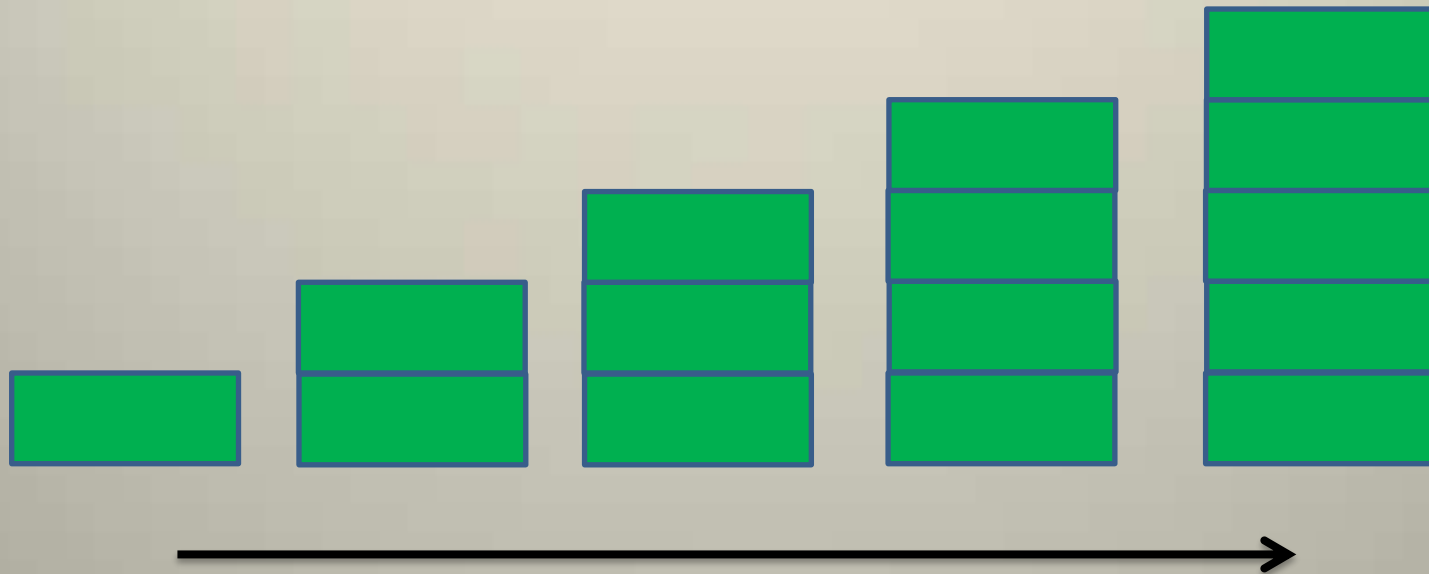


**“Imagine a world in which  
every single human being  
can freely share in the  
sum of all knowledge.  
That's our commitment.”**

