

# ALL ROADS LEAD TO PHILOSOPHY

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RESEARCH  
TOPIC

# WIKIPEDIA OVERVIEW



# Page Structure

- The first link is the first link in the paragraph content itself
  - Excludes citations and pronunciation*
- I will be all but entirely focused on the lead paragraph

From Wikipedia, the free encyclopedia  
(Redirected from Reykjavík)

**First Link** **First Lead Paragraph**

For the town in Canada, see [Reykjavík, Manitoba](#).

**Reykjavík** (Icelandic pronunciation: [r̥eɪkja v̥ík] ([listen](#)); English /rɛɪkja vɪk/, /rɛɪkja vi k/; [RAYK-yə-VIK](#), [RAKK-yə-veek](#))<sup>[4][5]</sup> is the capital and largest city of [Iceland](#). It has a latitude of 64°08' N, making it the world's northernmost capital of a sovereign state and a popular tourist destination.<sup>[6]</sup> It is located in southwestern Iceland, on the southern shore of the Faxaflói Bay. With a population of around 120,000 (and over 200,000 in the Capital Region), it is the heart of Iceland's cultural, economic and governmental activity.

Reykjavík is believed to be the location of the first permanent settlement in Iceland, which Ingólfur Arnarson is said to have established in AD 874. Until the 18th century, there was no urban development in the city location. The city was founded in 1786 as an official trading town and grew steadily over the next decades, as it transformed into a regional and later national center of commerce, population, and governmental activities. It is among the cleanest, greenest, and safest cities in the world.<sup>[7][8][9]</sup>

**Lead Section**

**Contents** [hide]

- 1 History
  - 1.1 Rise of nationalism
  - 1.2 World War II
  - 1.3 Post-war development
- 2 Geography
  - 2.1 Climate
- 3 Cityscape
- 4 City administration
  - 4.1 Political control
  - 4.2 Mayor
  - 4.3 Latest election
- 5 Demographics
  - 5.1 Districts
- 6 Economy
  - 6.1 Major companies

**Infobox**

**Reykjavík**



View of Reykjavík from the spire of Hallgrímskirkja



Coat of arms of Reykjavík



Location of Reykjavík

**Region** Capital Region

**Constituency** Reykjavík Constituency North  
Reykjavík Constituency South

**Market right** August 18, 1786<sup>[1]</sup>

**Mayor** Óðnið Þorláksson

<sup>1</sup> Evaluating and Improving Navigability of Wikipedia: A Comparative Study of Eight Language Editions, 2016, Daniel Lamprecht, Markus Strohmaier, OpenSym '16: Proceedings of the 12th International Symposium on Open Collaboration

## David O. Russell

Excerpt shown by Google

From Wikipedia, the free encyclopedia

For other people named David Russell, see David Russell (disambiguation).

**David Owen Russell** (born August 20, 1958) is an American film director, screenwriter, and producer. His early directing career includes the comedy films *Spanking the Monkey* (1994), *Flirting with Disaster* (1996), *Three Kings* (1999) and *I Heart Huckabees* (2004).

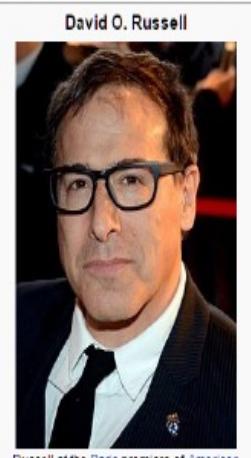
Three of Russell's more recent films – the biographical sports drama *The Fighter* (2010), the romantic comedy-drama *Silver Linings Playbook* (2012), and the comedy-drama crime film *American Hustle* (2013) – were commercially successful and acclaimed by critics, having earned Russell three Academy Award nominations for Best Director, as well as a Best Adapted Screenplay nomination for *Silver Linings Playbook* and a Best Original Screenplay nomination for *American Hustle*. Russell received his seventh Golden Globe nomination for the semi-biographical comedy-drama *Joy* (2015).

He has regularly collaborated with actors Mark Wahlberg, Bradley Cooper, Jennifer Lawrence and Robert De Niro, having directed each of them in three films.

Contents [hide]

- 1 Early life
- 2 Career
  - 2.1 Early career
  - 2.2 *Spanking the Monkey*
  - 2.3 *Flirting with Disaster*
  - 2.4 *Three Kings*
  - 2.5 *I Heart Huckabees*
  - 2.6 *Nailed*
  - 2.7 *The Fighter*
  - 2.8 *Silver Linings Playbook*
  - 2.9 *American Hustle*
- 2.10 *Joy*

Wikipedia Article



Russell at the Paris premiere of *American Hustle*, February 2014

Born	David Owen Russell August 20, 1958 (age 57) Manhattan, New York City, United States
Residence	Santa Monica, California
Other names	David O'Russell Stephen Greene
Alma mater	Amherst College (B.A.)
Occupation	Film director, screenwriter, producer
Years active	1987–present
Spouse(s)	Janet Grillo (m. 1992–2007) Holly Davis (2007–present)
Children	2

Link leading to IN component



David O. Russell



All

Images

News

Videos

Books

More ▾

Search tools

About 215.000.000 results (0,31 seconds)

**David O. Russell - IMDb**

[www.imdb.com/name/nm0751102/](http://www.imdb.com/name/nm0751102/) ▾

David O. Russell was born on August 20, 1958 in New York City, New York, USA as David Owen Russell. He is a producer, known for *Silver Linings Playbook* ...  
[Awards](#) · [Biography](#) · [Photo Gallery](#) · [Publicity](#)



