

英語で出版する 科学論文の 著者・翻訳者向け EASE ガイドライン

国際的な科学コミュニケーションをより効果的にするために、研究論文やその他科学系出版物は、完全かつ簡潔、明快であるべきです。この一般ガイドラインは、これらを達成するために、著者および翻訳者、校正者をサポートすることを目的としています。

書き始める前に：

- **賢明かつ信頼性のある結論**を出すために、研究結果が確実かつ完全であると確信するまで論文を書き始めない(O'Connor 1991)。
- 書き始める前に**ジャーナルを選択**することが望ましい。ジャーナルの読者層とあなたが対象とする読者が一致しているかを確認する(Chipperfield et al. 2010)。ジャーナルの投稿規程を入手し、全体の長さ、必要または許される図表の数等に関して、ジャーナルが望む規定にそった論文作成計画を立てる。

原稿は完全でなければなりません。つまり、必要な情報が欠如してはなりません。**情報は読者が見つけやすい場所にあれば、より解釈が深まる**ことを覚えておいてください(Gopen & Swan 1990)。例えば、実験的研究論文には以下の情報を含むべきです。

- **タイトル**：他分野の専門家にも明確かつ理解できるものであり、さらに論文の内容を反映したものであること。具体的であり、一般的または曖昧でないこと(O'Connor 1991)。関係があれば、タイトルに研究機関や場所、研究対象となった有機体の国際的な学名、実験計画

(例：ケーススタディ、ランダム化比較試験)を含める。重複する場合はやむを得ないが、タイトルに含める情報はアブストラクトの中で繰り返す必要はない(常に併記されるため)。

- **著者一覧**：例えば、研究計画やデータ収集、結果の解釈に大いに貢献した、**かつ**原稿を執筆または大幅な見直しを行った、および決定稿の承認を行った人々(ICMJE 2010)。最も活躍した人を著者一覧の最初に示す。著者名には、著者の(研究中の)**所属、現住所**を連絡用に記載すること。連絡が付きやすいように著者全員のメールアドレスも記載しておくこと。
- **アブストラクト**：研究を行った理由(背景)、何の疑問に答えようとしているのか(目的)、どのように研究を行ったか(方法)、発見事項(結果：主なデータ、関連性)、発見に対する解釈と主な帰結(結論)を簡潔に説明すること。読者の大半にとって、アブストラクトはあなたの研究に関する主な情報源となるので、論文の**内容を反映**させる。あなたの研究結果に興味を持つ可能性のある人に論文がオンラインで検索されやすいように、キーワードは全てアブストラクトに含める(データベースの多くはタイトルとアブストラクトしか含んでいない)。**研究レポート**においては、アブストラクトは実際の結論を含む**有益な情報**であること。査読、メタ分析、その他広範囲な論文においてのみ、アブストラクトは指標となるものであること。例えば、主な論点は列挙するが結果は示さない(CSE

2006)。アブストラクトは別に掲載されるので、アブストラクトの中では図表を参照しないこと。文献参照は、どうしても必要でない限り許されていない（但し、括弧の中で著者やタイトル、年数等の詳細情報を示す必要がある）。アブストラクトにある情報は全て、論文本文中にも必ず登場していること。（*Appendix: Abstracts* 参照）

- **追加キーワードリスト**（ジャーナル編集長が許可する場合）：タイトルやアブストラクトに抜けている関連科学用語を全て列挙する。固有のキーワードであること。研究が学際的な意味合いをもつ場合は、より一般的な用語を追加すること（O'Connor 1991）。メディカル文書では、[MeSH Browser](#)にある語彙を使用する。
- **略語リスト**（ジャーナル編集長が要求する場合）：専門家以外の人たちに対しても明白であるという場合を除き、論文で使用する略語は全て定義すること。
- **序文**：研究の必要性を説明し、**研究目的**や何の疑問に答えようとしているのかを明確にする。より一般的な問題から始め、徐々に研究課題に焦点を当てていく。
- **方法**：研究の実施方法を詳細に説明する（例：研究範囲、データ収集、基準、分析物質の出所、サンプルの規模、計測数、参加者の年齢・性別、装置、データ分析、統計的検定、使用ソフトウェア）。結果に影響しうる全ての要因を考慮する必要がある。英語以外またはアクセスできない出版物に記載されている方法を引用する場合は、論文の中で詳細に説明する。患者の権利や動物実験、環境保護等については、倫理規範（例：[WMA 2008](#)）を必ず遵守すること。
- **結果**：研究の新しい結果を示す（公表済みデータは本項には含むべきではない）。図表は全て論文記載順に番号を付加し、論文本文中に記述すること。統計解析は必ず適切であること（例：[Lang 2004](#)）。データの加工や歪曲、重要なデータを排除してはならない。また、読者の誤解を招くような図を作成してはならない。データ改ざんは**科学的不正行為**になる可能性がある（[COPE flowcharts](#) 参照）。
- **考察**：（序文の終わりに記載した）研究課題に回答し、できるだけ客観的に新しい結果と公表済みデータを比較する。研究の欠点や主な結果を考察する。あなたの考えに反する結果も全て考慮する。自分の見解を立証するために、秩序立った信頼できる証拠を使用する（[ORI 2009](#)）。考察の最後または別の項で研究の主な結論や実際の意義を強調する。
- **謝辞**：共同著者を除く研究に大いに貢献した人々について言及し、あらゆる資金源へ感謝を示す。“This work was supported by the Medical Research Council [grant number xxxx]”の形式を推奨する。特定の資金源が無い場合は次の文書を記載する。“This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.”（[RIN 2008](#)）その他に利益相反があれば編集者に公表する。例えば、メーカーまたは投稿論文に興味がある組織との金銭的、個人的つながり等（[Goozner et al. 2009](#)）。発表済みの図表等を利用する場合は、著作権所有者に確認し、図表の説明文か謝辞の中で言及する。言葉の専門家（例：校正者、翻訳者）や統計学者、データ収集者等にサポートしてもらった場合は、透明性を確保するために彼らのサポートに対して謝辞を述べる（[ICMJE 2010](#), [Graf et al. 2009](#)）。但し論文の決定稿に対する責任はないことを説明する。謝辞に挙げた人全ての同意を必ず得ること。（*Appendix: Ethics* 参照）
- **参照**：その他出版物から引用した情報は情報源を全て必ず明らかにする。参照リストには、図書館やインターネットで検索する際に必要なデータを全て含むこと。非英語出版物については可能な限り大括弧の中に（必要ならば英語表記に従って音訳された）**原題**を記載すること（[CSE 2006](#)）。利用できないデータの引用は避けること。参照リストに非公表のデータは含めない。非公表データを記載する場合は、論文本文中に情報源を記載する。デー

