Webinar Series

Publishing Research when English is your second language

12 August | SGT 12PM

Dr. Atsushi Kume
Professor, Department of Agro-environmental Sciences, Faculty of Agriculture, Kyushu University
Publishing research when English is your second language

英語が第二言語の場合の研究の出版

当英语是您的第二语言时，出版研究报告

영어가 제 2 언어 인 경우 연구 출판

Publikasi penelitian jika bahasa Inggris adalah bahasa kedua

งานวิจัยที่พิมพ์ถ้าภาษาอังกฤษเป็นภาษาที่สอง

إصدار بحث إذا كانت اللغة الإنجليزية هي اللغة الثانية

九州大学大学院農学研究院 Kyushu University

久米 篤 Kume, Atsushi
Conflict of interest statement

I have nothing to declare and I have no conflict of interest related to this presentation.

Dr. KUME, Atsushi
Self-introduction
https://kyushu-u.pure.elsevier.com/ja/persons/atsushi-kume/

• **First English paper** Ecological Research (1993)

• **First Author**

• **Reviewer**

• **Editor**
  Journal of Plant Research, Ecological Research (EiC), Plant Root, Scientific Data
Translation
Introduce excellent textbooks to Japan
分野のレベルを上げるための教科書翻訳
I'm still not very good at English

• Has my English improved since I wrote a lot of English papers? No!
• Did I improve my English conversation by writing a lot of papers? No!
• In many cases, articles written by British scientists are not easy to read. Why?
• If I ask a British person in my neighborhood to look at my English, suggested English seems to be different from the English used in scientific articles.
<table>
<thead>
<tr>
<th>Rank</th>
<th>Region, country, or economy</th>
<th>2008</th>
<th>2018</th>
<th>Average annual growth rate 2008–18 (%)</th>
<th>2018 world total (%)</th>
<th>2018 cumulative total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>World</td>
<td>1,755,850</td>
<td>2,555,959</td>
<td>3.83</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>China</td>
<td>249,049</td>
<td>528,263</td>
<td>7.81</td>
<td>20.67</td>
<td>20.67</td>
</tr>
<tr>
<td>2</td>
<td>United States</td>
<td>393,979</td>
<td>422,808</td>
<td>0.71</td>
<td>16.54</td>
<td>37.21</td>
</tr>
<tr>
<td>3</td>
<td>India</td>
<td>48,998</td>
<td>135,788</td>
<td>10.73</td>
<td>5.31</td>
<td>42.52</td>
</tr>
<tr>
<td>4</td>
<td>Germany</td>
<td>91,904</td>
<td>104,396</td>
<td>1.28</td>
<td>4.08</td>
<td>46.61</td>
</tr>
<tr>
<td>5</td>
<td>Japan</td>
<td>108,241</td>
<td>98,793</td>
<td>-0.91</td>
<td>3.87</td>
<td>50.47</td>
</tr>
<tr>
<td>6</td>
<td>United Kingdom</td>
<td>91,358</td>
<td>97,681</td>
<td>0.67</td>
<td>3.82</td>
<td>54.29</td>
</tr>
<tr>
<td>7</td>
<td>Russia</td>
<td>31,798</td>
<td>81,579</td>
<td>9.88</td>
<td>3.19</td>
<td>57.49</td>
</tr>
<tr>
<td>8</td>
<td>Italy</td>
<td>56,157</td>
<td>71,240</td>
<td>2.41</td>
<td>2.79</td>
<td>60.27</td>
</tr>
<tr>
<td>9</td>
<td>South Korea</td>
<td>44,094</td>
<td>66,376</td>
<td>4.17</td>
<td>2.60</td>
<td>62.87</td>
</tr>
<tr>
<td>10</td>
<td>France</td>
<td>66,460</td>
<td>66,352</td>
<td>-0.02</td>
<td>2.60</td>
<td>65.47</td>
</tr>
<tr>
<td>11</td>
<td>Brazil</td>
<td>35,490</td>
<td>60,148</td>
<td>5.42</td>
<td>2.35</td>
<td>67.82</td>
</tr>
<tr>
<td>12</td>
<td>Canada</td>
<td>53,296</td>
<td>59,968</td>
<td>1.19</td>
<td>2.35</td>
<td>70.17</td>
</tr>
<tr>
<td>13</td>
<td>Spain</td>
<td>44,191</td>
<td>54,537</td>
<td>2.13</td>
<td>2.13</td>
<td>72.30</td>
</tr>
<tr>
<td>14</td>
<td>Australia</td>
<td>37,174</td>
<td>53,610</td>
<td>3.73</td>
<td>2.10</td>
<td>74.40</td>
</tr>
<tr>
<td>15</td>
<td>Iran</td>
<td>17,034</td>
<td>48,306</td>
<td>10.99</td>
<td>1.89</td>
<td>76.29</td>
</tr>
<tr>
<td>-</td>
<td>EU</td>
<td>528,938</td>
<td>622,125</td>
<td>1.64</td>
<td>24.34</td>
<td>-</td>
</tr>
</tbody>
</table>

