

English Technical Writing

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Fall 2023 (112-1)
Class 14

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Feedback

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Feedback

- I feel it is difficult to expand a paragraph (how to write longer). Do you have any tips for that?
- Most common problem: Assuming your audience knows things that they may not know. (If they know it, you do not need to write more.)
- Solution: Make sure you include definitions of all new words, connect each new word with those previously mentioned. Add examples, more details about methods or results of past work (how it differed from others), ...

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Peer Review

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Excellent job

- Both writing and grading
- Current class average 55/60 points

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Grading

- 90% = excellent = very few changes needed
 - Some of you gave many comments, but grades of 95%
- Overall grade should match category grades
 - Average of categories similar to final grade
 - If not, change one or the other

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Small things

- Make sure you
 - Change filename
 - Include assignment name in header
 - Delete argument structure outline (not needed now)
- References
 - Plural (more than one)
 - Mostly good, some small format problems
 - Often due to errors in Endnote database

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Biggest problems

- Topic sentences
 - Everything in the paragraph relates to the topic sentence
 - Expand topic sentence or reduce paragraph (split)
- Still to do
 - Title and abstract (today)

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Making changes

- Pay attention to
 - My comments
 - Partner's comments (see if I responded to them)
 - My Track Changes (small errors – spelling, grammar)

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Turnitin

- Next assignment I will activate this
 - Make sure you do not copy from sources
 - Revise, rewrite in your own words
- Will generate a similarity report when you submit
 - Remember – some parts may be similar – that is okay

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Adding the final parts



Title

Abstract

Finalization

Work Time
Assignment

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Presentation

- | | | |
|-------|--|----------|
| 11/14 | Planning your writing (Ch 10, 19.1-2)
Exercise 19.1 Argument structure outline | Charles |
| 11/21 | Brainstorming and linearizing (Ch 18, 19.3-4)
Exercise 19.3 Topic sentence outline | Tran |
| 11/28 | Writing and organizing (Ch 20, 21)
Exercise 21.1, 2 Coherence and conciseness | Neo |
| 12/5 | Clarifying your argument (Ch 22)
Exercises 22.1, 2, 3 Connection and connotation | Hai |
| 12/12 | Final revision and final parts (Ch 23, 26.1-3)
Exercises 26.1, 3 Abstract and title | Charleen |

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Title
Section 26.3

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Length

- Specified in Instructions to Authors?
- Fit expectations of field:
 - Some fields of EE <10 words
 - Some fields of EE ~15 words
 - Some chemical engineering up to 30 words

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Noun phrase, sentence, or question?

- Noun phrase (no verb) most common in EE
- Period. Rare
- Question mark? Rare in engineering
- Colon: Not uncommon
 - Contribution: Topic
 - Topic: Contribution
 - Problem: Solution
 - General: Specific

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Research goal and Title

- To that end, we propose a novel approach using bipartite graph labels (BGL) that models the rich relationships among the ultra-fine grained classes.
- **Fine-grained Image Classification by Exploring Bipartite-Graph Labels**
 - Topic
 - Contribution
- **Using Bipartite-Graph Labels for Fine-grained Image Classification**
 - Topic first – not as good
 - But contribution specific

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Research goal and Title

- To this end, in this paper, we study the anomaly detection of traffic with the following two goals. The first goal is to find the road segments with abnormal traffic. The second goal is to find the major cause(s) of the anomalies found in the previous goal.
- **A New Framework for Traffic Anomaly Detection**
 - = abnormalities
 - Contribution
 - Topic
 - Contribution first – good
 - But weak, not specific

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Research goal and Title

- To address this concern, this paper proposes a new multilayer, adaptive block-based background subtraction method and a pixel-based refinement procedure that uses the rather robust mean feature to cater to the codebook model (CB) to yield high processing efficiency and detection precision (Pr) simultaneously.
- **Fast Background Subtraction Based on a Multilayer Codebook Model for Moving Object Detection**
 - Contribution
 - Topic
 - Good order and specificity

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Improving your Title

- Look at your title
- Does it show both general topic and contribution?
- Could the order or wording be improved?
- We will talk about it in the consultation time