タを引用する際には生産者から許可を得ること。

- 理論に関する出版物や総説、ケーススタディ等には異なる論文の構造が適切な場合もある。● 出版物の中には、アブストラクトや長めの**概要**がその他の言語で記載されている場合もある。これは多くの研究分野において非常に有益である。
- アブストラクトの長さや参照スタイル等については、ジャーナルの**投稿規定**に従うことを忘れないこと。

査読者と読者の時間を節約するために「簡潔」に記述する

- 序文に示した研究課題に無関係な情報は含めない。引用数は過度にならないこと。類似例を多用しない。
- あなたが過去に発表した論文の本質的部分を丸写しせず、同じ原稿を2つのジャーナルに同時に投稿しないこと。さもなければ、**二重投稿**になる可能性がある（[COPE flowcharts](#) 参照）。これは、会議アブストラクトのような予備的出版には適用されない（O'Connor 1991）。また、完全に異なる読者層（例：別言語、専門家および一般大衆への出版）に対する場合、および両ジャーナルのジャーナル編集長から許可を得た場合は、**第二次的出版**が認められる（[ICMJE 2010](#)）。二次出版のタイトルページ脚注に一次出版について言及すること。
- ひとつの項に記載される情報は、別の項で**繰り返さない**ほうが望ましい。アブストラクト、図表の凡例、結論を示す項は除く。
- 図表全ての必要性を検討する。表に示すデータは図で再度示すべきではない（逆も同様）。データのリストが長い場合は、文書中に繰り返すべきではない。
- 図表に対する説明は、参考情報とし長くなりすぎないこと。類似データが複数の図表に示されている場合は、説明形式も同様にすべきである
- **疑う余地の無い説明**（例：“Forests are very important ecosystems.”）、その他冗長

表現（例：“It is well known that...”）は**削除する**のが望ましい。

- **長い科学用語**を繰り返し使用する場合は、論文本文の中での初回言及時に略語を定義し、その後はその略語を使用する。
- 必要であれば懸念事項を示すが、**過度に言葉を濁すのは避ける**（例：“may possibly be potential”よりも“are potential”と書くこと）。しかし、**結論を一般化し過ぎてはならない**。
- ジャーナル編集長が要求しない限り、数は、**ゼロ、イチ**（単位が無い場合）や**誤解が生じそうな場合**（例：文書の始まりまたは数字を含む略語の前）を**除くと**、1桁の場合も**全て数字で書く**（CSE 2006）。

理解しやすくするために明確に書く：文書を読みやすくする

科学的内容

- 他者や自分のこれまでの出版物における**考えと今回の研究のデータを明確に区別する**。関連性がある場合は常に引用する。翻訳する場合も含め、**その他の情報源の文書を要約または説明することが望ましい**。そのまま文書（例：文書全体または長文）をコピーする場合は、引用符の中に記述する（例：[ORI 2009](#), [Kerans & de Jager 2010](#)）。そうでなければ、他者または自身の**剽窃**になる可能性がある（[COPE flowcharts](#) 参照）。
- **必ず英語の科学用語を正しく使用する**。英語ネイティブスピーカーが書いた文書に基づくのが望ましい。直訳は間違っている場合がある（例：*false friends* 等似ているが意味の異なる語、翻訳者が作り出したいわゆる存在しない言葉の場合がある）。間違った言葉の使用が多いので、疑問に思う場合は、英語辞書で調べる（例：動物の妊娠に関する *trimester*。 [Baranyiová 1998](#) 参照）。また単語やフレーズを [Wikipedia](#) で調べることができる。例えば、母国語と英語で結果を比較し、想定する言葉の意味が本当に同じかを調べる。しかし、[Wikipedia](#) は常に信頼できる情報源とは限らない。

