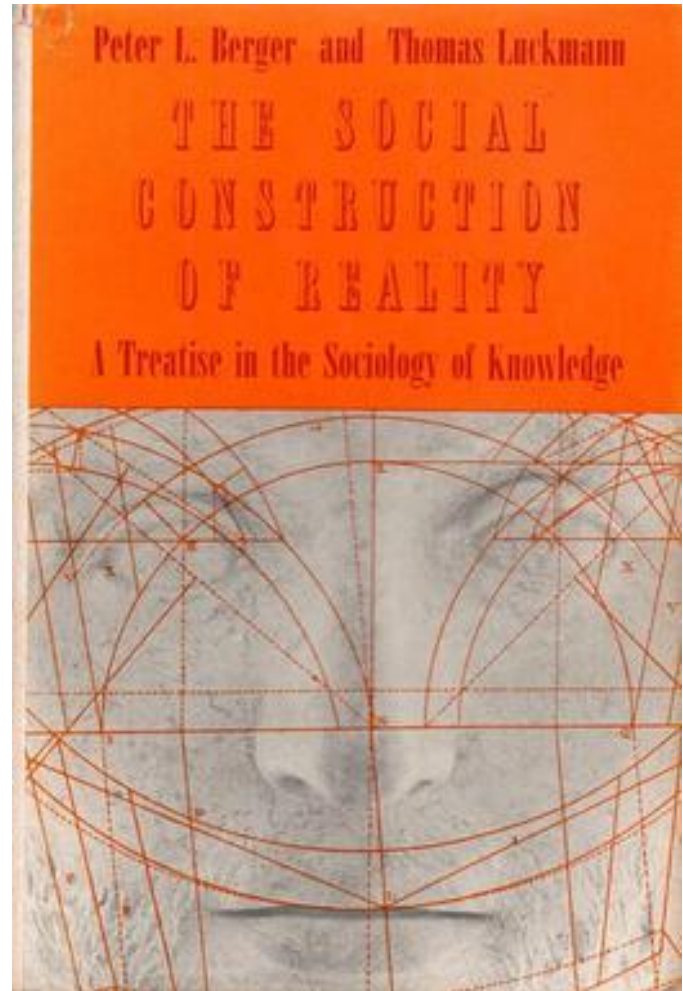
And what changes can WE make to reduce the overall effects of that biased language?

Enter Social Construction Theory

# Berger & Luckmann (1966)

## *The Social Construction of Reality*

- Society and accepted norms are created by humans through interaction with other humans through **habitualization**
  - Habitualization: actions repeated frequently that become “cast into a pattern” to be performed again in the future.
- Not only do we create our society through habitualization, but we **accept** it as it is because others have created it before us.
- Norms are created by other people before us, and exist only through collective agreement.
- It becomes implanted in society through this agreement, which is the process of **institutionalization**.



# Example: American Football



A close-up of Morpheus from The Matrix, wearing his signature sunglasses. The reflection in the lenses shows two figures in a dimly lit room. The background is a blurred, industrial-looking environment.

**WHAT IF I TOLD YOU**

**REALITY IS SOCIALLY CONSTRUCTED**

# Patchy Endorsements





# Like social construction?

Try these:

**Introductory:** [OpenStax “Introduction to Sociology 2e” Chapter 4.3.](#)

**Language:** Searle, J. R. (1995). *The Construction of Social Reality*. Simon and Schuster.

**Identity and intervention:** Rand, E. J. (2014). *Reclaiming Queer: Activist and Academic Rhetorics of Resistance* (First edition). University Alabama Press.

**Mind-blowing social construction:** Yeh, H.Y. (2016). Classification of Edibility and Inedibility: Unveiling the Sociomental Logics beneath Food Habits. *Theory in Action*, 9(4), 22–41. <https://doi.org/10.3798/tia.1937-0237.16023>



# Methodology

1. Selected our own institutions' websites that talk about Open Access
  - a. 7 pages total
2. Coded the text according to linguistic practices that increase cognitive load and status quo bias (from 1st paper)
3. Developed four interventions based on recommendations from the literature

# Four Interventions

# Four Interventions

One and Two: Centering Open Access through  
Word Choice and Word Order

Start using the term “Subscription Publishing”

Using words like “traditional” is value-laden, and indexes establishment and authority.