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Abstract

Section 26.2



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Writing or Copying

- Can you copy sentences from the body of the paper?
 - Copy phrases, usually not whole sentences
 - May combine several sentences into one
- How to do it:
 - Copy key phrases or sentences
 - Combine into short, succinct sentences
 - Eliminate any unnecessary words
- Nothing in abstract that is not in paper

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Evaluating an Abstract

- For one of your exemplar articles
 - Evaluate each sentence in the Abstract
 - What division does it represent?
- Share with your neighbor and the class
- Write an abstract for your article this week

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Title/Abstract/Goal/Conclusion

- Four places in the article should match
 - Title
 - Abstract
 - Research goal
 - Conclusion
- How well do they match?
 - Evaluate one of your exemplar articles
- In EE, many do not match very well

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Finalization

Section 23.1



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Alterations

- Final fitting
- Trim, not add



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List of things to check

- Figure 23.2, p. 245

Checklist for final proofreading

- Spelling
- Double spaces **Missing spaces**
- Foreign punctuation or other marks
- Font and font size
- Margins, indents
- Format of paragraphs—extra line or space before/after, indented or not
- Format of headings, titles, captions, footnotes
- Format of reference and citations

Figure 23.2 Checklist for final proofreading.

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Consistency

Section 23.2

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Consistency

- Example:
- Do you use the same vocabulary in the first part as in the last section?
- Do you use the same vocabulary in the first section as the last section?
- Often change ideas, focus over course of paper
 - Rewrite earlier sections to match later

“Direction Strength Parameter (STP)”

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Ambiguity

- John **heard** her when she whispered **clearly**.
- John **heard** her **clearly** when she whispered.
 - Place connected words as close together as possible
- His driving **slowly became** annoying.
- His **slow driving** became annoying.
 - Consider how else something could be interpreted

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Ambiguity

- He gave a lecture about cheating at the university in January.
- What happened at the university?
 - Lecture or cheating?
- What happened in January?
 - Lecture or cheating?

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Ambiguity

1. He gave a lecture about / cheating at the university in January.
2. He gave a lecture about / cheating at the university / in January.
3. He gave a lecture about / cheating / at the university in January.

Cheating at the U
Cheating in Jan

Cheating at the U
Lecture in Jan

Lecture at the U
Lecture in Jan

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Ambiguity

- He gave a lecture about cheating at the university in January.
- Rewrite the statement, making it clear that:
 1. the cheating was at the university, but the lecture was in January
 2. the lecture was at the university, but the cheating was in January
 3. the lecture was at the university, and the lecture was in January
 4. the cheating was at the university, and the cheating happened in January
- Principle:
Keep related words/phrases close to one another

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Ambiguity

- He gave a lecture about cheating at the university in January.
 1. the cheating was at the university, but the lecture was in January
- He gave a lecture in January about cheating at the university.
- In January he gave a lecture about the cheating at the university.
- The lecture he gave in January was about cheating at the university.

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Ambiguity

- He gave a lecture about cheating at the university in January.
- Rewrite the statement in four different ways, making it clear that:
 1. the cheating was at the university, but the lecture was in January
 2. the lecture was at the university, but the cheating was in January
 3. the lecture was at the university, and the lecture was in January
 4. the cheating was at the university, and the cheating happened in January

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Ambiguity

- He gave a lecture about cheating at the university in January.
 2. the lecture was at the university, but the cheating was in January
- He gave a lecture at the university about the cheating in January.
- He gave a lecture at the university about the cheating that had occurred in January.

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Ambiguity

- He gave a lecture about cheating at the university in January.
 3. the lecture was at the university, and the lecture was in January
- He gave a lecture in January at the university about cheating.
- He gave a lecture at the university in January about cheating.
- In January he gave a lecture at the university about cheating.

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Ambiguity

- He gave a lecture about cheating at the university in January.
 4. the cheating was at the university, and the cheating happened in January
- He gave a lecture about the cheating in January at the university.
- He gave a lecture about the cheating that happened in January at the university.

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Correctness

Section 23.3

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Correctness

- Example:
- Bee sewer you're spilling id collect, the punctuation is right: and everything is formatted the same.

