

Fun or Functional? The Misalignment Between Content Quality and Popularity in Wikipedia

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Peer Production Communities

Wikipedia, the free encyclopedia

en.wikipedia.org/wiki/Main_Page

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Main Page **Talk**

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The Free Encyclopedia

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Welcome to **Wikipedia**,
the free encyclopedia that anyone can edit.
4,877,631 articles in English

- Arts
- History
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- Biography
- Mathematics
- Technology
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- Science
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From today's featured article



The **Texas Revolution** began when colonists in the Texas rebelled after the Mexican government overturned the Mexican constitution, dismissing state legislatures and centralizing the government down from the president to the emperor. **Sam Houston** led the Texian Army and secured the Alamo to keep it out of Mexican hands. **Travis** chose instead to lead the Alamo. The battle became the most famous battle of Texas. Later, the Mexican army executed 400 Texian soldiers in the **massacre**, then marched east as terrified. The Texian army moved in the same direction that they were running away. Under a

OpenStreetMap

www.openstreetmap.org/#map=10/51.4899/-0.3289

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Search Where am I? Go

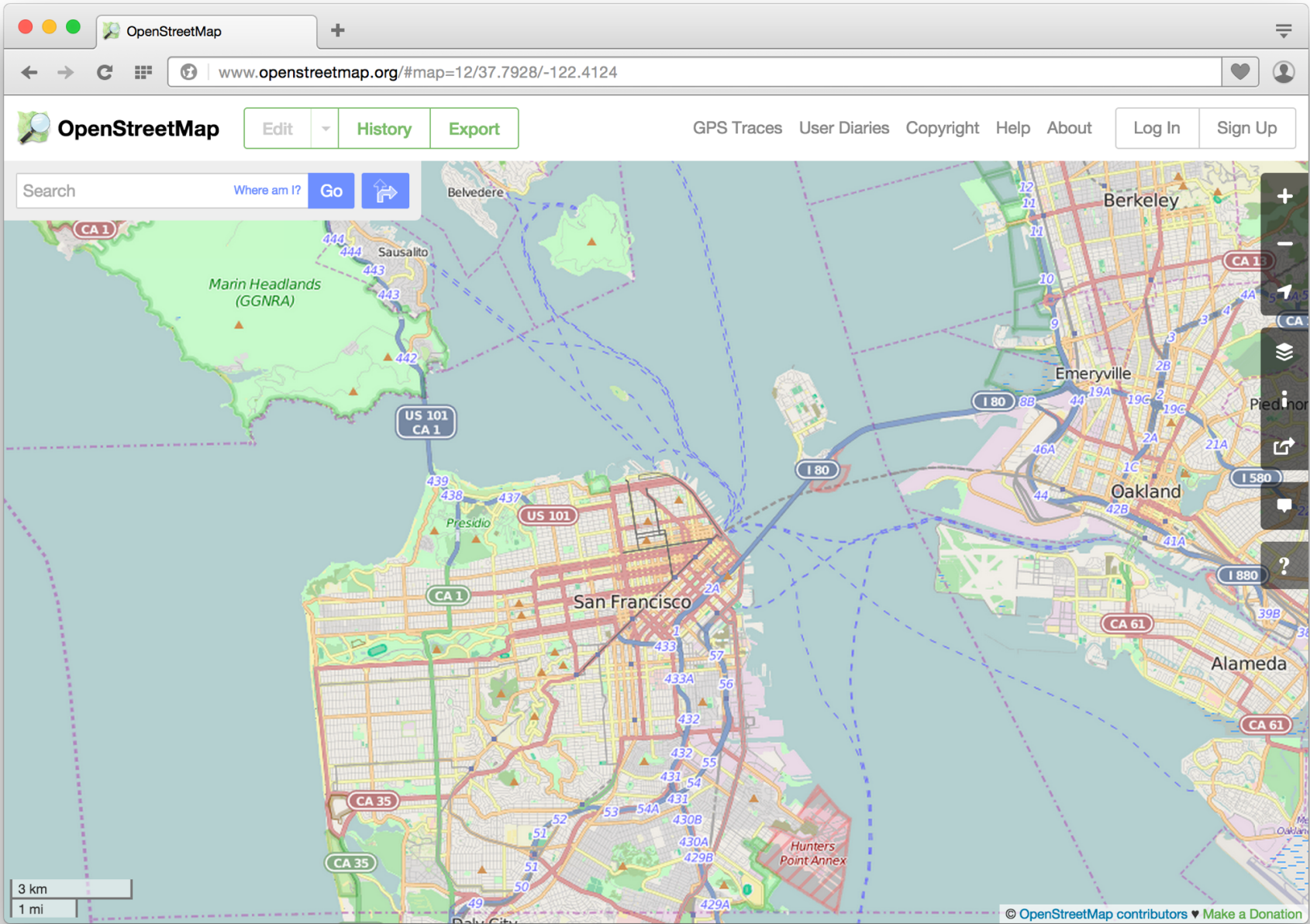
London

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How do contributors decide what to do?

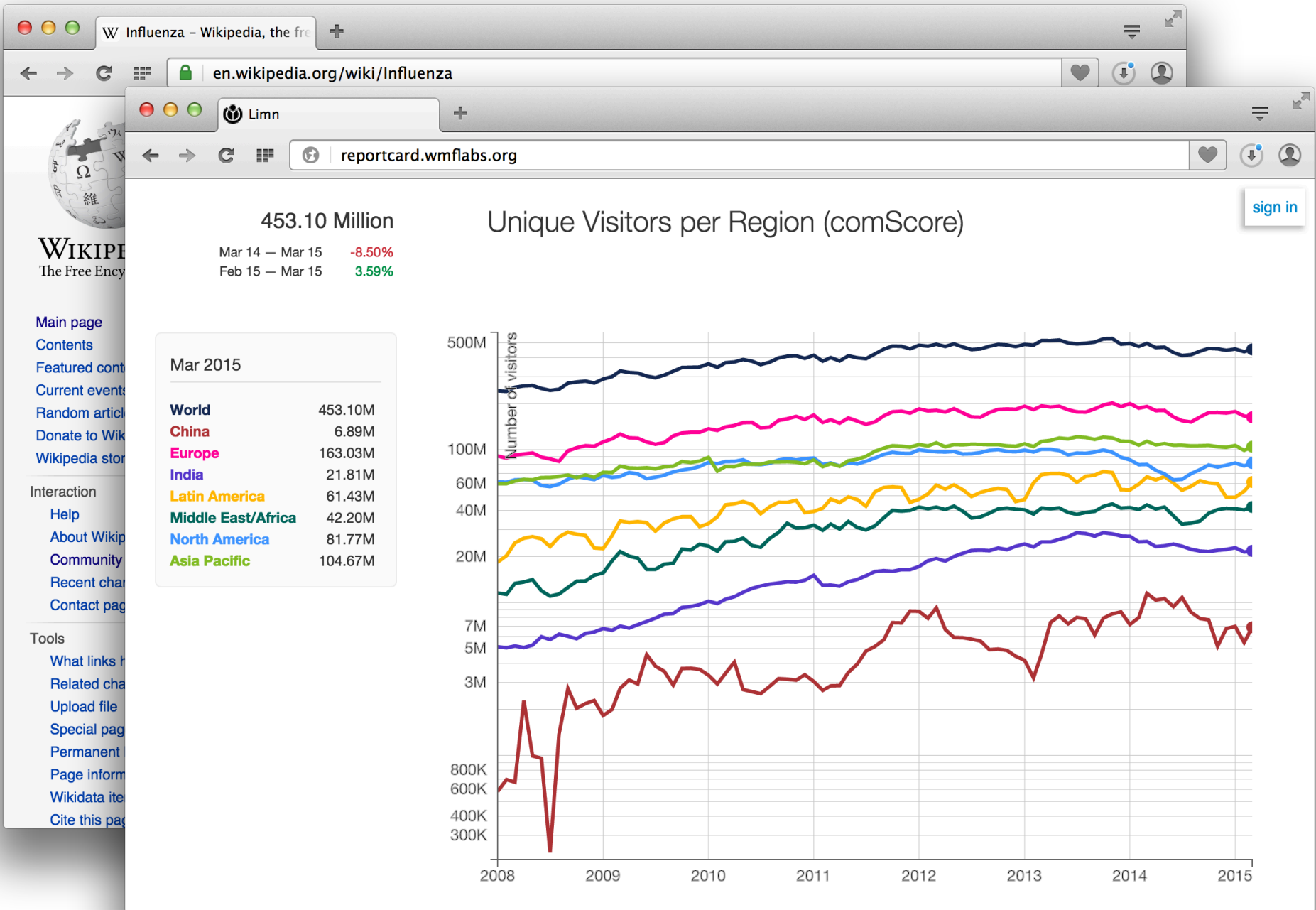
Fun!