# Some themes

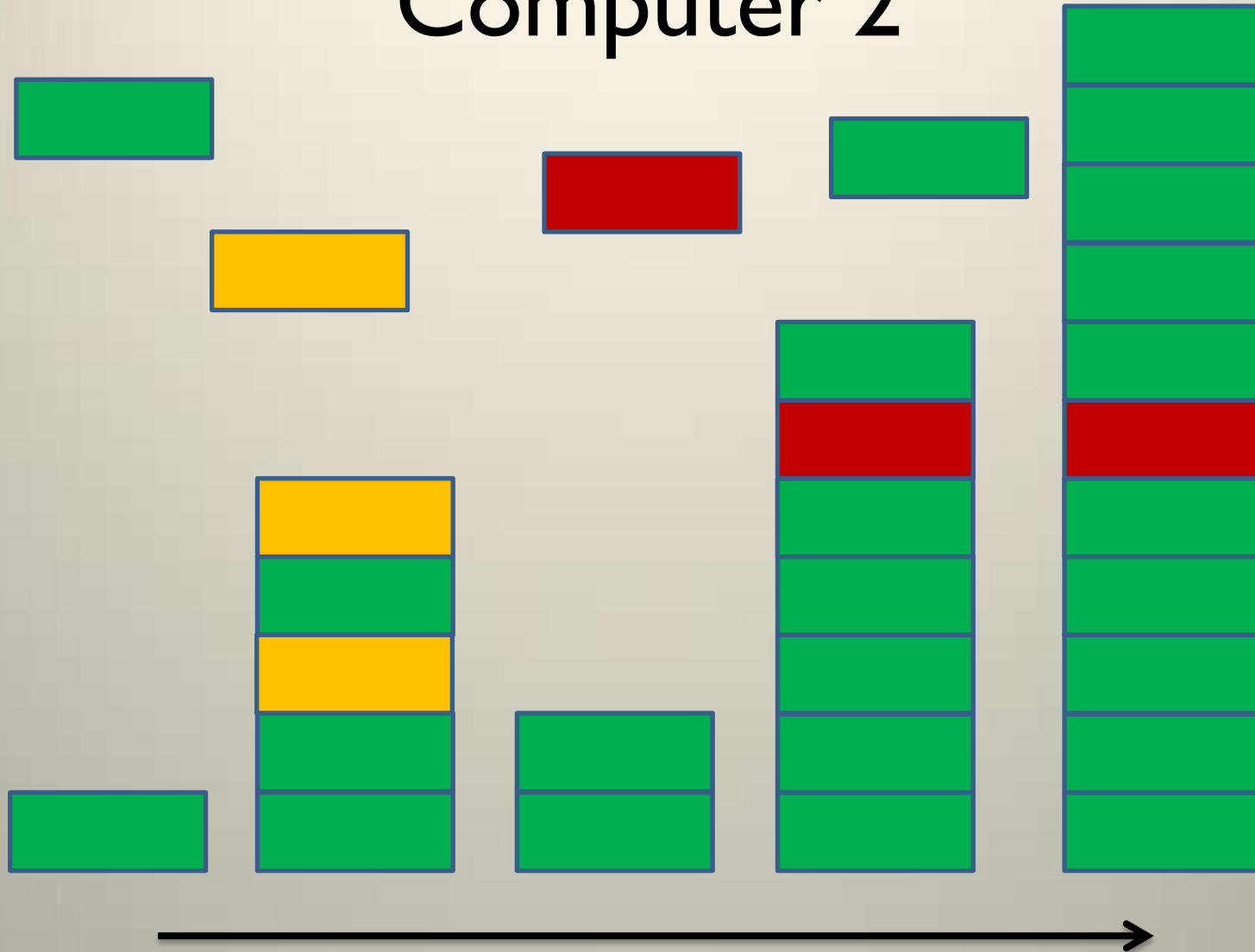
- digital literacy
- skills for the knowledge economy
- open practice/ “how open is it?”
- open access to research
- learners as producers
- mass learning (immediate, everywhere, for free)
- learning analytics

# Computer I



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# Computer 2



I gratefully acknowledge funding from, but do not speak for, Jisc and Wikimedia UK.

# Me

Twitter: @mlpoulter

Email: martin.poulter@wikimedia.org.uk

“There is something fundamentally appealing about the notion that out of millions of heads can come information [...] larger than the sum of its parts. Imagine if the world’s people could write poetry or make music together; these are unbelievable ideas.”

—Mahzarin R. Banaji, (then) President of the Association for Psychological Science, 2010

"If you're serious about ensuring public engagement in your research then you need to make damn sure your work can be incorporated into Wikipedia. Wikipedia is the most important engagement channel for your research."

—Cameron Neylon, Public Library of Science

"The key challenge for the scholarly community [...] is to work actively with Wikipedia to strengthen its role in 'pre-research.' We need to build stronger links from its entries to more advanced resources that have been created and maintained by the academy."

—Casper Grathwohl, Oxford University Press

“My colleagues tell me that they are invited to contribute to over half a dozen different encyclopedias each year and I have no doubt that that is because publishers have correctly figured out that there’s money to be made selling these tomes [...] that will sit on library shelves gathering dust.”