Word spelling/grammar checker finds no problem with this!

- Be sure your spelling is correct, the punctuation is right, and everything is formatted the same.

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Frequently Misused Words

Section 23.3.1

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Respectively

- Two lists to be merged
 - Same number of objects
 - Same order
- Comma separated
- Does not mean sequentially

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Respectively

- Correct :
 - The two subjects were male and female, aged 67 and 63, respectively.
 - The two subjects were, respectively, male and female, aged 67 and 63.
- A₁ and B₁, A₂ and B₂, respectively

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Respectively

- Incorrect :
 - The two subjects were aged 67 and 63, respectively.
 - [No second list.]
 - The three subjects were male and female, aged 67, 63 and 62, respectively.
 - [Unequal numbers.]
 - The two subjects were a male aged 67 and a female aged 63, respectively.
 - [Two lists are already merged.]
 - The two subjects will be described respectively.
 - [Sequentially, not respectively.]

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Articles

Section 23.3.3

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Which article to use?

```

    graph TD
      NP[Noun Phrase] --> PN{Proper noun?}
      PN -- Y --> ORB{Ocean, River, Building?}
      ORB -- Y --> D[The definite]
      ORB -- N --> KN{Known to reader?}
      KN -- Y --> D
      KN -- N --> C{Countable?}
      C -- Y --> S{Singular?}
      S -- Y --> AI[A/an indef.]
      S -- N --> P{Plural}
      P -- N --> NA[No article]
      C -- N --> CA{Collective Abstract}
      CA -- N --> NA
      P -- Y --> NA
      KN -- N --> NA
      PN -- N --> NA
      ORB -- N --> NA
      CA -- Y --> NA
      P -- Y --> NA
      
```

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Articles

- Can you take some examples of the flow chart of the "Which article to use?", like Field Programmable Gate **Array** (FPGA), what is the article?
- First identify the noun

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Field Programmable Gate **Array**

```

    graph TD
      NP[Noun Phrase] --> PN{Proper noun?}
      PN -- Y --> ORB{Ocean, River, Building?}
      ORB -- Y --> D[The definite]
      ORB -- N --> KN{Known to reader?}
      KN -- Y --> D
      KN -- N --> C{Countable?}
      C -- Y --> S{Singular?}
      S -- Y --> AI[A/an indef.]
      S -- N --> P{Plural}
      P -- N --> NA[No article]
      C -- N --> CA{Collective Abstract}
      CA -- N --> NA
      P -- Y --> NA
      KN -- N --> NA
      PN -- N --> NA
      ORB -- N --> NA
      CA -- Y --> NA
      P -- Y --> NA
      
```

Annotations:

- Is there only one? (points to 'Singular?')
- Has it been mentioned? (points to 'Known to reader?')
- Is it countable? (points to 'Countable?')
- Later uses: The array (points to 'The definite')
- First use: An array (points to 'A/an indef.')

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Field Programmable Gate **Arrays**

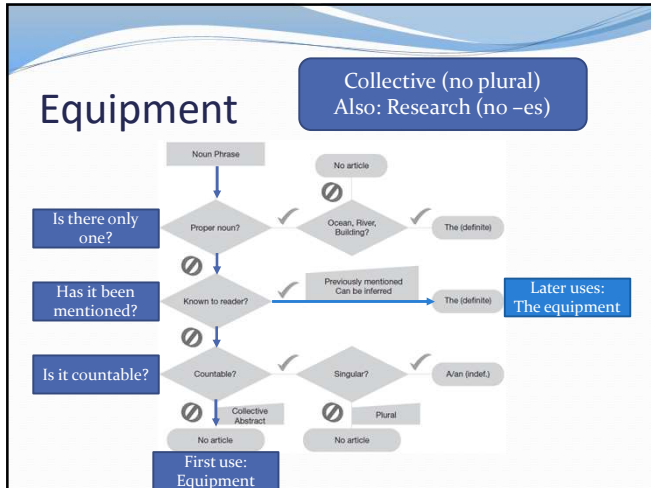
```

    graph TD
      NP[Noun Phrase] --> PN{Proper noun?}
      PN -- Y --> ORB{Ocean, River, Building?}
      ORB -- Y --> D[The definite]
      ORB -- N --> KN{Known to reader?}
      KN -- Y --> D
      KN -- N --> C{Countable?}
      C -- Y --> S{Singular?}
      S -- Y --> AI[A/an indef.]
      S -- N --> P{Plural}
      P -- N --> NA[No article]
      C -- N --> CA{Collective Abstract}
      CA -- N --> NA
      P -- Y --> NA
      KN -- N --> NA
      PN -- N --> NA
      ORB -- N --> NA
      CA -- Y --> NA
      P -- Y --> NA
      
```

