

Scientific Writing 6951

Wednesdays 10-12 Room 0.008

THE
ASTROPHYSICAL JOURNAL
AN INTERNATIONAL REVIEW OF SPECTROSCOPY
AND ASTRONOMICAL PHYSICS

VOLUME XXXVII

MAY 1913

THE

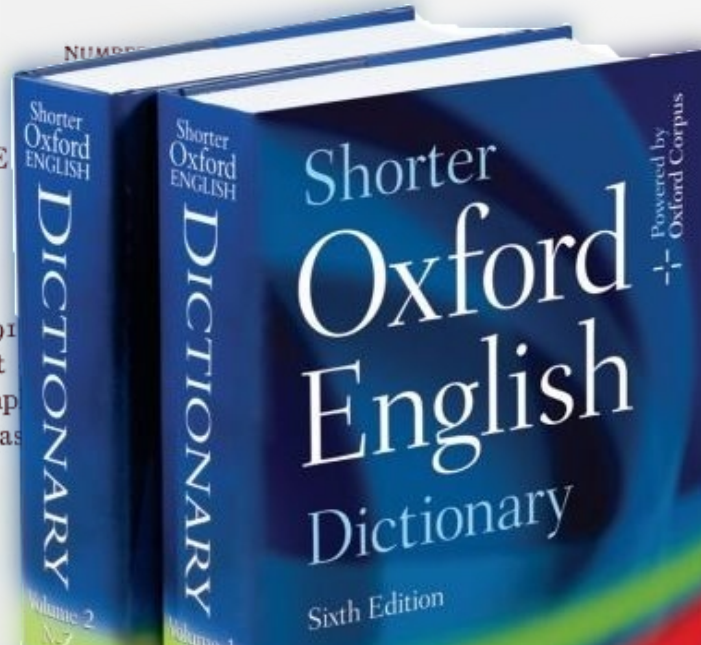
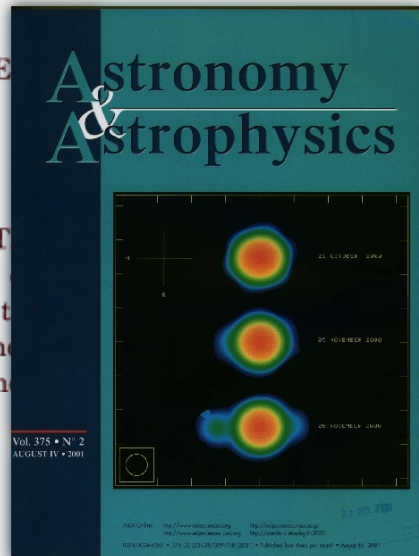
Astronomy
&
Astrophysics

DURING THE
MAY 17, 1912
ECLIPSE

INVESTIGATION

on April 17, 1912
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<http://www.astro.uni-bonn.de/~izzard/writing.html>

Previously on *Scientific Writing*

- Style part 2 of 3
- Punctuation hell:
 - **Commas**, dashes
- Numbers and counting
- **Fluffy verbs**
- Connotation
- Misused pronouns



Commas

- <http://grammar.ccc.commnet.edu/grammar/commas.htm>
- I have spent most of the day putting in a comma and the rest of the day taking it out. (Oscar Wilde)

*Give your supervisor five Euros for each comma you use in your thesis. Your supervisor will return five Euros for each comma used **correctly**... This teaching technique has been endorsed by **every supervisor** who has tried it!*

Today's class

- Nouns from verbs (when to avoid them)
- The Gerund
- Common English Mistakes
- ***German to English***
- Useless and silly phrases
- Acronyms
- **Cliché** and euphemisms
- Jargon and buzzwords



Nouns from verbs

- “Measurements **were** carried out on the variation...”
- *“The variation was measured”*
- “Observations **were** made of α Cen”
- *“ α Cen was observed”*
- Words ending in -tion, -ance, -sion, -ment, -ness, -cy can often be replaced with an **active** verb.