“Instead of (or in addition to) writing for these types of publications, why not contribute to Wikipedia?”

—Mahzarin R. Banaji, (then) President of the Association for Psychological Science, December 2010



# Some article hit rates

(from English Wikipedia)

Article	Monthly hits
Asperger Syndrome	426,803
Henry VIII of England	438,855
Volcano	160,940
Habeas Corpus	123,500
John Locke	179,382
Lymphoma	226,934
World War I	516,579
Dependent and independent variables	220,831



2 1157 TIL there's a domesticated cat that grows to be as large as a medium sized-dog, and has the loyalty and playfulness of canines (en.wikipedia.org) submitted 14 hours ago by idernolinux 784 comments share



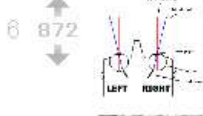
3 421 TIL that jury nullification has a darkside. Emmett Till a black boy talked "fresh" with a white girl and was murdered. The all white jury let off the killers. (en.wikipedia.org) submitted 11 hours ago by cactusfrog 161 comments share



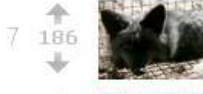
4 241 TIL The Twinkies on Zombieland were not real twinkies because Woodie Harrelson was a vegan (todayifoundout.com) submitted 10 hours ago by ironyfree 123 comments share



5 254 TIL Donald Trump was a registered Democrat from 2001 to 2009. (nydailynews.com) submitted 11 hours ago by doug3465 50 comments share



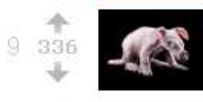
6 872 TIL that the human eye has independent blind spots. This blew my mind in class! (doobybrain.com) submitted 18 hours ago by GibsonJunkie 417 comments share



7 186 TIL you can buy tame foxes online. They cuddle like a cat, but act like a dog (sibfox.com) submitted 11 hours ago by JrDnRgrs 76 comments share



8 487 TIL: The cost of the Iraq war is enough to provide water systems for every village, every person, on Earth. (economix.blogs.nytimes.com) submitted 17 hours ago by rabble123 105 comments share



9 336 TIL what a baby aardvark looks like....weird! (laughingsquid.com) submitted 15 hours ago by Newageknobhead 77 comments share



10 24 TIL what empire contained the largest percentage of the world's population ever... a bit more than China, India, and the EU contain today. Yeah, you guessed right: the Achaemenid. (en.wikipedia.org) submitted 3 hours ago by PhnomPencil 2 comments share



11 35 TIL the Texas House has proposed slashing \$27 billion from the budget, including huge cuts to education, nursing homes, and health care, but Friday, they approved a tax break for those who want to buy yachts costing \$250,000 or more (businessweek.com) submitted 6 hours ago by \_Kita\_ 8 comments share



12 560 TIL Best Buy will take any computer or CRT for recycling FREE. Good bye 20+ year old Mac Plus, and thank you Best Buy for doing a good thing. (imgur.com) submitted 21 hours ago by technicolormotorhome 584 comments share



13 174 TIL there is a species of Jellyfish that is thought to be immortal (secure.wikimedia.org) submitted 16 hours ago by TheForeignMan 47 comments share

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14 70 TIL Wilson actually makes a volleyball with the Wilson from Castaway (wilson.com) submitted 12 hours ago by heyfatkid 13 comments share

- frontpage 248,304 learners  
You learn something new every day; what did you learn today?  
Submit interesting and specific **facts** that you just found out (not broad information you just looked up, TodayILearned is not /r/wikipedia).  
Please **contact the moderators** if your submission does not appear in the new queue (be sure to include a link to it).

- Rules**
- Submissions must be **verifiable**. Either link *directly* to a source or provide a way to prove your claim
  - No personal opinions or subjective statements (e.g "TIL xyz is a great movie")
  - No news. Posts about recent events probably belong on a different subreddit
  - Use descriptive post titles (e.g. **not** "TIL something interesting about bacon")
  - Post titles **must** begin with "TIL ...". Ones like "TIL about ..." may belong on r/Wikipedia, and "TIL how to ...\*" posts should probably go in /r/HowTo.