**David O. Russell - Wikipedia, the free encyclopedia**

[https://en.wikipedia.org/wiki/David\\_O.\\_Russell](https://en.wikipedia.org/wiki/David_O._Russell) ▾

David Owen Russell (born August 20, 1958) is an American film director, screenwriter, and producer. His early directing career includes the comedy films ...  
[I Heart Huckabees](#) · [David O. Russell](#) · [Spanking the Monkey](#) · [Flirting with Disaster](#)

**David O. Russell**

Film director

David Owen Russell is an American film director, screenwriter, and producer. His early directing career includes the comedy films *Spanking the Monkey*, *Flirting with Disaster*, *Three Kings* and *I Heart Huckabees*. [Wikipedia](#)

Born: August 20, 1958 (age 57),

Manhattan, New York, United States

Spouse: Janet Grillo (m. 1992–2007)

Partner: Holly Davis

Children: Matthew Antonio Grillo Russell, Leo Russell

Education: Mamaroneck High School, Amherst College

Wikipedia Excerpt

**David O. Russell | Official Website**

[www.davidorussell.com/](http://www.davidorussell.com/) ▾

Official website of the Oscar-nominated director and screenwriter known for *The Fighter*, *Silver Linings Playbook*, *American Hustle*, and *Joy*.

**David O. Russell - Filmmaker, Screenwriter - Biography.com**

[www.biography.com/people/david-o-russell-21092831](http://www.biography.com/people/david-o-russell-21092831) ▾

David O. Russell is the Oscar-nominated director and screenwriter known for *The Fighter*, *Silver Linings Playbook* and *American Hustle*. Learn more at ...

## Lead Paragraph

"In Wikipedia, the lead section is an introduction to an article and a summary of its most important contents. It is located at the beginning of the article, before the table of contents and the first heading. It is not a news-style lead or "lede" paragraph.

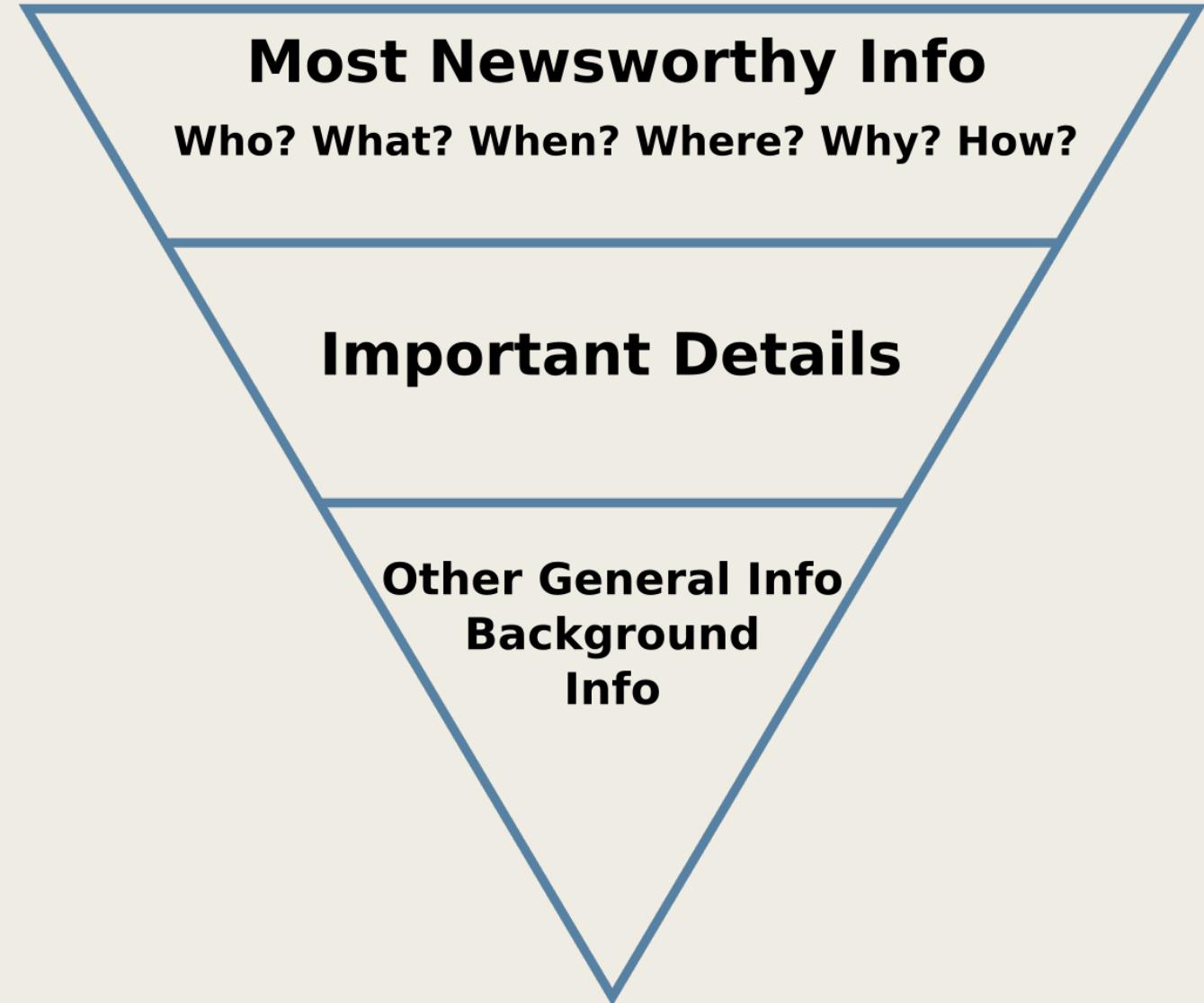
The average Wikipedia visit is a few minutes long. The lead is the first thing most people will read upon arriving at an article and may be the only portion of the article that they read. It gives the basics in a nutshell and cultivates interest in reading on—though not by teasing the reader or hinting at what follows. It should be written in a clear, accessible style with a neutral point of view."<sup>2</sup>

