Errors and Infelicitous Usages Commonly Found in Students' Term Projects

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from among Several Possibilities

NOTE: Each word in the following word groups is a correct spelling under some circumstances. You should familiarize yourself with each spelling, and be prepared in each case to use the spelling appropriate to the meaning that you want to convey.

- their, they're, & there

  [Egregious Example: ". . . claim to have no back doors into there software."

- its & it's

  [Egregious Example: "Intel decided to buy back the rights and it's marketing from Busicom for a price of sixty thousand dollars."]

- two & too & to

  [Egregious Example: "Hook too cameras together."]

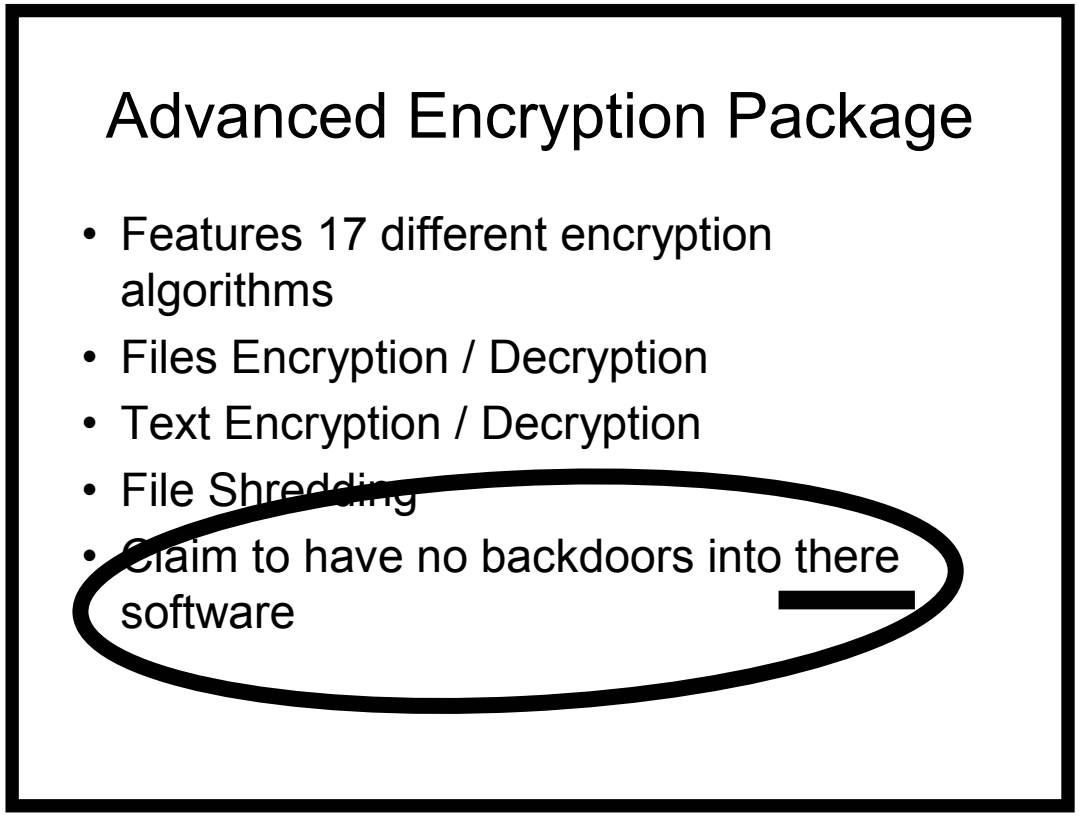
- principle & principal

  [Egregious Example: "ILP is limited by branches in two principle ways."]

- manner & manor

  [Egregious Example: "The cracker can then shut down services or cripple the server in some manor that could inconvenience."]

The Actual Student Slide with "into there software"



The Actual Student Slide with "Hook too cameras together"

Peer-to-Peer

- communicate with one another without the need for a computer
  - could transfer data from a hard drive without the need for computer assistance
  - hook too cameras together and dub from one to the other without any computer
- share the same resource without any need for special support
- Also supports "Hot Swapping"

Inappropriate Choice of Homonym (continued)

- border & boarder
  [Egregious Example: ". . .allows the user to configure the appearance of the window border to some extent by manipulating the sunken-edge boarder and gap between text and window edge . . ."]

- past & passed
  [Egregious Example 1: "If work is being done in front of a faculty office, there will be no way to get in or out of that office until the workers get passed that particular office as they move down the hall."]
  [Egregious Example 2: "How many places passed the radix point must be written in the converted number?"]

