

# Unclear, awkward, or just plain poor writing

## Passive voice abuse

To maximize induction, the most turns of coil possible was needed .... The sizes of coils were selected with radii of 3.3 cm .... Each coil was constructed with 1000 windings. The windings were kept at 1000 due to the limited amount of wire. Once the best arrangement and size had been determined, a coil with a greater or lesser number of loops will be developed.

→ We require *as many* turns as possible to maximize induction .... *We selected* coils with radii of 3.3 cm .... Each coil had 1000 windings because we had limited wire. When we decide on the best *configuration* and *diameter*, we will *fabricate* a coil with more or fewer turns.

## **Misplaced modifiers, dead words, and circumlocutions**

By placing a resistor at the front of the amplifier filter circuit, a current will be allowed to flow causing a force on the system opposite any motion.

→ *Placing a resistor at the front of the amplifier filter circuit allows a current to flow. The current causes a force on the system opposite any motion.*

In terms of magnets, the horseshoe magnet used from the previous semester was tested.

→ *We tested the horseshoe magnet used last semester.*

Or, if it is a new paragraph or topic,

*As for the magnets, we tested the horseshoe magnet used  
last semester.*

After mixing with a needed hardener (\$10 a gallon), only about  
3 quarts will be needed.

→ *We will need only about 3 quarts of epoxy once it is mixed with a required hardener, which costs \$10 a gallon.*

Or

*Only about 3 quarts of the epoxy-hardener mixture will be needed. The cost is \$10 per gallon.*

Rubber stoppers will be applied around the edge of the base in order to avoid human laceration injuries.

→ *We will attach rubber stoppers around the edge of the base to prevent ~~human laceration~~ injuries.*

Unfortunately, due to the weight of the panels, the torque placed on this bracket could ~~possibly~~ cause ~~the shape of the~~ bracket to distort and therefore ~~would be~~ *cause* a safety hazard.

Exactly *what* is the hazard here? (*Distort the bracket* wd be even better.)

## A form of misplaced modifier

[which some experts accept]

modifies  
A test was chosen that would ....

→ *A test that would ... was chosen*

or, better,

*We chose a test that would ....*

## **Comma-Kazes!** (They can make you comma-tose.)

The mechanism will be a somewhat simple device, consisting of a semicircular piece of steel with holes in it, which will be connected to the bottom panel, and a pin-spring system, which will be attached, to the top panel, by four bolts.

→ The mechanism will be simple and consist of a semicircular piece of steel with holes in it. This piece will be connected to the bottom panel. A pin-spring system will be attached to the top panel by four bolts.

## **Naked “this,” “these,” and “it”** [without antecedent]

This force eventually overcomes the force of static friction, and the spring will pull the block back to equilibrium along the cardboard. *This* occurs because....

*What* occurs? Overcoming? Pulling? Force?

An emf will be induced in the coil when there is a change in magnetic flux; *this* is caused by ground motion.

*What* is caused? The change? The flux? The emf?

It was not plausible to categorize the slopes from topographic maps without extensive analyses. *These* would be less accurate and not worth the time involved.

*What* would be less accurate? Maps? Analyses?

**Moral:** Always follow *this* or *these* with a noun.

What, always? Yes, always. What, always? Well, almost  
always. [Apologies to W. S. Gilbert]

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## Editor's last inch

1. **Vogue words** (words that are in fashion and are overused or imprecisely used)

Determine = measure, calculate, decide, learn, find out, ...

It was *determined* = We *decided*

*L* and *g* *determine* the period of a pendulum

All you can do is measure it

## 1. Vogue words (cont.)

Create = write, design, build, draw

You *design and build* a weather station, not *create* it

Reasonable = ??? (and to whom?)

Do not use *reasonable* as a substitute for *approximate* or for  
*good, fair*

Believe (≠ think ≠ feel)

## 2. References, documentation

What is the function of a reference?

What good is private communication?

None unless the source is clearly identified with contact information

So make the most of your private communications into acknowledgments

### 3. Units and symbols

Use unit symbols, not complete spellings

Minor exceptions

A few kelvins *not* a few K

300 K, *not* 300 kelvins

Use ampere *not* Amp, kelvin *not* Kelvin, *but* A and K

*Symbol* is capitalized when unit is named for person

*Name* of unit is not capitalized (ampere, kelvin)

Micrometer *not* micron

Celsius *not* Centigrade

$5 \times 10^6$  *not* 5E06 *and not*  $5 * 10^6$

Avoid \* for multiplication (\* means convolution)

## 4. Lawyer's words — be less formal

Said techniques, aforementioned report

In the same spirit:

There are, *not* There exist

Rule of thumb:

If tempted to write *there is*, don't

If tempted to write *there exists*, write *there is*

How do you say in English:

There is this dog that my sister has that I like to photograph.

*My sister has a dog that I like to photograph.*

*I like to photograph my sister's dog.*

## 5. Capitalization and punctuation

detector circuit *not* Detector Circuit

Capitalize only names and trade names (*no* ugly ® on someone else's trademarks)

Usually no comma before paren

Rutgers University Press, 2004, *not* Rutgers University Press, (2004)

We have a dog and a cat, *not*

We have a dog, and a cat

We ate and drank, *not*

We ate, and drank

## 6. Use *will not would* (more forceful)

The experiment would = The experiment will

After rinsing it, I would clean = After rinsing it, I cleaned

Please give me your approval to continue; when I receive it, I  
will ..., *not*

If I receive[d] it I *would* ...

but be careful not to seem pushy, as in *I await your  
immediate approval and will ....*

## 7. Circumlocutions and dead (unnecessary) words

In the process of, serves to, it has been shown or found that, it is the case that — *almost never needed*

Control of the experiment *is accomplished* by =  
The experiment *is controlled* by ....

Eclosion of the moths *occurs* in June =  
The moths *eclose* in June.

*Is accomplished, occurs, is done, is performed* are signs of a circumlocution

Not to mention:

able to

amount of

*We were able to* measure the *amount of* volume =

*We measured* the volume.

## 8. Dangling and misplaced modifiers (never mind the difference)

Make sure that any *-ing* or *-ed* word that begins a sentence refers to the *subject* of the sentence

also *by* + *-ing* or *-ed* word

Deep down, these are verbs and demand subjects

Partly assembled and dirty, I disassembled the pump.

By adjusting the initial conditions, a galaxy will form.

While a small child, Einstein's father sent his son to gymnasium.