<sup>1</sup> Evaluating and Improving Navigability of Wikipedia: A Comparative Study of Eight Language Editions, 2016, Daniel Lamprecht, Markus Strohmaier, OpenSym '16: Proceedings of the 12th International Symposium on Open Collaboration

<sup>2</sup> "Wikipedia:Manual of Style/Lead section." Wikipedia, 2023, [https://en.wikipedia.org/wiki/Wikipedia:Manual\\_of\\_Style/Lead\\_section](https://en.wikipedia.org/wiki/Wikipedia:Manual_of_Style/Lead_section). Accessed 8 July 2023.

# Opening Sentence

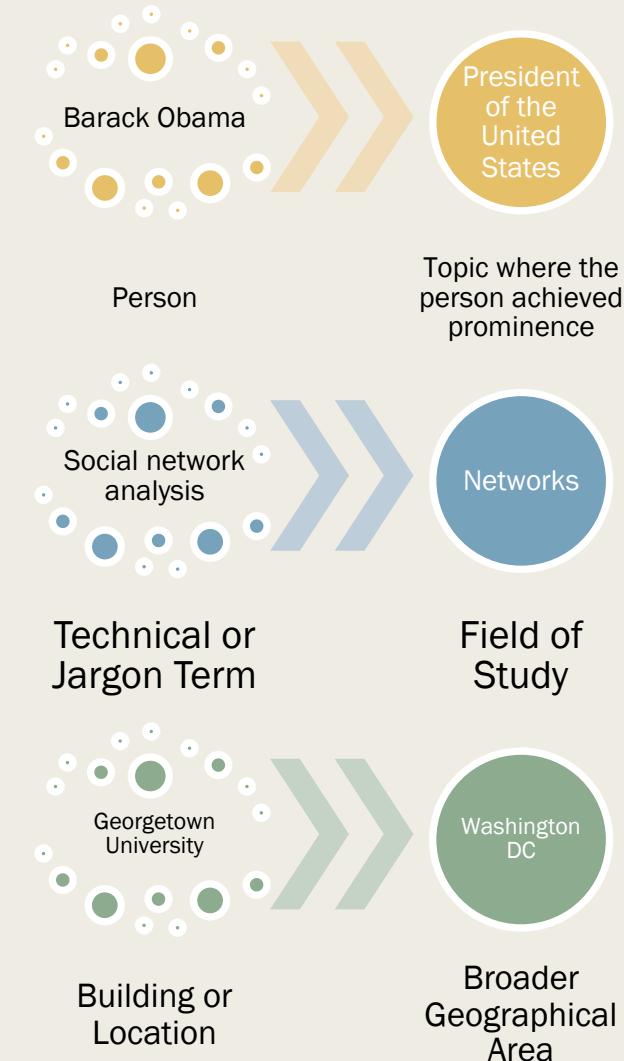
- “The first sentence should tell the nonspecialist reader what or who the subject is, and often when or where. It should be in plain English.”<sup>2</sup>



<sup>2</sup> “Wikipedia:Manual of Style/Lead section.” Wikipedia, 2023, [https://en.wikipedia.org/wiki/Wikipedia:Manual\\_of\\_Style/Lead\\_section](https://en.wikipedia.org/wiki/Wikipedia:Manual_of_Style/Lead_section). Accessed 8 July 2023.

# Leading Paragraph Links

“The first sentence should provide links to the broader or more elementary topics that are important to the article's topic or place it into the context where it is notable.”<sup>2</sup>



<sup>2</sup> “Wikipedia:Manual of Style/Lead section.” Wikipedia, 2023, [https://en.wikipedia.org/wiki/Wikipedia:Manual\\_of\\_Style/Lead\\_section](https://en.wikipedia.org/wiki/Wikipedia:Manual_of_Style/Lead_section). Accessed 8 July 2023.

# GETTING TO PHILOSOPHY



# First Link Philosophy

- Idea: If you pick any Wikipedia article and click on the first link and repeat the process for every subsequent article, you will eventually reach the philosophy page.
- Holds for 97.0% of English Wikipedia articles<sup>1</sup>
  - *Results vary by language*
- First discovered by Wikipedia user Mark J. in May 2008<sup>3</sup>



[This Photo](#) by Unknown Author is licensed under [CC BY-NC-ND](#)

<sup>1</sup> Evaluating and Improving Navigability of Wikipedia: A Comparative Study of Eight Language Editions, 2016, Daniel Lamprecht, Markus Strohmaier, OpenSym '16: Proceedings of the 12th International Symposium on Open Collaboration

<sup>3</sup> "Wikipedia:Getting to Philosophy." Wikipedia, [https://en.wikipedia.org/wiki/Wikipedia:Getting\\_to\\_Philosophy](https://en.wikipedia.org/wiki/Wikipedia:Getting_to_Philosophy). Accessed 8 July 2023.

# EXAMPLE





# ≡ Philosophy

文 A 228 languages ▾

Article Talk

Read View source View history Tools ▾

From Wikipedia, the free encyclopedia



For other uses, see [Philosophy \(disambiguation\)](#).