- compliment & complement

- peddle & pedal

- whose & who's

- aid & aide

- course & coarse

- meet & meat

Inappropriate Choice of Homonym (continued)

- **raise & raze**
- **rest & wrest**
- **sight & site**

Side Note: Homonyms *in Extremis*

When you write copy, you have the right to copyright the copy you write, if the copy is right. If, however, your copy falls over, then you must right your copy. If you write religious services you write rite, and you have the right to copyright the rite you write.

Very conservative people write right copy, and have the right to copyright the right copy they write. A right wing cleric would write right rite, and has the right to copyright the right rite he has the right to write. His editor has the job of making the right rite copy right before the copyright can be right.

Should Tom Wright decide to write right rite, then Wright would write right rite, which Wright would then have the right to copyright. Duplicating that rite would copy Wright rite right, and would therefore violate copyright, which violation Wright would then have the right to right. Right?

Confusion Between Words that Are Nearly Homonyms

- **then & than**
  [Egregious Example: "Smaller instruction set then RISC"]

- **effect & affect (the nouns, and *also* the verbs)**
  [Egregious Example: ". . . might not only effect you, but possibly all the computers that you have accounts on."]

- **diffuse (the verb) & defuse**

- **founder & flounder**

- **versus (vs.) & verses**
  [Egregious Example: "The first advantage the 750CX has is the amount of power it uses verses the 750."]

- **homogenize & homogeneous (NOTE that the proper spelling of *homogeneous* includes two 'e's, one on each side of the 'n'.)**

- **presence & presents [Example: Children may soon forget your presents, but they will always remember your presence.]**

Confusion Between Words that Are Nearly Homonyms (continued)

- **appraise & apprise**

- **due, dew, & do**

- **imminent & eminent**

  [Egregious Example: "Approving this resolution does not mean that military action is eminent or unavoidable."]

- **perspective & prospective**

  [Egregious Example: "I have a perspective student who would like to . . ."]

- **compile & comply**

  [Egregious Example: "It is open source and can be downloaded and run effectively on an Intel machine, if the source is complied on the Intel machine."]

The Actual Student Slide with "Smaller instruction set then RISC"

EPIC

- Explicitly Parallel Instruction Computing
- Smaller instruction set then RISC.
- Room on chip for more functional units and registers.
- Relies on Compiler to extract parallelism.

Inconsistencies Within the English Language

- **choose & chose**

- **loose & lose (NOTE: There exists an English language word losing, but there is NOT a word loosing.)**
  [Egregious Example: "So, loosing a password due to poor security might . .]

Preposition with Missing Object

- Dynamic switching between the 64-bit and 32-bit is supported.

Switching between the 64-bit and 32-bit *WHAT*?

- IBM 601 microprocessor used all but two of the instructions in the of the PowerPC's instruction set.

Instructions in the *WHAT* of the PowerPC's instruction set?

The Actual Slide Containing BOTH Object-Deprived Prepositions

PowerPC Architecture: A New Beginning

- The PowerPC is 64-bits in length and is compatible with the Power 32-bit data paths.
- Dynamic switching between the 64-bit and 32-bit is supported.
- Infrequently executed instructions in the Power architecture were discarded in the PowerPC.
- IBM 601 microprocessor used all but two of the instructions in the of the Power instructions set.

The Unfinished Sentence

- What separates the 750CX from its predecessor the 750, commonly known as the G3, is that the 750CX has an integrated 256KB level 2 (L2) cache.

The authors fail to state what *DOES* the G3 have:

(a) an L2 cache of some size other than 256k, or
(b) a 256kB L2 cache that is NOT integrated, or
(c) no L2 cache at all, just an L1 cache?

