



Editing and processing an abstract in English

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2002-2011 University College Dublin, Ireland

2002-2011 University of Southampton, UK

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What will we talk about today?

- ✓ The structure of an effective English abstract
- ✓ Abstract writing tips & tricks



The structure of an effective English abstract



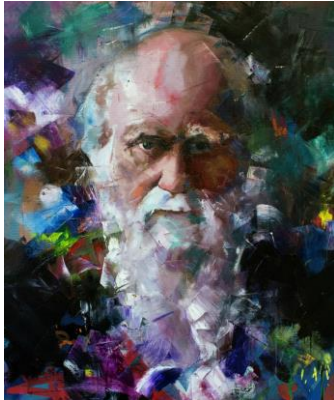
"Mobilised the English language and sent it into battle" (John F Kennedy)

Winston Churchill:
British PM





History and development: Journal article abstracts



On the Tendency of Species to form Varieties; and on the Perpetuation of Varieties and Species by Natural Means of Selection. By CHARLES DARWIN, Esq., F.R.S., F.L.S., & F.G.S., and ALFRED WALLACE, Esq. Communicated by Sir CHARLES LYELL, F.R.S., F.L.S., and J. D. HOOKER, Esq., M.D., V.P.R.S., F.L.S., &c.

[Read July 1st, 1858.]

London, June 30th, 1858.

MY DEAR SIR,—The accompanying papers, which we have the honour of communicating to the Linnean Society, and which all relate to the same subject, viz. the Laws which affect the Production of Varieties, Races, and Species, contain the results of the investigations of two indefatigable naturalists, Mr. Charles Darwin and Mr. Alfred Wallace.

A gap has existed in Darwin scholarship that, until now, has—surprisingly—remained unfilled. *Charles Darwin, Godgift* provides a crucial missing link in our understanding of a preeminent Victorian thinker and his revolutionary achievement.

Sandra Herbert is well regarded among what she terms “an informal band of scholars working on Charles Darwin” (xviii), having served as editor of *The Red Notebook of Charles Darwin* (Ithaca, NY, 1980) and coeditor of *Charles Darwin's Notebooks, 1836–1844* (Ithaca, NY, 1987). *Charles Darwin, Godgift* builds upon her earlier essay studies and decades of careful research of archived manuscripts and published primary sources; it represents a tour de force that synthesizes and expands upon such gems as her well-known chapter, “Darwin the Young Geologist,” in *The Darwinian Heritage*, edited by David Kohn (Princeton, NJ, 1983). Janet Browne, author of the acclaimed two-volume *Charles Darwin* (Princeton, NJ, 2003), leads the informal band's enthusiastic endorsements of Herbert's book appearing on the back side of its dustcover. Essentially, Herbert argues for the centrality of ecology in orienting Darwin to his evolutionary theory. Although this is not a new insight, Herbert's monograph provides the first comprehensive, in-depth analysis of that orientation and demonstrates its significance.

Earthworms: Charles Darwin's 'Unheralded Soldiers of Mankind': Protective & Productive for Man & Environment

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ABSTRACT

Earthworms promises to provide cheaper solutions to several social, economic and environmental problems plaguing the human society. Earthworms can safely manage all municipal and industrial organic wastes including sewage sludge and divert them from ending up in the landfills. Their body work as a 'biofilter' and they can 'purify' and also 'disinfect' and 'detoxify' municipal and several industrial wastewater. They reduce the BOD & COD loads and the TDSS of wastewater significantly. They can even remove the EDCs (endocrine disrupting chemicals) from sewage which is not removed by the conventional sewage treatment plants. Earthworms can bio-accumulate and bio-transform many chemical contaminants including heavy metals and organic pollutants in soil and clean-up the contaminated lands for re-development. Earthworms restore & improve soil fertility by their secretions (growth hormones) and excreta (vermicast with beneficial soil microbes) & boost 'crop productivity'. They have potential to replace the environmentally destructive chemical fertilizers from farm production. The 'protein rich' earthworm biomass is being used for production of 'nutritive feed materials' for fishes, dairy & poultry industries. They are also being used as 'raw materials' for rubber, lubricant and detergent industries. The bioactive compounds isolated from earthworms are finding new uses in production of 'life saving medicines' for cardiovascular diseases and cancer cure.

Keywords: Detoxifying, Disinfecting, Waste Degradation, Wastewater Purification, Soil Decontamination, Soil Fertility, Crop Production, Earthworms Medicines, Nutritive Feed



The general structure of a full article

- ▷ Title
- ▷ Authors
- ▷ Abstract
- ▷ Keywords

Make them easy for indexing and searching!
(informative, attractive, effective)

Main text (IMRAD)

- ▷ Introduction
- ▷ Methods
- ▷ Results
- ▷ And
- ▷ Discussion (Conclusions)

Each has a distinct function.

- ▷ Acknowledgements
- ▷ References
- ▷ Supplementary materials

PREPARATIONS



STRUCTURE: THE MOST CRUCIAL ELEMENT

Readers need to know throughout a paper

- ↩ Where they have come from
- ↓ Where they are now
- ➡ Where they are going

(A plot is needed: A paper is a story)

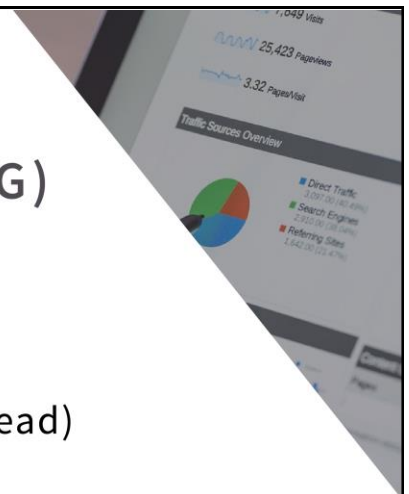


THE ABSTRACT (ADVERTISEMENT/MARKETING)

A good quality abstract is:

- ▷ Honest and precise
- ▷ Can stand alone
(search engines, sometimes all people read)
- ▷ No technical jargon
- ▷ Short and specific
- ▷ Cites no references

The quality of an abstract *will inform* the editor's decision



Why is this important?