The Gerund

- -ing verbs that *act as a noun* e.g.

I like **swimming**

- Does a noun based on the verb already exist? If so, use it:
 - The **constructing** was very loud.
 - *The **construction** was very loud.*
- Gerund as the subject:
 - **Observing** galaxies is tiring.
- After prepositions:
 - I am interested in **studying** astronomy.

The Gerund

- After some verbs:
 - I will go **shopping**.
- But others take the infinitive:
 - I hope **to shop** soon.
- See your favourite dictionary!
- Often confused with present participles
 - I am **going** to the shops. (verb)
- Present participles can be used as adjectives:
 - The **singing** man



Common Mistakes

- Most problems are because of English's particularly *random spelling system*!
- Spellchecker will spot most mistakes e.g.
- Loose vs lose, proofs vs proves
- Dwarf/dwarfs, goose/geese but moose/moose
- Datum/data
- Accept/except, insure/ensure
affect/effect, less/fewer
- Astrology/Astronomy!

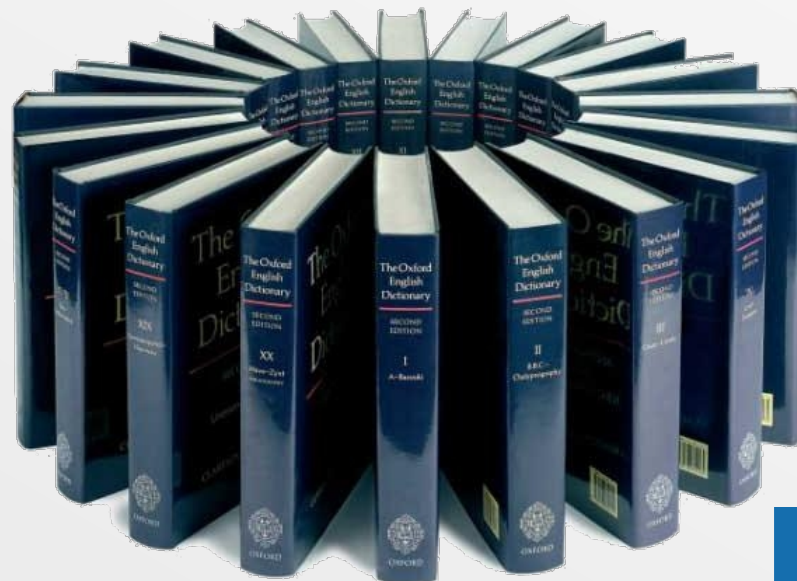


Subtle errors

- My coat is **broken**.
- Would you mind helping? **Yes**, of course!
- Who **cooked** the salad?
- I have no exercise talent.
- How does she look like?
- Bring/take, teach/learn, borrow/lend

Further reading...

- <http://public.wsu.edu/~brians/errors/errors.txt>
- <http://www.learnenglish.de/mistakes/CommonMistakes.htm>
- <http://www3.telus.net/linguisticsissues/commonerrorsinenglish.html>
- <http://english-grammar-mistakes.blogspot.com/>
- Oxford English Dictionary (OED) “Word of the day”
- <http://www.merriam-webster.com/word-of-the-day/>
- Google etc.

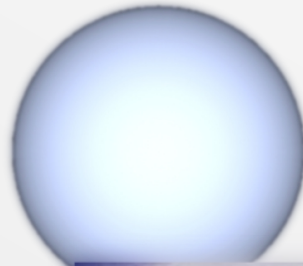


Common mistakes

- White dwarf



- White dwarfs



- White dwarves



German to English

From: German ▾



To: English ▾

Translate

- English is relatively compact compared to French, German, ...
- ***No credit*** for fluffy style in academia!
- Read this:

http://files.nothingisreal.com/publications/Tristan_Miller/advice.pdf



Common mistakes

- *in Abhängigkeit von*

X is in dependence of y

- X *depends* on y ?
- X is *independent* of y ?