**Philosophy** (from Greek: φιλοσοφία, *philosophia*, 'love of wisdom')<sup>[1][2]</sup> is the systematized study of general and fundamental questions, such as those concerning **existence, reason, knowledge, values, mind, and language**.<sup>[3][4]</sup> Philosophical methods include **questioning, critical discussion, rational argument, and systematic presentation**.<sup>[5][i]</sup>

Historically, philosophy encompassed all bodies of knowledge and a practitioner was known as a **philosopher**.<sup>[1]</sup> Natural philosophy, the origins of which trace back to Ancient Greece, encompasses **astronomy, medicine, and physics**.<sup>[6][7]</sup> In the transition to the modern era, various areas of investigation that were traditionally part of philosophy became separate academic disciplines such as **psychology, sociology**,

Part of a series on  
**Philosophy**



Plato · Kant · Nietzsche

Buddha · Confucius ·老子 (Laozi)

# xefer

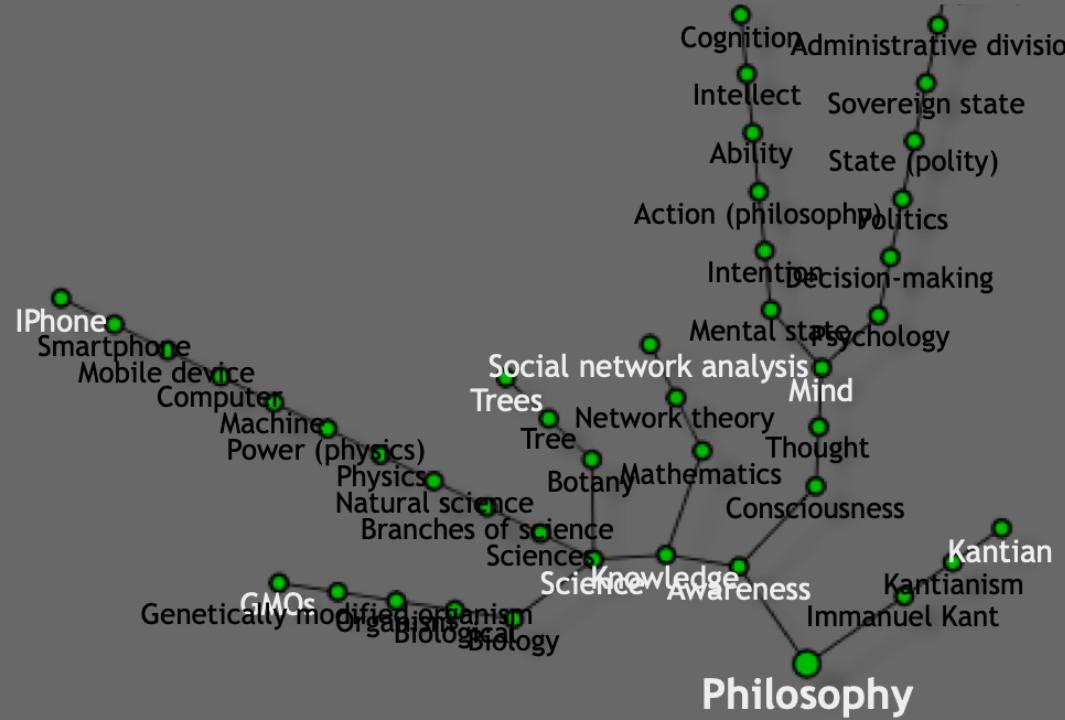
Add one or more comma-separated Wikipedia article titles:

English ▾

William Shakespeare

Submit

Random





# LITERATURE REVIEW

# Evaluating and Improving Navigability of Wikipedia: A Comparative Study of Eight Language Editions

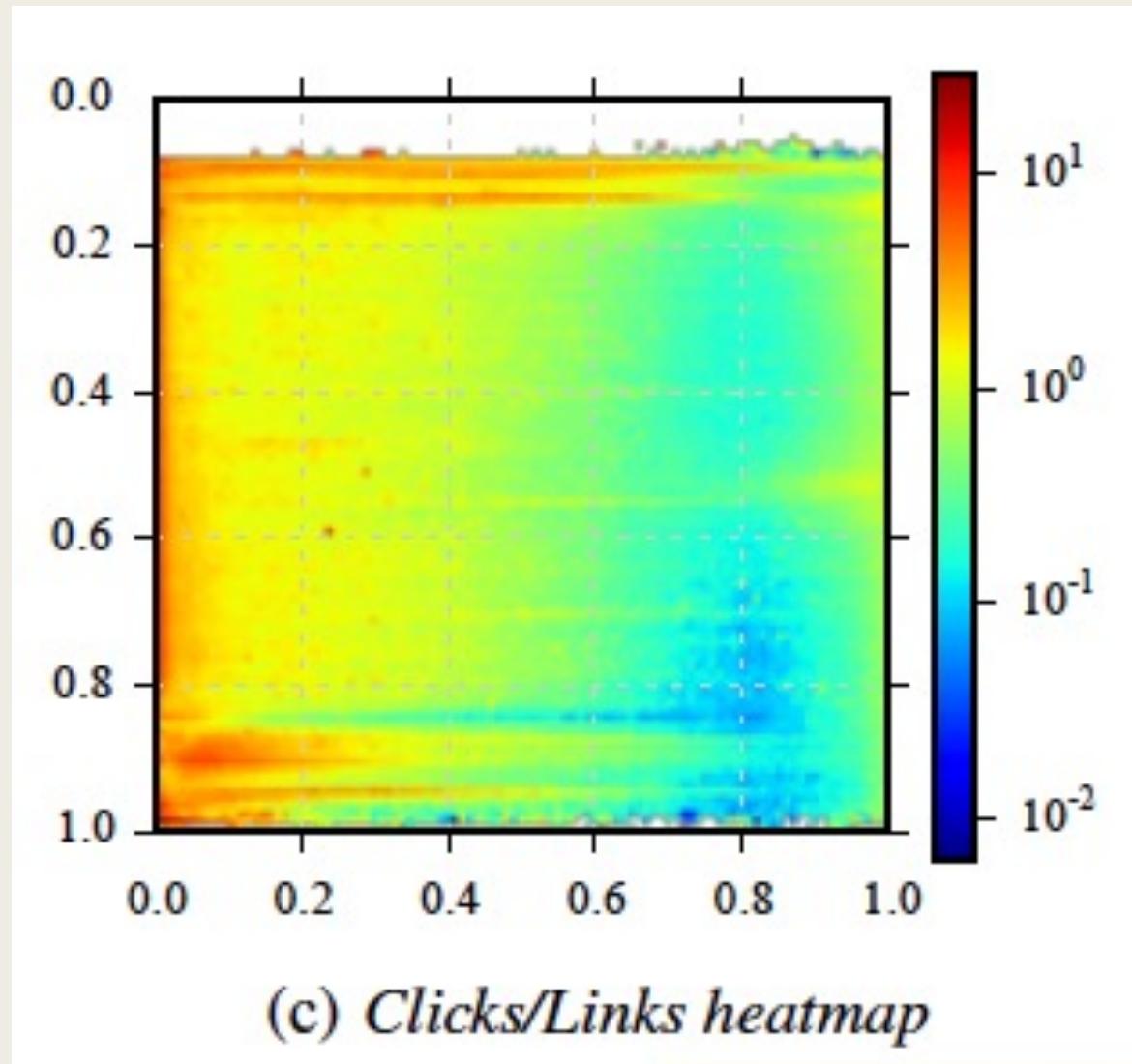
- Focused on the navigability of Wikipedia by language.
- Includes the most recent test of the popular theory of “getting to philosophy”
- Illustrates the scale of Wikipedia’s SCC
- Demonstrates the importance of links, particularly in the lead for page navigation.