Source(s)
National Center for Science and Engineering Statistics, National Science Foundation; Science-Metrix; Elsevier; Scopus abstract and citation database, accessed June 2019.
I am not good at Japanese handwriting!

• I have been not good at writing Kanji (漢字) since I was in elementary school.
• When I was in high school, it is very difficult for me to remember Kanji and spell English words correctly.
• As a result, I struggled with university entrance examinations.
• Fortunately, I passed an entrance examination because the university adopted optical answer sheets!
The beginning of the personal computer era (1980s)

• Development and practical application of Japanese word processor.
• Practical use of Japanese input software (FEP, IME).
• Type in my pronunciation and it will be converted to 漢字!
• It doesn't matter if my handwriting is not very good.
• Easy to edit long sentences.

It was a revolution for me and I started to write a lot of Japanese essays and reports.
Timeline related to digitization of writing/publishing environment

- Articles were written by hand (Japanese) or typewriter (English).
- The figure was drawn by hand using rOtring and French curves (-1985)
- WordStar (1978) CP/M
- Grammatik (1981) was the first grammar checking program
- IBM PC DOS 1.0 (1981)
- Macintosh (1984) and LaserWriter (1985) enabled DTP
- Japanese word processors had become popular (not PC/AT)
- WordStar and WordPerfect
- Adobe Illustrator (1989)
- Adobe Photoshop (1990)
- Microsoft word add grammar checking function (1992)
- Adobe Acrobat (1993)
- Netscape Navigator (1994)
- SpringerLink (1996), Blackwell/Synergy, ScienceDirect (2000-)
- PLOS ONE (2006)
All manual writing environment!

http://www.bellini.it/design/OLIVETTI_Lettera35.html
1. Introducing WordStar

WordStar is highly flexible and very visible. Match the screens as you give commands, and information in various parts of the screen will guide you. You won't see all the information all the time, but it will be there when you need it.

WHERE YOU ARE

The seven WordStar menus are your greatest aids. They are like signposts at the top of your screen, showing where you are.

Adobe Illustrator
Macintosh version 3

Personalized for:
Apple Laserwriter (1985)
By Apple - Apple, CC0,
https://commons.wikimedia.org/w/index.php?curid=31015583

The Macintosh (1984)
By Marcin Wichary from San Francisco, U.S.A. - en:File:Macintosh,_Google_NY_office_computer_museum.jpg, CC BY 2.0,
https://commons.wikimedia.org/w/index.php?curid=84346215
How to write English papers?
Old Examples of typical Japanese researchers

• Researchers make a living by compiling and publishing their research results in scientific papers.
• There is no way to avoid writing papers in English.
• However, it was not easy for many Japanese researchers to write a paper in English.
• Usually, they had to go through many rounds of correction by their supervisors before they were ready to submit a paper in English.
• However, in many cases, the ability of the supervisors to write English papers was insufficient.

I have seen so many tragedies.
When I was in my doctoral course (-1995)

• To obtain a degree, three English papers must be published.
• Since the establishment of my laboratory, no student had been able to receive a degree in the program.
• My supervisor had no experience of publishing in an international journal.
• I didn't have any information, so I tried to write something like a paper blindly and submitted it to domestic and international journals.
• There were few companies specializing in English proofreading.
• The manuscript was sent by international mail. There was no electronic submission system.
• Piles of rejections, but continued to revise according to peer reviews’ suggestions.
• Finally, I managed to publish required papers!
After I got my degree, an acquaintance told me, “Dr. XX at a certain research institute corrected your submitted paper every night.”

