Scientific writing

Session III: common writing mistakes

- Wrong word
 Did you catch my illusion to the Bible?
- 2. Missing comma after an introductory element
- 3. Incomplete or missing documentation (sources)
- 4. Vague pronoun reference
- 5. Spelling
- Mechanical error with a quotation
- 7. Unnecessary comma
- 8. Unnecessary or missing capitalization
- 9. Missing word
- Faulty sentence structure etc.

- 1. Wrong word
- 2. Missing comma after an introductory element Determined to make their flight on time they rose at dawn.
- 3. Incomplete or missing documentation (sources)
- 4. Vague pronoun reference
- 5. Spelling
- 6. Mechanical error with a quotation
- 7. Unnecessary comma
- 8. Unnecessary or missing capitalization
- 9. Missing word
- 10. Faulty sentence structure etc.

- 1. Wrong word
- 2. Missing comma after an introductory element
- 3. Incomplete or missing documentation (sources)

 According to one source, it costs almost twice an employee's salary to recruit and train a replacement.
- Vague pronoun reference
- Spelling
- 6. Mechanical error with a quotation
- 7. Unnecessary comma
- 8. Unnecessary or missing capitalization
- 9. Missing word
- 10. Faulty sentence structure

- 1. Wrong word
- 2. Missing comma after an introductory element
- 3. Incomplete or missing documentation (sources)
- 4. Vague pronoun reference

 The authoritarian school changed its cell phone policy, which many students resisted.
- 5. Spelling
- 6. Mechanical error with a quotation
- 7. Unnecessary comma
- 8. Unnecessary or missing capitalization
- 9. Missing word
- 10. Faulty sentence structure

- 1. Wrong word
- 2. Missing comma after an introductory element
- 3. Incomplete or missing documentation (sources)
- 4. Vague pronoun reference
- 5. **Spelling** *Why entertain hypographical errors?*
- 6. Mechanical error with a quotation
- Unnecessary comma
- 8. Unnecessary or missing capitalization
- 9. Missing word
- Faulty sentence structure etc.

- 1. Wrong word
- 2. Missing comma after an introductory element
- 3. Incomplete or missing documentation (sources)
- 4. Vague pronoun reference
- 5. Spelling
- 6. Mechanical error with a quotation "One typo is OK," he argued.
- 7. Unnecessary comma
- 8. Unnecessary or missing capitalization
- 9. Missing word
- Faulty sentence structure etc.

- 1. Wrong word
- 2. Missing comma after an introductory element
- 3. Incomplete or missing documentation (sources)
- 4. Vague pronoun reference
- 5. Spelling
- 6. Mechanical error with a quotation
- Unnecessary comma
 Many children, of working parents, walk home from school by themselves.
- 8. Unnecessary or missing capitalization
- 9. Missing word
- Faulty sentence structure

- 1. Wrong word
- 2. Missing comma after an introductory element
- 3. Incomplete or missing documentation (sources)
- 4. Vague pronoun reference
- 5. Spelling
- 6. Mechanical error with a quotation
- 7. Unnecessary comma
- 8. Unnecessary or missing capitalization Financial Aid is a pressing concern for many University Students.
- 9. Missing word
- Faulty sentence structure etc.

- 1. Wrong word
- 2. Missing comma after an introductory element
- 3. Incomplete or missing documentation (sources)
- 4. Vague pronoun reference
- 5. Spelling
- 6. Mechanical error with a quotation
- 7. Unnecessary comma
- 8. Unnecessary or missing capitalization
- 9. **Missing word**How to detect a missing word?
- Faulty sentence structure etc.

- 1. Wrong word
- 2. Missing comma after an introductory element
- 3. Incomplete or missing documentation (sources)
- 4. Vague pronoun reference
- 5. Spelling
- 6. Mechanical error with a quotation
- 7. Unnecessary comma
- 8. Unnecessary or missing capitalization
- 9. Missing word
- Faulty sentence structure etc.

