

Writing Powerful Journal Articles

A UCAR/NCAR Communicating Science Workshop for ESL Authors

February 28, 2005

10:00- Noon

ATD - Atrium

Junhong Wang, Mary Golden,
Carol Park, Chris Snyder



A Typical Review of Good Science and Bad Writing

“While the results are new, interesting and worth publishing, I cannot recommend publication at this time. Major grammatical errors and unclear statements are prevalent throughout the manuscript.

“I'm going to give the authors a second chance, however, because of the language barrier.

“They should completely rewrite the paper and ensure it is in colloquial English before resubmittal. Suggest that they get help from a technical editor before resubmitting a major revision. Unless the authors can improve the readability of the paper, it should be rejected.”

Little Mistakes That Matter: Articles

Use an article (a, an, the) or other determiner (e.g., this, my) if the noun is countable.*

- If the noun the article modifies is **SINGULAR** (one; specific)
 - *I need **the** book for **the** class.* (DEFINITE as to which book and class)
 - *I need **a** book for **a** class.* (INDEFINITE—implies others exist)
 - If the noun the article modifies is **PLURAL AND** restricts the meaning to a SPECIFIC group or subset of the noun. (Always use “the”— never “a” or “an”— with a plural noun.)
 - ***The** winds frequently found at this altitude are frigid.* (tells which winds)
 - *Winds may be found at any altitude in the atmosphere.* (unrestricted)
- * *Few, fewer and many are countable. Little, less and much are uncountable. Some, enough, more, most and all may be either, depending on context.*

THE DEFINITE ARTICLE



[www.bigcats.org/ abc/attacks/whattodo.html](http://www.bigcats.org/abc/attacks/whattodo.html)

Use the DEFINITE article (“the”):

- If a SINGULAR, countable noun is UNIQUE (Only one exists or is relevant.)
 - *The chinook is a type of hot, dry wind.*
- If a noun (SINGULAR or PLURAL):
 - Was PREVIOUSLY INTRODUCED, e.g., the subject of the paper
 - *The supercell developed rapidly.* (Reader knows which supercell.)
 - Represents the entire class or subset to which the noun belongs
 - *The chinook is the type of hot, dry wind chosen for this study.*
 - Is preceded by a superlative adjective (*most, least, -est*), the word “*same,*” or an ordinal number (*first, fourth*); or the noun is a group of years (*1960s, Sixties*)

Note: If a PLURAL noun is countable only in a general sense, do not use an article: *Chinooks are known by other names as well.*

Choose which INDEFINITE article (“a,” “an”) to use:

- If the next word begins with a consonant **SOUND**, use “a.”
- If the next word begins with a vowel **SOUND** (a, e, i, o, u), use “an.”
 - *A house, a hospital, a holiday, a human—BUT an hour (H is silent)*
 - *An elephant, an emu—BUT a euphemism (EU sounds like Y)*
 - *An untold story, an uphill climb—BUT a university (U sounds like Y)*
- With singular, countable nouns:
 - *To refer to a nonspecific member of a group (“a wind in Colorado”)*
 - *To introduce a member of a group for the FIRST time*
 - *“a theory that we considered”—implies other theories were considered (Subsequently use “the theory,” not “a theory.”)*
- With plural nouns that require an indefinite article, use **SOME**:
 - *“Some theories were rejected as unfounded.”*

Little Mistakes That Matter: Pronouns

A pronoun substitutes for a noun. Although most English nouns (e.g., rabbit, table, building) do not change according to gender, pronouns do.

Tips on Using Third-Person Pronouns:

- Use **he** (subjective case), **him** (objective case) and **his** (possessive case) when referring to a male.
 - *Juan is a writer so **he** is glad that I gave a book to **him** for **his** birthday.*
- Use **she**, **her** and **her** or **hers** when referring to a female.
 - *Dr. Huang is a top scientist in **her** field. I heard **her** speak: the day was **hers** because **she** spoke extremely well.*
- Use **it**, **it** and **its** when the gender is neuter, neither male nor female.
 - *We need meteorology—**it** is important and **its** application is evident daily. So give **it** more funding, George.*

- Other pronouns include: (first person) **I, me, my/mine; we, us, our/ours;** (second person) **you, you, your/yours;** (third person) **they, them, their/theirs;** (indefinite pronouns) **who, whom, whose; whoever, whomever, whose ever.**
- When possible, avoid gender-specific language by using plural pronouns:
 - Weak: *A scientist must have the skills to communicate **his** ideas.*
 - Stronger: *Scientists must have the skills to communicate **their** ideas.*
- As in the above example, the connection between a pronoun and its noun **antecedent** must be clear. They must be the same in gender and number. No other nouns or pronouns may intervene to cloud the meaning.