- ほとんどが訳文中で使用されており、英語圏ではあまり見かけない言葉の場合は、同様な意味を持つよく知られた英単語で置き換えてみる（例：*phytocoenosis* を *plant community* で置き換える）。科学用語の類義語が英語になれば、明確に定義し、好ましい英訳を提案する。
- 初回言及時に、**共通でないまたは不明瞭な科学用語を定義する**。（検索支援のために）類義語が複数あればリストにすることができ、（混乱を避けるために）後でひとつだけを採用すること。科学機関によって正式な用語体系が確立されていれば、その用語を科学コミュニケーションの際に使うべきである。
- 読者に意味を推測させるような**不明瞭な記述はさける**。（*Appendix: Ambiguity* 参照）
- 割合を書く場合は、**何を 100%とするか**を明確にする。相関や関係等について書く場合は、どの値を比較しているのかを明確にする。
- 「SI units」「Celsius degrees」が一般的に好まれている。数字の「1」との混乱を避けるため、必要であれば「litre」は「L」と省略する（CSE 2006）。
- その他多くの言語と同様に、英語にも**小数点**がある（コンマとは異なる）。小数点の左右どちらかに4桁以上の数値がある場合は、小数点から左右どちらにも3桁毎に**半角スペース**（コンマとは異なる）を使用する（CSE 2006）。
- 世紀や月等を表示する場合は、**大文字のローマ数字は英語ではまれなため使用しないこと**。英国と米国では日付の表記が異なるため（下記参照）、「月」は単語全体または最初の3文字で示すのが望ましい。
- あまり知られていない**地名**を翻訳する場合は、可能な限り元の地名も記載すること。例えば、“in the Kampinos Forest (Puszcza Kampinowska)”と記載する。場所や気候等に関する付加情報は読者にとって役に立つ場合がある。
- 文書は**主に外国人によって読まれることを忘れてはならない**。彼らはあなたの国では常識となっている特定の状況や分類、概念を理解していないかもしれない。従って、補足説明が必要となる場合がある（Ufnalska 2008）。例えば、よく知られている雑草、*Erigeron annuus* は国によっては *Stenactis annua* と呼ばれる。よって、英文でも、国際的に認められている名前を使用し、同意語を括弧の中を書くこと。

文章構造

- **一般的に文は長すぎてはならない。構造は比較的シンプルなものとし、主語は動詞の近くに置くこと**（Gopen & Swan 1990）。例えば、抽象名詞は避け、“Measurements of X were carried out...”ではなく“X was measured...”と書く（*Appendix: Simplicity* 参照）。受身を多用しないこと（例：Norris 2011）。メッセージを正確またはより明確に伝えるために、必要であれば翻訳時に文章構造を修正すること（Burrough-Boenisch 2003）。
- **文章はまとまりのある論理的な構造であり、よって理解しやすくすること**。（*Appendix: Cohesion* 参照）
- 各段落は、トピックセンテンスから始まり、以降の文はトピックを十分に発展させるものであること。
- 他の言語とは対照的に、英語では理解を深めるために並列構造が認められている。例えば、類似データを比較する場合に“it was high in A, medium for B, and low in the case of C”と書くよりも“it was high in A, medium in B, and low in C”と書くことができる。
- 論文本文を参照することなく**図表が容易に理解できるようにすること**。参考とならないデータは省く（例：ある列の値が全ての行に含まれる場合はその列を削除し、脚注に記述することができる）。一貫性を保つために必要な場合、または単語全体を記述するスペースが無い場合のみ、略語を使用する。図表の説明文や脚注で、不明瞭な略語や記号を全て定義すること（例：エラーバーは、標準偏差または標準誤差、信頼区間を示す場合があ

る)。小数点（コンマとは異なる）を使うことを忘れないようにし、必要なときは常に軸ラベルと単位を表記する。

- 小規模データ集団を扱うときは、表を使用することを考える (Kozak 2009)。(Appendix: Text-tables 参照)
- 長い一覧（略語等）の場合は、コンマとピリオドの間であるセミコロン (;) で個々の項目を区切るのが望ましい。

言語問題

- 科学用語が不要な場合は常に一般的な用語を使うのが望ましい。但し、非英語ネイティブスピーカーにとって理解しづらい場合があるので、句動詞と同様に話し言葉や慣用語句は避けること（例：find out, pay off）(Geercken 2006)。
- 論文本文における初回言及時に略語を定義すること（読者にとってあいまいな場合）。文章が理解しづらくなるので様々な略語を多用しすぎないこと。論文の中でほとんど使われない用語は略さないこと。アブストラクトの中での略語の使用は避けること。
- 一般的に、研究をいかにに行い何を見発見したか、または他の研究者が行った内容については過去形を使用する。一般的な説明や解説（例：統計的有意性、結論）、論文の内容、特に図表の内容について記述する場合は現在形が望ましい (Day & Gastel 2006)。
- 不明瞭となるので、自分自身のことを“the author(s)”と書かないこと。必要ならば“we” or “I” と書くか、または“in this study”, “our results” または “in our opinion” といった表現を用いる（例：Hartley 2010, Norris 2011）。自分の新しい発見を示す場合に限り、“this study” と書くことに留意する。過去の文書で示した出版物を示す場合は“that study”と書く。引用した出版物の著者を示す場合は“those authors”と書く
- 科学文書では、制限用法では“that”（例：“only those that” を意味する場合）を用いるが、非制限用法では“which”を用いること。