English language errors in academic writing

AJE scholar

- Incrorrect article usage
- 2. Use of the same word/phrase repeatedly
- 3. Incorrect construction of questions
- 4. Incorrect pluralization
 - equipment, information
 - · research, literature
 - bacteria, phenomena
 - data
 - virus, index, axis
 - grammar rears its ugly head

See also: Project Nayuki, Problems with plurals in English [http://archive.ph/fnH0R].

- above
 - There were above a hundred people in the crowd.
 - What do you think of the above suggestion?
 - Taking all of the above into account,
- accomplish
- account
- actual
- actually
- advantage
- advice
- affect
- after
- allow

- above
- accomplish
 - To accomplish world unity, we need peace.
- account
- actual
- actually
- advantage
- advice
- affect
- after
- allow

- above
- accomplish
- account
 - Remember to take into account that the schools are closed.
 - Remember to account for the fact that the schools are closed.
- actual
- actually
- advantage
- advice
- affect
- after
- allow

- above
- accomplish
- account
- actual
 - We'd like to understand the actual crisis better.
 - My actual job involves math.
- actually
- advantage
- advice
- affect
- after
- allow

- above
- accomplish
- account
- actual
- actually
 - I love this movie. Actually, I know it by heart.
 - You should work harder than (you do) actually.
- advantage
- advice
- affect
- after
- allow

- above
- accomplish
- account
- actual
- actually
- advantage
 - Although this paper has its advantages, it has a serious flaw.
 - Sports provides many advantages.
- advice
- affect
- after
- allow

- above
- accomplish
- account
- actual
- actually
- advantage
- advice
 - I adviced them to see the police.
 - My prof gave me a good advice / advices.
 - Ask your lawyer for advise.
 - What would you advise doing?
- affect
- after

- above
- accomplish
- account
- actual
- actually
- advantage
- advice
- affect
 - What is the affect of computers in education?
 - How do computers affect on education?
- after
- allow

- above
- accomplish
- account
- actual
- actually
- advantage
- advice
- affect
- after
 - I studied math. After that, I have been unemployed.
- allow

- above
- accomplish
- account
- actual
- actually
- advantage
- advice
- affect
- after
- allow
 - They allow to the prisoners to keep birds.
 - The dissident was allowed leaving the country.
 - Online blogs allow strong emotions.

- above
- accomplish
- account
- actual
- actually
- advantage
- advice
- affect
- after
- allow

- also
 - We also would like to publish more.
 - The journal publishes also opinion columns.
 - A new bridge is too expensive. Also, the area is protected.
- alternate, alternatively
- among
- amount
- announce, announcement
- another
- answer
- anyway, anyhow
- appear
- apply

- also
- alternate, alternatively
 - We should make alternate arrangements.
 - As parents we take care of the kids alternatively.
- among
- amount
- announce, announcement
- another
- answer
- anyway, anyhow
- appear
- apply
- approach

Turton & Heaton, Longman 2003

- also
- alternate, alternatively
- among
 - We should develop ties among Hungarian and US scholars.
 - Among these arguments, the most powerful is ...
- amount
- announce, announcement
- another
- answer
- anyway, anyhow
- appear
- apply
- approach

5/7

- also
- alternate, alternatively
- among
- amount
 - The amount of accidents is rising.
 - A grant is usually not a high amount of money.
 - Tremendous amounts of research have been published.
- announce, announcement
- another
- answer
- anyway, anyhow
- appear
- apply

Turton & Heaton, Longman 2003

- also
- alternate, alternatively
- among
- amount
- announce, announcement
 - The school suddently announced the students to stay home.
 - I tend to ignore commercial announcements in newspapers.
- another
- answer
- anyway, anyhow
- appear
- apply
- approach

5/7

- also
- alternate, alternatively
- among
- amount
- announce, announcement
- another
 - Rio has another important site than the famous statue.
 - We need an other chair.
 - Please ask another person for reviewing your paper.
 - Don't publish another's work as your own.
- answer
- anyway, anyhow
- appear

- also
- alternate, alternatively
- among
- amount
- announce, announcement
- another
- answer
 - Nobody has been able to find an answer for this problem.
 - Why does it take 6 months to answer to my inquiry?
 - I couldn't answer to the last two questions.
 - Nobody answered me.
- anyway, anyhow
- appear