Not labeling one with an adjective says it’s the default.



Linguistic term: *markedness*

“Unmarked” terms are seen as default, e.g. female doctor (“marking” this with *female* implies that doctors are default male)

# Examples

Journals/Open Access Journals

Conventional publishing

Traditional publishing

Standard mode of publishing

New models of publishing

Optional Open Access Publishing

Use instead...

Subscription Journals/Open Access Journals

Subscription Publishing

Open Access Publishing

Hybrid Publishing

Eliminate the words “alternative,” “new” or “choice” when describing Open Access

“New” often = Risky

Behaviors perceived as risky increase cognitive load



# Examples

From our research...

Alternative Access

Alternative pay models

Options for Open Access

Chooses to publish Open Access

The choice to pay a publication charge

Open Access as a “movement”  
“gaining steam” vs. “traditional publishing”



# Try instead...

Open Access

Methods of access/payment

Open Access licenses

Publishes Open Access

Incurs/Involves a publication charge

Another easy one: Pay particular attention to what comes first or last in your lists

Cognitive load increases with more options.

Recency effect: People tend to remember the most recent thing they heard (e.g. the last item in a list). (Hu et al. 2016)

Primacy effect: The first item in a list influences how other things in the list are perceived. (Sullivan 2019)



# Examples

From our research...

“...scrutinize open access journals in terms of **status**, scope, suitability, publication speed, Impact Factor, article-level metrics, archiving policy and availability in **indexing services**.”

# Try instead...

“...scrutinize open access journals in terms of **scope**, status, publication speed, Impact Factor, article-level metrics, archiving policy availability in indexing services, and **suitability**.”

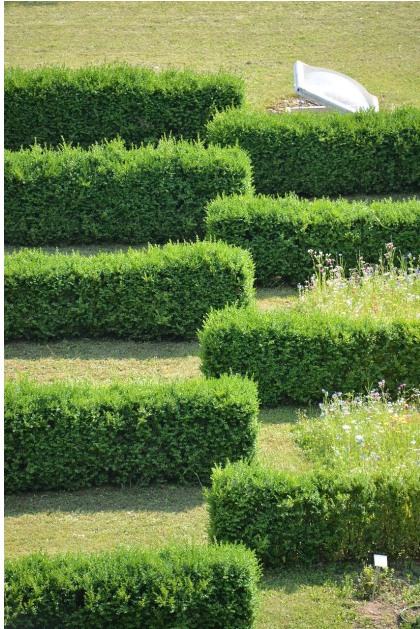
# Four Interventions

Three and Four: Reducing Uncertainty Caused  
by Hedging and Complex Language

## 3 Avoid Hedging

# Don't use squishy language!

“Squishy language” = imprecise language that can lead to confusion about meaning!



Linguistic term: *hedge*

Implies uncertainty -> implies risk -> bias to status quo

Hedges are obstacles to understanding and increase cognitive load!

## 3 Avoid Hedging

# Examples

From our research...

“Publishing OA also means published research can generally be re-used by third parties with few, or no, restrictions.”

“Open access literature is digital, online free of charge, and free of most copyright and licensing restrictions.”

## 3 Avoid Hedging

Try instead...

“Publishing OA also means published research can be re-used by third parties with attribution.”

“Open access literature is digital, online free of charge, and reusable with attribution.”



## 3 Avoid Hedging

### Avoid unnecessary disclaimers!

Some disclaimers are necessary, e.g. “funding of Open Access journal article fees does not imply endorsement of the research”.

Others introduce connections & doubt where none may have existed by trying to predict concerns.



# Examples of unnecessary disclaimers



## 3 Avoid Hedging

“Open access does not mean an open door for publication.”

“All major OA initiatives for scientific and scholarly literature insist on the importance of peer review.”

## 3 Avoid Hedging

# Try instead...



Removing these things from  
your writing.

## 4 Simplify!

Check the Readability Score of your writing about OA (or anything really!)

Reduce complexity wherever possible.