- 曖昧な単語を使用する場合は、文脈の中で意味を確実に明確にすること。動詞が主語の人称と全て合っているか、代名詞が全て明確であるか（これは翻訳文の場合は重要である）を確認する。不規則複数形の名詞に留意すること。(Appendix: Plurals 参照)
- 文書を声に出して読み句読点を確認する。正しく理解してもらうために、音調の切れ目をコンマやその他句読点で示す（例：“no more data are needed”と“no, more data are needed”の違いに留意する）。
- スペルを一貫させる。スペルやデータの表記は、英国式か米国式ルールのどちらかに従うこと（例：英国式では“21 Sep 2009”、米国式では“Sep 21, 2009”）(Appendix: Spelling 参照)。目標ジャーナルが米国式と英国式のどちらのスペルを使用しているか確認し、スペルチェックと文章校正の設定を合わせる。
- 曖昧な箇所が無いか確認するために、親切な同僚に文書を全部読んでもらうよう依頼する。

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Appendix: Abstracts

Key elements of abstracts

Researchers are quite often in a “box” of technical details – the “important” things they focus on day in and day out. As a result, they frequently lose sight of 4 items essential for any readable, credible, and relevant IMRaD¹ article: the point of the research, the research question, its answer, and the consequences of the study.

To help researchers to get out of the box, I ask them to include 6 key elements in their article and in their abstract. I describe briefly the elements below and illustrate them with a fictitious abstract.

Key element 1 (BACKGROUND): the point of the research – why should we care about the study? This is usually a statement of the BIG problem that the research helps to solve and the strategy for helping to solve it. It prepares the reader to understand the specific research question.

Key element 2 (OBJECTIVES): the specific research question – the basis of credible science. To be clear, complete and concise, research questions are stated in terms of relationships between the variables that were investigated. Such specific research questions tie the story together – they focus on credible science.

Key element 3 (METHODS): a description of the methods used to collect data and determine the relationships between the variables.

Key element 4 (RESULTS): the major findings – not only data, but the RELATIONSHIPS found that lead to the answer. These are historical facts and, therefore, reported in past tense.

Key element 5 (CONCLUSIONS): the answers to the research questions – the authors’ INTERPRETATION of the factual findings. An answer to a research question is in the present tense - it reports the authors’ belief of how the world IS. Of course, in a pilot study such as the example below, the authors cannot yet present definitive answers, which they indicate by using the words “suggest” and “may”.

Key element 6 (final CONCLUSIONS): the consequences of the answers – the value of the work. This element relates directly back to the big problem: how the study helps to solve the problem, and it also points to the next step in research.

To save words in an abstract, we can combine several of the elements in a sentence. Here is a fictitious example. I have indicated the beginning of each key element with [..].

Predicting malaria epidemics in Ethiopia

Abstract

[1] Most deaths from malaria could be prevented if malaria epidemics could be predicted in local areas, allowing medical facilities to be mobilized early. Epidemics are known to be related to meteorological factors, but their correlations with subsequent malaria epidemics have never been determined. [2,3] In a retrospective study, we collected meteorological and epidemic data for 10 local areas in Ethiopia, covering the years 1963-2006. Using Poisson regression, we found that [4,5] factors AAA, BBB, and CCC correlated significantly ($P < 0.05$) with subsequent epidemics in all 10 areas, and our model has a predictive power of about 30%. [6] We conclude that meteorological factors can be used to predict malaria epidemics. The predictive power of our model needs to be improved, and it needs to be validated in other areas. (126 words)

This understandable and concise abstract forms the “skeleton” for the entire article. A final comment: This example is based on an actual research project and, at first, the author was in a “box” full of the mathematics, statistics, and computer algorithms of his predicting model. This was reflected in his first version of the abstract, where the word “malaria” never appeared.

**Written by Ed Hull, edhull@home.nl
(for more information, see Bless & Hull 2008)**

¹ IMRaD stands for Introduction, Methods, Results, and Discussion.

Appendix: Ambiguity

Empty words and sentences

Many English words are empty – they do not add information but require the reader to fill in information or context to be understood. The reader is forced to supply his or her own interpretation, which could be different from what you, the writer, mean.

Empty words seem to give information and uncritical readers do not notice them – that is why they work so well for marketing texts. However, empty words do not belong in articles reporting scientific research. Empty words require the reader to supply the meaning – very dangerous. Concise and clear communication requires words that convey specific meaning.