(Nov, 2007)

Appropriate Challenges!

(Lakhani and Wolf, 2005)

What's fun for editors
might not be what readers
are interested in?



Misalignment between *quality and popularity*

Agenda

- » Introduction
- » RQ1: How widespread is misalignment?
- » RQ2: What is the impact on readers?
- » RQ3: Characterising misalignment
 - RQ3a: Are certain topics over-represented amongst misaligned articles?
 - RQ3b: Is popularity associated with short-term surges in demand?
- » Discussion
- » Q&A

Introduction

RQ1

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RQ1: How widespread is misalignment?

Introduction

RQ1

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Discussion

Perfect Alignment Hypothesis

Introduction

RQ1

RQ2

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RQ3b

Discussion

Perfect Alignment Hypothesis

The *limited supply* of contributor work
is *optimally applied*
such that the quality of articles
perfectly matches their demand.

Introduction

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Datasets

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Wikipedia, the free encyclopedia

en.wikipedia.org/wiki/Main_Page

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- Technology
- Geography
- Science
- All portals

From today's featured article

The **Texas Revolution** (1835–36) began when colonists in the Mexican province of Texas rebelled after **President Santa Anna** overturned the **Mexican constitution**, dismissing state legislatures and militias and centralizing the government. He stepped down from the presidency to lead Mexican troops in quashing the revolt. **Sam Houston** was named commander of the **Texian Army** and sent **Jim Bowie** to destroy the **Alamo** to keep it out of Mexican hands. Bowie and **William B. Travis** chose instead to lead the **Alamo** defenders in what

In the news

- A **heat wave** in India kills at least 500 people.
- In motorsport, **Nico Rosberg** wins the **Monaco Grand Prix**.
- In cricket, **Mumbai Indians** win the **Indian Premier League** after defeating **Chennai Super Kings** in the **final**.
- Måns Zelmerlöw** (*pictured*), representing **Sweden** with the song "Heroes", wins the **Eurovision Song Contest** in Vienna, Austria.
- Mathematician and **Nobel Laureate John**

Википедия — свободная энциклопедия

ru.wikipedia.org/wiki/Главная_страница

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Добро пожаловать в Википедию,
свободную энциклопедию, которую может редактировать каждый.
Сейчас в Википедии **1 223 878 статей** на русском языке.

Создать статью (с помощником) Справка Система рубрикации Пресса о Википедии

География Наука Спорт
Искусство Общество Техника
История Персоналии Философия
Музыка Религия Все порталы

Избранная статья

Оригенизм — совокупность направлений **христианского богословия**, восходящая к различным теориям представителя **александрийской богословской школы Оригена** (ок. 185 — ок. 254). Ориген оказал огромное влияние на последующее развитие христианского богословия, его учениками были **святитель Григорий Чудотворец**, выдающийся богослов III века **Памфил Кесарийский** и церковный историк **Евсевий**

Знаете ли вы?

Из новых статей Википедии:

- По одной из версий «**Скрюченный человек**»^[en] жил **здесь** (на илл.).
- Троюродный брат Лермонтова** женился на светской львице, который был посвящён приписываемый Лермонтову **ярвительный экспромт**.
- Построенный в настоящем **Байконуре** космодром был **ложным**.
- Первые номера **революционной газеты** были напечатаны на седьмом году её существования.

Wikipédia, l'encyclopédie libre

fr.wikipedia.org/wiki/Wikipédia:Accueil_principal

Nettrom Discussion Brouillon Préférences Bêta Liste de suivi Contributions Se déconnecter

Accueil Discussion Lire Voir le texte source Historique Recherche

Bienvenue sur Wikipédia
Le projet d'encyclopédie libre que vous pouvez améliorer
1 626 734 articles en français
Version pour appareil mobile

Arts — Géographie — Histoire — Sciences — Société — Sport — Technologies
Liste des portails thématiques

Lumière sur...

La **maison Joseph-Gauvreau** est un immeuble patrimonial situé à **Rimouski** dans la région du **Bas-Saint-Laurent** au **Québec**. Cette maison bourgeoise de style **éclectique**, construite en 1906 et 1907 pour le D^r **Joseph Gauvreau**, lui sert de résidence principale, abritant également son cabinet médical et une clinique d'**hydrothérapie**, dont la notoriété s'étendra à tout le Québec. Gauvreau est aussi l'un des pionniers de l'**hygiène** et de la **médecine préventive** au Québec.

Présentation

Wikipédia est un projet d'encyclopédie collective établie sur Internet, universelle, multilingue et fonctionnant sur le principe du **wiki**. Wikipédia a pour objectif d'offrir un contenu librement réutilisable, objectif et vérifiable, que chacun peut modifier et améliorer.

Wikipédia, a enciclopédia livre

pt.wikipedia.org/wiki/Wikipédia:Página_principal

Nettrom Discussão Testes Preferências Beta Páginas vigiadas Contribuições Sair

Página principal Discussão Ler Ver código-fonte Ver histórico Pesquisa

Bem-vindo(a) à Wikipédia,
a enciclopédia livre que todos podem editar.
874 941 artigos em português.
Versão para dispositivos móveis

Ajuda · Índice geral · Perguntas frequentes · Políticas da Wikipédia · Portais

Artigo em destaque

Neptuno (português europeu) ou **Netuno** (português brasileiro) (AO 1990: **Neptuno** ou **Netuno**) é o oitavo planeta do Sistema Solar, o último a partir do Sol desde a reclassificação de **Plutão** para a categoria de **planeta anão**, em 2006. Pertencente ao grupo dos **gigantes gasosos**, possui um tamanho ligeiramente menor que o de **Urano**, mas maior massa, equivalente a 17 **massas terrestres**. Netuno orbita o Sol a uma distância média de 30,1 **unidades astronômicas**.