The abstract: 摘要

MANY JOURNALS NOW BASE THEIR DECISION ON THE ABSTRACT ALONE
很多期刊会直接根据摘要来决定稿件去留

Sadly, many authors write the abstract in a great rush, almost as an afterthought.

It should be a concise “standalone” piece with a very clear message.

It must accurately reflect the full text of the paper.

Why did you do the report? What did you do? What did you find? What did you conclude?

然而，很遗憾，很多作者对待摘要，却总是在最后匆匆写就。

摘要应该能够单独存在且卖点清晰，必须准确无误地总结全文。

为什么做这项研究、怎么做的、发现了什么、你得出什么结论？



A STRUCTURED ABSTRACT: IT CAN HELP ORGANISE YOUR IDEAS – TRY IT!

Background Abstract	<i>Glossina fuscipes fuscipes</i> is the major vector of human African trypanosomiasis, commonly referred to as sleeping sickness, in Uganda. In western and eastern Africa the disease has distinct clinical manifestations and is caused by two different parasites: <i>Trypanosoma brucei rhodesiense</i> and <i>T. b. gambiense</i> . Uganda is exceptional in that it harbors both parasites, which are separated by a narrow 160-km belt. This separation is puzzling considering there are no restrictions on the movement of people and animals across this region.
Methodology/Principal Findings Abstract	We investigated whether genetic heterogeneity of <i>G. f. fuscipes</i> vector populations can provide an explanation for this disjunct distribution of the <i>Trypanosoma</i> parasites. Therefore, we examined genetic structuring of <i>G. f. fuscipes</i> populations across Uganda using newly developed microsatellite markers, as well as mtDNA. Our data show that <i>G. f. fuscipes</i> populations are highly structured, with two clearly defined clusters that are separated by Lake Kyoga, located in central Uganda. Interestingly, we did not find a correlation between genetic heterogeneity and the type of <i>Trypanosoma</i> parasite transmitted.
Conclusions/Significance Abstract	This lack of a correlation between genetic structuring of <i>G. f. fuscipes</i> populations and the distribution of <i>T. b. gambiense</i> and <i>T. b. rhodesiense</i> indicates that it is unlikely that genetic heterogeneity of <i>G. f. fuscipes</i> populations explains the disjunct distribution of the parasites. These results have important epidemiological implications, suggesting that a fusion of the two disease distributions is unlikely to be prevented by an incompatibility between vector populations and parasite.

What about a *Science & Technology* Abstract?

Starting to write: Tricks for success and accessibility

Object

Method

Result

Conclusion

- Checking the original nature of the results/the story/the take-home message
反复思考研究结果的属性/故事怎么讲/主要结论是什么
- Is this new and interesting? Why?
创新吗? 有意义吗? 为什么?
- How does your work relate to a currently hot topic?
与你的学科内最近热议的话题有什么关联?

Abstract

In this article, I examine how nudging powered by Big Data relates to both negative and positive liberty. I focus in particular on how liberty is affected by appeals to irrational mechanisms. I conclude that it is problematic to use *liberty* as an argument for nudging. Such an argument would have to be based on the concept of positive liberty, empowerment and *emancipation* from irrationality, but I argue that even stronger arguments *against* nudging can be built on the same conception of liberty. I consider Big Data-powered nudging to have the potential to be both manipulative and coercive, and believe that we should be wary of the effects such efforts have on liberty. As I consider *liberty* to be part of what makes a good society, this becomes an effort to analyse one aspect of the effects of technology on society in general. While I do not accept arguments in favour of nudging based on *liberty*, it is easier to see that arguments based on *utility* could support nudging. I do not evaluate what the proper trade-off is between utility and liberty in this article, and it is obvious that, at times, utility trumps an absolute demand for liberty. However, I argue in favour of transparent traditional regulation and rational persuasion instead of nudging, when these approaches can serve the same purposes. Should we choose to nudge, we should not euphemise our efforts by claiming that we do so on behalf of freedom.

Abstract

Blockchain technology was created as a response to the trust crisis that swept the world in the wake of the 2008 financial crisis. Bitcoin and other blockchain-based systems were presented as a “trustless” alternative to existing financial institutions and even governments. Yet, while the trustless nature of blockchain technology has been heavily questioned, little research has been done as to what blockchain technologies actually bring to the table in place of trust. This article draws from the extensive academic discussion on the concepts of “trust” and “confidence” to argue that blockchain technology is not a ‘trustless technology’ but rather a ‘confidence machine’. First, the article provides a review of the multifaceted conceptualisations of trust and confidence, and the relationship between these two concepts. Second, the claim is made that blockchain technology relies on cryptographic rules, mathematics, and game-theoretical incentives in order to increase confidence in the operations of a computational system. Yet, such an increase in confidence ultimately relies on the proper operation and governance of the underlying blockchain-based network, which requires trusting a variety of actors. Third, the article turns to legal, constitutional and polycentric governance theory to explore the governance challenges of blockchain-based systems, in light of the tension between procedural confidence and trust.