Examples

It is important that patients take their medicine.

- Note that to a physician the meaning is probably entirely different than to the sales manager of a pharmaceutical company. “Important” is one of our best-loved, but empty, words – it fits every situation.

The patient was treated for XXX.

- “Treated” is empty; we do not know what was done. One reader could assume that the patient was given a certain medicine, while another reader could assume that the patient was given a different medicine. Perhaps the patient was operated on, or sent to Switzerland for a rest cure.

The patient reacted well to the medicine.

- “Reacted well” gives us a positive piece of information, but otherwise it is empty; we do not know how the patient reacted.

We do high-quality research.

- “Quality” is empty. “Cost-effective” or “meets XXX guidelines” would be more specific.

The patient’s blood pressure was low.

- We interpret “high/low blood pressure” to mean “higher/lower than normal”, but we, the readers, have to supply that reference standard. A more concise statement is: *The patient’s blood pressure was 60/45.*

Empty words and phrases not only require the reader to supply the meaning, they also contribute to a wordy blah-blah text. In scientific articles they destroy credibility. Here are some examples.

It has been found that the secondary effects of this drug include...

- Better: *The secondary effects of this drug include...(ref.).* Or, if these are your new results: *Our results show that the secondary effects of this drug include...*

We performed a retrospective evaluation study on XXX.

- “Performed a study” is a much overused and rather empty phrase. Better: *We retrospectively evaluated XXX.*

More examples that require the reader to supply information if it is not evident from the context:

- *quality*
- *good/bad*
- *high/low*
- *large/small*
- *long/short*
- *proper/properly* (e.g. “...a proper question on the questionnaire...”)
- *As soon as possible...*

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Appendix: Cohesion

Cohesion – the glue

The word “cohesion” means “unity”, “consistency”, and “solidity”. Building cohesion into your text makes life easier for your readers – they will be much more likely to read the text. Cohesion “glues” your text together, focusing the readers’ attention on your main message and thereby adding credibility to your work.

Think of your text as a motorcycle chain made up of separate links, where each sentence is one link. A pile of unconnected links is worthless – it will never drive your motorcycle. Similarly, a pile of unconnected sentences is worthless – it will never drive your message home.

To build a cohesive text, you have to connect your sentences together to make longer segments we call paragraphs. A cohesive paragraph clearly focuses on its topic. You then need to connect each paragraph with the previous paragraph, thereby linking the paragraph topics. Linking paragraphs results in building cohesive sections of your article, where each section focuses on its main topic. Then, link the sections to each other and, finally, connect the end of your article to the beginning, closing the loop – now the chain will drive our motorcycle. Let’s look at linking techniques.

Basic guidelines for building a cohesive story:

1. Link each sentence to the previous sentence.
2. Link each paragraph to the previous paragraph.
3. Link each section to the previous section.
4. Link the end to the beginning.

Linking techniques

Whether you want to link sentences, paragraphs, sections or the beginning to the end, use two basic linking techniques:

- Use linking words and phrases, such as: *however, although, those, since then...*
- An example: *Our research results conflict with those of Smith and Jones. To resolve those differences we measured ...*
- Repeat key words and phrases – do not use synonyms. In scientific writing, repetition sharpens the focus. Repetition especially helps the reader to connect ideas that are physically separated in your text. For example: *Other investigators have shown that microbial activity can cause immobilization of labial soil phosphorus. Our results suggest that, indeed, microbial activity immobilizes the labial soil phosphorus.*

The example below illustrates how to link your answer to your research question, thus linking the Discussion with the Introduction.

In the Introduction, the research hypothesis is stated. For example: *The decremental theory of aging led us to hypothesize that older workers in “speed” jobs perform less well and have more absences and more accidents than other workers have.*

In the Discussion, the answer is linked to the hypothesis: *Our findings do not support the hypothesis that older workers in speed jobs perform less well and have more absences and more accidents than other workers have. The older workers generally earned more, were absent less often, and had fewer accidents than younger workers had. Furthermore, we found no significant difference between...*

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Appendix: Ethics

Examples of author's ethical declarations

Please tick and fill in where appropriate below. (Obligatory declarations applying to all manuscripts are printed in bold.)

Originality or acceptable secondary publication

- No part of this manuscript (MS) has been published, except for an abstract/summary published in.....
.....
.....
- This MS was published in
.....
..... but in another language (i.e.), so it could be an acceptable secondary publication in English if editors of both publications agree to it.
- No part of this MS is currently being considered for publication elsewhere.**
- In this MS, original data are clearly distinguished from published data. All information extracted from other publications is provided with citations. It has been paraphrased or (if cited literally, e.g. a whole sentence or paragraph) placed in inverted commas.**

Authorship

- All people listed as authors of this MS meet the authorship criteria, i.e. they contributed substantially to study planning, data collection or interpretation of results and wrote or critically revised the MS and will be asked to approve the final version before publication.**
- All people listed as authors of this MS are aware of it and have agreed to be listed.**
- No person who meets the authorship criteria has been omitted.**

Ethical experimentation and interpretation

- The study reported in this MS involved human participants and it meets the ethical principles of the Declaration of Helsinki ([WMA 2008](http://www.wma.net)).