Language	Size of IN	Article Titles (Translated)	Article Titles (Original)
English	97.0%	Philosophy (92.1%), Existence, Ontology, Reality	Philosophy, Existence, Ontology, Reality
German	95.8%	Philosophy (95.8%), World, Totality	Philosophie, Welt, Totalität
French	85.0%	Philosophy (68.8%), Linguistics, Discipline (academia), Knowledge, Ancient Greek, Knowledge, Notion (philosophy), Greek language, Feature (linguistics), Isogloss, Centum and satem languages, Hellenic languages	Philosophie, Linguistique, Discipline (spécialité), Connaissance, Grec ancien, Savoir, Notion, Grec, Trait (linguistique), Isoglosse, Isoglosse centum-satem, Langues helléniques
Spanish	87.8%	Psychology (87.7%), Profession, Activity, Specialization	Psicología, Profesión, Actividad, Especialización
Russian	73.7%	Philosophy (58.9%), Mathematics, Science, Cognition, Object (philosophy), Set theory, Method (philosophy), Systematization, Objectivity (philosophy)	Философия, Математика, Наука, Познание, Объект (философия), Теория множеств, Метод, Систематизация, Объективность
Italian	73.2%	Science (39.0%), Knowledge, Biology, Psychology, Psyche (psychology), Tissue (biology), Central nervous system, Brain, Nervous system, Awareness	Scienza, Conoscenza, Biologia, Psicologia, Psiche, Tessuto (biologia), Sistema nervoso centrale, Cervello, Sistema nervoso, Consapevolezza
Japanese	82.3%	Person (82.3%), Interpersonal relationship	人間, 人間関係
Dutch	67.0%	Knowledge (67.0%), Know-how	Kennis, Weten

<sup>1</sup> Evaluating and Improving Navigability of Wikipedia: A Comparative Study of Eight Language Editions, 2016, Daniel Lamprecht, Markus Strohmaier, OpenSym '16: Proceedings of the 12th International Symposium on Open Collaboration

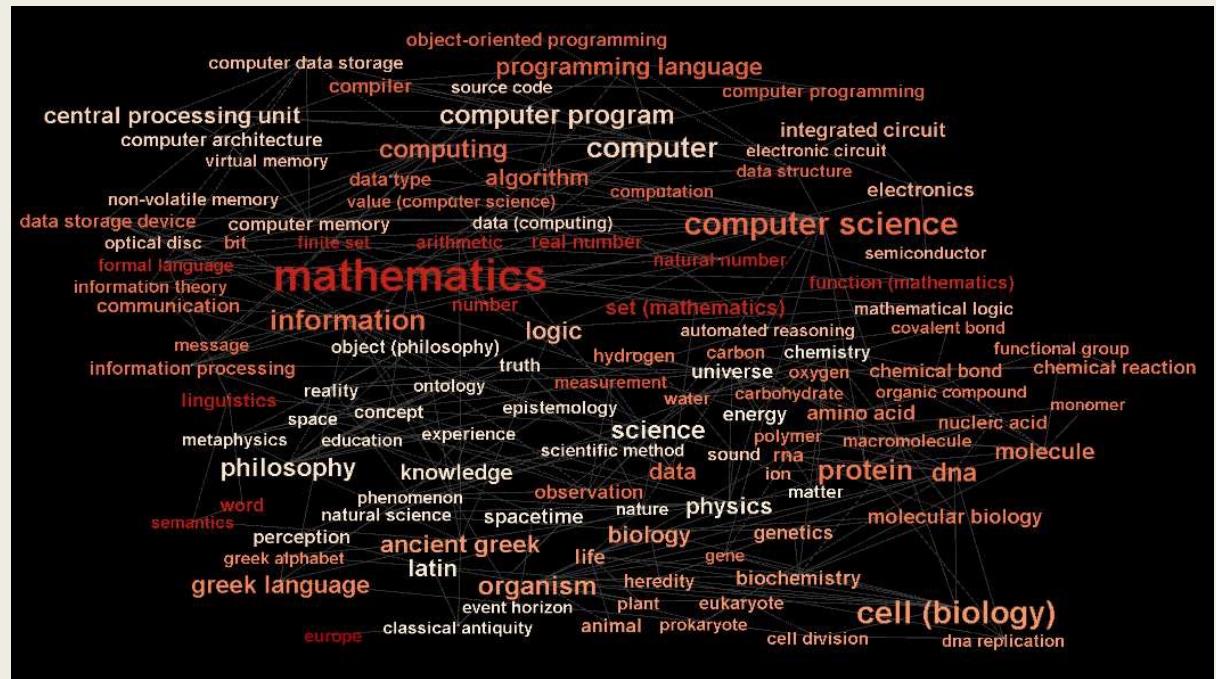
# Visual Positions of Links and Clicks on Wikipedia