This includes qualifiers, hedging, and excess information  
Resources:

Microsoft Word

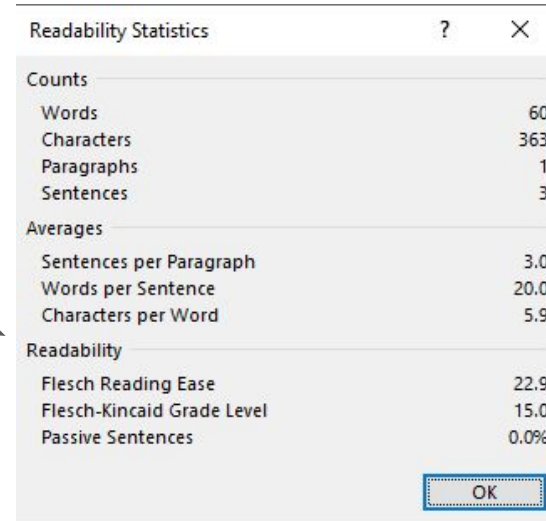
[Readable](#) (online)

[Grammarly](#) (online)

[Textstat](#) (python)

many more!

use "Check Document"



Readability Statistics	
<b>Counts</b>	
Words	60
Characters	363
Paragraphs	1
Sentences	3
<b>Averages</b>	
Sentences per Paragraph	3.0
Words per Sentence	20.0
Characters per Word	5.9
<b>Readability</b>	
Flesch Reading Ease	22.9
Flesch-Kincaid Grade Level	15.0
Passive Sentences	0.0%
OK	

## 4 Simplify!

# Example

From a library's guide on Open Access



Open access (OA) refers to freely available, digital, online information. Open access scholarly literature is free of charge and **often carries less restrictive** copyright and licensing barriers than **traditionally** published works, **for both the users and the authors. While OA is a newer form** of scholarly publishing, **many** OA journals comply with **well-established** peer-review processes and **maintain** high publishing standards.

## 4 Simplify!

# Try instead...



Open Access is the free, immediate, online availability of research works coupled with the rights to use the work fully in the digital environment.

- SPARC

## 4 Simplify!

Descriptive terms are more useful for those not working in scholarly communication

# Example



Green OA

Gold OA

Hybrid OA

Gratis OA

Libre OA

Bronze OA

Diamond OA

Descriptive terms are more useful for those not working in scholarly communication

# Try instead...

4 Simplify!

Green OA = Self-archiving

Gold OA = OA Journal publishing

Hybrid OA = OA Publishing in a Subscription Journal

Gratis OA = “Free” article

Libre OA = “Free” article + reuse permissions

Bronze OA = Free to read, no license

Diamond OA = OA Journal publishing without charges



# Try your hand...

What are the issues with this text and how could it be improved?

“Open Access, which is gaining steam, is compatible with copyright, peer review, revenue (even profit), print, preservation, prestige, quality, career-advancement, indexing, and other features and supportive services associated with conventional scholarly literature.”

# Try your hand...

What are the issues with this text and how could it be improved?

“Open Access, which is *gaining steam*, is compatible with **copyright**, **peer review**, **revenue (even profit)**, **print**, **preservation**, **prestige**, **quality**, **career-advancement**, **indexing**, *and other features and supportive services associated with* **conventional** scholarly literature.”

# Why this is important

The HOW of messaging is just as important as the WHAT.

These are all small changes, but by collectively committing to reframing scholarly publishing and destabilizing subscription publishing as the norm, we can work towards a better and more open future for scholarly publishing.



# Find out more...

*Paper #1 (lots more literature on cognitive load, status quo bias):*

<https://doi.org/10.5210/fm.v24i7.10089>

*Github (data and code):*

<http://bit.ly/sqboagithub>

*Contact:*

Melissa Cantrell: [melissa.cantrell@colorado.edu](mailto:melissa.cantrell@colorado.edu)  @mhcantrell1904

Lauren Collister: [lbcollister@pitt.edu](mailto:lbcollister@pitt.edu)  @parnopaeus

*Slides:*

<https://bit.ly/ucbs1119>

# Attribution

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