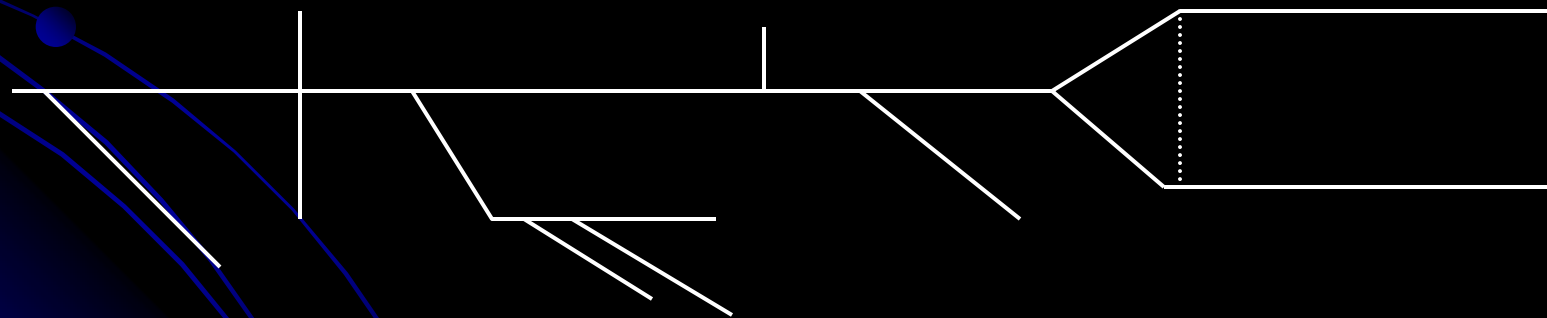
Little Mistakes That Matter: Punctuation Within Quotation Marks (U.S.A. Style)

- Commas and periods come before final quotation marks:
 - “We’ll attend the meeting,” they agreed. “Let’s hope it will be brief.”
- Others (semicolon, colon, exclamation point, question mark, dash) fall outside a final quotation mark unless part of the quotation itself:
 - “The worst is over”—this is what everyone was saying before the second wave hit the island. After that it was, “Run for your lives!”
 - She asked, “Are you going to cook dinner tonight or shall we go out?”
- Single quotation marks fall within double quotation marks:
 - “The lecture is entitled, ‘The Future of Global Warming,’” he read.

For more information, see *The Mayfield Handbook of Technical & Scientific Writing* and other references on the “Resources” page at the end of this presentation.