- Studies where users typically click on Wikipedia pages
- Found the highest link clicks in the lead and left side
  - *Demonstrates that users use the first few links to navigate Wikipedia*



# Extracting Domain Knowledge by Complex Networks Analysis of Wikipedia Entries

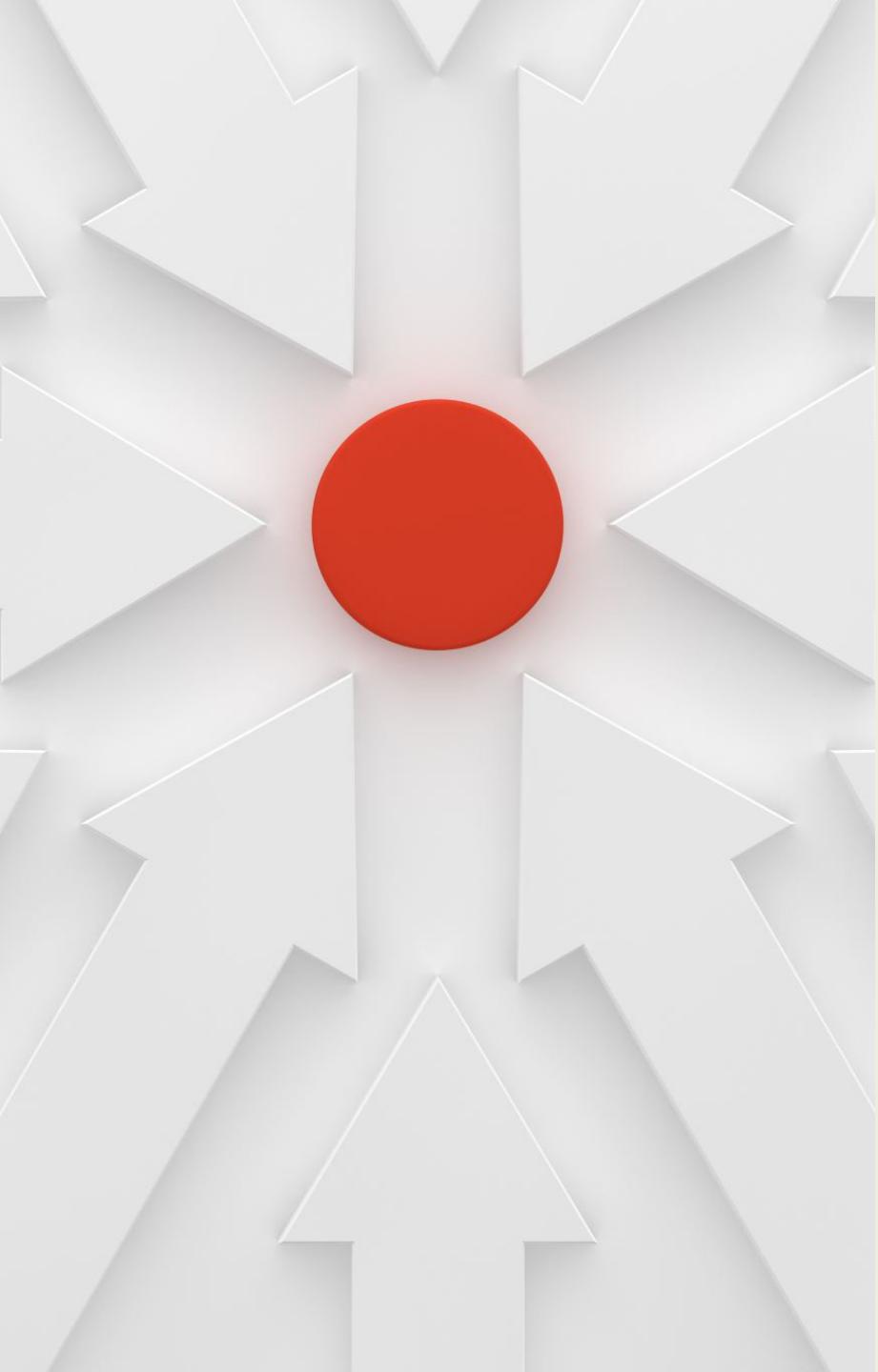
- Examines Wikipedia's network structure using links as edges and pages as nodes
- Only used the first 10 links since they will be the higher density nodes as they are most general topics.
- Found entries grouped into communities are more closely semantically related.
- Wikipedia can be treated as a small world network.