O **planeta** é formado por um pequeno núcleo rochoso ao redor do qual encontra-se uma camada formada possivelmente por **água**, **amônia** e **metano** sobre a qual situa-se sua turbulenta atmosfera constituída predominantemente de **hidrogênio** e **hélio**. De fato notáveis eventos climáticos ocorrem em Netuno, inclusive a formação de diversas

Apresentação

A Wikipédia é um projeto de enciclopédia coletiva universal e multilingue estabelecido na Internet sob o princípio **wiki**. A Wikipédia tem como objetivo fornecer um conteúdo reutilizável livre, objetivo e verificável, que todos possam editar e melhorar. O projeto é definido pelos **princípios fundadores**. O conteúdo é disponibilizado sob a licença **Creative Commons BY-SA** e pode ser copiado e reutilizado sob a mesma licença

Introduction

RQ1

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RQ3a

RQ3b

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San Francisco - Wikipedia, the free encyclopedia

en.wikipedia.org/wiki/Talk:Alcatraz_Island

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Wikipedia for World Heritage

en.wikipedia.org/wiki/Wikipedia_for_World_Heritage

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Article Talk Read Edit source Edit View history More Search

Wikipedia for World Heritage

A stub-class article from Wikipedia, the free encyclopedia

The topic of this article **may not meet Wikipedia's general notability guideline**. Please help to establish notability by adding **reliable, secondary** sources about the topic. If notability cannot be established, the article is likely to be **merged, redirected, or deleted**.

Find sources: "Wikipedia for World Heritage" – news · newspapers · books · scholar · JSTOR · free images (August 2012)

Wikipedia for World Heritage refers to the efforts put forth to get Wikipedia listed as a UNESCO World Heritage Site. The idea was originally proposed to the Wikipedia chapter by Wikimedia at the 2011 Wikimedia Conference in Berlin.^{[1][2]} An online petition was started at the German Wikipedia on May 23, 2011.^[3] The bid is considered to be the first for a digital entity and is expected to be controversial with the list's maintainers who are notably conservative.^[2]

Jimbo Wales has stated that "the basic idea is to recognize that Wikipedia is this amazing global cultural phenomena that has transformed the lives of hundreds of thousands of people."^[2]

If Wikipedia fails to get listed as a World Heritage Site, it has been suggested that they apply for UNESCO Intangible Cultural Heritage Lists.^[3]

References [edit source | edit]

- [↑] "Wikimedia Conference 2011/Documentation/Common Project I: 10 years Wikipedia" ⓘ. Wikimedia Meta-Wiki. Retrieved 27 May 2011.
- [↑] ⓘ Ⓘ Ⓒ O'Brien, Kevin J. (23 May 2011). "Worthy Online Resource, but Global Cultural Treasure?" ⓘ. *The New York Times*. Retrieved 27 May 2011.
- [↑] ⓘ Ⓘ Ⓒ Williams, Christopher (May 26, 2011). "Wikipedia seeks World Heritage Site status" ⓘ. *The Daily Telegraph*. Retrieved 27 May 2011.

San Francisco - Wikipedia, the free encyclopedia

en.wikipedia.org/wiki/San_Francisco

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Article Talk Read Edit source Edit View history More Search

San Francisco

A featured article from Wikipedia, the free encyclopedia

Coordinates: 37°47′N 122°25′W﻿ / ﻿37.783°N 122.417°W﻿ / 37.783; -122.417

This article is about the city and county in California. For other uses, see San Francisco (disambiguation).

San Francisco (/sænˈfrɑːnsɪskoʊ/), officially the **City and County of San Francisco**, is the cultural, commercial, and financial center of Northern California and the only consolidated city-county in California.^[24] San Francisco encompasses a land area of about 46.9 square miles (121 km²)^[25] on the northern end of the San Francisco Peninsula, which makes it the smallest county in the state. It has a density of about 18,187 people per square mile (7,022 people per km²), making it the most densely settled large city (population greater than 200,000) in the state of California and the second-most densely populated major city in the United States after New York City.^[26] San Francisco is the fourth-most populous city in California, after Los Angeles, San Diego and San Jose, and the 13th-most populous city in the United States—with a Census-estimated 2014 population of 852,469.^[21] The city and its surrounding areas are known as the San Francisco Bay Area, which is a part of the larger OMB designated San Jose-San Francisco-Oakland combined statistical area, the fifth most populous in the nation with an estimated population of 8.6 million.

San Francisco (Spanish for Saint Francis) was founded on June 29, 1776, when colonists from Spain established Presidio of San Francisco at the Golden Gate and Mission San Francisco de Asis named for St. Francis of Assisi a few miles away.^[8] The California Gold Rush of 1849 brought rapid growth, making it the largest city on the West Coast at the time. San Francisco became a consolidated city-county in 1856.^[27] After three-quarters of the city was destroyed by the 1906 earthquake and fire,^[28] San Francisco was quickly rebuilt, hosting the Panama-Pacific International Exposition nine years later. In World War II, San Francisco was the port of embarkation for service members shipping out to the Pacific Theater.^[29] After the war, the confluence of returning servicemen, massive immigration,

WikiProject California / San Francisco Bay Area (Rated B-class, High-importance) [show]

WikiProject Protected areas (Rated B-class, Low-importance) [show]

WikiProject Islands (Rated B-class) [show]

A fact from this article was featured on Wikipedia's Main Page in the *On this day...* section on

- Introduction
- RQ1**
- RQ2
- RQ3a
- RQ3b
- Discussion

Measuring misalignment

Introduction

RQ1

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Discussion

Example: English Wikipedia

| Stub | Start | C | B | Good Article | A | Featured Article |
|-----------|-----------|---------|--------|--------------|-----|------------------|
| 2,226,591 | 1,068,722 | 167,907 | 77,946 | 19,914 | 793 | 4,353 |



PAH:
Least
popular



PAH:
Most
popular

| | | | | | |
|--------------|------------|-----|------|------|------------|
| Introduction | RQ1 | RQ2 | RQ3a | RQ3b | Discussion |
|--------------|------------|-----|------|------|------------|

Perfect Alignment Hypothesis

Real World

| | PAH ₁ | PAH ₂ | PAH ₃ | PAH ₄ | PAH ₅ | PAH ₆ | PAH ₇ |
|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Q ₁ | 2,226,591 | 0 | 0 | 0 | 0 | 0 | 0 |
| Q ₂ | 0 | 1,068,722 | 0 | 0 | 0 | 0 | 0 |
| Q ₃ | 0 | 0 | 167,907 | 0 | 0 | 0 | 0 |
| Q ₄ | 0 | 0 | 0 | 77,946 | 0 | 0 | 0 |
| Q ₅ | 0 | 0 | 0 | 0 | 19,914 | 0 | 0 |
| Q ₆ | 0 | 0 | 0 | 0 | 0 | 793 | 0 |
| Q ₇ | 0 | 0 | 0 | 0 | 0 | 0 | 4,353 |

| | | | | | |
|--------------|-----|-----|------|------|------------|
| Introduction | RQ1 | RQ2 | RQ3a | RQ3b | Discussion |
|--------------|-----|-----|------|------|------------|

Trend 1: Overall alignment

| | PAH ₁ | PAH ₂ | PAH ₃ | PAH ₄ | PAH ₅ | PAH ₆ | PAH ₇ |
|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Q ₁ | 1,710,819 | 477,687 | 30,701 | 6,647 | 657 | 16 | 64 |
| Q ₂ | 454,270 | 477,547 | 92,585 | 37,148 | 6,130 | 190 | 852 |
| | 49 | 19,056 | 6,259 | 232 | 1,344 | | |
| | 07 | 12,102 | 5,447 | 262 | 1,351 | | |
| | 92 | 2,136 | 953 | 62 | 506 | | |
| | 28 | 92 | 31 | 0 | 12 | | |
| | 46 | | | | 218 | | |



| | | | | | |
|--------------|-----|-----|------|------|------------|
| Introduction | RQ1 | RQ2 | RQ3a | RQ3b | Discussion |
|--------------|-----|-----|------|------|------------|

Trend 1: Overall alignment

Consistent across languages

| Language | % aligned articles |
|------------|--------------------|
| English | 62.5 |
| French | 67.8 |
| Portuguese | 77.6 |
| Russian | 45.8 |