Please report spam, inaccurate or otherwise inappropriate posts and/or message the moderators, as this helps us remove them more quickly!

- Recommended subreddits**
- Figured out how to do something interesting? Check out /r/HowTo
  - Share what you think should be common knowledge on YouShouldKnow
  - Found an interesting Wikipedia article? Share it on /r/wikipedia

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"...or just hang out to get to know us better, and send us presents." -nix0n  
P.S. You are loved.  
P.P.S. Snake on YouTube.

a community for 2 years



Instead of an ad, here's a cat playing a DS.



submitted 19 hours ago by WSUKIWI  
24 comments share



TIL that Queen Elizabeth II is Barack Obama's 16th cousin once removed (en.wikipedia.org)

submitted 16 hours ago by shwey  
24 comments share



TIL: Head Transplants are real and have been around since 1908 (en.wikipedia.org)

submitted 5 hours ago by temptedfate25  
3 comments share



TIL the verb snipe comes from the 1770's. (en.wikipedia.org)

submitted 2 hours ago by ToasTeR1094  
comment share



TIL Muhammad had a cat. And he liked it quite a bit. (en.wikipedia.org)

submitted 21 minutes ago by emood123  
1 comment share



TIL you can stream mp3s from your Dropbox to Facebook (self.todayilearned)

submitted 9 hours ago by JimboLodisC  
1 comment share



TIL every single Beastie Boys reference. (avclub.com)

submitted 7 hours ago by Fishmandog  
comment share



TIL That Kristin Gore, Al's Daughter, Wrote for Futurama (youtube.com)

submitted 19 hours ago by coffin  
14 comments share



TIL about the Flesch-Kincaid readability scale. (self.todayilearned)

submitted 1 hour ago by Brysamo  
comment share



TIL That the Russian Space Agency uses the Starfleet logo (en.wikipedia.org)

submitted 16 hours ago by supapuerco  
12 comments share



TIL a mafia hitman was hired to kill Dennis Kucinich in the 70's. (en.wikipedia.org)

submitted 21 hours ago by MyCityNeedsAnNBATeam  
16 comments share



TIL there is a Snow White cartoon starring Betty Boop that pre-dated the Walt Disney classic by 4 years. (en.wikipedia.org)

submitted 6 hours ago by gatr1126  
comment share



TIL McDonalds in Singapore delivers -- AND they have spicy chicken nuggets. (mcdelivery.com.sg)

submitted 9 hours ago by codechino  
7 comments share



I've been watching Home Movies for years and TIL that Brendan's dad (Andrew Small) is voiced by Louis C.K., I felt my brains start leaking out of my ears. (en.wikipedia.org)

submitted 10 hours ago by Weakgrip  
4 comments share



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TIL the German bombing's nephew flew an American bomber in WWII. His co-pilot was given orders to shoot him if he ever tried to land in Germany. (en.wikipedia.org)

submitted 18 hours ago by Rail\_gunn

- Share what you think should be common knowledge on YouShouldKnow
- Found an interesting Wikipedia article? Share it on /r/wikipedia

Talk with us on IRC: #todayilearned on irc.freenode.org, or just click here.

"...or just hang out to get to know us better, and send us presents." -nix0n

P.S. You are loved.

P.P.S. Snake on YouTube.

a community for 2 years

you choose the charity



stikkitnow.com

reddit this ad

Submit a link



to anything interesting: news article, blog entry, video, picture...

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SolInvictus  
happybadger  
DrJulianBashir  
manbra

...and 15 more >

# Google searches for “Confirmation bias”

Web Search Interest: "confirmation bias". Worldwide, 2004 - present.



## Interest over time ?

The number 100 represents the peak search volume

News headlines  Forecast ?