OPPOSITE

A Senior AlFA Researcher
(Repeatedly...)
... and all his students!

- Since/for

- *Since* 1912 ...
- *Since* I was five ...
- *For* ten years ...

- Circa (c./ca.) rarely used (except dates)

Useless and Silly

- The star was very cold.
- It is noteworthy that ...
- Results clearly demonstrate that ...
- First of all, ...
- The area of cosmology is ...
- Fortunately, stars are spherical ...
- The presence of ...

(See today's exercises)

Acronyms

- Use **sparingly**
- Always define, in **capitals** e.g.
The United Nations (UN) is ...
- Catchy is good, but don't overdo it!
*The Companion Reinforced Attrition Process (**CRAP**) is ...*
- Take care: “**Lensed galaxies in CANDELS**”
- <http://www.acronymfinder.com>



Bad Acronyms 1: acronymfinder.com

Thermally pulsing asymptotic giant branch

~~Zenosegen~~ Activated Mouse Serum



~~Thistle~~ Degenerated Unit Plan?

Toilet Paper

“The **TPAGB** star with a **ZAMS** mass of $2M_{\odot}$ experiences **TDUP** until the 5th **TP** after which it underwent **RLOF**, i.e. entered **CEE** and became a **COWD** with associated **PN**, binary **CSPN** and **CBD**.”

~~Rocked~~ Overfidity

Conjugated Evlope Estobge

~~Close~~ by Wgking W Day Dwarf

Planetary Nebula

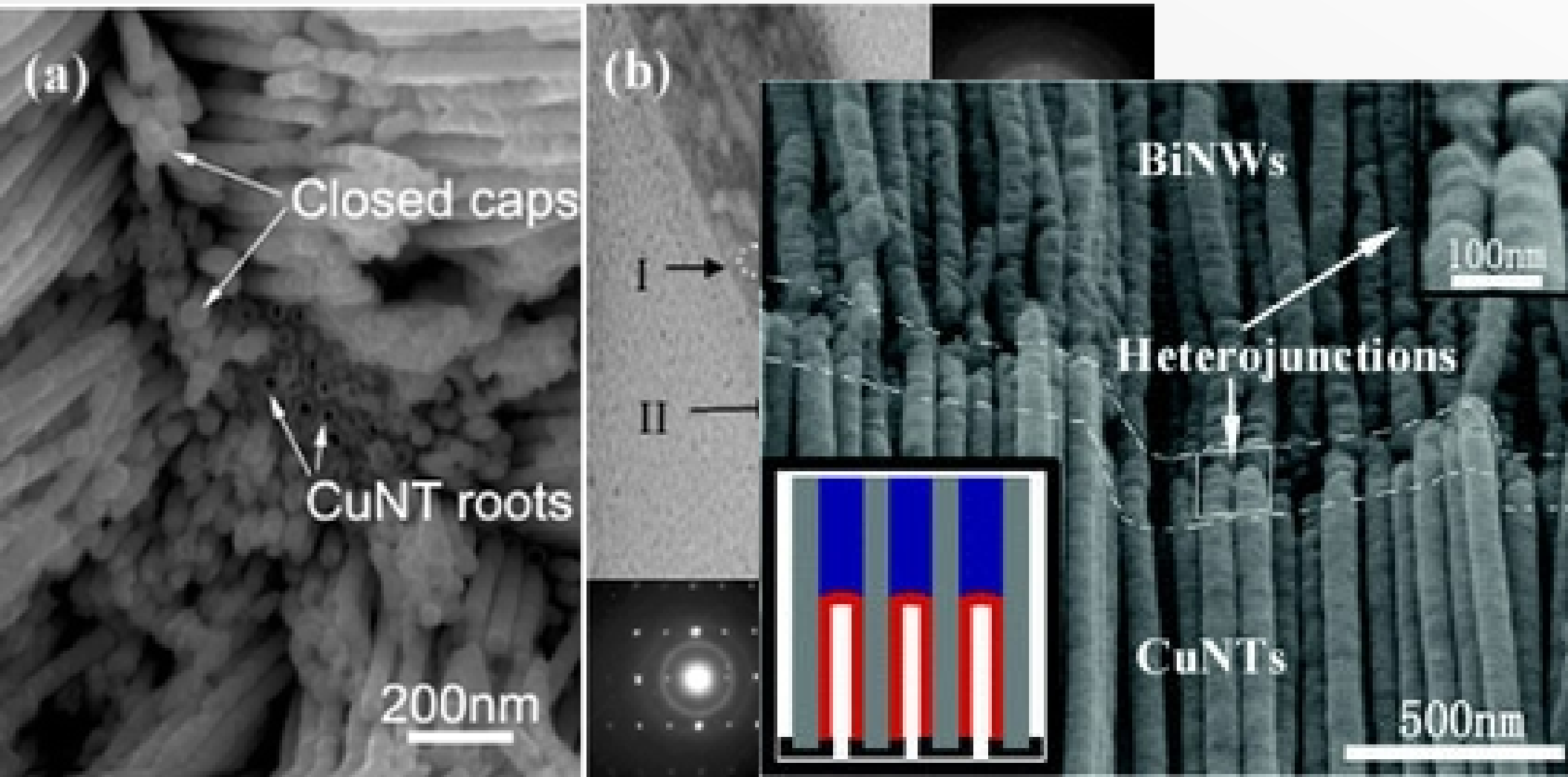
~~College~~ Starings P planetary Nebulae