Introduction

RQ1

RQ2

RQ3a

RQ3b

Discussion

Trend 2: High quality misaligned

| | PAH ₁ | PAH ₂ | PAH ₃ | PAH ₄ | PAH ₅ | PAH ₆ | PAH ₇ |
|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Q ₁ | 1,710,819 | 477,687 | | | | | |
| Q ₂ | 454,270 | 477,547 | | | | | |
| Q ₃ | 43,255 | 71,012 | | | | | |
| Q ₄ | 14,408 | 30,669 | | | | | |
| Q ₅ | 3,649 | 9,416 | | | | | |
| Q ₆ | 132 | 399 | | | | | |
| Q ₇ | 59 | | | | | | |

Introduction

RQ1

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Trend 2: High quality misaligned

Also consistent across languages

| Language | % High Quality/Low Demand |
|------------|---------------------------|
| English | 47.2 |
| French | 62.7 |
| Portuguese | 52.0 |
| Russian | 23.6 |

Introduction

RQ1

RQ2

RQ3a

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Discussion



ularity misaligned

| | PAH ₅ | PAH ₆ | PAH ₇ |
|--------|------------------|------------------|------------------|
| 6,647 | 657 | 16 | 64 |
| 37,148 | 6,130 | 190 | 852 |
| 19,056 | 6,259 | 232 | 1,344 |
| 12,102 | 5,447 | 11 | 1,351 |
| 2,136 | 55 | 62 | 506 |
| 52 | 31 | 0 | 12 |
| 766 | 438 | 32 | 218 |

Introduction

RQ1

RQ2

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Discussion

Trend 3: High popularity misaligned

Also consistent across languages

| Language | % High Popularity/Not top quality |
|------------|-----------------------------------|
| English | 95.0 |
| French | 95.7 |
| Portuguese | 91.1 |
| Russian | 94.1 |

Introduction

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RQ2: What is the impact of misalignment on Wikipedia's readers?

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RQ1

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Popularity is nonlinear

| PAH ₁ | PAH ₂ | PAH ₃ | PAH ₄ | PAH ₅ | PAH ₆ | PAH ₇ |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 2,226,591 | 1,068,722 | 167,907 | 77,946 | 19,914 | 793 | 4,353 |



The Misaligned View

A view of an article where its quality is not in alignment with its popularity

Introduction

RQ1

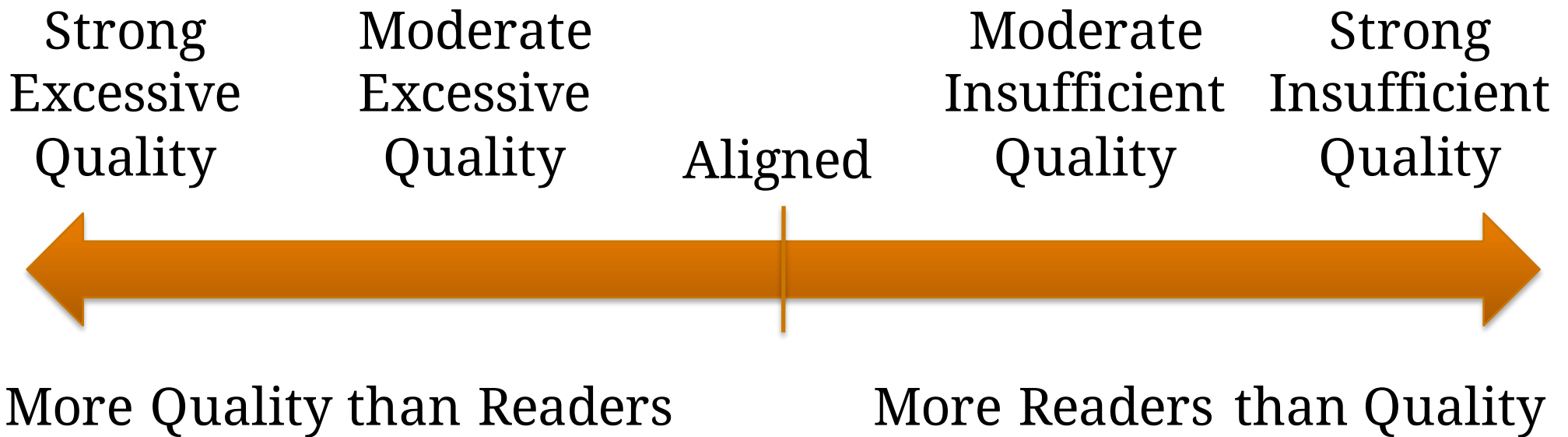
RQ2

RQ3a

RQ3b

Discussion

Categories



| | | | | | |
|--------------|-----|-----|------|------|------------|
| Introduction | RQ1 | RQ2 | RQ3a | RQ3b | Discussion |
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Misalignment negatively affects Wikipedia, 42.7% of monthly article views are in the *strong insufficient quality* category.

Introduction

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That's *2 billion*
monthly article views!