# Research outputs



**Citations & impact**

# Learners



**Subject knowledge; skills; motivation**

# Universities



**Skills; Scholarship; Low-cost**

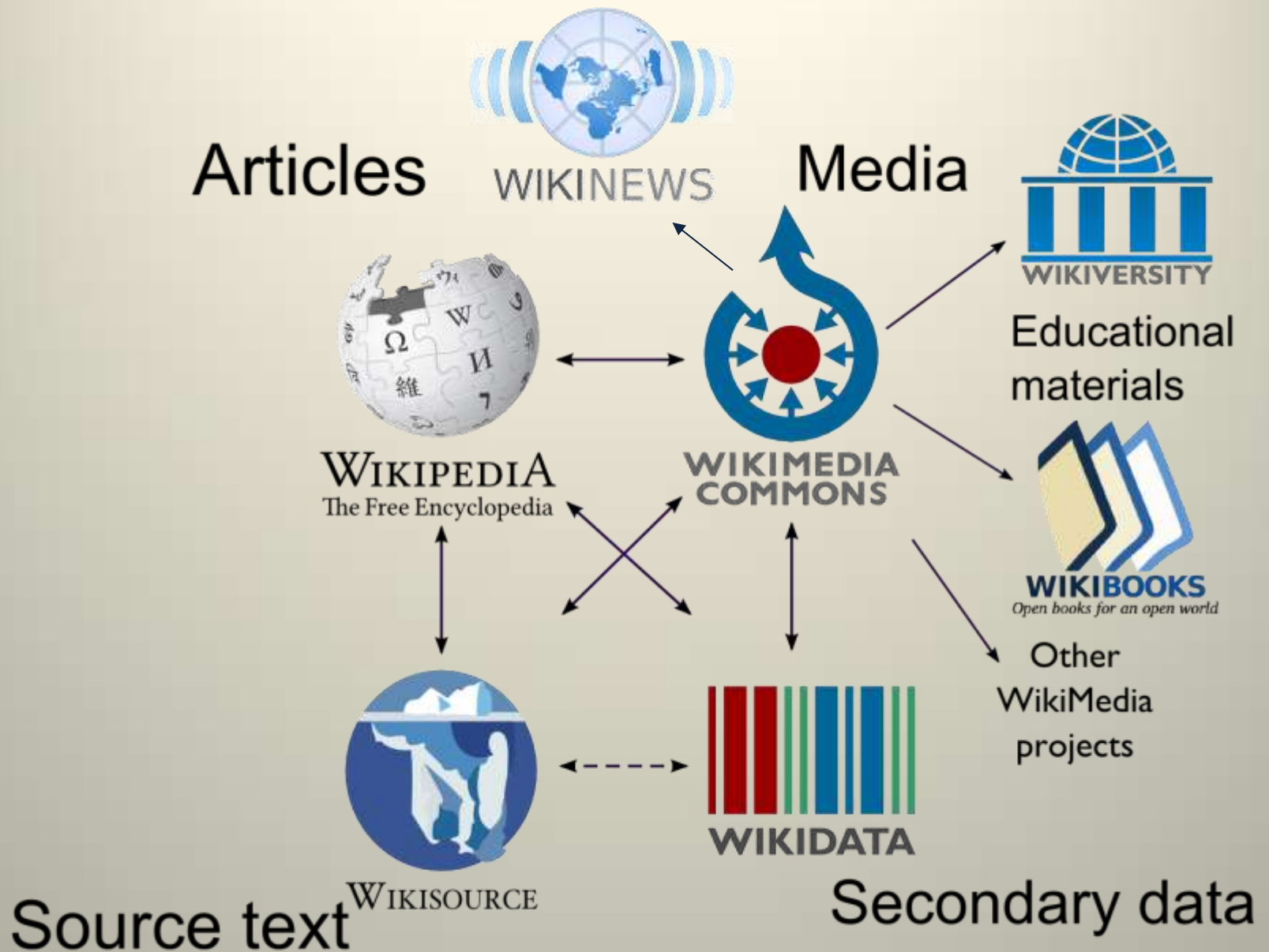


[Vision of Britain homepage 2009 by GBHGIS Group, University of Portsmouth](#), CC-BY-SA

[Keble College, Oxford, Dimitri B.](#), CC-BY [Iraqi medical students... U.S. Army photo](#), Public Domain