Writing Powerful Journal Articles

Crack ing the Code of Sentence Structure



Carol Park

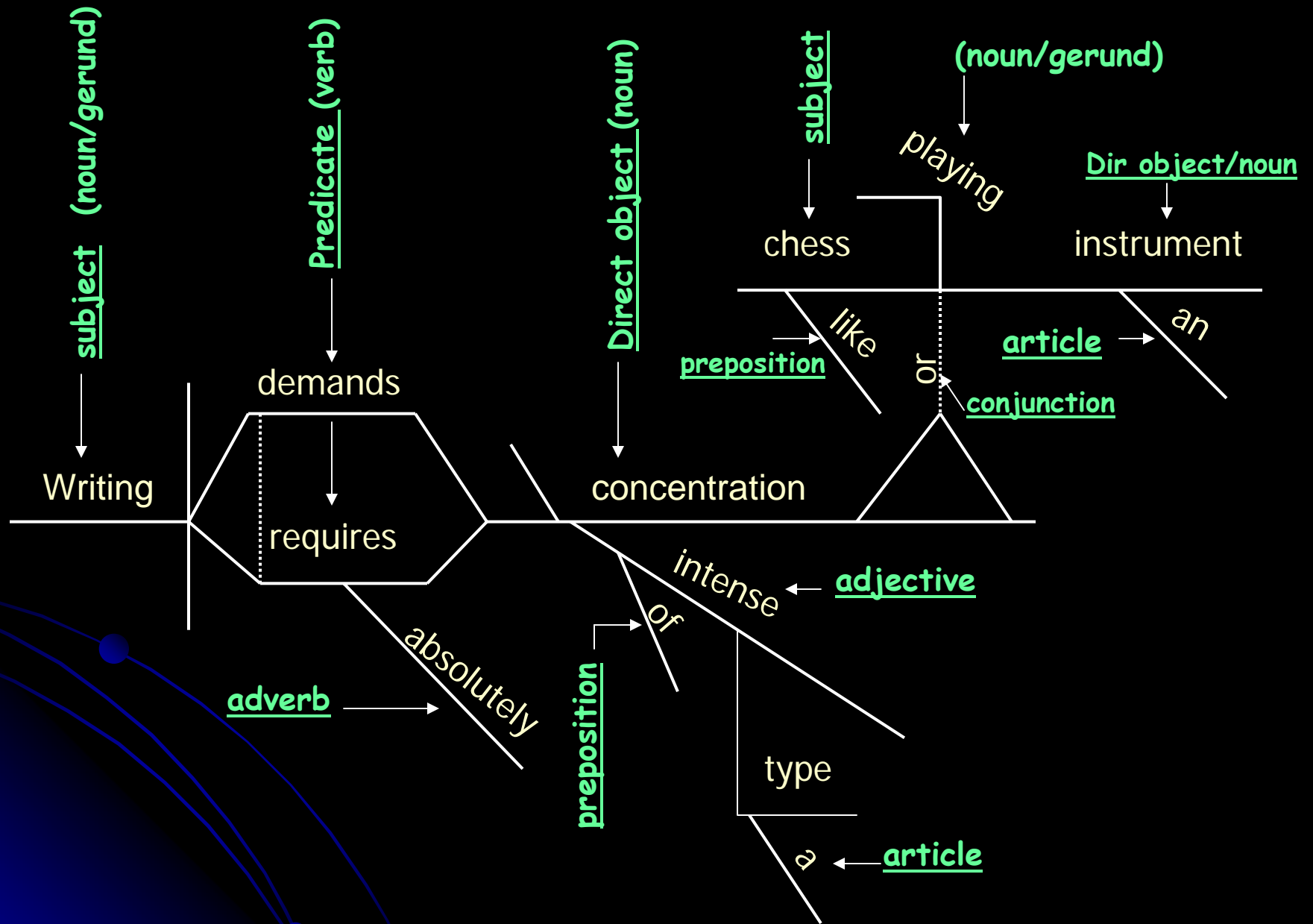
Sentence Structure and Diagramming Sentences

Diagramming Sentences:

A lost art and a useful tool for analyzing sentence structure and diagnosing a problem in a poorly constructed sentence—a way to debug.

- “Writing demands, absolutely requires, a type of intense concentration, like chess or playing an instrument.”

(from *Communicating Science*, Montgomery, p. 36)



- The basic rules for sentence structure haven't changed.
- Trouble communicating a complex concept?
Deconstruct the fuzzy sentence or paragraph and see where the problems are.
- Write with **brevity** and **clarity**.
- Watch out for common ESL hazards: Articles, antecedents, run-ons, compound sentences, parallel construction*, syntax, commas (punctuation), tense(s), repetitive words (therefore, however, etc.), unnecessary words and phrases (in order, it is apparent that, etc.), and transitions.

Parallel Construction

As its name implies, parallel construction is necessary to show a parallel relationship between two concepts of equal weight.

Raoul's QPA is higher than Ralph.
Raoul's QPA is higher than Ralph's.