Introduction

RQ1

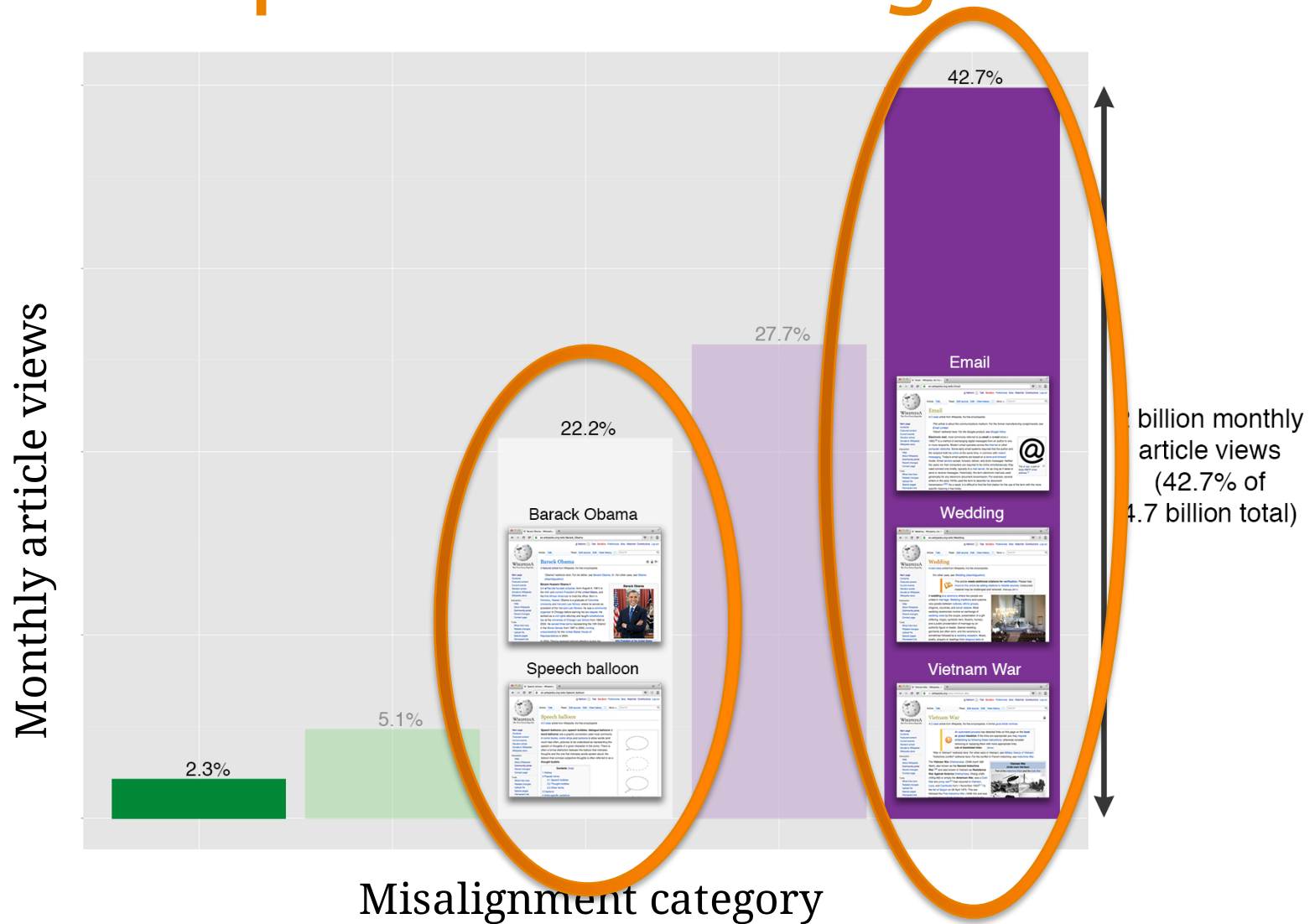
RQ2

RQ3a

RQ3b

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The Impact of Misalignment



Introduction

RQ1

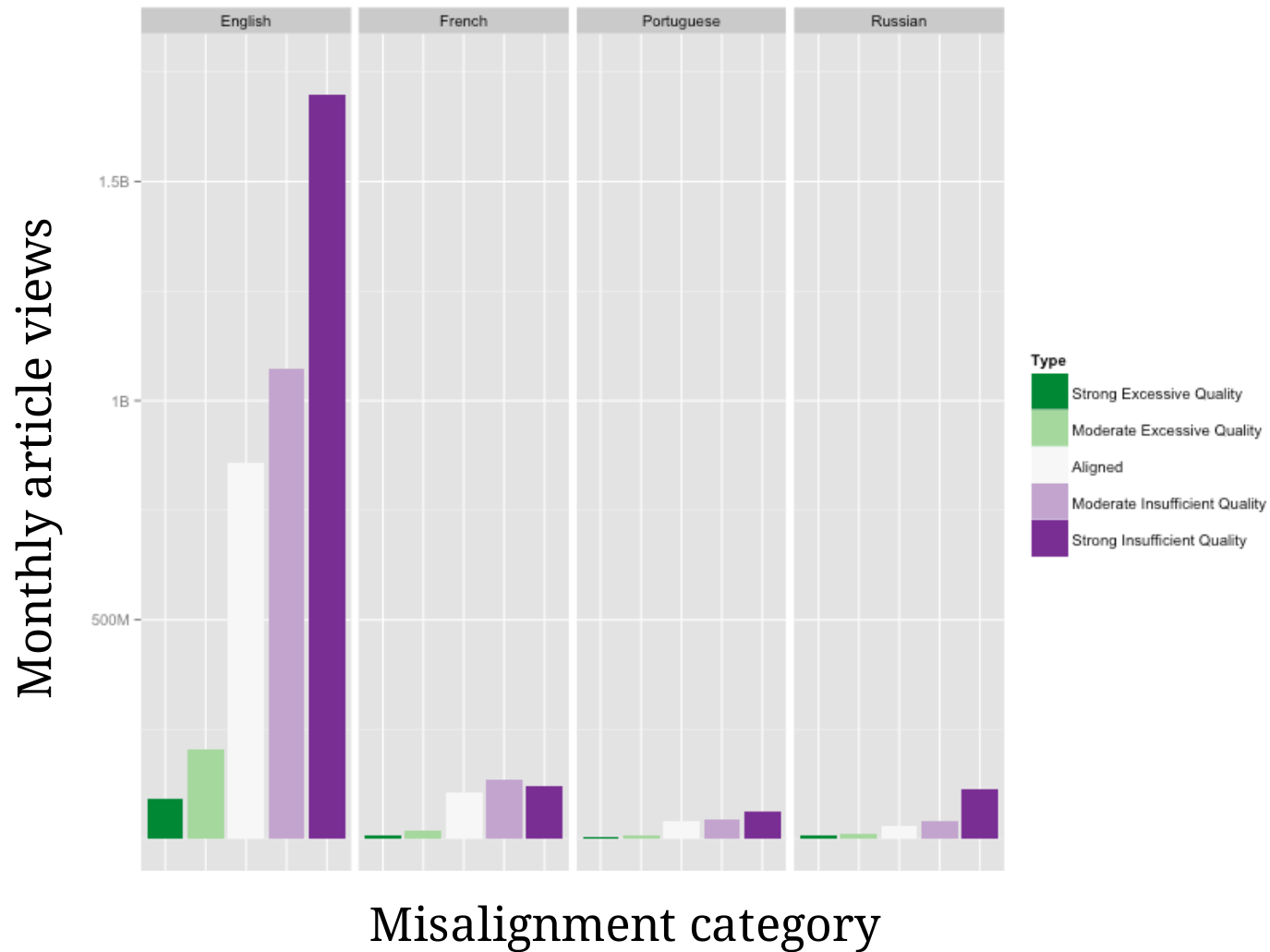
RQ2

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RQ3b

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Impact by Language



Introduction

RQ1

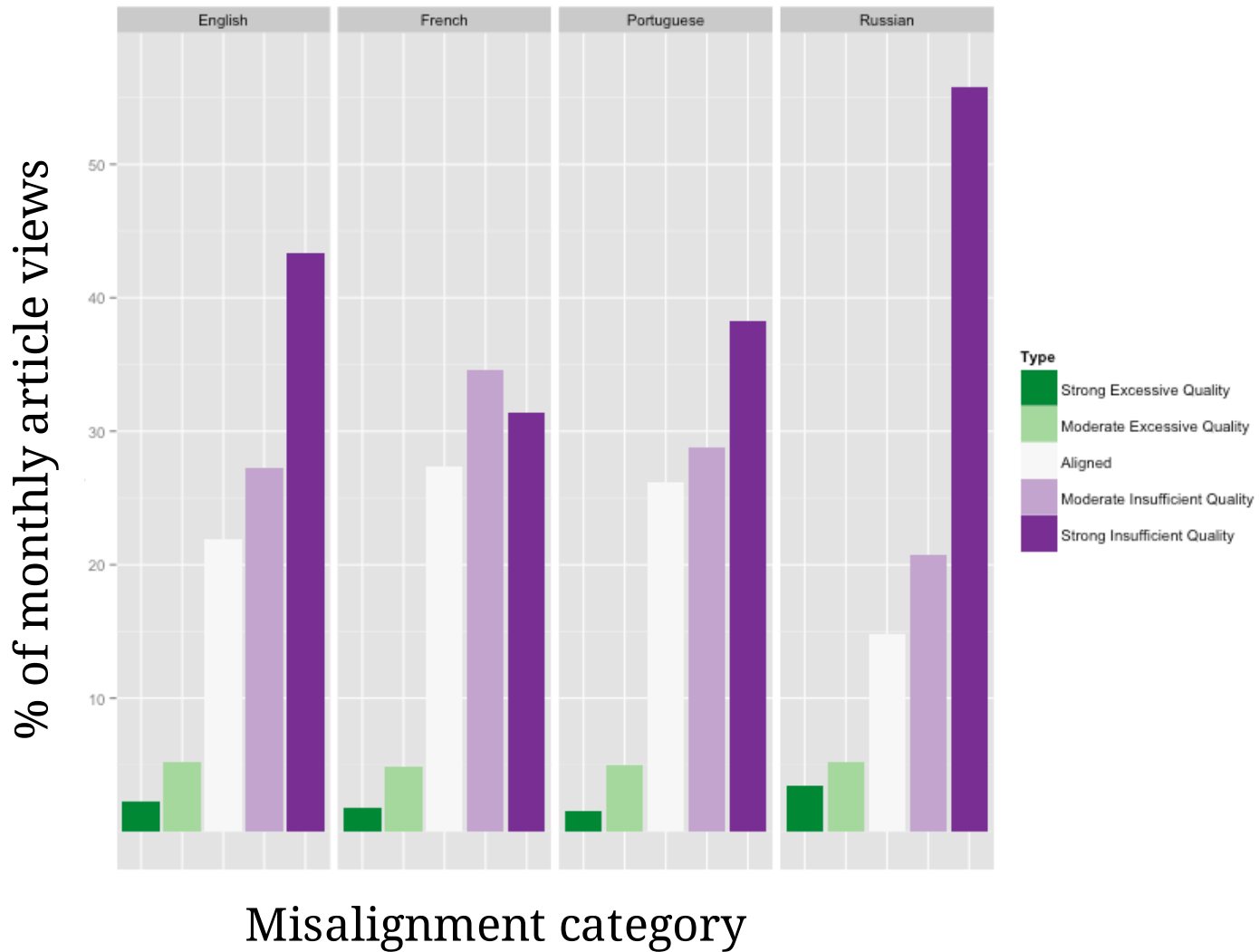
RQ2

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RQ3b

Discussion

Impact Proportions by Language



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Characterising misalignment

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RQ3a: Are certain topics over-represented amongst misaligned articles?

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Categorisation

The screenshot shows the Wikipedia page for Portal:Contents/Categories. The page title is "Portal:Contents/Categories" and it is part of the "Portal:Contents" namespace. The page features a navigation bar with tabs for "Contents", "Overview", "Outlines", "Lists", "Featured", "Portals", "Glossaries", "Categories", and "Indices". Below this, there is a grid of sub-topics including Reference, Culture, Geography, Health, History, Mathematics, Nature, People, Philosophy, Religion, Society, and Technology. The main content area is titled "Wikipedia's contents: Categories" and lists various categories such as General reference, History and events, Philosophy and thinking, Culture and the arts, Mathematics and logic, Religion and belief systems, Geography and places, Natural and physical sciences, Society and social sciences, Health and fitness, People and self, and Technology and applied sciences. A section titled "Categories" explains that these help users find information. Below this, there is a "General reference" section with a list of "Main categories" and a "QUICK LINKS" box.

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San Francisco - Wikipedia, the free encyclopedia

en.wikipedia.org/wiki/Talk:Alcatraz_Island

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Article Talk Read Edit source New section View history More Search

Talk:Alcatraz Island

From Wikipedia, the free encyclopedia

This is the **talk page** for discussing improvements to the **Alcatraz Island** article.

- This is not a forum for general discussion of the article's subject.**
- Put new text under old text. **Click here to start a new topic.**
- Please sign and date your posts by typing four tildes (~~~~).
- New to Wikipedia? **Welcome!** Ask questions, get answers.
- Be polite, and welcoming to new users
- Assume good faith
- Avoid personal attacks
- For disputes, seek dispute resolution

Article policies

- No original research
- Neutral point of view
- Verifiability

This article is of interest to the following WikiProjects: [hide]