A Slide SO Crammed Full of Graphics as to be UNREADABLE when Projected

PowerPC 750 Microprocessor

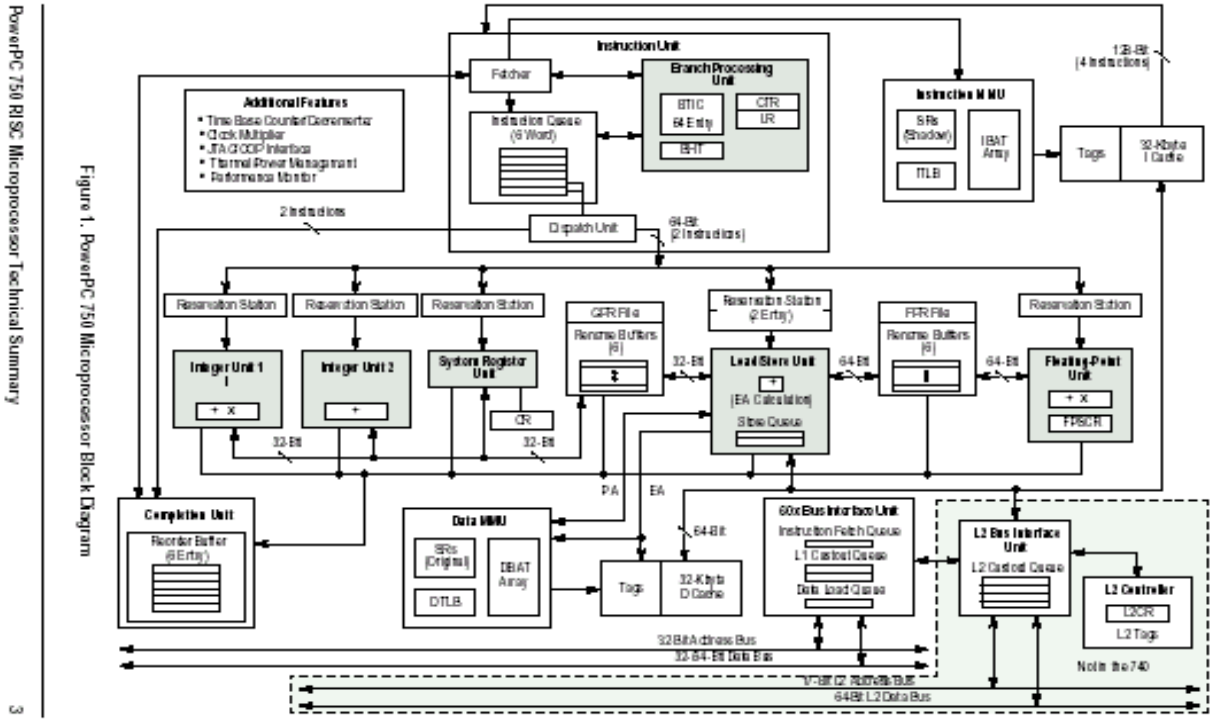


Figure 1. PowerPC 750 Microprocessor Block Diagram

A Slide SO Crammed Full of Graphics as to be UNREADABLE when Projected

SOLUTION if this slide must be part of the presentation: make hardcopies, and give one out to each and every member of the audience (be sure to make enough).

Transitive Verb with Missing Object

Bulleted item in student presentation:

- Technology eventually renders obsolete

WHAT is it that is rendered obsolete?

Multiple Errors in One Slide

CAN YOU FIND THE ERRORS?

Speculation (Memory Hoisting)

- Speculation is used to try to eliminate memory latency
- IA-64 looks ahead in code are loads data before it is needed.

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and

Multiple Errors in One Slide

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Redundant Information

Introduction

- industry standard for the scalable, inexpensive interface
- universal interconnect among many different devices
- Apple computer corporation version is called Fire Wire while Sony and other corporation's version is called i.Link

History

- Apple invented Fire Wire in the early 1990s
- adopted by IEEE Trade Association
  - became known as 1394
  - name Fire Wire still used by Apple
- Others have adopted the name i.Link
  - trademarked by the Sony Corporation
- 1394 comes from the specification that defines the technical traits of the interface

Slide 2 **Slide 9**

Two Slides from a Single Student Presentation

Use of Complete Sentences instead of Bullets

Shortcomings

- not robust enough to operate as a true network interface
- Many devices don't require such high throughput yet
  - USB still sufficient
- Many computer companies haven't started including the interface on their personal computers

BETTER:

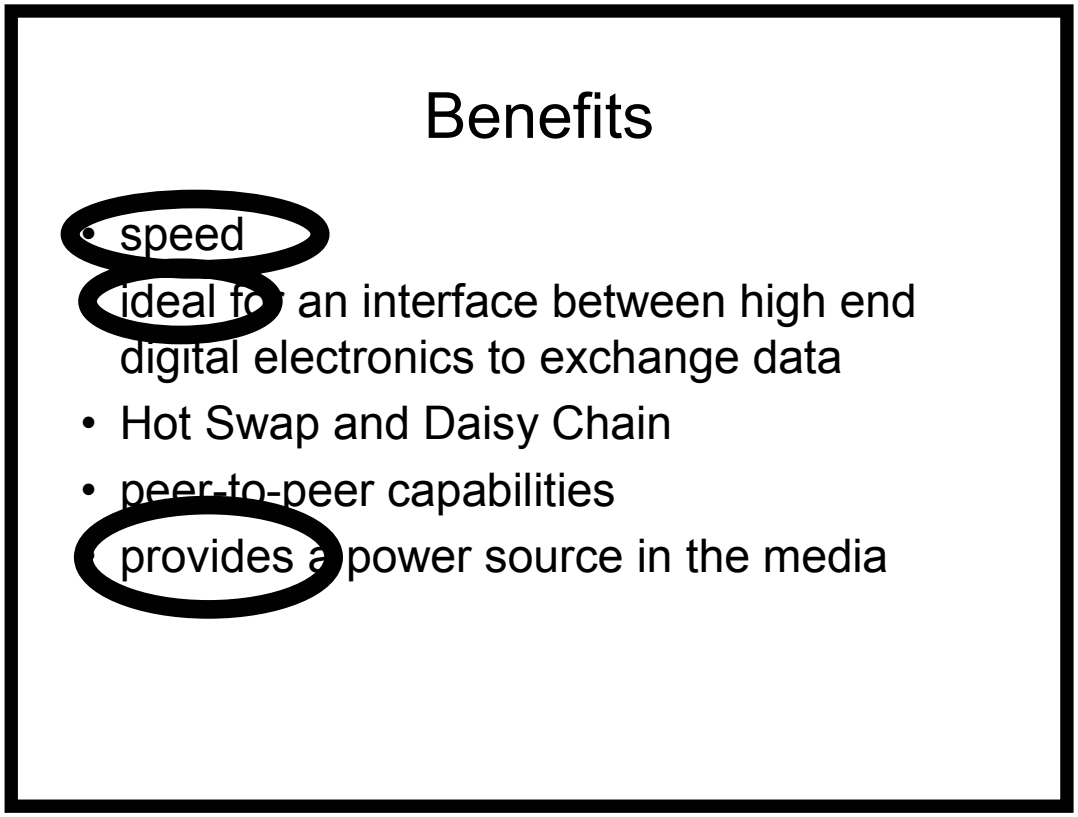
- **Insufficient robustness to operate as a true network interface**
- **Lack of requirement for throughput at the high level provided by this bus**
- **Failure by manufacturers to incorporate into Personal Computers**

Mixture of Verbs, Adjectives, and Nouns

Benefits

- speed
- ideal for an interface between high end digital electronics to exchange data
- Hot Swap and Daisy Chain
- peer-to-peer capabilities
- provides a power source in the media

Mixture of Verbs, Adjectives, and Nouns



COMMENTS:

- **"Speed" is a noun.**
- **"Ideal" is an adjective.**
- **"Provides" is a verb.**

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COMMENTS:

- **"Speed" is a noun.**
- **"Ideal" is an adjective.**
- **"Provides" is a verb.**

BETTER:

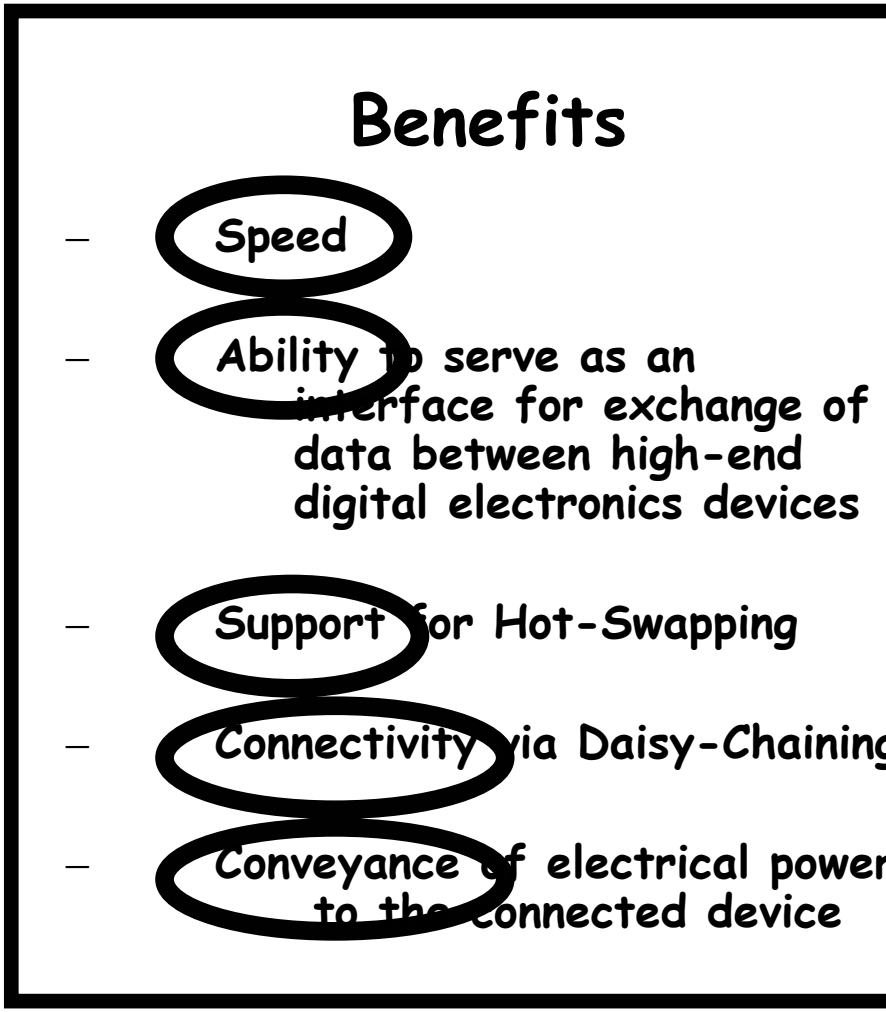
Benefits

- **Speed**
- **Ability to serve as an interface for exchange of data between high-end digital electronics devices**
- **Support for Hot-Swapping**
- **Connectivity via Daisy-Chaining**
- **Conveyance of electrical power to the connected device**

Mixture of Verbs, Adjectives, and Nouns

BETTER:

ALL NOUNS

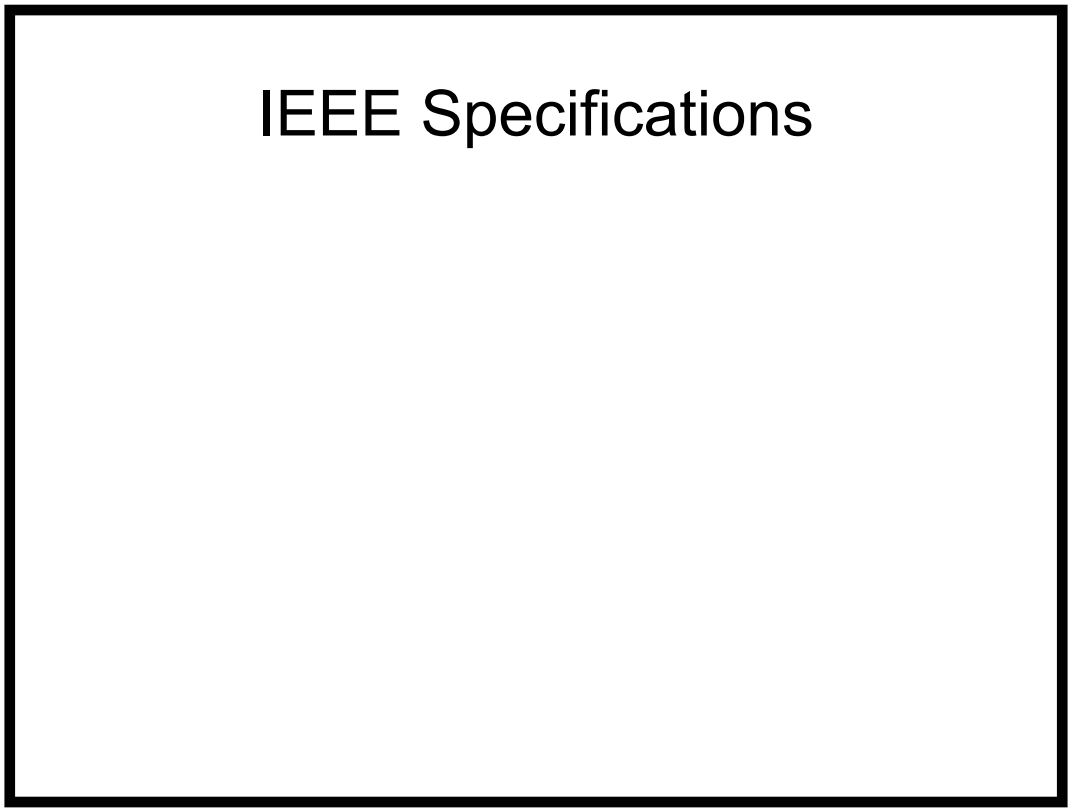


Failure to Separate Distinctly Different Items

Benefits

- speed
- ideal for an interface between high end digital electronics to exchange data
- Hot Swap and Daisy Chain
- peer-to-peer capabilities
- provides a power source in the media

Sloppy Editing



This is the ENTIRE slide that was part of these students' presentation!!!!!