I realized that the management of academic journals is based on chains of good will and friendship among researchers!
English expression in scientific papers

• It's not a colloquialism.
• It's very different from the English I learned before high school in Japan.
• There are many technical terms and expressions that are not found in ordinary dictionaries.
• Scientific English can't be written or fixed by ordinary English speakers.
• Complicated phrases and syntax are excluded, and simple and easy-to-understand expressions are selected.

How do I find the right terminology usage?
inMeXes: An Incremental PubMed Expression Search

https://docman.dbcls.jp/im/index.html.en
Hyper Collocation

dictionary based on arXiv repository

https://hypcol.marutank.net/
# Allie: A Search Service for Abbreviation / Long Form


## Search Result - Abbreviation: SPF

<table>
<thead>
<tr>
<th>Long Form No.</th>
<th>Long Form</th>
<th>Research Area</th>
<th>Co-occurring Abbreviation</th>
<th>PubMed/MEDLINE Info. (Year, Title)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>specific pathogen-free (1991 times)</td>
<td>Veterinary Medicine</td>
<td>GF (144 times) IBIV (60 times) NOV (60 times)</td>
<td>1961 Swine reperation. IV. Influence of management upon the growth of specific pathogen-free (SPF) pigs.</td>
</tr>
<tr>
<td>2</td>
<td>S-phase fraction (491 times)</td>
<td>Neoplasms (276 times)</td>
<td>FCM (54 times) DI (38 times) Pi (28 times)</td>
<td>1976 Subpopulations of breast carcinoma defined by S-phase fraction, morphology, and estrogen receptor content.</td>
</tr>
<tr>
<td>3</td>
<td>sun protection factor (469 times)</td>
<td>Dermatology (217 times)</td>
<td>UV (88 times) UVR (28 times) MED (19 times)</td>
<td>1968 Passive transfer of acquired resistance in mice to group B Arboviruses by serum protective factor(s) (SPF) independent of serum neutralizing antibody or interferon.</td>
</tr>
<tr>
<td>4</td>
<td>Supematant protein factor (21 times)</td>
<td>Biochemistry (14 times)</td>
<td>alpha-TTF (4 times) CRALBP (2 times) PG (2 times)</td>
<td>1977 Purification and properties of a soluble protein activator of rat liver squamae epoxide.</td>
</tr>
<tr>
<td>5</td>
<td>synthetic phase fraction (19 times)</td>
<td>Pathology (6 times)</td>
<td>PI (4 times) PCNA (3 times) EGFR (2 times)</td>
<td>1988 Flow cytometric DNA analysis of colon adenocarcinomas: a comparative study of preparatory techniques.</td>
</tr>
<tr>
<td>6</td>
<td>sphenopalatine foramen (17 times)</td>
<td>Otolaryngology (9 times)</td>
<td>SPA (4 times) FR (3 times) PPF (3 times)</td>
<td>1996 Osteologic classification of the sphenopalatine foramen.</td>
</tr>
<tr>
<td>7</td>
<td>safety performance function (14 times)</td>
<td>Traumatology (12 times)</td>
<td>CMFs (3 times) CT (2 times) ED (2 times)</td>
<td>2012 Measuring safety treatment effects using full Bayes non-linear safety performance intervention functions.</td>
</tr>
</tbody>
</table>

## Display Settings:
- **Search Conditions:**
  - Search Keyword: SPF
  - Search Method: Exact match.
  - Research Area: All
- **Results:**
  - Abbreviation: SPF
  - Appearance Frequency: 2004 times
  - Long forms: 212
Moment of inertia when axis of center of gravity and axis of revolution of an inertia field do not match is calculated by the following formula.  
\[ I = \frac{1}{2} \int r^2 \, dm \]  

With a specific gravity of 1, they have nevertheless the identical physical properties traditional silicone.  

Inclination sensing uses the gravity vector and its projection on the axes of the accelerometer to determine the tilt angle.

[ [...] mass more than one million times that of the sun and strong gravity, black holes suck in gas in their vicinity and emit visible light and x-rays.  

The control circuit power is still input even in a non-excitation state and when the stop position of the load mechanism moves due to the effect of gravity, human power, etc., position deviation pulses generate.

In this experiment of stress associated with gravity change, an aircraft was...
Be careful when borrowing sentences

- The best way to improve your English is to imitate good English expressions.
- In the old days, it was recommended to copy and use the expressions of leading papers.
- The authors often reused texts from their own previously published papers.