- also
- alternate, alternatively
- among
- amount
- announce, announcement
- another
- answer
- anyway, anyhow
 - Use however, nevertheless, etc. if you have to.
- appear
- apply
- approach

- also
- alternate, alternatively
- among
- amount
- announce, announcement
- another
- answer
- anyway, anyhow
- appear
 - Unfortunately, another problem appeared.
 - It would seem to appear that ... ("hedging")
- apply
- approach

Turton & Heaton, Longman 2003

- also
- alternate, alternatively
- among
- amount
- announce, announcement
- another
- answer
- anyway, anyhow
- appear
- apply
 - I applied to the fellowship, which was rejected.
 - We apply the method X to do Y.

approach5/7

Turton & Heaton, Longman 2003

- also
- alternate, alternatively
- among
- amount
- announce, announcement
- another
- answer
- anyway, anyhow
- appear
- apply
- approach

• ...

How not to "approach"

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

The most appropriate physiological signals to develop simplified as well as accurate screening tests for obstructive sleep apnoea (OSA) remain unknown. This study aimed at assessing whether joint analysis of at-home oximetry and airflow recordings by means of machine-learning algorithms leads to a significant diagnostic performance increase compared to single-channel approaches.

[Abstract]

How not to "approach"

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

Regression support vector machines were used to estimate the [apnoea-hypopnoea index] from single-channel and dual-channel approaches.

[Abstract]

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

Overall performance of the dual-channel approach (kappa: 0.71; 4-class accuracy: 81.3%) significantly outperformed individual oximetry (kappa: 0.61; 4-class accuracy: 75.0%) and airflow (kappa: 0.42; 4-class accuracy: 61.5%).

[Abstract]

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

According to our findings, oximetry alone was able to reach notably high accuracy, particularly to confirm severe cases of the disease. Nevertheless, oximetry and airflow showed high complementarity leading to a remarkable performance increase compared to single-channel approaches.

[Abstract]

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

Particularly, support vector machines (SVMs) reached high diagnostic performance in binary classification problems (OSA-positive vs. OSA-negative) improving conventional approaches [15, 19, 20].

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

All recordings, both SpO₂ and airflow, with a total recording time <4 h after pre-processing were discarded due to insufficient data for accurate estimation of the AHI from a single/dual-channel approach [6].

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

Additionally, in order to avoid dependence on a particular training dataset, a bootstrapping approach was implemented. Accordingly, FCBF was repeated using 1000 bootstrap replicates derived from the training set.

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

As under the most common classification approach, the learning stage of a SVM algorithm for regression is based on the principle of structural risk minimisation.

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

Table 3 shows the 4-class confusion matrices for the proposed approaches, whereas Tables 4–6 summarise the diagnostic assessment when setting a single fixed threshold for binary classification.

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

Under a dual-channel approach, variables within the joint optimum feature subset were different compared with features selected in each single-channel approach, particularly airflow-derived variables (Fig. 2). While the histogram of relevance values for SpO₂-derived features is very similar under both single- and dual-channel approaches, the profile for airflow-derived features is completely different.

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

Accordingly, the performance of the dual-channel approach significantly outperformed individual SpO_2 and airflow. AUC of SVM_{SpO_2+AF} model was significantly higher (p < 0.01) for all diagnostic thresholds. Moreover, in contrast to single-channel approaches, balanced sensitivity-specificity pairs were always obtained.

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

Using a less conservative approach, with patients showing an estimated AHI \geq 15 events/h directly referred for treatment since 100% of patients categorised as moderate-severe OSA had at least mild OSA with symptoms (71 out of 77 actually had moderate or severe OSA, while 6 out of 77 had mild OSA), the number of PSGs potentially avoidable would increase up to 89.6%.

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

Our proposal is a robust approach without significantly increasing the complexity and intrusiveness of portable monitoring. Indeed, commercial portable devices for simultaneous measurement of oximetry an airflow already exist, such as the widely known ARES and AppeaLink.

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

This study provides significant evidence on the superiority of a dual-channel approach in the framework of unattended abbreviated monitoring for OSA screening. Particularly, SpO2 and airflow signals have been found to provide complementary information leading to a remarkable performance increase compared to single-channel approaches.