GREAT concept, but where is the rest of the table?

Processor Timeline

Date	Name	MIPS	MFLOPS
1987	SUN 4		
1989	SPARCstation 1	12.5	1.4
1990	SPARCstation2	28.5	4.2
1991	SPARCserver 600MP		
1992	SPARCstation 10		
1993	SuperServer 6400 – Crap computer		
1995	SPARC64- 64 bit Computer SuperSparcII is released		
1996	UltraSPARC is released		
1998	UltraSPARC IIi, Ultra5, Ultra10, Ultra30		
1999	Ultra 60, Ultra 80 Processor Release		

Inconsistency in Type Size

Why is the type size for the bulleted list of items on the right (for CISC) different from that on the left (for RISC)?

RISC vs. CISC

- Reduced Instruction-Set Computer
- More register
- Faster and slower
- Faster raw speed (executing instructions per sec)
- Faster in terms of implementing one single instruction

- Complex Instruction-Set Computer
- Micro conversion layer
- Faster and slower
- More powerful in terms of what each instruction can do

Failure to Distinguish between Compound Words and their Separate Component Words

setup vs. **set up**

maybe vs. **may be**

Without is a single word.

Therefore is a single word.

Failure to Distinguish between Simple Past and Participle

- **ran & run**
  [Egregious Example: ". . . the platforms in which it can be *ran*, . ."]

Constructive Use of Hyphens to Indicate Word Association

EXAMPLE 1: *large memory addresses*

QUESTION: Does this term refer to the ordinary-sized addresses of a large memory, or to memory addresses where the addresses are large, not the memory?

Ambiguity can be resolved using a single hyphen:

large-memory addresses

large *memory-addresses*

EXAMPLE 2: *large animal veterinarian*

QUESTION: Does this term describe a 350-lb veterinarian who may treat sick salamanders, rabbits, and mice, or an 86-lb veterinarian who treats elephants, rhinoceri, and hippopotami?

EXAMPLE 3: *indestructible patio furniture covers*

QUESTION: Exactly what is it that is indestructible? The patio, the furniture, or the covers?

Use of Slang in Formal Documents

Example 1:

". . . because the cache runs off the CPU's power."

Example 2:

". . . in terms of breaking new ground and building off of and improving their previous accomplishments in processor technologies . . ."

Example 3:

"This is based off of the AIX operating system."

Use of Meaningless Rhetoric

Example 1:

"The memory sizes on this computer can go from big to huge."

Example 2:

"."

Example 3:

"."

Chattiness/Folksiness Inappropriate in a Technical Report

Example 1:

"With grand raves coming from Intel and Hewlett-Packard, most were looking forward to its release with much anticipation." [Subsidiary Note: "most" what?]

Example 2:

"."

Example 3:

"."

A Piece of Sound Advice

If yours is a group project, DO take the trouble to find out how your colleagues spell their names.

Abominations I: The Run-On Sentence

Egregious Example: **"Ted Hoff and Stan Mazor creators of the chip it was 1/8 inch long and 1/6 inch wide, had 2,300 metal oxide semiconductors"**

Correct Treatment:

- **Creators of the chip: Ted Hoff and Stan Mazor**
- **Dimensions: 1/8" long x 1/6" wide**
- **Composition: 2300 MOS transistors**

The Original in All Its Magnificent Splendor:

– Ted Hoff and Stan Mazor creators of the chip it was 1/8 inch long and 1/6 inch wide, had 2,300 metal oxide semiconductors