<sup>5</sup> Extracting Domain Knowledge by Complex Networks Analysis of Wikipedia Entries, 3, 2015, Neven Matas, Ana Meštrović, 2015 38th International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO)



RESEARCH  
QUESTIONS  
AND  
OBJECTIVES



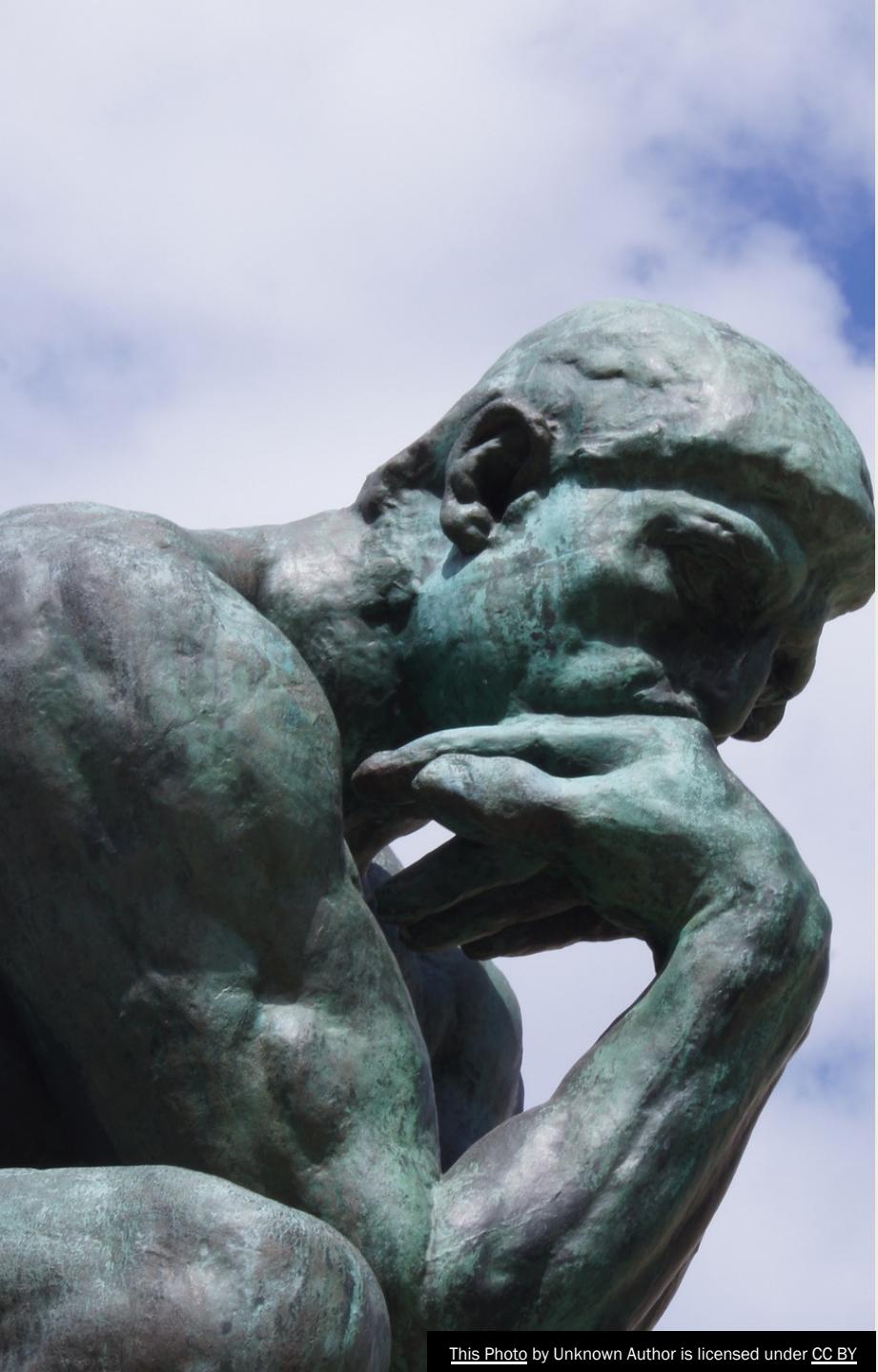
# What is the current size of the SCC?

- Is it still at the 97% found by Lamprecht et al. or has it continued to grow?
- Is there a centralized landing point for the 3% of nodes not connected to Philosophy?



## Why is the first link special, if at all?

- What does the network of first link edges look like?
- If random links are selected, will you reach philosophy at a higher rate than other pages?
- Seek to replicate results with other link locations (second, third, etc.)



# What is the nature of the Philosophy node?

- Why is it the center of Wikipedia's network?
  - Is it simply because it is a self loop?
    - Do any other nodes loop back to themselves?
- What are its inward facing neighbors?
- If you removed philosophy from the network, would it still be strongly connected?
  - *If not, how large would the components be?*
- What is the average shortest path length to the philosophy node?
  - *What node is furthest from philosophy?*



# PROPOSED METHODS

# Creating the Wikipedia network

- I plan to use the Wikipedia API and NetworkX in order to create my network
  - I would like to find a downloadable network online to save on computing power and time however I am doubtful I will be able to delineate to the first (or other selected) link only
- Could prove difficult to examine the full scale of the network
  - Can instruct to skip over any node that has been seen to reach philosophy since we will know its end-result