Abstract

Artificial intelligence (AI) has proven to be superior to human decision-making in certain areas. This is particularly the case whenever there is a need for advanced strategic reasoning and analysis of vast amounts of data in order to solve complex problems. Few human activities fit this description better than politics. In politics we deal with some of the most complex issues humans face, short-term and long-term consequences have to be balanced, and we make decisions knowing that we do not fully understand their consequences. I examine an extreme case of the application of AI in the domain of government, and use this case to examine a subset of the potential harms associated with algorithmic governance. I focus on five objections based on political theoretical considerations and the potential *political* harms of an AI technocracy. These are objections based on the ideas of ‘political man’ and participation as a prerequisite for legitimacy, the non-morality of machines and the value of transparency and accountability. I conclude that these objections do not successfully derail AI technocracy, if we make sure that mechanisms for control and backup are in place, and if we design a system in which humans have control over the direction and fundamental goals of society. Such a technocracy, if the AI capabilities of policy formation here assumed becomes reality, may, in theory, provide us with better means of participation, legitimacy, and more efficient government.

ABSTRACT: EXAMPLE 1

The aim of this study is to evaluate genetic variability in the Turkish Arab horse population using pedigree information. This work is possible because the first detailed pedigree analysis of this breed was carried out in Turkey, and information can be extracted from The National Studbook. Thus, pedigree data for 23,668 horses born between 1904 and 2014 were compared with a reference population of 14,838 animals from the most recent generation. A number of demographic parameters for the horse

Template:

First one or two sentences state the aim of the study/state of the art

“The aim of this study is to”

“In this study, we ...”

ABSTRACT: EXAMPLE 1

from the most recent generation. A number of demographic parameters for the horse population were assessed using the software ENDOG v4.8: Inbreeding level (F), average relatedness (AR), effective population size (N_e), effective number of founders (f_e), effective number of ancestors (f_a), and number of founder genome equivalents (f_g). The average generation interval (GI) for the total (TP) and reference populations (RP) was 12.3 ± 4.8 years and 12.2 ± 4.6 years, respectively, while calculated pedigree completeness levels (PCL) were 98.2%, 96.6%, and 95.0% for the first, second, and third known generations. Mean equivalent generations (t), average complete generations, and mean maximum generations for the TP were 7.8, 5.4, and 12.2, respectively, while mean F was 4.1% and 4.6%, and AR was 8.8% and 9.5% for the TP and RP , respectively. The rate of inbred animals (RIA) were 89.0% and 94.2% for the TP and RP , while the number of founders, the number of ancestors, and the f_e , f_a

Template:

Second sentences state the “methods used” and “the results”

ABSTRACT: EXAMPLE 1

101 (N_{ec}) is 74.4 ± 3.9 and 73.5 ± 0.58 animals; during the last 50 years of breeding, there
 102 were increases in both the average F (ca. 2% to 5%) and AR (ca. 4% to 9%). Overall,
 103 these results corroborate a clear reduction in the genetic variability in Turkish Arab
 104 horses.

Template:

Final sentence(s) state the conclusion of the work
 Try to see if other Abstracts follow this template?

ABSTRACT: EXAMPLE 2

24 Plant roots are vital for acquiring nutrients and water from soil. However, the
 25 mechanisms regulating root growth in hexaploid wheat remain to be elucidated.
 26 Previously, we detected a major quantitative trait locus (QTL), $qTaLRO-B1$, that
 27 controls primary root length in wheat. Here, a comparative proteomic analysis
 28 approach was used to study the mechanism of $qTaLRO-B1$ regulated root growth. A
 29 total of 80 differentially expressed proteins, comprising two steroid biosynthesis
 30 related proteins and nine class III peroxidases (PODs) were identified. Real-time PCR
 31 analysis showed that brassinosteroid (BR) biosynthesis pathways were significantly
 32 elevated in plants harboring the positive $TaLRO-B1$ allele compared with those with
 33 the negative allele. However, there existed both significantly up-regulated and
 34 down-regulated POD members, implying a functional differentiation of PODs.
 35 Moreover, O_2^- and H_2O_2 were distributed abundantly in both the root meristematic
 36 and elongation zones of plants containing the positive $TaLRO-B1$ allele, but only in
 37 the meristematic zone of plants with the negative allele. The differential distribution
 38 of reactive oxygen species in the root tips of different genotypes may be caused by the
 39 differential expression of these PODs. Taken together, our results suggest that
 40 $TaLRO-B1$ promotes primary root growth by elevating BR biosynthesis and
 41 BR-mediated ROS pathways.



Grab the reader:
 draw them immediately to the crucial issue
 that your paper addresses

My favourite paper of all time

Wildlife Road Kills In A Diverse Terrain In Southeastern Brazil: A Spatial and Temporal Analysis Towards Mitigation

‘A Spatial and Temporal Analysis Aimed at Generating Strategies for Mitigation’?

‘A Spatial and Temporal Analysis Aimed at Generating Mitigation Strategies for Wildlife Road Kills in a Diverse Terrain in Southeastern Brazil’?