Central Business Disk



Bad Acronyms 2: *Copper nanotubes*

- **Chemical Communications**, 2007, 1733-1735
- “Electrochemical synthesis of metal and semimetal nanotube–nanowire heterojunctions and their electronic transport properties”



Cliché and Euphemism

- To be avoided! Say what you mean *directly*.

The patient expired.

The patient passed away.

The patient succumbed.

The patient breathed his last.

The patient has gone to his rest.

- All these can be replaced by

“The patient died.”



Cliché

- The holy grail

“Astronomers Closer to Exoplanet Holy Grail”

- Silver bullet.



- *Shedding light on galaxy formation.*

- Missing link between stars and galaxies.

- *Paradigm shift. God particle. Pave the way. Groundbreaking/breakthrough. Crack the genetic code. Possible cure for... Tipping point. Unlocking the mystery. Revolutionary.*

Exercise for the student...

<http://www.wired.com/wiredscience/2009/07/blackholescience/>

Jargon and Buzzwords

- Some jargon is necessary but do not invent your own language.
- See if you can guess what these mean:

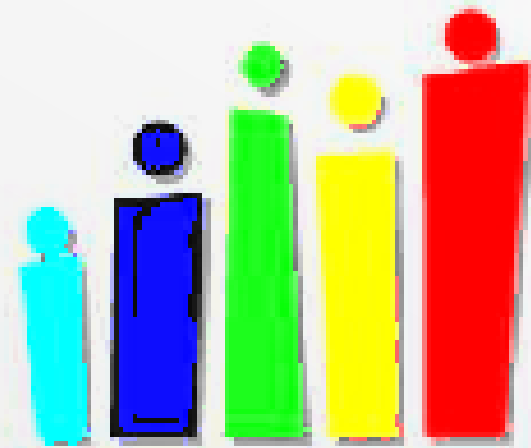
Comitology

Democratic deficit

Eurobarometer

Financial perspective

Semester



EUROBAROMETER

http://europa.eu/abc/eurojargon/index_en.htm

For next time

- Write a **300-word *short proposal*** on the astronomical topic of your choice e.g. for
 - Observing time at a telescope
 - Computer time at an HPC facility
 - Resources or grants (money/people/stuff)
 - Something else ... ?
- Use all the skills you have learned in the last ten classes!
- Remember: ***structure, concise, precise etc.***
- ***Next class you will assess each other's proposals! :-)***