[Conclusions]

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

All data generated during this study (estimated AHI) are included in this published article and its Supplementary Information Files. Additionally, the datasets (raw signals) analysed during the current study are available from the corresponding author on reasonable request.

[Data availability]

From "A machine learning-based test for adult sleep apnoea screening [..]" by D. Alvarez et 10 al., Scientific Reports (2020).

Conception and design: D.A., A.C.-H., R.H., F.C. Patient recruitment and data acquisition: A.C.-H., A.C., F.M., C.A.A. Machine learning: D.A., A.C.-H., G.C.G.-T., F.V.-V., V.B.-G. Statistical analysis: D.A., A.C.-H., T.R. Interpretation of results: D.A., A.C.-H., A.C., R.H., F.C. Drafting and reviewing the manuscript for important intellectual content: D.A., A.C.-H., A.C., G.C.G.-T., F.V.-V., V.B.-G., F.M., C.A.A., T.R., R.H., F.C.

[Contributions]

Turton & Heaton, Longman 2003

- approximately
 - I arrived in Buda/pest approximately one year ago.
 - The train fare is approximately 20 USD.
- argue
- arguments
- arise
- as
- as well as
- aspect
- assist, attend
- attempt
- average
- avoid

7/7

Turton & Heaton, Longman 2003

- approximately
- argue
 - We argued in class about the usage of passive voice.
 - I would argue that short papers are preferable. ("hedging")
- arguments
- arise
- as
- as well as
- aspect
- assist, attend
- attempt
- average

• avoid

Turton & Heaton, Longman 2003

- approximately
- argue
- arguments
 - There are good arguments for living in the countryside.
 - Having a child is a personal argument.
- arise
- as
- as well as
- aspect
- assist, attend
- attempt
- average

• avoid

Turton & Heaton, Longman 2003

- approximately
- argue
- arguments
- arise
 - Many problems have aroused from overpopulation.
- as
- as well as
- aspect
- assist, attend
- attempt
- average
- avoid

Turton & Heaton, Longman 2003

- approximately
- argue
- arguments
- arise
- as
 - My skin is not as the skin of a young person.
 - I suddenly feel as fifteen again.
 - Let's talk important issues as child abuse and poverty.
 - As we live upstairs, so we didn't notice the noise.
 - I was treated as an old friend.
- as well as
- aspect
- assist, attend

7/7

Turton & Heaton, Longman 2003

- approximately
- argue
- arguments
- arise
- as
- as well as
 - Each week he wrote letters, as well as called her.
- aspect
- assist, attend
- attempt
- average
- avoid

Turton & Heaton, Longman 2003

- approximately
- argue
- arguments
- arise
- as
- as well as
- aspect
 - From a biological aspect, the two plants are similar.
 - In this aspect all plants are the same.
 - Are humans superior to dolphins in every aspect?
- assist, attend
- attempt
- average

7/7

Turton & Heaton, Longman 2003

- approximately
- argue
- arguments
- arise
- as
- as well as
- aspect
- assist, attend
 - Everybody has to assist the meeting.
 - My labmate assisted me to write up.
 - Ask the secretary to assist you.
 - I won't be able to attend your wedding.
 - It's important to attend to all courses.

7/7

Turton & Heaton, Longman 2003

- approximately
- argue
- arguments
- arise
- as
- as well as
- aspect
- assist, attend
- attempt
 - The attempt of seizing power failed.
- average
- avoid

Turton & Heaton, Longman 2003

- approximately
- argue
- arguments
- arise
- as
- as well as
- aspect
- assist, attend
- attempt
- average
 - Our average patient requires 2-3 months of hospitalization.
 - The average of hours on social networks has increased.

• avoid

Turton & Heaton, Longman 2003

- approximately
- argue
- arguments
- arise
- as
- as well as
- aspect
- assist, attend
- attempt
- average
- avoid
 - Please avoid to ring the door bell after midnight.

Turton & Heaton, Longman 2003

- approximately
- argue
- arguments
- arise
- as
- as well as
- aspect
- assist, attend
- attempt
- average
- avoid