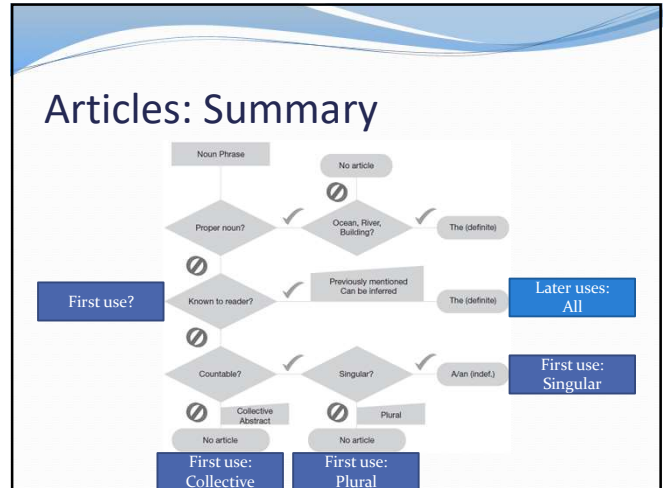
Annotations:

- Is there only one? (points to 'Singular?')
- Has it been mentioned? (points to 'Known to reader?')
- Is it countable? (points to 'Countable?')
- Later uses: The arrays (points to 'The definite')
- First use: Arrays (points to 'A/an indef.')

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Articles: Summary / exceptions

- Definite vs. indefinite
 - Definite: we both know it (author and reader)
 - Indefinite: at least one person does not know it
- Exception to chart:
 - If talking about a general class, not a specific object, continue to use A rather than switching to THE

An array has a higher gain than a single antenna.
Vs.
The array has a higher gain than previous arrays.

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Articles in your Introduction

- Try the chart with your Introduction – does it work?

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British English

Section 23.3.4

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American vs. British English

- Spelling
- Numbers
- Dates
- ...
- Most journals accept either
- Be consistent (set language)
 - Select all
 - Select language

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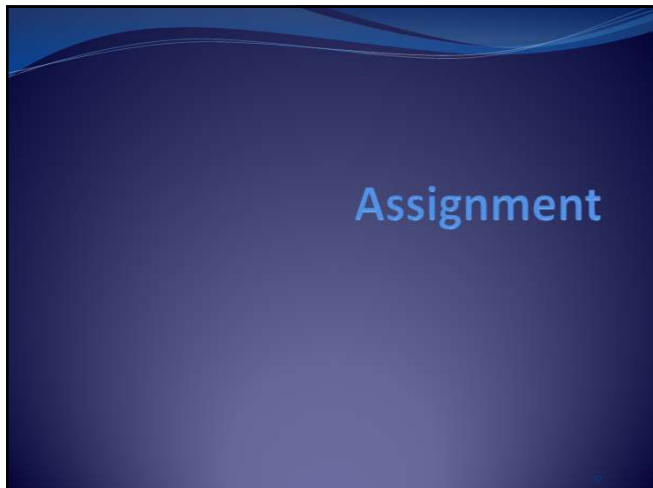


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Work time

- Check the comments and track changes
 - Make sure you understand
 - What do you need to change first? (for First draft)
- Make the necessary changes
- Revise your title, Write an abstract
- Keep writing and revising

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1 Turn in

- First draft of Introduction
 - Check grading standards to make sure it is complete
 - Title and Abstract
 - Rewrite if necessary to avoid plagiarism

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2 Read

- Chapter 17 (Email)

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