Please also note that ‘Spatiotemporal’ is the usual form in English scientific writing

Wildlife road kills lead to species population declines and threaten biodiversity. As millions of road fatalities occurs daily, it is important to test the hypothesis that terrain and species abundance can explain road kills volume to guide mitigation measures implementation. We investigated spatial and temporal factors that characterize road kills in an interstate highway that crosses a diverse region of southeastern Brazil. The highway crosses both Cerrado and Atlantic Forest biomes, as well as seasonal forest, farms, and urban areas encompassing heterogeneous topography and including a range of road features. We recorded the coordinates, highway, and roadside attributes of each carcass as spatial determinants, and evaluated death seasonality via analysis of variance. We performed multiple logistic regression models for road kills in general and mobility groups to investigate the relationship between road-kills, landscape, and road attributes. We utilized chi-square tests for multiple category variables with casualties and road scanning on rows and categories on columns, and a Ripley K-statistic simulation to determine spatial aggregations. We recorded 615 road kills mostly comprising birds (45.2%), mammals (21.1%), amphibians (11.1%) and reptiles (6.8%). Reptile deaths were most frequent during the rainy season, while stretches of straight road carried twice the road kill risk and vegetation increased risk 1.26 times. Animal deaths occurred frequently on straight/level and straight/downhill stretches, while bird, mammal, amphibians and snakes were dependent of grass and cerrado vegetation. The patch level for all carcasses was within a 0-45 km radius, data also suggest that because stretches of straight road encourage high speeds, the likelihood of animal collisions also increases, especially when vegetation is dense and driver visibility is restricted. Terrain and its attributes prove to correlate with road-kills. Mitigation strategies to reduce animal casualties and speed could include the clearing of roadside vegetation and radar installation on straight road stretches. However, the large number of animal carcasses we recovered also suggests that one unique solution is unfeasible; we recommend the use of fences coupled with under, or overpasses, on bisected road stretches and in level or irregular roadside areas where vegetation is dense to enable wildlife to cross the highway and to maintain connectivity.

Overview



- Purposes and uses of abstracts
- Types of abstracts
- Common errors
- The writing and the writing process
- Special considerations for presentations, meetings, posters, etc



Purposes of an Abstract



- Provides an overview of the article (readers may read nothing else)
- Provides context for those who do read the article
- Used by journals to assign reviewers
- Used by abstracting and information services to index and retrieve articles
- Used by translation services for foreign readers



Purposes of the Abstract



- Helps reader decide whether to read the article (i.e., is this important to me?)
- Provides reminders for readers after they've read the article
- Directs readers' attention to the highlights of the article

In general, the abstract reflects on the professionalism and integrity of the work.



What Abstracts Are NOT



- Not substitutes for the article and should not be cited as references
- Not a summary of the entire article; should present main finding
- Do not contain enough information for a critical evaluation of the research
- Not fully peer-reviewed; up to 60% are never followed by a complete scientific article



Types of Abstracts



- Descriptive abstracts
 - Indicative abstracts (review articles)
 - Informative abstracts (results papers)
 - Structured abstracts
- Presentation, meeting, poster abstracts



Descriptive Abstracts



- Indicate the scope of the findings
- Contain little substantive information
- Emphasize the report itself, not its contents
 - Called “pap” abstracts

“A study was undertaken, the data were accumulated, and some interesting observations were made. Our conclusions are given.”



Descriptive Abstracts



Example:

This report describes a brief, 15-session couples group therapy format developed by a university-affiliated human sexuality clinic for the simultaneous treatment of marital and sexual dysfunctions. The major marital and sexual themes addressed in this group treatment design, an overview and description of the structure of the cognitive-behavioral approach, and a case illustration are presented.



Descriptive Abstracts



Example:

Behavioral wellness has become a recent focus for the care of laboratory animals, farm and zoo animals, and pets. Behavioral enrichment issues for these groups are more similar than dissimilar, and each group can learn from the other. The emphasis on overall enhancement for laboratory dogs and cats in this review includes an emphasis on behavioral enrichment. Understanding the range of behaviors, behavioral choices, and cognitive stimulation that cats and dogs exhibit under non-laboratory conditions can increase the ability of investigators to predict which enrichments are likely to be the most successful in the laboratory. Many of the enrichment strategies described are surprisingly straightforward and inexpensive to implement.



ILAR J. 2005;46(2):202-215.

Indicative Abstracts



Abstracts of Review Articles

- State objective of review
- Give succinct summary of the data sources
- Specify criteria used to select studies
- Describe guidelines used for abstracting data and assessing data quality
- State main results of review and methods used to obtain these results
- State conclusions and potential applications of the results



Written after the paper has been written



Indicative Abstracts



Example:

Objective—To review the literature relating to the effectiveness of education strategies designed to change physician performance and health care outcomes.

Data Sources—We searched MEDLINE, ERIC, NTIS, the Research and Development Resource Base in Continuing Medical Education, and other relevant data sources from 1975 to 1994, using *continuing medical education* (CME) and related terms as keywords. We manually searched journals and the bibliographies of other review articles and called on the opinions of recognized experts.



cont.



Indicative Abstracts



Study Selection—We reviewed studies that met the following criteria: randomized controlled trials of education strategies or interventions that objectively assessed physician performance and/or health care outcomes. These intervention strategies included (alone and in combination) educational materials, formal CME activities, outreach visits such as academic detailing, opinion leaders, patient-mediated strategies, audit with feedback, and reminders. Studies were selected only if more than 50% of the subjects were either practicing physicians or medical residents.

Data Extraction—We extracted the specialty of the physicians targeted by the interventions and the clinical domain and setting of the trial. We also determined the details of the educational intervention, the extent to which needs or barriers to change had been ascertained prior to the intervention, and the main outcome measure(s).



cont.



Informative Abstracts



Abstracts of Results Papers

- State briefly the content of the paper
- Follow the sequence of the article
 - Intro, Method, Results, Discussion
 - Also possibly Background, Conclusions, Implications
- Include the species or population, study design or experimental approach, and independent and dependent variables
- Represent each section of the paper by at least one sentence in the abstract



Written after the paper has been written



Informative Abstracts



Common Errors

- Inconsistency between text and abstract (~50%)
- Reporting data not present in the paper (~30%)
- Both (15%)



Informative Abstracts



How to Fix Most Common Errors

Double check every single piece of data in the abstract against the data in the body of the article!