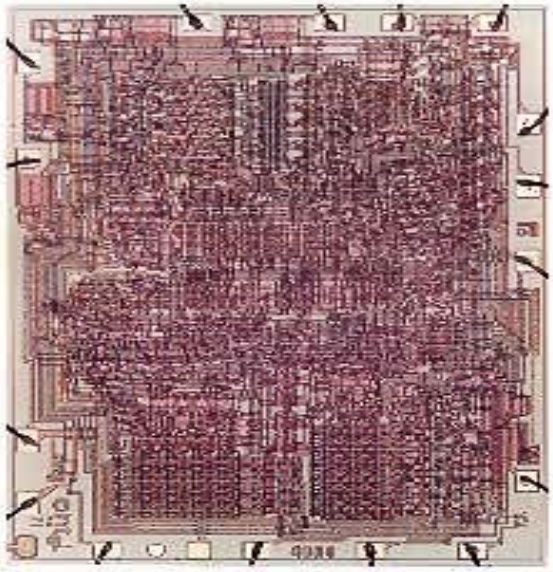
Abominations II: Jumble of Information

The First Microprocessor

- Busicom asked Intel to create 12 custom chips
- Intel answered this with one general purpose chip
- Ted Hoff and Stan Mazor creators of the chip it was 1/8 inch long and 1/6 inch wide, had 2,300 metal oxide semiconductors
- Equivalent to the ENIAC supercomputers
- Foundation of modern Chips the Intel 4004

Abominations III: Information Vomit

Intel 4004



- 4-Bit
- Containing command registers, a decoder, decoding control, control monitoring of machine commands, and interim registers.
- Pioneer spacecraft used the 4004 and started the use of processors in broader areas

1. Photograph unnecessary, conveys no useful information, wastes space
2. Sudden transition from technical data to historical

Doing It Right: The First Microprocessor: Intel 4004

- **Significance: forerunner of modern microprocessor chips, initial realization of a concept that has radically transformed the entire computer industry**
- **Creators of the chip: Ted Hoff and Stan Mazor**
- **Dimensions: 1/8" long x 1/6" wide**
- **Composition: 2300 MOS transistors**
- **Register width and datapath width: BOTH 4 bits**
- **Contents:**
  - **Command Registers**
  - **Decoder**
  - **Decoding Control**
  - **Interim Registers**
- **Use: Pioneer spacecraft**

Abominations IV & V: Repetitiveness & Inconsistency & Sloppiness

Generations: First Generation
Generations: Second Generation
Generations: Third Generation
Generations: Fourth Generation
Generations: Fifth Generation
Generations: sixth Generation
Generations: seventh Generation
Generations: eight Generation
Generations: nine Generation

Abomination VI: Grammatical Sloppiness

Example 1:

"This new partnership company drastically needed findings in which they found in a San Francisco venture capitalist Art Rock."

Example 2:

"Processor Design based off of the RISC I and II designs as the University of California, Berkeley"

"Processor Design based off of the RISC I and II designs as the University of California, Berkeley"

Abomination VII: Non-Agreement in Number between SUBJECT and VERB

Example 1:

"first Intel processors that was backwards compatible"

Example 2:

"Only a small amount of the total physical register are available at any one time."

Example 3:

". . . in the Power architecture each function were partitioned into their own separate units."

Abomination VIII: Totally Inappropriate Use of a Legal English Word

Example 1:

". . . for this paper we refrain to discussing three of those microprocessors."

Example 2:

"."

Example 3:

"."

Words of Latin Origin Used in English

Masculine and Feminine		Neuter	
SINGULAR	PLURAL	SINGULAR	PLURAL
femin**a**	femin**ae**	medi**um**	medi**a**
alumn**a**	alumn**ae**	datum	dat**a**
		bacteri**um**	bacteri**a**
alumn**us**	alumn**i**		

RIGHT: The data are useful.
RIGHT: The infection was due to a bacterium.
RIGHT: The broadcast medium was radio.

RIGHT: She is an alumna of Harvard.
RIGHT: Fred and Jim are alumni of Brown.

WRONG: The data is useless.
WRONG: That bacteria is deadly.
WRONG: The media is relentlessly pursuing that issue.

WRONG: He is an alumna of Yale.
WRONG: Mike and Ted are alumnae of Swarthmore.

Subtleties of Word Order in WRITTEN English

Text Appearing on a Sign: **"Right turn only during peak hours."**

Which is the correct meaning:

(a) During peak hours, it is permitted only to turn right. Left turn, or proceeding straight ahead without turning, are both forbidden,

i.e., Right turn only during peak hours.

(b) It is permitted to make a right turn during peak hours only. At no other time may a right turn be made,

i.e., Right turn only during peak hours.

NOTE that in *SPOKEN* English, the correct meaning would be apparent from the phrasing.

Points to Ponder on the Futilities of English Spelling, Grammar, and Usage

Is it a coincidence that the only 15 letter word that can be spelled without repeating a letter is uncopyrightable?

Is there another word for *synonym*?

Why do *overlook* and *oversee* mean opposite things?

Why doesn't *onomatopoeia* sound like what it is?