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# Lord Byron

From Wikipedia, the free encyclopedia

"Often described as the most flamboyant and notorious of the major Romantics, Byron was celebrated in life for aristocratic excesses...,"



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The Free Encyclopedia



WIKIMEDIA  
COMMONS



## Longer poetic works [\[edit\]](#)

- *English Bards, and Scotch Reviewers*, a satire (1809) *(transcription project)*
- *Hints from Horace* (1811) *(transcription project)*
- *The Curse of Minerva* (1811)
- *The Waltz*, an apostrophic hymn (1813)
- *The Giaour* (1813)
- *The Bride of Abydos*, a Turkish tale (1813) *(transcription project)*
- *The Corsair*, a tale (1814)
- *Ode to Napoleon Buonaparte* (1814)
- *Lara*, a tale (1814)
- *The Siege of Corinth* (1816)
- *Parisina* (1816)
- *The Prisoner of Chillon* (1816)
- *Monody on the Death of the Right Hon. R. B. Sheridan* (1816)
- *Manfred*, a dramatic poem (1817)
- *The Lament of Tasso* (1817)
- *Beppo*, a Venetian story (1818)



WIKISOURCE

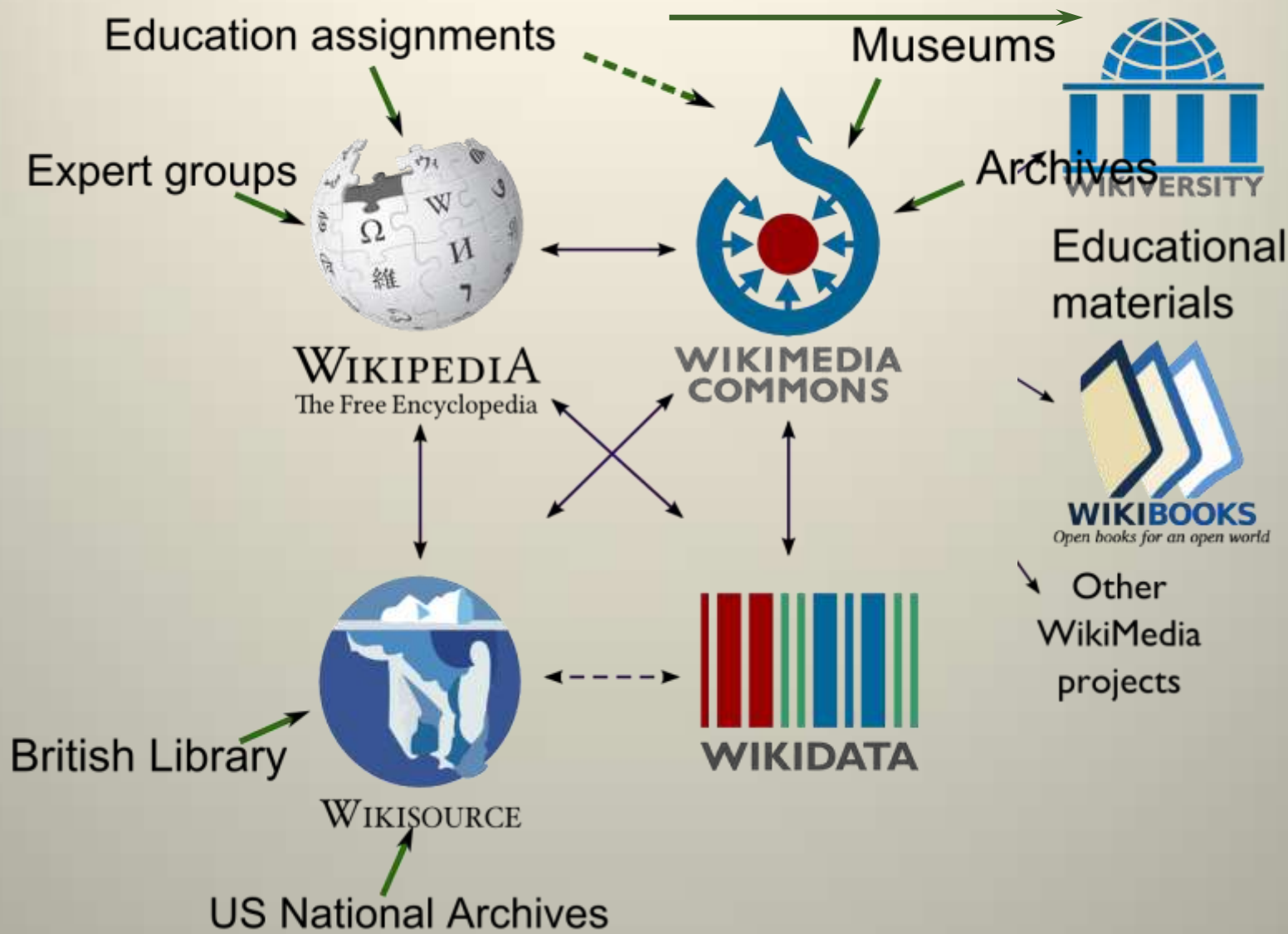


WIKIDATA

Child: Ada Lovelace  
Member of: Royal Society  
LCCN ID: n81026857

...

...





# The famous frog



“Frog diamagnetic levitation.jpg” by Lijnis Nelemans [via Wikimedia Commons](#)

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# What you *wouldn't* do

# (1)

- Someone has recently had a conference presentation published, and is adding it as an external link to many different articles in the same subject area.

## (2)

- In the overview article for a subject, a new user has added a paragraph saying that a particular new paper provides the first “rigorous and systematic” theorisation of the topic.