Informative Abstracts



Other Errors

- No question or question stated vaguely
- Implication stated instead of answer
- Too long
- Too much detail



Informative Abstracts



Research Paper

- Study design
- Experimental subjects
- Methods
- Results
- Interpretation

Case Report

- Patient
- Unusual features of the case



Informative Abstracts



Example:

^A In patients with heart disease, left ventricular diastolic performance is evaluated clinically by inserting a Swan-Ganz catheter to measure pulmonary capillary wedge pressure as an estimate of left atrial pressure. ^{B1} To determine whether pulmonary venous flow and mitral inflow assessed less invasively, by transesophageal pulsed Doppler echocardiography, accurately estimate mean left atrial pressure, ^{B2} we prospectively studied 27 consecutive patients undergoing cardiovascular surgery. ^C We correlated Doppler variables of pulmonary venous flow and mitral inflow with simultaneously measured mean left atrial pressure and changes in pressure assessed by left atrial or pulmonary artery catheters.



Cont.



Informative Abstracts



^D We found that the most strongly correlated pulmonary venous flow variable, the systolic fraction of pulmonary venous flow, correlated more strongly with mean left atrial pressure ($r = -0.86$) than did the most strongly correlated mitral inflow variable, the ratio of peak early diastolic to peak late diastolic mitral flow velocity ($r = -0.75$). ^E Similarly, changes in the systolic fraction of pulmonary venous flow correlated more strongly with changes in mean left atrial pressures ($r = -0.79$) than did changes in the ratio of peak early diastolic to peak late diastolic mitral inflow velocity ($r = 0.65$). ^F We conclude that pulmonary venous flow assessed by transesophageal pulsed Doppler echocardiography accurately estimates mean left atrial pressure. ^G We suggest that this technique may offer a relatively noninvasive means of estimating the mean left atrial pressure of patients with heart disease.



Informative Abstracts



In view of the remarkable decrease of the relative heart weight (HW) and the relative blood volume in growing pigs, we investigated whether HW, cardiac output (CO), and stroke volume (SV) of modern growing pigs are proportional to BW, as predicted by allometric scaling laws: HW (or CO or SV) = $a \bullet BW^b$, in which a and b are constants, and constant b is a multiple of 0.25 (quarter-power scaling law). Specifically, we tested the hypothesis that both HW and CO scale with BW to the power of 0.75 (HW or CO = $a \bullet BW^{0.75}$) and SV scales with BW to the power of 1.00 ($SV = a \bullet BW^{1.0}$). For this purpose, 2 groups of pigs (group 1, consisting of 157 pigs of 50 ± 1 kg; group 2, consisting of 45 pigs of 268 ± 18 kg) were surgically instrumented with a flow probe or a thermodilution dilution catheter, under open-chest anesthetized conditions to measure CO and SV, after which HW was determined. The 95% confidence intervals of power-coefficient b for HW were 0.74 to 0.80, encompassing the predicted value of 0.75, suggesting that HW increased proportionally with BW, as predicted by the allometric scaling laws. In contrast, the 95% confidence intervals of power-coefficient b for CO and SV as measured with flow probes were 0.40 to 0.56 and 0.39 to 0.61, respectively, and values obtained with the thermodilution technique were 0.34 to 0.53 and 0.40 to 0.62, respectively. Thus, the 95% confidence limits failed to encompass the predicted values of b for CO and SV of 0.75 and 1.0, respectively. In conclusion, although adult breeding sows display normal heart growth, cardiac performance appears to be disproportionately low for BW. This raises concern regarding the health status of adult breeding sows.



J Anim Sci 2011;89(2):376-382.



Informative Abstracts



Due to increased production of ethanol, abundance of distillers grains (DG) is increasing. Steers ($n = 176$) were assigned to 1 of 5 treatment groups: steam-flaked corn (SFC), 10% dry DG (DDG), 10% wet DG (WDG), 20% WDG, or 30% WDG. The objectives were to determine the effects of feeding greater amounts of WDG, or DDG on meat quality. Steaks, 2.54 cm, were cut from strip loins and identified for simulated retail display, Warner-Bratzler shear force analysis, palatability, and fatty acid composition. Steaks from cattle fed 10% WDG and 30% WDG had smaller ($P < 0.05$) Warner-Bratzler shear force values than steaks from cattle fed 20% WDG. Trained sensory panelists found no differences ($P > 0.05$) in overall tenderness and off-flavors. No differences were found in total SFA and MUFA composition among treatments; however, 20% and 30% WDG had a greater proportion of PUFA and n-6 fatty acids than 10% WDG. No differences were found during simulated retail display between various amounts of WDG. Further research needs to be conducted to evaluate methods that aid in increasing shelf life of steaks from cattle fed greater rates of WDG.



Problems?

J Anim Sci 2011;89(1):179-184.



Structured Abstracts



- Also called “more informative” abstracts
- Purposes:
 - Help readers quickly judge the findings of a study
 - Guide authors into better summaries
 - Aid reviewers
 - Facilitate electronic searches (eg, MEDLINE)
- Include headings
- May use incomplete sentences
- Follow journal requirements



Written after the paper has been written



Structured Abstracts



Example:

Background—Dual-chamber (atrioventricular) and single-chamber (ventricular) pacing are alternative treatment approaches for sinus-node dysfunction that causes clinically significant bradycardia. However, it is unknown which type of pacing results in the better outcome.