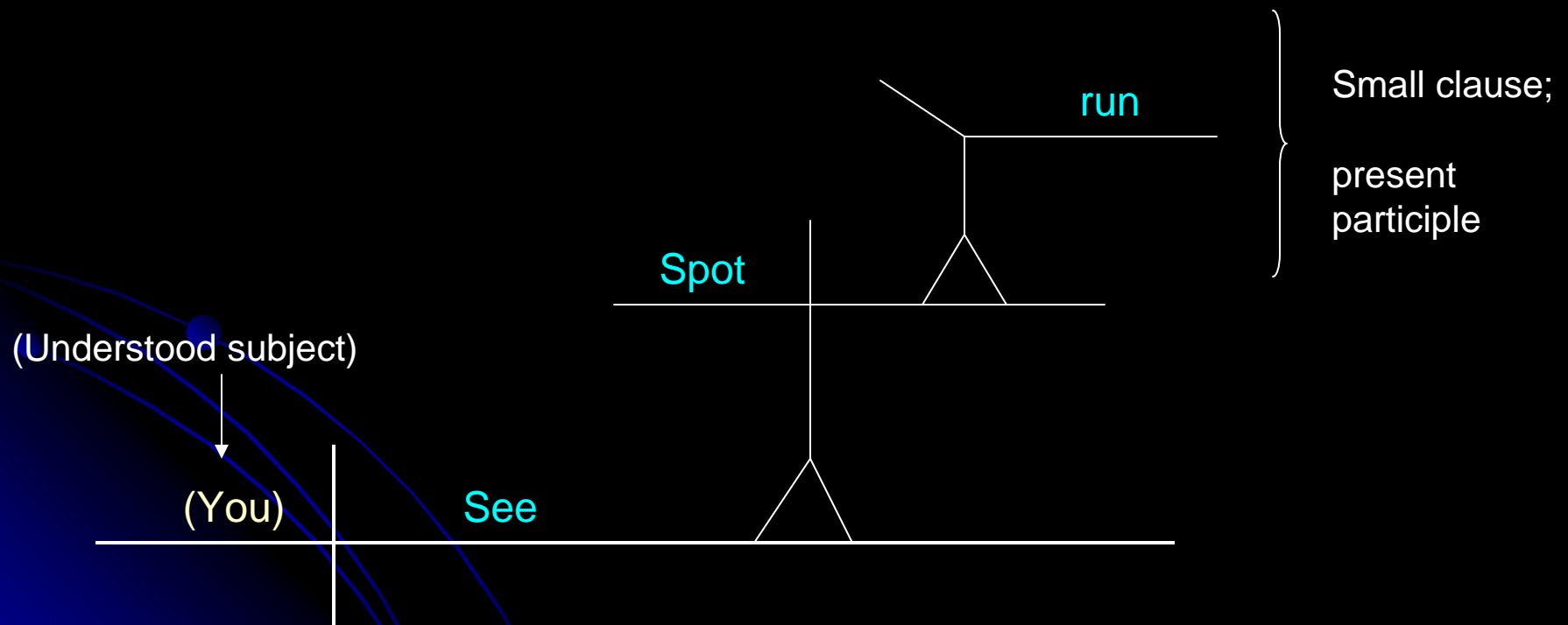
Phuong Tran has wit, charm, and she has an extremely pleasant personality.

Phuong Tran has wit, charm, and a pleasing personality.

(Example added after talk.)

“See Spot run.”
Simple sentence or not?

<http://www.straightdope.com/classics/a980814a.html>



“I really do not know that anything has ever been more exciting than diagramming sentences.”

- Gertrude Stein

Resources

Books:

The Chicago Guide to Communicating Science, Montgomery
The Chicago Manual of Style
The Mayfield Handbook of Technical & Scientific Writing, Perelman
Elements of Style, Strunk & White
Elements of Grammar, Shertzer
English for Science and Technology: A Handbook for Nonnative Speakers, Huckin
Oxford Fowler's Modern English Usage Dictionary, Fowler

Websites:

- UCAR/NCAR CommSci: <http://www.ncar.ucar.edu/eo//commsci/>
- ESL: <http://owl.english.purdue.edu/handouts/esl/index.html>
- Diagramming: <http://webster.commnet.edu/grammar/diagrams2/diagrams2.stm>
- Diagramming: http://www.geocities.com/gene_moutoux/basicdiagrams
- Diagramming: <http://webster.commnet.edu/grammar/diagrams2/diagrams2.stm>
- *Chicago Manual of Style*: <http://www.press.uchicago.edu/Misc/Chicago/cmosfaq/cmosfaq.html>
- *The Mayfield Handbook*: <https://mit.imoat.net/handbook/home.htm>
- *Monthly Weather Review*: <http://www.mmm.ucar.edu/mwr>
- AMS Style guide for journal papers: <http://www.ametsoc.org/pubs/refstyl.html>
- UCAR Style Guide: <http://www.ucar.edu/communications/styleguide/index.html>

Thanks for helping launch CommSci!

For a copy of this presentation and access to other resources, please visit
the CommSci website:

<http://www.ncar.ucar.edu/eo//commsci/>

Mary Golden: mgolden@ucar.edu

Carol Park: park@ucar.edu