- The study reported in this MS has met other ethical principles, namely.....
.....
.....
- I and all the other authors of this MS did our best to avoid errors in experimental design, data presentation, interpretation, etc. However, if we discover any error in the MS (before or after publication), we will alert the editor promptly.**
- None of our data presented in this MS has been fabricated or distorted, and no important data have been excluded.**
- Results of this study have been interpreted objectively. Any findings that run contrary to our point of view are discussed in the MS.**

Acknowledgements

- All sources of funding for the study reported in this MS are stated.**
- All people who are not listed as authors but contributed substantially to the study reported in this MS or assisted in its writing (e.g. language professionals) are mentioned in the acknowledgements.**
- All people named in the acknowledgements have agreed to this. However, they are not responsible for the final version of this MS.**
- Consent has been obtained from the author(s) of unpublished data cited in the MS.
- Copyright owners of previously published figures or tables have agreed to their inclusion in this MS.

Conflict of interest

- All authors of this study have signed a conflict of interest statement and disclosed any financial or personal links with people or organizations that have a financial interest in the submitted manuscript.**

Date:.....

Signature:.....

Compiled by Sylwia Ufnalska

Appendix: Plurals

Examples of irregular plural nouns deriving from Latin or Greek

Singular	Plural	Examples
-a	-ae rarely -ata	<i>alga – algae, larva – larvae</i> <i>stoma – stomata</i>
-ex	-ices	<i>index – indices (or indexes*)</i> <i>apex – apices (or apexes*)</i>
-ies	-ies	<i>species, series, facies</i>
-is	-es	<i>axis – axes, hypothesis – hypotheses</i>
-ix	-ices	<i>appendix – appendices (or appendixes*)</i> <i>matrix – matrices (or matrixes*)</i>
-on	-a	<i>phenomenon – phenomena, criterion – criteria</i>
-um	-a	<i>datum – data, bacterium – bacteria</i>
-us	-i rarely -uses or -era	<i>locus – loci, fungus – fungi (or funguses*)</i> <i>sinus – sinuses</i> <i>genus – genera</i>

* Acceptable anglicized plurals that are also listed in dictionaries.

It must be remembered that some nouns used in everyday English also have irregular plural forms (e.g. *woman – women, foot – feet, tooth – teeth, mouse – mice, leaf – leaves, life –*

lives, tomato – tomatoes) or have no plural form (e.g. *equipment, information, news*). For more examples, see CSE (2006). If in doubt, consult a dictionary.

Compiled by Sylwia Ufnalska

Appendix: Simplicity

Examples of expressions that can be simplified or deleted (∅)

Long or (sometimes) wrong	Better choice (often)
<i>accounted for by the fact that</i>	<i>because</i>
<i>as can be seen from Figure 1, substance Z reduces twitching</i>	<i>substance Z reduces twitching (Fig. 1)</i>
<i>at the present moment</i>	<i>now</i>
<i>bright yellow in colour</i>	<i>bright yellow</i>
<i>conducted inoculation experiments on</i>	<i>inoculated</i>
<i>considerable amount of</i>	<i>much</i>
<i>despite the fact that</i>	<i>although</i>
<i>due to the fact that</i>	<i>because</i>
<i>for the reason that</i>	<i>because</i>
<i>if conditions are such that</i>	<i>if</i>
<i>in a considerable number of cases</i>	<i>often</i>
<i>in view of the fact that</i>	<i>because</i>
<i>it is of interest to note that</i>	∅
<i>it may, however, be noted that</i>	<i>but</i>
<i>large numbers of</i>	<i>many</i>
<i>lazy in character</i>	<i>lazy</i>
<i>methodology</i>	<i>methods</i>
<i>owing to the fact that</i>	<i>because</i>
<i>oval in shape</i>	<i>oval</i>
<i>prior to</i>	<i>before</i>
<i>taken into consideration</i>	<i>considered</i>
<i>terminate</i>	<i>end</i>
<i>the test in question</i>	<i>this test</i>
<i>there can be little doubt that this is</i>	<i>this is probably</i>
<i>to an extent equal to that of X</i>	<i>as much as X</i>
<i>utilize</i>	<i>use</i>
<i>whether or not</i>	<i>whether</i>

Based on O'Connor (1991)

