

## Scientific Writing 6951

THE  
ASTROPHYSICAL JOURNAL  
AN INTERNATIONAL REVIEW OF SPECTROSCOPY  
AND ASTRONOMICAL PHYSICS

Wednesdays 10-12 Room 0.008



<http://www.astro.uni-bonn.de/~izzard/writing.html>

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## Previously on *Scientific Writing*

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



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## 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!*

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## 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



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## Nouns from verbs

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

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## 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.

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## 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



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## 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!



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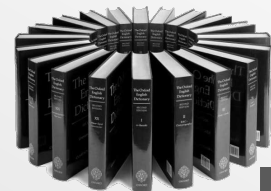
## Subtle errors

- 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

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## 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.



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## Common mistakes

- White dwarf
- White dwarfs
- White dwarves



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## German to English

From: German  To: English

- 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](http://files.nothingisreal.com/publications/Tristan_Miller/advice.pdf)



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## Common mistakes

- *in Abhängigkeit von*

X is in dependence of y

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



**OPPOSITE**

- Since/for

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

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

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

## 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  
Zero-age Activated Moose Serum

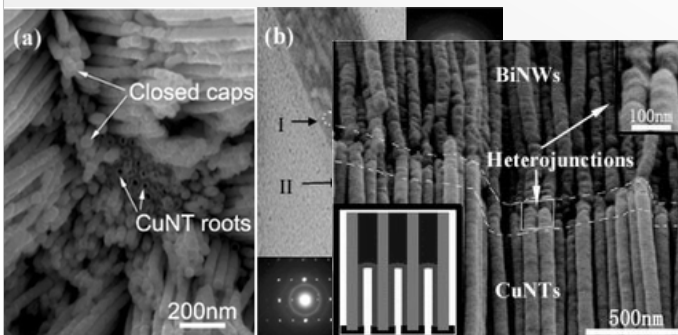
Thirsted Deformed Unit Plan? Toilet Paperise

"The TPAGB star with a ZAMS mass of 2M<sub>⊙</sub> 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 the Overfitty Conjugated Europe Estrogg  
Close of Working Day Dwarf Planetary Nebula  
College Starting Planetary Nebulae  
Central Business DysDist

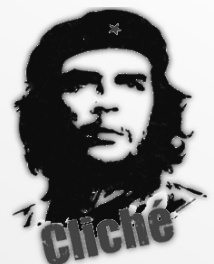
## Bad Acronyms 2: Copper nanotubes

- **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/>

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## 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**



[http://europa.eu/abc/eurojargon/index\\_en.htm](http://europa.eu/abc/eurojargon/index_en.htm)

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## 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! :-)**

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