Methods—We randomly assigned a total of 2010 patients with sinus-node dysfunction to dual-chamber pacing (1014 patients) or ventricular pacing (996 patients) and followed them for a median of 33.1 months. The primary end point was death from any cause or nonfatal stroke. Secondary end points included the composite of death, stroke, or hospitalization for heart failure; atrial fibrillation; heart-failure score; the pacemaker syndrome; and the quality of life.



cont.



Structured Abstracts



Results—The incidence of the primary end point did not differ significantly between the dual-chamber group (21.5 percent) and the ventricular-paced group (23.0 percent, $P=0.48$). In patients assigned to dual-chamber pacing, the risk of atrial fibrillation was lower (hazard ratio, 0.79; 95 percent confidence interval, 0.66 to 0.94; $P=0.008$), and heart-failure scores were better ($P<0.001$). The differences in the rates of hospitalization for heart failure were not significant in unadjusted analyses but became marginally significant in adjusted analyses. Dual-chamber pacing resulted in a small but measurable increase in the quality of life, as compared with ventricular pacing.

Conclusions—In sinus-node dysfunction, dual-chamber pacing does not improve stroke-free survival, as compared with ventricular pacing. However, dual-chamber pacing reduces the risk of atrial fibrillation, reduces signs and symptoms of heart failure, and slightly improves the quality of life. Overall, dual-chamber pacing offers significant improvement as compared with ventricular pacing.



NEJM 2002;346:1854-1862.

Structured Abstracts



Example:

Objective—To identify predictors in medical schools that can be manipulated to affect the proportion of graduates entering generalist practice.

Design and Participants—Cross-sectional and retrospective studies of medical schools and practicing generalist physicians; surveys of MD-granting and DO-granting medical schools; site visits to nine schools with a high proportion of graduates becoming generalist physicians; surveys of national samples of MD and DO generalist physicians.



cont.

Structured Abstracts



Independent Variables—Characteristics of medical schools, including structural characteristics, financing, mission, admissions policies, student demographics, curriculum, faculty, and the production of generalist physicians; information on personal characteristics, background, perceptions, and attitudes of practicing generalist physicians.

Dependent Variable—Estimated proportion of graduates of the classes 1989, 1990, and 1991 in family practice, general internal medicine, and general pediatrics.



cont.



Structured Abstracts



Results—Institutional mission, certain admissions policies, characteristics of entering students, and the presence of a primary care-oriented curriculum explained statistically significant variation in the number of physicians choosing generalist careers, even after the structural characteristics of public or private status, age of the school, and class size were controlled for statistically.

Conclusions—Public and institutional policies, where implemented, have had a positive effect on students' choice of generalist careers. The most influential factors under the control of the medical school are the criteria used for admitting students and the design of the curriculum, with particular emphasis on faculty role models. Personal social values was the individual characteristic that most strongly influenced graduates' career choice.



Structured Abstracts



Example:

Objective—To determine clinical features and outcome in dogs and cats with obsessive-compulsive disorder (OCD).

Design—Retrospective study.

Animals—103 dogs and 23 cats.

Procedures—Records of patients with OCD were analyzed for clinical features, medication used, extent of behavior modification, and outcome.



JAVMA 2002;221(10):1445-1452.

cont.



Structured Abstracts



Results—Most dogs affected with OCD had been obtained from breeders. Male dogs significantly outnumbered females (2:1). Female cats outnumbered male cats by 2:1 in a small sample. Most affected dogs lived in households with 2 or more humans and other dogs or cats, and had some formal training. Client compliance with behavior modification was high. A combination of behavior modification and medication resulted in a large decrease in intensity and frequency of OCD in most animals. Clomipramine was significantly more efficacious for treatment in dogs than was amitriptyline. Only 1 dog and 1 cat were euthanatized because of OCD during the study.

Conclusions and Clinical Relevance—OCD in dogs does not appear to be associated with lack of training, lack of household stimulation, or social confinement. In cats, OCD may be associated with environmental and social stress. Obsessive-compulsive disorder appears at the time of social maturity and may have sporadic and heritable forms. With appropriate treatment (consistent behavior modification and treatment with clomipramine), frequency and intensity of clinical signs in most dogs and cats may decrease by > 50%. Success appears to depend on client understanding and compliance and the reasonable expectation that OCD cannot be cured, but can be well controlled.



Presentation and Meeting Abstracts



- Must be comprehensive
- Must strictly follow format and content rules (the old “blue box”) and must be neat
- Often contain more details of methods
- More likely to include implications
- May be published in conference proceedings
- Provides opportunity for feedback from others in the field



Written before the paper has been written



Poster Abstracts



- Include lots of illustrations, tables, and graphs
- Keep words to a minimum
- Consider as a billboard, not a summary

People decide whether to read your poster in the first three seconds!



Poster Abstracts



Type size is important!

96 point

48 point

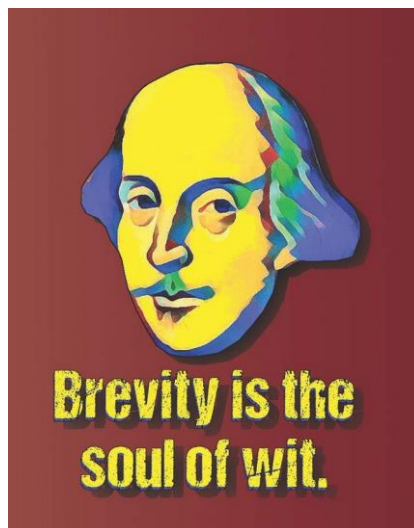
36 point

28 point

12 point



English writing tips & tricks



English writing tips & tricks

Where is the distinctiveness? The evidence



Less than 10 seconds before your readers lose interest!