Appendix: Spelling

Examples of differences between British and American spelling

British English	American English
-ae- e.g. <i>aetiology, anaemia, haematology</i>	-e- e.g. <i>etiology, anemia, hematology</i>
-ce in nouns, -se in verbs e.g. <i>defence, licence/license, practice/practise</i>	-se in nouns and verbs e.g. <i>defense, license</i> (but <i>practice</i> as both noun and verb)
-isation or -ization* e.g. <i>organisation/organization</i>	-ization e.g. <i>organization</i>
-ise or -ize* e.g. <i>organise/organize</i>	-ize e.g. <i>organize</i>
-lled, -lling, -llor, etc. e.g. <i>labelled, travelling, councillor</i> (but <i>fulfil, skillful</i>)	-led, -ling, -lor, etc. e.g. <i>labeled, traveling, councilor</i> (but <i>fulfill, skillful</i>)
-oe- e.g. <i>diarrhoea, oedema, oestrogen</i>	-e- e.g. <i>diarrhea, edema, estrogen</i>
-ogue e.g. <i>analogue, catalogue</i>	-og or -ogue e.g. <i>analog/analogue, catalog/catalogue</i>
-our e.g. <i>colour, behaviour, favour</i>	-or e.g. <i>color, behavior, favor</i>
-re e.g. <i>centre, fibre, metre, litre</i> (but <i>meter</i> for a measuring instrument)	-er e.g. <i>center, fiber, meter, liter</i>
-yse e.g. <i>analyse, dialyse</i>	-yze e.g. <i>analyze, dialyze</i>
<i>acknowledgement</i>	<i>acknowledgment</i>
<i>aluminium</i>	<i>aluminum</i> or <i>aluminium**</i>
<i>grey</i>	<i>gray</i>
<i>mould</i>	<i>mold</i>
<i>programme</i> (general) or <i>program</i> (computer)	<i>program</i>
<i>sulphur</i> or <i>sulfur**</i>	<i>sulfur</i>

* One ending should be used consistently.

** Recommended by the International Union of Pure and Applied Chemistry and the Royal Society of Chemistry.

For more examples, see CSE (2006). If in doubt, consult a dictionary.

Compiled by Sylwia Ufnalska

Appendix: Text-tables

Text tables – effective tools for presentation of small data sets

Arranging statistical information in a classic table and referring to it elsewhere means that readers do not access the information as immediately as they would when reading about it within the sentence. They have to find the table in the document (which may be on another page), at a cost of losing some time. This slightly decreases the strength of the information. Quicker access to the information can be achieved within a sentence, but this is not an effective structure if more than 2 numbers are to be compared. In such situations, a “text-table” appears to be ideal for communicating information to the reader quickly and comprehensibly (Tufté 2001). The text-table is a simple table with no graphic elements, such as grid lines, rules, shading or boxes. The text-table is embedded within a sentence, so no reference to it is needed. Keeping the power of tabular arrangements, text-tables immediately convey the message. Look at the following examples.

Original sentence:

Iron concentration means (\pm standard deviation) were as follows: 11.2 \pm 0.3 mg/dm³ in sample A, 12.3 \pm 0.2 mg/dm³ in sample B, and 11.4 \pm 0.9 mg/dm³ in sample C.

Modified:

Iron concentration means (\pm standard deviation, in mg/dm³) were as follows:

sample B	12.3 \pm 0.2
sample C	11.4 \pm 0.9
sample A	11.2 \pm 0.3

Original sentence (do Carmo et al. 2001):

“Prior to rotavirus vaccine introduction, there was a trend of declining diarrhea-related mortality among children younger than 1 y (relative reduction [RR] =

0.87/y; 95% CI 0.83-0.94; 1 to < 2 y of age (RR = 0.96/y; 95% CI 0.91-1.02; $p = 0.23$) and 2 to 4 y of age (RR = 0.93/y; 95% CI 0.87-1.00; $p = 0.06$).”

Modified:

Prior to rotavirus vaccine introduction, there was a trend of declining diarrhea-related mortality among children in all age groups (RR stands for relative reduction per year):

< 1 y	RR = 0.87	(95% CI 0.83-0.94; $p < 0.001$)
1 to < 2 y	RR = 0.96	(95% CI 0.91-1.02; $p = 0.23$)
2 to 4 y	RR = 0.93	(95% CI 0.87-1.00; $p = 0.06$)

Some rules for arranging text-tables

1. The larger a text-table is, the less power it has.
2. The sentence that precedes the text-table acts as a heading that introduces the information the text-table represents, and usually ends with a colon. Text-tables should have neither headings nor footnotes.
3. Indentation of text-tables should fit the document’s layout.
4. Occasional changes in font (such as italics, bold, a different typeface) may be used, but with caution. They can, however, put some emphasis on the tabular part.
5. Do not use too many text-tables in one document or on one page.
6. In addition to the above rules, apply rules for formatting regular tables. For example, numbers should be given in 2-3 effective digits; ordering rows by size and their correct alignment will facilitate reading and comparison of values; space between columns should be neither too wide nor too narrow.

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(for more information, see Kozak 2009)

About EASE

Background information about EASE and the EASE Guidelines

The European Association of Science Editors (EASE) was formed in May 1982 at Pau, France, from the European Life Science Editors' Association (ELSE) and the European Association of Earth Science Editors (Editerra). In 2012 we will celebrate the 30th anniversary of our association.

EASE is affiliated to the International Union of Biological Sciences (IUBS), the International Union of Geological Sciences (IUGS), the International Organization for Standardization (ISO), and is represented on committees of the British Standards Institution. Through its affiliation to IUBS and IUGS, our association is also affiliated to the International Council for Science (ICSU) and is thereby in formal associate relations with UNESCO.