| | | |
|---|----------------------------------|--------|
| WikiProject Military history | (Rated B-Class) | [show] |
| WikiProject National Register of Historic Places | (Rated B-class, High-importance) | [show] |
| WikiProject Correction and Detention Facilities | (Rated B-class, Top-importance) | [show] |
| WikiProject California / San Francisco Bay Area | (Rated B-class, High-importance) | [show] |
| WikiProject Protected areas | (Rated B-class, Low-importance) | [show] |
| WikiProject Islands | (Rated B-class) | [show] |

A fact from this article was featured on Wikipedia's Main Page in the *On this day...* section on

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Datasets

| | PAH ₁ | PAH ₂ | PAH ₃ | PAH ₄ | PAH ₅ | PAH ₆ | PAH ₇ |
|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Q ₁ | 1,710,819 | 477,687 | 30,701 | 6,647 | 657 | 16 | 64 |
| Q ₂ | 454,270 | 477,547 | 92,585 | 37,148 | 6,130 | 190 | 852 |
| Q ₃ | 43,255 | 71,012 | 26,749 | 19,056 | 6,259 | 232 | 1,344 |
| Q ₄ | 14,408 | 30,669 | 13,707 | 12,102 | 5,447 | 262 | 1,351 |
| Q ₅ | 3,649 | 9,416 | 3,192 | 2,136 | 953 | 62 | 506 |
| Q ₆ | 132 | 398 | 128 | 92 | 31 | 0 | 12 |
| Q ₇ | 59 | 1,994 | 846 | 766 | 438 | 32 | 218 |

Spent Effort

Needs Improvement



Adjusting focus



1. Size of WikiProject in number of articles
2. Size of WikiProject in number of members
3. Number of articles in our misaligned datasets

Introduction

RQ1

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RQ3b

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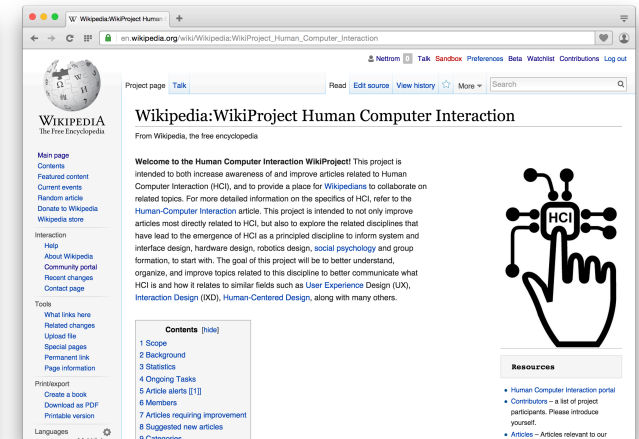
Accounting for size



1,314,572 articles



149,602 articles



167 articles

Introduction

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Relative Risk

“how much risk is increased
or decreased from an initial level”
(Davies, Crombie, and Tavaloki 1998)

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Needs Improvement

High popularity, not highest quality

Introduction

RQ1

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Discussion

Needs Improvement

| Rank | Topic | N | Rel. Risk |
|------|-----------------|-----|-----------|
| 1 | Countries | 144 | 506.9 |
| 2 | Pop music | 97 | 38.9 |
| 3 | Internet | 84 | 37.6 |
| 4 | Comedy | 134 | 21.9 |
| 5 | Technology | 58 | 15.8 |
| 6 | Religion | 121 | 15.8 |
| 7 | Science Fiction | 70 | 15.5 |
| 8 | Rock music | 84 | 11.4 |
| 9 | Psychology | 60 | 11.1 |
| 10 | LGBT studies | 136 | 9.1 |

Introduction

RQ1

RQ2

RQ3a

RQ3b

Discussion

Needs Improvement

| Rank | Topic | N | Rel. Risk |
|------|-----------------|-----|-----------|
| 1 | Countries | 144 | 506.9 |
| 2 | Pop music | 97 | 38.9 |
| 3 | Internet | 84 | 37.6 |
| 4 | Comedy | | |
| 5 | Technology | | |
| 6 | Religion | | |
| 7 | Science Fiction | | |
| 8 | Rock music | | |
| 9 | Psychology | | |
| 10 | LGBT studies | | |