研究的特异之处为何？



在10秒内吸引读者的目光与伫留



English writing tips & tricks

Concise, to the point

- Short sentences
- No unnecessary words
- Familiar words
- Style
- Good punctuation

简明扼要

- 短句
- 没有多余词语
- 使用常见词汇
- 倾风格
- 吐字清晰



English writing tips & tricks

Effective English: Tips & tricks

- No single style fits everyone; no writing training can fit to everyone
But, a number of key skills can be learned
- Are you happy with the way you write?
- **Good English is plain English: The Golden Rule**
- Writers on business communication share similar views; plain English is at the heart of effective written communication

聪明的文字运用： 秘诀与技巧

- 没有适合所有人的通用写作风格；也没有哪一种写作培训能够满足所有人的要求，但从中可以学到许多关键技能。
- 您是否满意您的写作方法？
- **黄金原则：简明英语就是高水平的英语**
- 商务信函作者持相似观点；简明英语是有效书面沟通的核心。





English writing tips & tricks



Tips: American (AE) and British English (BE)

Common differences in spelling

					
AE	BE	AE	BE		
color	colour	center	centre		
organization	organisation	dialog	dialogue		
traveling	travelling	defence	defense		
recognize	recognise	analyze	analyse		

Tenses

AE	BE
burned/was burned	burnt/was burnt
learned/has learned	learnt/has learnt
(see also: dream, kneel, lean, leap, spell, spill, spoil)	
My personal favourite: gray (AE) and grey (BE)	



English mistakes: How to find and correct

'What are the most common mistakes editors encounter?'



Pronoun referent

Who vs Whom

Lay and Lie

Transition Words

English mistakes: How to find and correct

'What are the most common mistakes editors encounter?'



Pluralization of nouns

Commas

Its and It's

Affect and Effect

English mistakes: How to find and correct

'What are the most common mistakes editors encounter?



Pronoun referent

Pronouns are used to substitute the name of a noun in the sentence to avoid repetition of the said noun.

My **brother** was obese when **she** was younger because of the food choices at home.

(In this sentence, the pronoun "**he**" should be used instead of "**she**" as the sentence is referring to the noun "**brother**".)

English mistakes: How to find and correct

'What are the most common mistakes editors encounter?



Pronoun referent

James was with **his** mother when the accident happened.

The **woman** was found bathing in **her** own blood.

Jenny is wearing a beautiful diamond necklace, a gift from **her** husband James.

English mistakes: How to find and correct

'What are the most common mistakes editors encounter?'



Who vs Whom

both are used in adjective clauses

"who" should be used as the **subject** of the adjective clause

"whom" is used as the **object** of the clause

English mistakes: How to find and correct

'What are the most common mistakes editors encounter?'



Who vs Whom

The man **whom** gave me the proposal was my senior.

(The adjective clause should use **"who"** instead of "whom" as it is used as the subject in the clause.)

English mistakes: How to find and correct

'What are the most common mistakes editors encounter at TopEdit?



Who vs Whom

The woman **who** is wearing a black suit is a killer.

The woman **whom** we talked to is a killer.

Whom did you step on?

TOPEDIT

English mistakes: How to find and correct

'What are the most common mistakes editors encounter?



Lay and Lie

Lay is a transitive verb that needs an object after it.

It needs something or someone to receive its action.

Lie is an intransitive verb.

- it does not need an object

- it can stand alone

English mistakes: How to find and correct

'What are the most common mistakes editors encounter?'



Lay and Lie

I **lay** the book on the counter.

The country **lies** between different mountain ranges.

Andrew **lays** his bag on the table.

English mistakes: How to find and correct

'What are the most common mistakes editors encounter?'



Transition Words

Transitions are phrases or words that are used to link one idea to the next

These words are also used to show the relationship within paragraphs

in addition

alternatively

in contrast

also

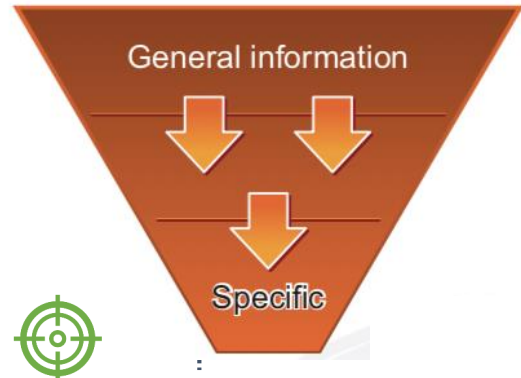
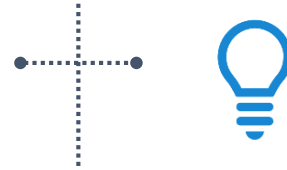
moreover

on the other hand

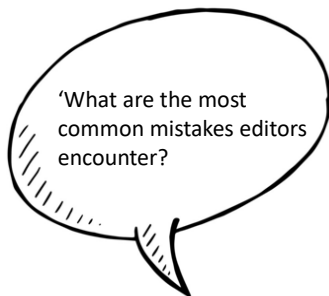
English mistakes: How to find and correct

Concise and to the point

- Short sentences
- No unnecessary words
- Familiar words
- Prefer the active to the passive voice
- Style
- Good punctuation



English mistakes: How to find and correct



Transition Words

They say that health is wealth. **Hence**, it is important to eat the right kind of foods and exercise.

(We use "hence" to show a reason to a prior idea.)

Vegetables are good for one's health. **Additionally**, fruits that are rich in vitamins and minerals also can keep us healthy.

("Additionally" is used to add an idea or a point.)