Today, such acts can be ethically problematic as plagiarism or self-plagiarism.
After reviewing the iThenticate report for your manuscript, the Editor-in-Chief determined that it exceeds AJS's established threshold of 20% similarity to other published sources. You may review the similarity index on the attached pdf. We are returning the manuscript to you for correction/rewriting so that it is substantially different.
“Text recycling, also known as self-plagiarism, occurs when sections of the same text appear (usually un-attributed) in more than one of an author’s own publications. The term ‘text recycling’ has been chosen to differentiate from ‘true’ plagiarism (i.e. when another author’s words or ideas have been used, usually without attribution).”

Two conflicting principles!

• Write in English from the beginning.
• Write in your first language and then translate it into English.

• I've tried both, but lately I've been writing in Japanese first. Why?
Humans can no longer beat AI in most board games

The impact of AlphaGo (2016)
Google DeepMind

ARTICLE

Mastering the game of Go without human knowledge

David Silver1*, Julian Schrittwieser1*, Karen Simonyan1*, Ioannis Antonoglou1, Aja Huang1, Arthur Guez1, Thomas Hubert1, Lucas Baker1, Matthew Lai1, Adrian Bolton1, Yutian Chen1, Timothy Lillicrap1, Fan Hui1, Laurent Sifre1, George van den Driessche1, Thore Graepel1 & Demis Hassabis1

A long-standing goal of artificial intelligence is an algorithm that learns, tabula rasa, superhuman proficiency in challenging domains. Recently, AlphaGo became the first program to defeat a world champion in the game of Go. The tree search in AlphaGo evaluated positions and selected moves using deep neural networks. These neural networks were trained by supervised learning from human expert moves, and by reinforcement learning from self-play. Here we introduce an algorithm based solely on reinforcement learning, without human data, guidance or domain knowledge beyond game rules. AlphaGo becomes its own teacher: a neural network is trained to predict AlphaGo’s own move selections and also the winner of AlphaGo’s games. This neural network improves the strength of the tree search, resulting in higher quality move selection and stronger self-play in the next iteration. Starting tabula rasa, our new program AlphaGo Zero achieved superhuman performance, winning 100–0 against the previously published, champion–defeating AlphaGo.
“You can now use Google Translate to translate articles on Wikipedia”
https://wikimediafoundation.org/2019/01/09/you-can-now-use-google-translate-to-translate-articles-on-wikipedia/
The rise of machine translation services!

- Google Translate
  https://translate.google.co.jp/
- Microsoft Translator
  https://www.bing.com/translator
- Mirai Translator
  https://miraitranslate.com/trial
- DeepL Translate
  https://www.deepl.com/translator
- Other free and paid services

These services are incomplete but are improving day by day.
Use of English editorial services

• There are many companies specializing in English proofreading for scientific manuscripts.
• AJE, Textcheck, Edanz, Editage, Enago...
• English proofreading is done by Ph.D experts, but the level of editors varies from person to person, even in a same company.
• The main difference between companies is in the management of the editors (assignment, accounting, etc.) and the extent of their specialization.
• If you can find, it's a good choice to hire a good personal editor.
Demo document

The basics

Misspellings and grammatical errors can affect your credibility. The same goes for misused commas, and other types of punctuation. Not only will Grammarly underline these issues in red, it will also showed you how to correctly write the sentence.

Underlines that are blue indicate that Grammarly has spotted a sentence that is unnecessarily wordy. You’ll find suggestions that can possibly help you revise a wordy sentence in an effortless manner.

But wait...there’s more?

Grammarly Premium can give you very helpful feedback on your writing. Passive voice can be fixed by Grammarly, and it can handle classical word-choice mistakes. It can also help with inconsistencies such as switching between e-mail and email or the U.S.A. and the USA.

It can even help when you wanna refine ur siang or formality level. That’s especially useful when writing for a broad audience ranging from businessmen to friends and family, don’t you think? It’ll inspect your vocabulary carefully and suggest the best word to make sure you don’t have to analyze your writing too much.
Take-home message

• The majority of scientific papers are published by researchers whose second language is English.
• Even in the field of scientific paper writing, AI is surpassing human capabilities.
• It became easier to translate an article written logically in your native language into English.
• We are entering the era of writing papers based on AI and networks.