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RQ1

RQ2

RQ3a

RQ3b

Discussion

Spent Effort

Highest quality, low popularity

Introduction

RQ1

RQ2

RQ3a

RQ3b

Discussion

Spent Effort

| Rank | Topic | N | Rel. Risk |
|------|-------------------|-----|-----------|
| 1 | Cricket | 65 | 159.0 |
| 2 | Tropical cyclones | 112 | 99.3 |
| 3 | Middle Ages | 87 | 13.4 |
| 4 | Politics | 147 | 12.0 |
| 5 | Fungi | 53 | 9.1 |
| 6 | Birds | 78 | 8.2 |
| 7 | Military history | 404 | 5.3 |
| 8 | Ships | 88 | 5.0 |
| 9 | England | 72 | 4.9 |
| 10 | Australia | 258 | 4.3 |

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Discussion

Spent Effort

| Rank | Topic | N | Rel. Risk |
|------|-------------------|-----|-----------|
| 1 | Cricket | 65 | 159.0 |
| 2 | Tropical cyclones | 112 | 99.3 |
| 3 | Middle Ages | 87 | 13.4 |
| 4 | Politics | 147 | 12.0 |
| 5 | Fungi | 53 | 9.1 |
| 6 | Birds | 78 | 8.2 |
| 7 | Military history | 404 | 5.3 |
| 8 | Ships | 88 | 5.0 |
| 9 | England | 72 | 4.9 |
| 10 | Australia | 258 | 4.3 |

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Discussion

Inefficient Choices

| Rank | Topic | N | Rel. Risk |
|------|-------------------|-----|-----------|
| 1 | Cricket | 65 | 159.0 |
| 2 | Tropical cyclones | 112 | 99.3 |
| 3 | Middle Ages | 87 | 13.4 |



Introduction

RQ1

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RQ3b

Discussion

RQ3b: Is popularity associated with short-term surges in demand?

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RQ2

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RQ3b: Needs Improvement dataset

| | PAH ₁ | PAH ₂ | PAH ₃ | PAH ₄ | PAH ₅ | PAH ₆ | PAH ₇ |
|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Q ₁ | 1,710,819 | 477,687 | 30,701 | 6,647 | 657 | 16 | 64 |
| Q ₂ | 454,270 | 477,547 | 92,585 | 37,148 | 6,130 | 190 | 852 |
| Q ₃ | 43,255 | 71,012 | 26,749 | 19,056 | 6,259 | 232 | 1,344 |
| Q ₄ | 14,408 | 30,669 | 13,707 | 12,102 | 5,447 | 262 | 1,351 |
| Q ₅ | 3,649 | 9,416 | 3,192 | 2,136 | 953 | 62 | 506 |
| Q ₆ | 132 | 398 | 128 | 92 | 31 | 0 | 12 |
| Q ₇ | 59 | 1,994 | 846 | 766 | 438 | 32 | 218 |

Introduction

RQ1

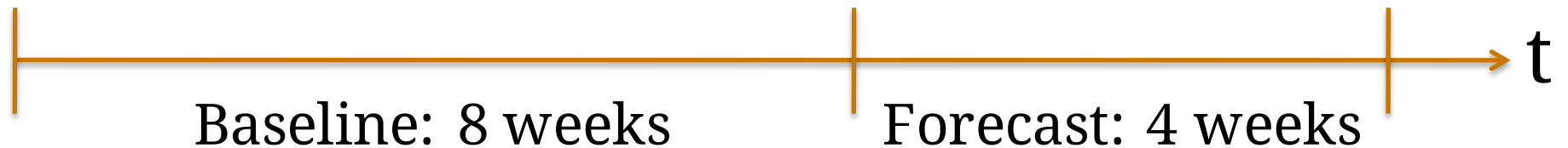
RQ2

RQ3a

RQ3b

Discussion

Method: ARIMA
time-series forecasting
Accuracy: 98%



Introduction

RQ1

RQ2

RQ3a

RQ3b

Discussion

Result: 53.6% stable



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RQ1

RQ2

RQ3a

RQ3b

Discussion

Discussion

Introduction

RQ1

RQ2

RQ3a

RQ3b

Discussion

The Volunteers are Free to Leave at Any Time



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Discussion

PAH



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RQ2

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RQ3b

Discussion

Solutions

RECENT RESEARCH

User:Nettrom/sandbox/sugg

en.wikipedia.org/w/index.php

Articles you might like to edit, from SuggestBot

Note: All columns in this table are sortable, allowing you to rearrange the table so the articles most interesting to you are shown at the top. All images have mouse-over popups with more information. For more information about the columns and categories, please [consult the documentation](#), and please do get in touch on [SuggestBot's talk page](#) with any questions you might have.

| Views/Day ↕ | Quality ↕ | Title ↕ | Content ↕ | Headings ↕ | Images ↕ | Links ↕ | Sources ↕ | Tagged with... ↕ |
|-------------|-----------|---|-----------|------------|----------|---------|-----------|------------------|
| 262 | ★★★ | Fender Precision Bass (talk) | × | × | | | × | Add sources |
| 68 | ★★★ | Yamaha electric guitar models (talk) | × | | | × | × | Add sources |
| 38 | ★★★ | Yngwie Malmsteen Stratocaster (talk) | × | × | × | | × | Add sources |
| 220 | ★★★ | Dreadnought (guitar type) (talk) | × | × | × | × | × | Add sources |
| 218 | ★★★ | Nerds (candy) (talk) | × | | × | × | × | Add sources |
| 51 | ★★★ | Ibanez Edge (talk) | × | × | × | × | × | Add sources |
| 31 | ★★★ | Daytona USA 2 (talk) | × | | × | × | × | Cleanup |
| 13 | ★★★ | Greatest Hits (Night Ranger album) (talk) | × | × | × | × | × | Cleanup |
| 36 | ★★★ | Mad (Ne-Yo song) (talk) | × | × | × | | × | Cleanup |
| 1,958 | ★★★ | Music genre (talk) | × | | × | | × | Expand |
| 94 | ★★★ | Teisco (talk) | × | | | × | × | Expand |
| 159 | ★★★ | Compression (physics) (talk) | × | | × | × | × | Expand |
| 14 | ★★★ | Celtic Thunder: Storm (talk) | × | × | × | × | × | Unencyclopaedic |
| 173 | ★★★ | Shred guitar (talk) | × | × | × | | × | Unencyclopaedic |

way
S.”