# (3)

- Across dozens of articles related to your academic subject, short statements are being added, often with poor grammar and poor or non-existent sourcing. Some are subjective comments on the topic or statements copied-and-pasted from other sources on the web.

# Wiki-to-Journal and Journal-to-Wiki

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# Circular permutation in proteins

This article has been published in PLOS Computational Biology and can now be edited on the English Wikipedia.

Spencer Bliven<sup>1</sup>, Andreas Prlic<sup>2</sup>

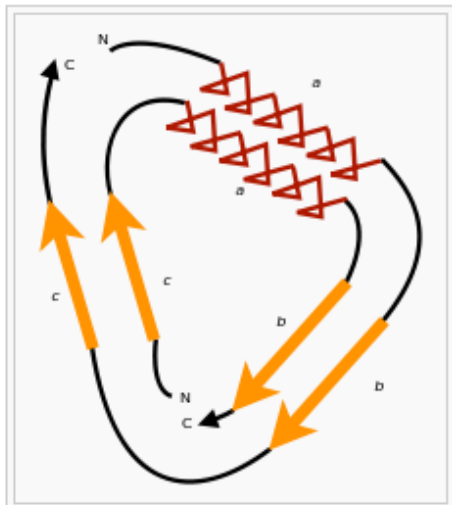
**Author Affiliations** [\[show\]](#)

**Circular permutation** describes a type of relationship between proteins, whereby the proteins have a changed order of amino acids in their protein sequence, such that the sequence of the first portion of one protein (adjacent to the N-terminus) is related to that of the second portion of the other protein (near its C-terminus), and vice versa (see figure 1). This is directly analogous to the mathematical notion of a cyclic permutation over the set of residues in a protein.

Circular permutation can be the result of evolutionary events, post-translational modifications, or artificially engineered mutations. The result is a protein structure with different connectivity, but overall similar three-dimensional (3D) shape. The homology between portions of the proteins can be established by observing similar sequences between N- and C-terminal portions of the two proteins, structural similarity, or other methods.