EASE cooperates with the International Society for Addiction Journal Editors (ISAJE), International Association of Veterinary Editors (IAVE), International Society of Managing and Technical Editors (ISMTE), the Council of Science Editors (CSE), and the Association of Earth Science Editors (AESE) in North America. Our other links include the African Association of Science Editors (AASE), the European Medical Writers Association (EMWA), the Finnish Association of Science Editors and Journalists (FASEJ), the Society of English-Native-Speaking Editors (Netherlands) (SENSE), the Association of Learned and Professional Society Publishers (ALPSP), and the Society for Editors and Proofreaders (SfEP).

We have major conferences every 3 years. The next one, entitled *Editing in the Digital World*, will be held in Tallinn in 2012. We also organize occasional seminars and other events between the conferences.

Since 1986, we publish the journal *European Science Editing*, distributed to all members 4 times a year. It covers all aspects of editing and includes original articles and meeting reports, announces new developments and forthcoming events, reviews books, software and online resources, and highlights publications of interest to members. To facilitate the exchange of ideas between members, we also use an electronic EASE Forum and the EASE Journal Blog.

In 2007, we issued the *EASE statement on inappropriate use of impact factors*. Its major objective was to recommend that “journal impact factors are used only – and cautiously – for measuring and comparing the influence of entire

journals, but not for the assessment of single papers, and certainly not for the assessment of researchers or research programmes either directly or as a surrogate”.

In 2010, we published the *EASE Guidelines for Authors and Translators of Scientific Articles*. Our goal was to make international scientific communication more efficient and help prevent scientific misconduct. This document is a set of major editorial recommendations concerning scientific articles to be published in English. We believe that if authors and translators follow these recommendations before submission, their manuscripts will be more likely to be accepted for publication. Moreover, the editorial process will probably be faster, so authors, translators, reviewers and editors will save time.

Our guidelines are a result of long discussions on the EASE Forum and during our 2009 conference in Pisa, followed by consultations within the Council. The present, updated version is enriched with new appendices and we plan to review all the recommendations annually.

This document has already been translated into more than 10 languages, e.g. Arabic, Bangla, Chinese, Estonian, French, Italian, Japanese, Korean, Persian, Polish, Portuguese (Brazilian), Romanian, Russian, Spanish, and Turkish. The translations are available as PDFs on our website. Translations into several languages are in progress and we invite volunteers to translate the guidelines into other languages.

Our guidelines are promoted on many websites, including the European Commission Research & Innovation website. Scientific journals also help in their popularization, by including in their instructions to authors a standard formula:

Before submission, authors are encouraged to follow the "EASE Guidelines for Authors and Translators", which are freely available as PDFs in many languages at <http://www.ease.org.uk/guidelines/index.shtml>.

For more details about our association, member's benefits and major conferences, see the next page and our website.

European Association of Science Editors



EASE

Skills-Communication-Fellowship

EASE is an internationally oriented community of individuals from **diverse backgrounds**, linguistic traditions, and professional experience, who share an interest in science communication and editing. Our association offers the opportunity to **stay abreast** of trends in the rapidly changing environment of scientific publishing, whether traditional or electronic. As an EASE member, you can sharpen your editing, writing and thinking skills; **broaden your outlook** through encounters with people of different backgrounds and experience, or **deepen your understanding** of significant issues and specific working tools. Finally, in EASE we **have fun and enjoy learning** from each other while upholding the highest standards.

EASE membership offers the following benefits

- A quarterly journal, *European Science Editing*, featuring articles related to science and editing, book and web reviews, regional and country news, and resources
- An **electronic forum** and **EASE journal blog** for exchanging ideas
- A major **conference every 3 years**, in different countries
- **Seminars and workshops** on hot topics
- The *Science Editors' Handbook*, covering everything from on-screen editing to office management, peer review, and dealing with the media
- **Advertise your courses** or services free of charge on the EASE website
- You or your employer may **advertise jobs** free of charge on the EASE website
- An opportunity to share problems and solutions with kindred spirits
- Good networking and **contacts for freelancers**
- The chance to meet **international colleagues** from a range of disciplines
- A unique learning community and supportive environment
- Leads for jobs, training, and employment options
- **Discounts** on editorial software, courses, etc.

Our Members

EASE welcomes members **from every corner of the world**. They can be found in 50 countries - from Australia to Venezuela by way of China, Russia and many more. EASE membership cuts across **many disciplines and professions**. Members work as: commissioning editors, academics, translators, publishers, web and multi-media staff, indexers, graphic designers, statistical editors, science and technical writers, authors' editors, journalists, proofreaders, and production personnel.

Major conferences

2012 Tallinn , Estonia (30th Anniversary)	1997 Helsinki , Finland
2009 Pisa , Italy	1994 Budapest , Hungary
2006 Kraków , Poland	1991 Oxford , UK
2003 Bath , UK	1989 Ottawa , Canada (joint meeting with CBE and AESE)
2003 Halifax , Nova Scotia, Canada (joint meeting with AESE)	1988 Basel , Switzerland
2000 Tours , France	1985 Holmenkollen , Norway
1998 Washington , DC, USA (joint meeting with CBE and AESE)	1984 Cambridge , UK
	1982 Pau , France