Topic sentences: Effective writing

Topic Sentence: To be an effective CEO requires certain characteristics.
The **topic** is "To be an effective CEO" and the controlling idea is "certain characteristics."

Topic Sentence: There are many possible contributing factors to global warming.
The **topic** is "global warming" and the controlling idea is "contributing factors."

Topic Sentence: Fortune hunters encounter many difficulties when exploring a shipwreck.
The **topic** is "exploring a shipwreck" and the controlling idea is "many difficulties."

Topic Sentence: Dogs make wonderful pets because they help you to live longer.
The **topic** is "dogs make wonderful pets" and the controlling idea is "because they help you to live longer."



69

English mistakes: How to find and correct

'What are the most common mistakes editors encounter?

Transition Words

singular subject takes a singular verb.

plural subject takes a plural verb



English mistakes: How to find and correct

'What are the most common mistakes editors encounter?



Pluralization of nouns

plural form of most nouns is created simply by adding the letter *s*.

Words that end in *-ch*, *x*, *s* or *s-like* sounds, however, will require an *-es* for the plural:

English mistakes: How to find and correct

'What are the most common mistakes editors encounter?



Pluralization of nouns

hobby – hobbies

bacterium – bacteria

witch – witches

gum – gums

box – boxes

boy – boys

lady – ladies

room – rooms

English mistakes: How to find and correct

'What are the most common mistakes editors encounter?'



Commas

A misplaced comma changes the meaning of the sentence.

Example:

1. Let's eat grandma.

2. Let's eat, grandma.

The first sentence suggests to eat grandma while the second sentence suggests an invitation.

Use the comma properly.

DON'T BE A PSYCHO!

Practical tips for scientific writing



Punctuation:

Colon (:) and semi colon (;)

A colon is used when a list or explanation follows, a semi colon is used to separate two or more related clauses provided each clause forms a full sentence.

Commas

A comma is put in a sentence to denote a brief pause between groups of words:

I will show you the paper about which I was speaking, but it is not as useful as I first thought.

Or to separate subclauses:

Professor Brown, who is in charge of recruiting for the University, said that the latest estimates were higher than those for this time last year.

Finally to separate all items in a list except for the last two:

The following items may be imported duty free into Azania: Animals, cereals, plants, fruit, trees, legumes and nuts.

English mistakes: How to find and correct

'What are the most common mistakes editors encounter?



Its and It's

Its - is an adjective

It is - is a contraction of it is (in some cases; it has)

It's a blue bird.

Its wings are blue.

It's our neighbour's dog.

English mistakes: How to find and correct

Affect and Effect

Affect is a verb

Effect is a noun

The typhoon has **affected** a lot of cities in the south.

Its **effect** can be felt everywhere.

The damages brought by the earthquake will **affect** the tourism of the town.





Academic plagiarism: Understand to avoid



Plagiarism is an issue in the academic environment and beyond. The use of information without crediting it's source can harm your credibility.

Thus,

- Make use of the works of others to gather information
- Use the work of another and call it your own
- Make use of the works of others to support your argument
- Examine the works of others to shape an argument



without citation



Common Forms of Academic Plagiarism

Mosaic Plagiarism

Include data from various sources and mix them together to make it seem original

Paraphrasing Plagiarism

Even if the words differ, the original idea remains the same and plagiarism occurs

Self-Plagiarism

It is best practice to cite your previous work thoroughly, even if you are simply revisiting an old idea or a previously published observation

Bulletproof your work: Inadvertent plagiarism can happen

You read something in a second (or third) language and then, without thinking, use it in your own writing

✓ **Important:** Consider getting your documents evaluated by a plagiarism checking service **before** submission

✓ Keep careful records of reference sources you refer to

✓ Endnote, Mendeley (etc) are examples of reference management tools

Beneficial Effects of Salacia Oblonga on Mitochondrial Localization in Cells and NADPH oxidase Activity in Glucose Induced Cytotoxicity on rat Muscle Cell Line		
32%		
PRIMARY SOURCES		
1. Basu, Sujata, Manita Paul, and R. Raghava. "Protective effect of Salacia oblonga against tobacco smoke-induced DNA damage and cellular changes in pancreatic β-cells". <i>Pharmacological Biology</i> . 2015.	126 words	5%
2. portal.elsevier.com	67 words	2%
3. Whaley-Garnett, A. "Combination of direct nerve stimulation with angiotensin type 1 receptor blockade improves atherosclerosis but does not improve kidney injury in the transgenic Rend rat". <i>Regulatory Peptides</i> . 2012(101).	96 words	2%
4. www.jil.ac.in	53 words	2%
5. Ray, S.K. "Diverse stimuli induce c-Jun/NF-κB overexpression and apoptosis in C6 glioma cells". <i>Brain Research</i> . 1999(852).	41 words	2%
6. Wang, X. "Double antioxidant activities of resveratrol against high glucose-induced oxidative stress in HepG2 cells". <i>Toxicology in Vitro</i> . 2011(26).	40 words	2%
7. ajla.info	35 words	1%

✓ **Journals/Publisher:** Check addresses of authors on articles and send papers for plagiarism checking **before** peer review

✓ Journals are looking for <10% similarity with already published sources otherwise they will consider the work to be recycled

What does a plagiarism check look like?

Software searches already published literature in standard databases (e.g. Crossref, Scopus)

NB: Software packages have negotiated access to different databases so best to use more than one checking service (e.g., Ephorus, Quetext, Ithenticate, Turnitin, Plagscan, Plagiarism)



What have we talked about today?

✓ The structure of an effective English abstract

✓ English writing tips & tricks



To make a **great film** you need
three things - the script,
the script and **the script.**

— *Alfred Hitchcock*