**Contents** [\[hide\]](#)

- 1 History
- 2 Evolution
  - 2.1 Permutation by Duplication
    - 2.1.1 Saposin and Swaposin



**Figure 1.** Schematic representation of a circular permutation in two proteins. The first protein (outer circle) has the sequence a-b-c. After the permutation the second protein (inner circle) has the sequence c-a-b. The

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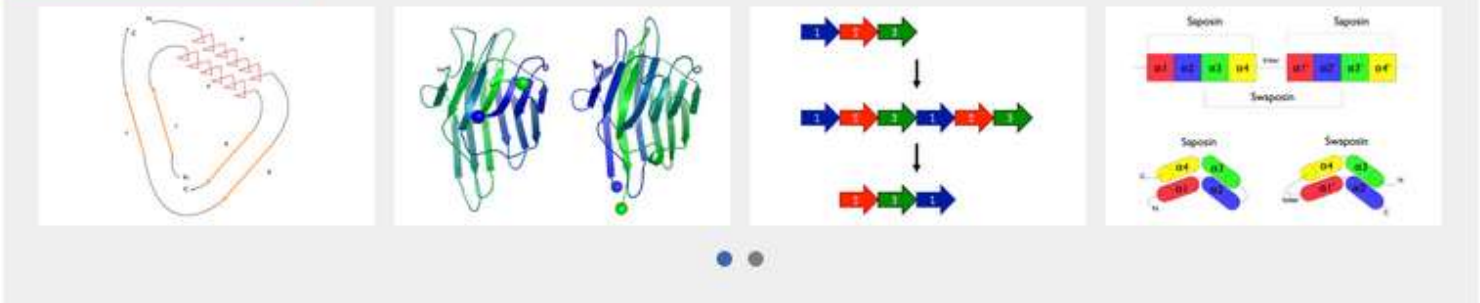
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# Circular Permutation in Proteins

Spencer Bliven , Andreas Prlić 

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**Citation:** Bliven S, Prlić A (2012) Circular Permutation in Proteins. *PLoS Comput Biol* 8(3): e1002445. doi:10.1371/journal.pcbi.1002445

**Editor:** Shoshana Wodak, University of Toronto, Canada

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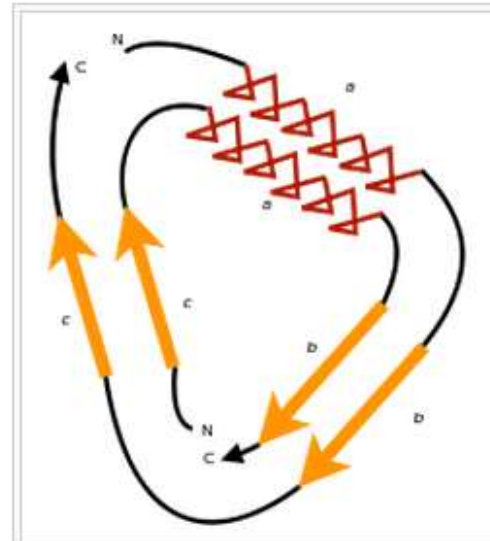
# Circular permutation in proteins [edit]

From Wikipedia, the free encyclopedia

A **circular permutation** is a relationship between **proteins** whereby the proteins have a changed order of **amino acids** in their **peptide sequence**. The result is a **protein structure** with different connectivity, but overall similar three-dimensional (3D) shape. In 1979, the first pair of circularly permuted proteins – **concanavalin A** and **lectin** – were discovered; over 2000 such proteins are now known.

Circular permutation can occur as the result of **evolutionary events**, **posttranslational modifications**, or **artificially engineered mutations**. The two main models proposed to explain the evolution of circularly permuted proteins are *permutation by duplication* and *fission and fusion*. Permutation by duplication occurs when a **gene** undergoes **duplication** to form a **tandem repeat**, before redundant sections of the protein are removed; this relationship is found between **saposin** and **swaposin**. Fission and fusion occurs when partial proteins fuse to form a single polypeptide, such as in **nicotinamide nucleotide transhydrogenases**.

Circular permutations are routinely engineered in the laboratory to improve their **catalytic activity** or **thermostability**, or to investigate properties of the original protein.



Schematic representation of a circular permutation in two proteins. The first protein (outer circle) has the sequence a-b-c. After the permutation the second protein (inner circle) has the sequence c-a-b. The direction of the peptide sequence is indicated by the arrows.

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