Introduction

RQ1

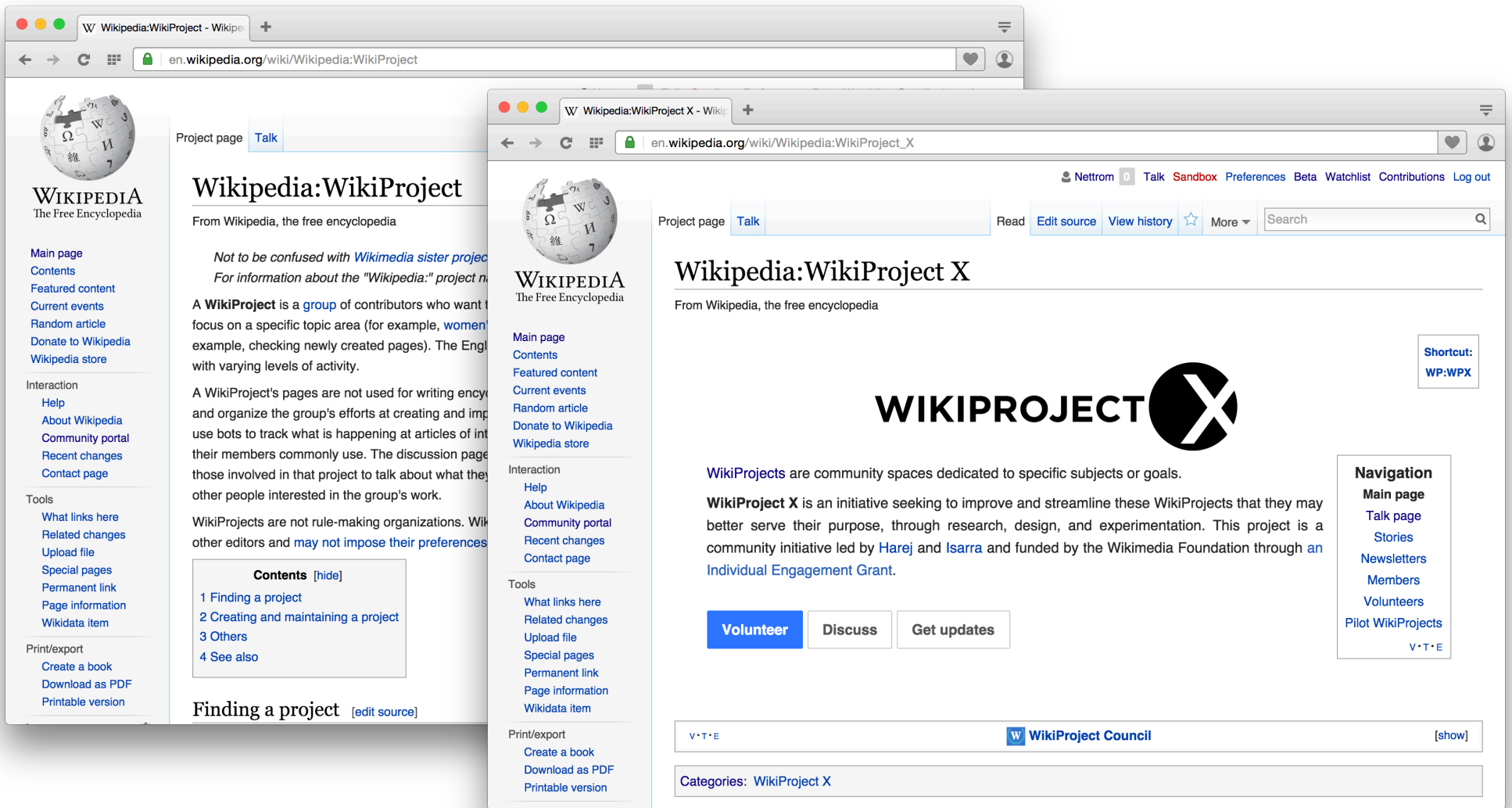
RQ2

RQ3a

RQ3b

Discussion

WikiProjects to the Rescue?



Introduction

RQ1

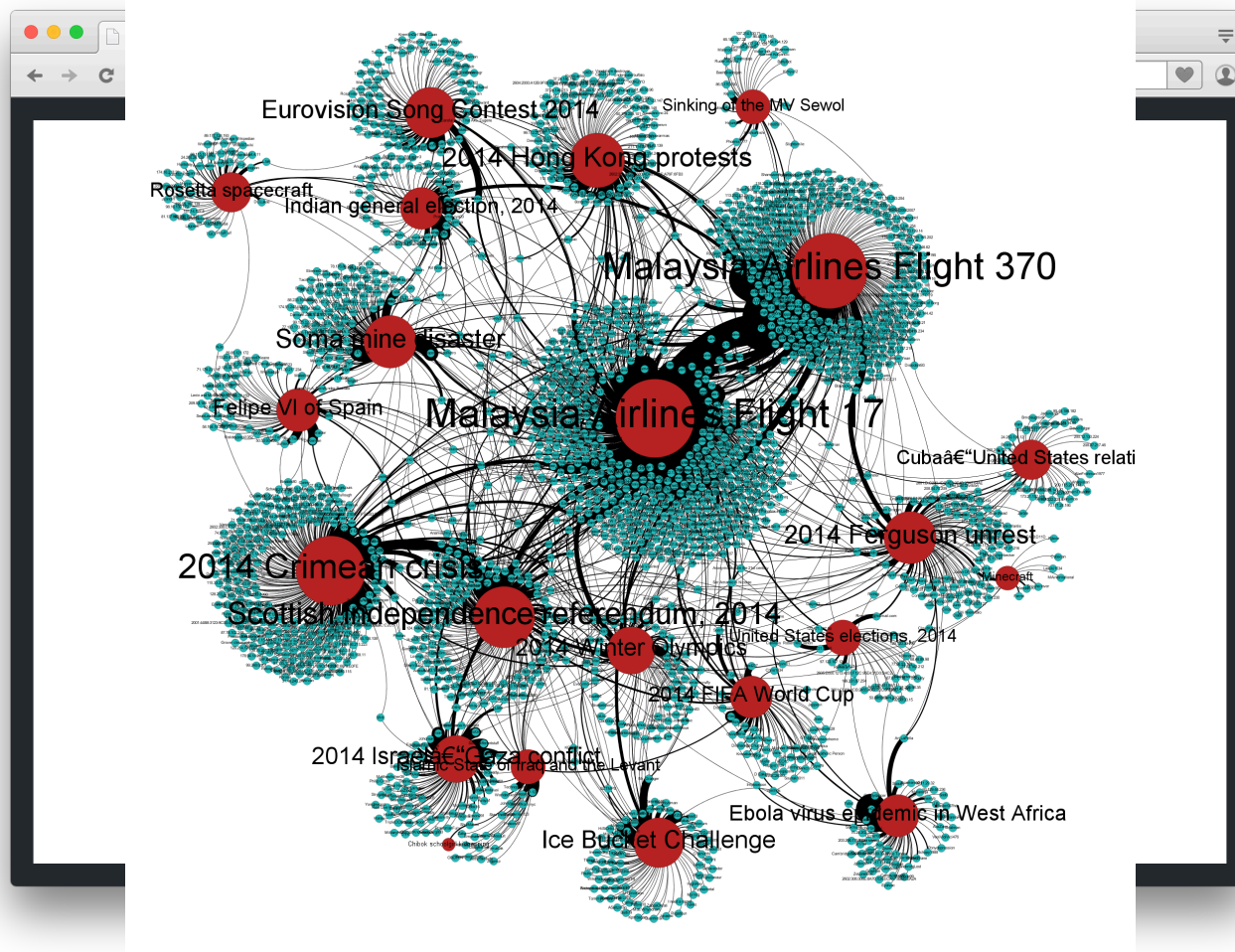
RQ2

RQ3a

RQ3b

Discussion

Rapid Response Team



Introduction

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Thanks to...

- » Wikimedia Foundation, Wiki ViewStats team, and Wikipedia contributors
- » GroupLens Research
- » Our reviewers
- » National Science Foundation, grants IIS-0808692, IIS-0968483, and IIS-1111201

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<http://www-users.cs.umn.edu/~morten/>

Seasonality Issues

Data gathering periods: July 27–Aug 24, 2014 (enwp),
Nov 2-30, 2014 (other languages)

Misses both Easter and Christmas.

Topic analysis did not reveal any typical events.

Multi-year dataset can enable predictions of seasonal events, e.g. religious holidays, sports events, etc...

Pageviews in Wikipedia

Granularity in our datasets: day

Possible improvement in filtering out automated agents, etc... AFAIK something WMF is working on.

Examining raw data did not reveal suspicious patterns, e.g. prolonged attention to “odd” articles.

Dataset used is the best data that is currently available.

Compared to Related Work

1. Grounded definition of misalignment using the Perfect Alignment Hypothesis.
2. First to examine multiple communities.
3. First to examine the impact of misalignment.
4. First to study the character of misalignment using two approaches: topics, and trend analysis.

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Brian C. Keegan