Why is it so hard to remember how to spell MNEMONIC?

Why is the plural of goose *geese*, but the plural of moose is not *meese*?
If two mouses are *mice* and two louses are *lice*, then why aren't two houses *hice*?
If the plural of *tooth* is *teeth*, then shouldn't the plural of *booth* be *beeth*?

Shouldn't there be a shorter word for "monosyllabic"?

(continued)

Points to Ponder on the Futilities of English Spelling, Grammar, and Usage (continued)

If *peanut butter cookies* are made from *peanut butter,* then what are *Girl Scout cookies* made out of?

If a *vegetarian* is someone who eats vegetables, then what does a *humanitarian* eat?

There is no *egg* in an *eggplant,* there is no *ham* in a *hamburger,* and a pineapple contains neither *pine* nor *apple*.

English muffins were not invented in England, and *French fries* were not invented in France.

Quicksand takes you down *slowly.*

Boxing *rings* are *square.*

Neither is a *guinea pig* from *Guinea,* nor is it a *pig.*

A house can *burn up* as it *burns down.*

(continued)

Points to Ponder on the Futilities of English Spelling, Grammar, and Usage (continued)

If *writers write,* then why don't *fingers fing?*

If the *teacher taught,* then surely the *preacher praught!*

Why do people *recite* at a *play,* yet *play* at a *recital?*

Why do we *park* on *driveways,* but *drive* on *parkways?*

Why do we *fill in* a form by *filling* it *out.*

When the stars are out, they are visible, but when the lights are out, they are invisible.

When I wind up my watch, it starts, but when I wind up this lecture, it ends.

(continued)

Points to Ponder on the Futilities of English Spelling, Grammar, and Usage (continued)

A father was reading Bible stories to his young son. He read, "The man named Lot was warned to take his wife and flee out of the city. But his wife looked back and was turned to salt."

The son asked, "What happened to the flea?"

Some Tongue-in-Cheek Advice

- **Who needs rhetorical questions?**
- **Parenthetical remarks (however relevant) are (usually) unnecessary.**
- **Foreign words and phrases are not *apropos*.**
- **Do not put statements in the negative form.**
- **Understatement is always the absolutely worst way to put forth earth-shaking ideas.**
- **Eschew ampersands & abbreviations, etc.**

WARNING: Beware the Hazards of Automation!!!

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SPELL CHECQUER

Eye halve a spelling chequer.
It came with my pea sea.
It plainly marques four my revue
Miss steaks eye Cannes knot sea.
Eye strike a key and type a word
And weight four it two say
Weather eye am wrong oar write
It shows me strait a weigh.

As soon as a miss steak is maid
It nose bee fore two long,
And eye can put the error rite.
Its rare lee ever wrong.
Eye have run this poem threw it.
I am shore your pleased two no
Its letter perfect awl the weigh.
My chequer tolled me sew.

Concluding Comments and Observations

1. In the classroom, shoddy spelling, grammar, and usage, as well as poor organization and focus, greatly detract from the effectiveness of both your paper and your presentation. They also leave a poor impression of you as a student.

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3. In the workplace, ability to communicate well and effectively leads to speedier promotion and higher probability of promotion.

4. It is never too late to correct deficiencies in spelling, grammar, and usage. However, the sooner you correct any deficiencies you may have, the better it is for you.

Some Useful Sources

1. Gordon, Karen Elizabeth (1993). *The Deluxe Transitive Vampire: The Ultimate Handbook of Grammar for the Innocent, the Eager, and the Doomed.* New York, NY: Pantheon Books. ISBN 0679418601.

   [This book is a concise, wittily written tutorial on the fine points of grammar and punctuation. It can serve as a guide for preparation of the term paper.]

2. Dupre, Lyn (1998). *Bugs in Writing Revised. A Guide to Debugging Your Prose.* Reading, MA: Addison-Wesley. ISBN 0-201 37921-X.

   [The author specifically addresses the needs of computer professionals and other technical people to write clearly. This book lacks the light, witty approach of *The Deluxe Transitive Vampire* (and is correspondingly more difficult to read), but it is more comprehensive. This book, too, can be a useful guide for the preparation of the term paper.]

3. Strunk & White (2000). *The Elements of Style. Fourth Edition.* Allyn & Bacon. ISBN: 020530902X.

   [This is a classic work that provides guidance on some of the finer points of writing. It is an advanced book, very useful <u>after</u> you have mastered either *The Deluxe Transitive Vampire* or *Bugs in Writing.*]

END