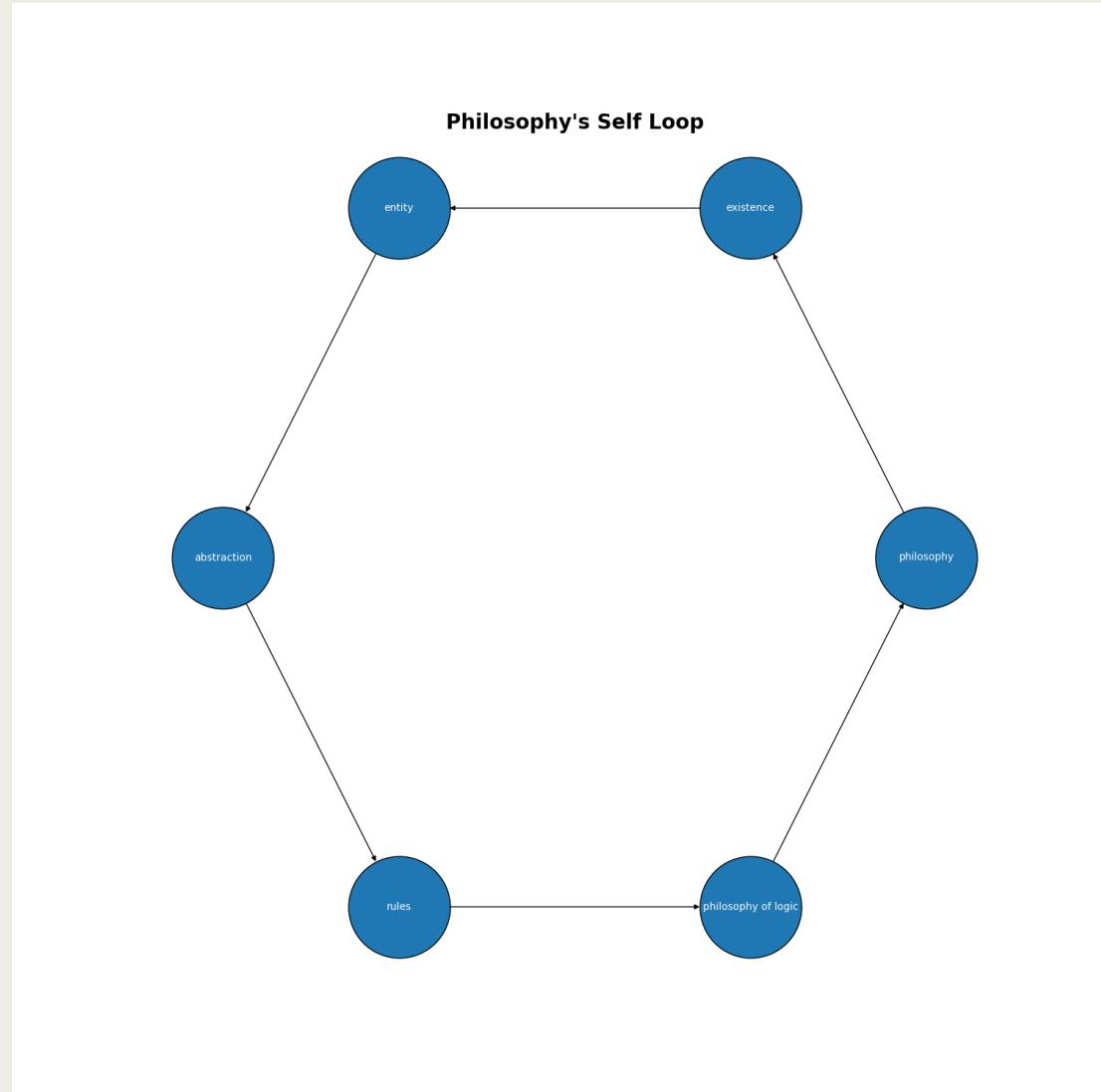
# Demonstrated Importance

- On first impression, it may seem irrelevant that Philosophy is reached by clicking on the first link of a page
- Key component of the nature of Wikipedia's network and navigation
- Significant research demonstrating that the lead is all that most people read and that they use its links to learn more
  - *Making their destinations extra significant*

# PRELIMINARY RESULTS

# Philosophy's Self-Loop

- What happens if you follow the first link on the Philosophy page
- Technically, you reach all of these pages if you click the first link
  - *Philosophy most likely has a far larger density*
- Loops like this are what would be needed to avoid the philosophy page



# Expected Challenges

- Page.links returns links in alphabetical order, not in order of appearance
  - *May require some HTML parsing*
- Could look for links that also appear in Page.content but that may be challenging
  - *Difficult to distinguish what is the first link based on text alone*



THANK YOU

# Citations

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<sup>1</sup> Evaluating and Improving Navigability of Wikipedia: A Comparative Study of Eight Language Editions, 2016, Daniel Lamprecht, Markus Strohmaier, OpenSym '16: Proceedings of the 12th International Symposium on Open Collaboration

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<sup>2</sup> “Wikipedia:Manual of Style/Lead section.” Wikipedia, 2023,  
[https://en.wikipedia.org/wiki/Wikipedia:Manual\\_of\\_Style/Lead\\_section](https://en.wikipedia.org/wiki/Wikipedia:Manual_of_Style/Lead_section). Accessed 8 July 2023.

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<sup>3</sup> “Wikipedia:Getting to Philosophy.” Wikipedia,  
[https://en.wikipedia.org/wiki/Wikipedia:Getting\\_to\\_Philosophy](https://en.wikipedia.org/wiki/Wikipedia:Getting_to_Philosophy). Accessed 8 July 2023.

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<sup>4</sup> Visual Positions of Links and Clicks on Wikipedia, 2, 2016, Dimitar Dimitrov, Markus Strohmaier, WWW '16 Companion: Proceedings of the 25th International Conference Companion on World Wide Web

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<sup>5</sup> Extracting Domain Knowledge by Complex Networks Analysis of Wikipedia Entries, 3, 2015, Neven Matas, Ana Meštrović, 2015 38th International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO)