Common Fallacies

(mistakes of reasoning)
The *fallacy* fallacy

- There is danger even in the study of fallacies. This study involves identifying certain patterns of reasoning as fallacies. Each pattern has a name. E.g. an argument that attacks a person is *ad hominem*. But *ad hominem* arguments are not always fallacies!

- Rejecting an argument as a (named) fallacy, based on its pattern alone, is a fallacy that we might call the *fallacy fallacy*.
The Adventures of:

**Fallacy Man!**

Master of Philosophy,
Lord of Debate,
Sultan of Reason!

Dun dun dun
Dun dun dun
Dunnnnnn!

Wherever someone is illogical...
I will be there.
Whenever someone is wrong,
I will tell them why.

Yeah, I don’t know man,
Peyton Manning says
this is the most talented roster he’s been on, I think
this might be their year.

Appeal to Authority!

Dude, what the hell...
Yeah, but Glenn Beck is an idiot, you shouldn't listen to anything he says.

Ad Hominem!!!

Ad Hominem Ad Hominem Ad Hominem Ad Hominem Ad Hominem Ad Hominem Ad Hominem!!!

Ahh
Conclusion

Argument from Authority
Conclusion

Ad Hominem (fair game)
Normal argument
(based on evidence, not authority)
Ad Hominem Fallacy
(target is irrelevant)
• In general, an *ad hominem* is only legitimate when attacking an argument from authority.
• But not all such attacks on authority are legitimate. They can be made on *irrelevant* grounds.
Irrelevant ad hominem

E.g. Einstein’s physics was attacked on the basis of Einstein being *Jewish*.

In December 1935, in a speech at a ceremony renaming the physics institute in Heidelberg for Philipp Lenard,²³ Stark singled out Heisenberg as “the spirit of Einstein’s spirit.” Heisenberg responded with an even-tempered defense of theoretical physics, including relativity, in the Nazi party newspaper *Völkischer Beobachter* in February 1936, but the editors appended a Stark counterattack which dismissed Heisenberg’s work as “an aberration of the Jewish mind.”²⁴

Thomas Powers, *Heisenberg’s War*, p. 41
Fallacy?

- Alliance leader Stockwell Day argues that Canada should increase its military expenditure now, by at least 20%, in order to continue to meet our NATO obligations five years from now. But Day is a fundamentalist who thinks the universe is only 6,000 years old! Clearly his view can be dismissed.

- Probably a fallacy. If Day is presenting evidence (e.g. based on future NATO obligations) then an ad hominem response is automatically fallacious. Even if Day is arguing from authority, then his (religion based) views about the age of the earth are likely not relevant to his views about military needs.
• Mr. Wilson, in his letter of January 16, argues that it would be counter-productive to yield to the demands of the hostage takers. He does not, I take it, have a son or daughter among the hostages. As such a parent, I am repelled by his callous attitude. My daughter could well be the next innocent victim of these terrorists, but Wilson apparently doesn’t give a damn about this.

• A fallacy. Wilson seems to be making an evidence-based argument, so an ad hominem response is automatically fallacious. Even if Wilson is arguing from authority, then his non-involvement makes him more objective, and arguably more reliable.
DEBATE STRATEGY: WIN ARGUMENTS WITH AD HOMINEM ATTACKS

No, your face is a logical fallacy!
1. Comment on the following *ad hominem* (to the person) arguments, explaining why they are, or are not, reasonable.

(i) Dr. Everett says that my rash is nothing to worry about – just a mild allergy of some kind. -- And you trust Dr. Everett? Didn’t you hear that he cheated on his wife?

Not reasonable. Being a bad husband doesn’t make him a bad doctor.
(ii) Dr. Malcolm Wardlaw argues, in the *British Medical Journal*, that wearing a helmet while cycling is unnecessary, since even bare-headed cycling is much safer than driving a car.

-- Yes, but Wardlaw is a well-known opponent of bike helmets, so he’s biased on this issue.

Not reasonable. (i) Wardlaw is making an evidence-based argument, not using his authority. (ii) Having an opinion doesn’t make Wardlaw biased. (His opinion might be based purely on evidence.)
(iii) Gillette does indeed shave closer and smoother. Tiger Woods says so, and he’s probably the best golfer ever.

-- He sure hits the ball well. But that doesn’t make him an expert on razors. I find Gillette no better than the generic brands.

Reasonable. Woods is making an argument from authority, but has no relevant expertise.
(iii) I wouldn’t buy that truck you’re thinking about. Brandy McElroy reviewed that model in *Truck Weekly* and said that it’s aimed at posers who just want to drive in the city. It looks aggressive, but underneath they’ve cut a lot of corners and it won’t stand up to heavy work.

-- Ok, whatever. You’re going to ask a woman which truck to buy? She probably just thought the vanity mirror was too small.

Unreasonable. (i) McElroy isn’t making an argument from authority. (ii) Being a women doesn’t show that she knows nothing about trucks.
(iii) Apparently there are no buses today because it’s Saturday. I just asked that taxi driver over there. Fortunately he says he can take us to the hotel.

-- Oh please! He’s a taxi driver. Of course he would say that.

Reasonable. The taxi driver is making an argument from authority, and has a financial incentive to lie about a competing service.
Appeal to Pity

• An appeal to pity tries to get us to believe something, or do something, on the basis of pity and similar emotions.

• More generally, this can be called an “appeal to emotion”.
Appeal to Pity

• You say that my essay is only worth a ‘B’, but how can that be right? I worked so hard on it! Also, I need a better grade or I risk losing my scholarship, which would cost me thousands of dollars. I might even have to drop out of school!

• Unreasonable. Essays receive grades depending on the quality of the essay. Not the amount of work done, the financial need of the student, etc.
When is pity a good thing?

- An appeal to pity isn’t always a fallacy. When is it ok to take emotion into account?

- Pity is sometimes an appropriate basis for action, but never for belief.

- The function of emotions is to provide energy for right action, not to help us determine what is right.
Plato’s chariot analogy of the soul

- Reason decides where to go.
- Emotion provides the power to get there.
• Should we pity this poor child, who might have his guns taken away?
No cherry picking

Pity, as a basis for action, must be based on all the relevant facts. (Once again, actions based on cherry-picked evidence are unjustified.)

E.g. the case of the man who, having killed his mother and father, throws himself on the mercy of the court because he is an orphan.
Cherry picking, since the fact that the pregnant flea will spawn hundreds of other fleas is overlooked.

“Gee, you wouldn’t turn away one lonely, pregnant flea, would you?”
(v) I can’t believe you! You really think that children who grow up in single-mother households are at greater risk of becoming criminals? Those mothers are some of the hardest-working, self-sacrificing people on the planet! Imagine how they’d feel if they heard you say that! What a slap in the face!

Unreasonable appeal to pity. Our responsibility is to find and speak the truth, even if feelings are hurt sometimes. (But one should still be sensitive to others’ feelings, and speak in suitable contexts, e.g. academic papers, classes, etc.)
Straw Person

Now let me tell you what my opponent thinks.
Straw Person

• A straw person fallacy is committed when one person misrepresents (e.g. distorts, exaggerates, caricatures) the opinion of argument of someone else.

• Why would anyone do this?

• Since the “straw person” is easier to refute.
Betty: When you hear about a scientific study, you should ask who funded the research, as this may indicate a source of bias. For example, if an oil company funds a study on the health effects of a gasoline additive, the results may be biased, and should be treated with caution.
Anything wrong?

Fred: I see where you’re going with that: No scientist whose research is funded can be trusted. I suppose you think that scientists should work for free? Nowadays, of course, science needs big money – get used to it!

Fred exaggerates Betty’s view. Betty urged caution, if the funder of a study has an interest in the outcome, not wholesale rejection of funded science.
Straw Person

WE SHOULD ADD THIS FEATURE TO OUR PRODUCT TO MAKE IT MORE USEFUL.

ARE YOU TELLING ME THAT NOT ONE PERSON ON EARTH WILL USE OUR PRODUCT WITHOUT THAT FEATURE?!!

YOU CHANGED WHAT I SAID INTO A BIZARRE ABSOLUTE.

OH, I CHANGE EVERYTHING YOU SAY?!
• My liberal, environmentalist friend believes in preserving species, that the spotted owl and the snail darter are more important than people.

• The liberal probably doesn’t think that these birds are more important than people. (She maybe thinks that birds count for something, so people can be somewhat inconvenienced if needed to save the birds.)
Why the liberals think that registering firearms will end gun violence is beyond me!
sometimes you just need a car.

join zipcar »
Genetic fallacy

• Rather than examining a person’s beliefs from a rational perspective, in terms of evidence and logic, see them as a symptom of (mental) disease, i.e. psychopathology.

• I.e. one is “taking a psychological stance”, rather than a logical one.

• This means giving up on understanding the *reasons* for a person’s belief, and evaluating the strength of the evidence for them, and instead seeing the belief as *caused* by some illness, or other personal circumstances. (Defending their privilege, etc.)
The Coddling of the American Mind review – how elite US liberals have turned rightwards

Greg Lukianoff and Jonathan Haidt’s book sets out to rescue students from ‘microaggressions’ and identity politics. But perhaps they merely resist change that might undermine them

Lukianoff and Haidt share some benefactors and allies with the well-established right that funded Bloom and D’Souza. (Lukianoff works at the Foundation for Individual Rights in Education, a nonprofit group that receives funding from the Scaife and Olin families.) But, reading The Coddling of the American Mind, I was more struck by their points of proximity to the newer Trumpist right.
Mary thinks that expanding the business right now would be a mistake. The Asian markets are showing signs of weakness, which could mean big trouble for us.

-- I wouldn’t worry about that. I think maybe it’s Mary’s “time of the month”.
“Religion is an attempt to get control over the sensory world, in which we are placed, by means of the wish-world, which we have developed inside us as a result of biological and psychological necessities. [...] If one attempts to assign to religion its place in man’s evolution, it seems not so much to be a lasting acquisition, as a parallel to the neurosis which the civilized individual must pass through on his way from childhood to maturity.”

–Sigmund Freud, *Moses and Monotheism*, 1939
“Medical materialism finishes up Saint Paul by calling his vision on the road to Damascus a discharging lesion of the occipital cortex, he being an epileptic. It snuffs out Saint Teresa as an hysterical, Saint Francis of Assisi as an hereditary degenerate. George Fox’s discontent with the shams of his age, and his pining for spiritual veracity, it treats as a symptom of a disordered colon. Carlyle’s organ-tones of misery it accounts for by a gastro-duodenal catarrh.”

William James, *Varieties of Religious Experience.*
A report scheduled to appear in an upcoming *Applied Cognitive Psychology* offers a preliminary psychological profile of people who believe in 9/11 conspiracies. A team led by psychologist Viren Swami of the University of Westminster in London identified several traits associated with subscribing to 9/11 conspiracies, at least among British citizens.

(From U.S. News, May 26 2009.)
“These characteristics [of 9/11 conspiracy believers] consist of:

• backing one or more conspiracy theories *unrelated* to 9/11
• frequently talking about 9/11 conspiracy beliefs with likeminded friends and others
• taking a cynical stance toward politics
• mistrusting authority
• endorsing democratic practices
• feeling generally suspicious toward others
• displaying an inquisitive, imaginative outlook”
“The children grow up, the hair falls out, careers plateau, physical powers ebb….. Like all forms of midlife crisis, the sudden lurch into conspiracism offers middle-aged men a sense of revitalization and adventure. In some ways it offers an even more complete escape than the proverbial mistress and sports car.”
When is it ok to take a psychological stance?

• If you *already know* that a person is delusional, then you shouldn’t treat them as an authority (e.g. a reliable witness).
• If a person holds a view that seems obviously crazy, then assume a medical cause?
• What if the person claims to have evidence for their strange view? Should you look at it?
• In the first *Terminator* movie, a soldier (Kyle Reese) is sent back in time to save a woman (Sarah Connor) from being murdered by a robotic assassin who appears human.

• There’s a scene where Reese is in police custody, explaining his story to a psychologist.

• What does the psychologist conclude? What *should* he conclude?
SILBERMAN: So. You're a soldier. Fighting for whom?
REESE: With the One Thirty Second under Perry, from '21 to '27–
SILBERMAN: (interrupting) The year 2027?
REESE: That’s right. Then I was assigned Recon/Security, last two years, under John Connor.
SILBERMAN: And who was the enemy?
REESE: SKYNET. A computer defense system built for SAC-NORAD by Cyber Dynamics. A modified Series 4800.

...

*Scalia*: I even believe in the devil.

*Senior*: You do?

*Scalia*: Of course! Yeah, he’s a real person. Hey, come on, that’s standard Catholic doctrine! Every Catholic believes that.

*Senior*: Have you seen evidence of Satan’s work recently?

*Scalia*: You know, it is curious. In the Gospels, the devil is doing all sorts of things. He’s making pigs run off cliffs, he’s possessing people and whatnot. And that doesn’t happen very much anymore. ... It’s because he’s smart.
“... it should be obvious that the opinions of mental health professionals are only as sound as their knowledge. ... 

... a German psychologist who heard from a patient in 1933 - when Hitler started consolidating power in Germany - that Hitler was a dangerous fascist who would launch a world war, try to take over the world and kill millions would likely be labeled as delusional. Just as with any field, the opinions of mental health professional are only as good as their knowledge”
Tu Quoque (Same to you)?

“Characteristics of believers in the official accounts of 9/11 consist of:

- Also rejecting other conspiracy theories unrelated to 9/11
- taking a naïve, optimistic stance toward politics
- trusting authority
- taking democratic practices for granted
- feeling generally trusting toward others
- displaying an unquestioning, unimaginative outlook.”
Hasty/Sweeping Generalisation

• You have evidence that a thing is true in some cases, or even in many cases, but you conclude (too broadly) that it is true in all cases.

• E.g. you periodically see cyclists running red lights, and you conclude that all cyclists run red lights.
Why You Hate Cyclists

Partly because of jerks like me. But it’s mostly your own illogical mind.


Data from nine major North American cities showed that, despite the total number of bike trips tripling between 1977 and 2009, fatalities per 10 million bike trips fell by 65 percent.

Photograph by Val Goretsky/Hemera/Thinkstock.
“If you are a city driver, you have undoubtedly been scared half to death by some maniac cutting across traffic like Frogger on a fixie. Such emotionally charged events stand out in our associative memory far more than mundane events, like a cyclist riding peacefully alongside your vehicle. The affect heuristic is compounded by the idea of negativity dominance—bad events stand out more than good ones. This causes you to overestimate both the amount and the severity of upsetting events, like almost getting some dirty hipster’s blood on your windshield.”
• “I know this guy, he just arrived from Honduras, lives in the basement next door. After arriving in Canada he never tried to get a proper job, he just went straight to dealing drugs. That’s why I’m against this insane level of immigration. These people we’re welcoming with open arms are all thieves and criminals.”
Composition Arguments

• A composition argument uses facts about the parts of a system to derive a conclusion about the whole.

• A composition argument is often (not always) a fallacy.

“The Red Wings players are each better than their counterparts on the Penguins. So the Red Wings are the better team.”
Fallacy of Composition?

• It is obvious that an atom cannot think, or be conscious. Hence no material object can be conscious, since material objects are composed entirely of atoms.
Fallacy of Composition

• The problem here is that sometimes a whole, that is composed of parts, may lack properties possessed by the parts.

• What about this composition inference:

  “Every part of this chair is made of wood. Hence the chair is made of wood”
Or:

“Every physical object needs a cause in order to exist. Hence the physical universe, i.e. the collection of all physical objects, needs a cause in order to exist”.
Begging the Question

• This does not mean raising the question, but rather assuming what you are trying to prove, or arguing in a circle. E.g.

A: Why do you believe God exists?
B: Because the Bible says he does.
A: But how do you know that the Bible is a reliable source of information?
B: Because the Bible is God’s Word, and God doesn’t lie.
• “No, no Doctor. I’m not paranoid. My co-worker really does hate me for some reason, and is trying to ruin my reputation.

• “That’s what we psychiatrists call rationalization, a classic symptom of mental illness. In fact, your denial simply proves to me that you are paranoid.
Complex Question (Presupposition)

• Statements and questions both make presuppositions, and sometimes these presuppositions are false, or at least debatable.
  – “If you were elected, which taxes would you cut?”
  – “What are you hiding?”
  – “When are you going to give up this bike thing and buy a car?”
Complex Question (Lumping issues together.)

- Another kind of “complex question” asks two questions together, in effect assuming that they must have the same answer.
  - Don’t you support protection and equal rights for children?
  - Don’t you think that hitting wives and children is wrong?
  - Are you one of those Republican market-worshipping, global warming deniers?
Presupposition or lumping?

Did you leave your skateboard here, hoping I’d fall and break my neck?

Did you betray me by telling my mother what I did?

Which one of you drew moustaches on my favourite dolls?
Argument from Ignorance

- Also known as the argument from *silence*.
- You infer a conclusion from the *absence* of evidence to the contrary.
- “I’m pretty sure that there are no real fossilized Tyrannosaurus skeletons on display anywhere at Langara, as I’ve never heard of there being one!”
- Some are good, others fallacious.
• “I’m sure that there can be no life anywhere else in the universe. After all, we still don’t have any clear evidence of such extra-terrestrials.”

• “If 9/11 were an inside job, some key figure in the conspiracy would have come forward by now, exposed the whole thing. But that hasn’t happened.”
• The key issue with an argument from ignorance is:

If H were true, then how likely is it that we would have evidence for H?

(E.g. If there were a Tyrannosaurus at Langara, then what’s the probability that we would know about it?)

• Also, how plausible is H itself?
Appeal to the Masses

• Also known as the *ad populam* fallacy.

• Here, one argues for a conclusion on the grounds that “everyone knows”.

• “The opinions of this upstart Galileo are manifestly absurd. Fortunately the people have better sense, being clearly aware that the earth does not move.”
• An appeal to the masses is a type of appeal to authority.
• While individuals are easily mistaken, it’s harder for a whole group of people to be mistaken, isn’t it?
• Are there circumstances under which vast numbers of people are dead wrong?
• Are appeals to the masses ever good arguments?
Independent vs. Derivative Knowledge

- Suppose 100 people have the same belief. Presumably this isn’t a mere coincidence. How did they all come to agree on this?
- It could be that one person had the belief at first, and then transmitted it to the others.
- Or it may be that each person formed the belief independently of the others.
The Calf-Path

One day, through the primeval wood,
A calf walked home, as good calves should;
But made a trail all bent askew,
A crooked trail, as all calves do.

Since then three hundred years have fled,
And, I infer, the calf is dead.
But still he left behind his trail,
And thereby hangs my moral tale. ...

Sam Walter Foss (1858-1911)
E.g. medical folklore

- You should drink at least 8 glasses of water a day
- Hair and fingernails continue to grow after death
- Reading in dim light ruins your eyesight
- Shaving causes hair to grow back faster or coarser
- Mobile phones are dangerous in hospitals
- Eating turkey makes people especially drowsy
- Home births are dangerous
- Peptic ulcers are caused by stress
Appeal to the Masses

• But when a large number of people independently reach the same belief, doesn’t this add authority to the belief?

• Especially if the belief concerns something that people experience directly, themselves?
Dr. Smith has maliciously claimed that drug X causes suicidal thoughts in teenagers. This despite the fact that drug X is the #1 drug prescribed by Canadian physicians for teenage depression!
Those Yankees want to free all the slaves. But we civilized people of the South know that slavery is part of the natural order of things.
• Young children will sometimes misbehave, in order to get attention. Every mother knows this!
• Petitions of scientists:

Ad populam fallacy?
“Victoria is the only major city in North America that doesn’t have a proper sewage treatment facility. Even in 2013, they still dump raw sewage directly into the Juan de Fuca Strait.

“It’s time has come, and we’re taking action,” said Conservative MP James Moore.
Tom Pedersen, director of the Pacific Institute for Climate Solutions:

“Victoria is simply injecting a tiny pinprick of nutrient-laden, organic sewage into the deep, fast, oxygen-rich waters of the Juan da Fuca strait. It’s mostly organic matter, and Mother Nature’s really good at processing that”.

“Mr Floatie” protests the dumping of raw sewage
In 1950 someone says:

Vancouver is lagging behind the rest of North America in clinging onto its rickety old electric street cars. Chicago, Philadelphia, Toronto, and many more cities have upgraded to fast, modern diesel buses. Come on, Vancouver!
False Cause

- Usually *post hoc ergo propter hoc*, i.e. “after this so caused by this”.
- “Since I hung my lucky charm from the rear-view mirror, I haven’t been given a speeding ticket”
- More generally, there’s the issue of inferring a causal connection from a correlation.
"See what I just caused to happen!"
Supposing there’s a stable correlation between factors A and B, such as smoking and cancer, there are many possible causal connections, e.g.

1. A causes B
2. B causes A
3. There is a third variable X, such that X causes A, and X causes B.
Slippery Slope

• The idea is that, even though this may look like a small, innocent step, it will place us at the top of a slippery slope. We will then start sliding downhill, unable to stop ourselves until we reach the bottom. So we’ll end up making drastic changes that no one intended.

• Can also be called the *domino effect*. 
• Some people don’t want to continue living, and with good reason, since their lives are horrific. They’re in terminal decline, in constant agony, with no hope of recovery. If such a person begs us to release them from their torment, we should have compassion and grant their request.

-- That all sounds good, but you know where it will lead. Once the general principle of killing sick people is accepted, we’ll end up killing those who want to live, but who are a burden on us.
• There are certainly some cases where torture is acceptable, even morally required. Suppose some monster has hidden your wife and kids somewhere, and they’ll die if they’re not rescued within hours. The only way to get the kidnapper to say where they are, in time, is to torture it out of him. What would you do?

-- That would be tempting. But once you start torturing, it’s a slippery slope. We’ll end up routinely torturing all people accused of crimes.
Poisoning the Well

(Make it undesirable to hold a view, by associating it with something bad.)

E.g.

“The rights of women, to have full control over their own bodies, are opposed only by patriarchal, misogynistic pigs.”
• You seem really concerned that everything be well managed, run efficiently, and so on. Of course the fascists thought so too.

... Mussolini was so determined to get the trains running on time that he once shot a train driver whose train was late.
• I see you’re not wearing a bike helmet. Doesn’t anybody love you?
When you drive a car, you drive with Hitler!

Ride your bicycle today!
• Only naïve “sheeple”, who trust the government without question, believe that the Iraq war is about spreading democracy.
• People who believe in government conspiracies are all crackpots, wearing tin foil hats. Are you really one of those?
Appeal to Force/Fear

• Also known as *ad baculum*, “appeal to the cudgel or club”.

• The basic trick is to *create fear* in the listener, causing their rational faculty to shut down, making agreement more likely.
• You don’t believe in ghosts? Don’t say that out loud! *The ghosts get really mad when they hear that!!*
NEW DREAD
THE MAGAZINE OF UNDISCOVERED FEARS

Ten Reasons to Avoid Bananas
Should Sofas Be Banned?
The Case Against Flannel
and so much more!

IS YOUR TEA PUTTING YOU AT RISK?
Here’s why you should wear a bike helmet.
“You don’t see any need to wear a bike helmet?

Actually, I didn't start wearing a helmet regularly until AFTER I WOKE UP FROM THE COMA!”
Other rhetorical tricks - humour

• I’m not saying that the honourable member is lying, but I wouldn’t buy a used car from him.
Old Bob Rae says that we need to cut back on our use of fossil fuels. No wonder, as he’s a bit of a fossil himself!
FACEPALM

Because expressing how dumb that was in words just doesn't work.
DOUBLE FACEPALM

When the Fail is so strong, one Facepalm is not enough.
“Damn bike lanes”
Verbal bullying

• mocking arguments as “obviously” terrible, too stupid for words, not worth anyone’s attention, etc.

• “Beyond the pale”

• “Disgusting”
Appeal to progress, etc.

- Your thinking on this issue seems stale and outworn. A little backward, actually. I’m looking for something fresh, innovative, and progressive.
- “This really was about looking forward.”
- Don’t be sucked in by the latest fads. Stick to what works, having served generation after generation.
Constantly adding an adjective

• A good trick to colour people’s perceptions of an idea is to always add an adjective, either positive or negative, whenever you use it.
• E.g. never say just “conservative”. Always say “narrow-minded conservative”.
• Never say “left winger”, say “loony left winger”
Other examples

• “fat cat banker”
• “expert sales associate”
• “out-of-touch academic”
• “scary right winger”
• “responsible government”
• “professional nurse”
• “hard-working moms”
Repetition

• The more times a person hears some claim, the more likely it seems to be true.
• “The carbon tax is a cash grab!” “The carbon tax is a cash grab!” “The carbon tax is a cash grab!” “The carbon tax is a cash grab!” “The carbon tax is a cash grab!”
• Now do you believe me?
• It’s better if many different people say it.
But surely you agree that truth can be created by the repetition of a lie.
• E.g. Use of “talking points”.

• “talking points” are short statements that are distributed to many people in an organisation, allowing them to speak with one voice on an issue, or “stay on message”.

• Talking points can be helpful, if true. But sometime false claims are repeated so often (e.g. by media personalities) that people accept them as true.
Quiz examples

1. Comment on the following *ad hominem* (to the person) arguments, explaining why they are, or are not, reasonable.

(i) Many women who live in predominantly Muslim countries are discriminated against.

-- How the heck would you know? You’re not Muslim, or even a woman!
(ii) My dentist has just bought a brand new CAT scanner, that gives a beautiful 3D image of all my teeth. He says I should get scanned every 6 months, for the best possible diagnostic information.

-- Be careful. He just shelled out maybe 200 grand for that machine. Of course he wants to use it as much as possible, to recoup that cost! Those things give you a high dose of radiation.
(iii) The treatment of animals in today’s factory farms is inhumane and morally indefensible. You should eat only free-range meat and eggs, or just vegetables.

-- Oh please! You can’t lecture me about that. You just ate that hamburger, which wasn’t free range.
Hypocrisy

• N.B. a *hypocrite* is someone who says one thing and does another, or fails to “practice what he preaches”.

• Hypocrisy is a bad thing. Yet does hypocrisy negate all epistemic authority?

• Suppose your doctor, who smokes, tells you that smoking is bad for your health. Should you believe him?
Question 2 examples

Comment on the following passages, being sure to:

(a) Identify the type(s) of argument used (e.g. ad hominem, appeal to force, etc.)

(b) Say why the argument is reasonable, or not, as the case may be. (Most are unreasonable.)
(i) Creationism, the idea that life is the product of a supernatural designer, is a scientific theory because it uses the scientific method. They look at the empirical data, and try to come up with an explanation of it that’s consistent with present scientific knowledge.

-- Nonsense. Science, by definition, can appeal only to material causes, so creationism is ruled out from the start.
Marriage should be an option for same-sex couples. Being married carries many benefits, from high social status to inheritance rights. To withhold those benefits from same-sex couples is discrimination.

-- Nonsense. Marriage, by definition, is a relationship between a man and a woman, so same-sex marriage is ruled out from the start.
(ii) Welfare seems to be needed to avoid severe hardship, but the trouble is that it traps them in a life of dependency. It’s like an addictive drug. A lot of people get used to being on welfare, they like it, and so it actually harms them by robbing them of their independence and self reliance.

-- I’m sorry, but I can’t listen to any more of your poor-bashing. I’ve heard it all before, all this claptrap about welfare being so cushy and generous. You try living on $610 a month, including $375 for shelter, and see how wonderful that is!
A – Larry Summers is a total sexist to even suggest that one reason why few women become top scientists is because of innate biology.

B – I’m not so sure. There seems to be some evidence to support what he said.

A – If you think that, then it means you’re a sexist too.
Some documents that seem purely technical, such as the BC Building Code and local planning bylaws, should be drafted with more attention to the human misery they cause. The stringent requirements for a ‘legal’ suite, for example, lead to many basements sitting empty, even while people sleep outside for lack of housing. The committees that draft these rules need to show more compassion.
Dear Ms. Rooks

As you may be aware the Property Standards Committee has had many appeals concerning ceiling height in habitable rooms (Sec 6.5.1, By-law 01-2002). It is important that we have a consistent application of this section.

Most of the appeals that come to us are in older homes and some units have existed for many years. In these older homes it is often not possible to comply, due to physical limitations of the building or excessive costs.

We are concerned that these units represent a significant amount of the affordable housing in Oshawa.

The Committee would request that this section of the by-law be reviewed and a grandfathering clause be considered for existing units.
Request *denied*, due to issues of “fire safety” with low ceilings.

### 3.6 Fire Safety

The establishment of minimum floor to ceiling heights is a very important matter which promotes health and safety and ensures that reasonable minimum standards are provided for the occupants of dwellings.

The City’s Property Standards By-law requires a minimum floor to ceiling height of 6’ 5” and this is considered appropriate because:

(a) It matches the required minimum height in Part 11 of the Ontario Building Code;
(b) It promotes a reasonable level of comfort, convenience and dignity for occupants in consideration that the average Canadian male height is 5’ 11”;
(c) It advances safety and safe access by emergency services personnel (Fire, Ambulance, Police) who need sufficient height to undertake their work.

Oshawa Fire Services does not support a reduction of the minimum floor to ceiling height to any height less than 6’-5”, as provided for in Part 11 of the Ontario Building Code.
(v) You claim that there was no link between 9/11 and Saddam’s Baathist party in Iraq. But, according to a Newsweek poll, 83% of Americans believe that Saddam was involved. So I guess you’re wrong about that.
(vi) I assure you that none of the chemicals we produce are hazardous to health. If you look at the composition of each molecule, you’ll find just carbon, hydrogen, nitrogen and oxygen, which are all completely harmless.
There’s no proof that the new H1N1 virus won’t mutate into something even more deadly, causing another global pandemic like the 1918 Spanish flu, killing millions of people. Get yourself out of the city, right now, before it’s too late!
(ix) I used to get colds all the time until I started using oil of oregano. Now, after more than two weeks, I haven’t had the tiniest sniffle.
Students complain about high tuition fees, but if you look at the student parking lots of major Canadian universities you’ll see mostly newer cars, including a lot of high-end luxury models. Clearly, most students are doing just fine, and can afford to pay more in tuition.
The following complex questions either involve an assumption, or ask two questions in one. For each question below say which kind it is, and state the assumption being made, or separate the question into two, as appropriate.

(i) Have you recently associated with Muslims and terrorists?

(ii) Were you fooled by her fallacious argument?

(iii) Why did you copy parts of your friend’s essay?
Straw Person question

Based on the (admittedly slim) textual evidence given here, is McCaughey’s presentation of Emanuel’s view accurate, or does she commit a straw person fallacy? Support your answer with a detailed comparison of the texts, noting the similarities and differences.
In the article, “Deadly Doctors: Advisors want to ration care” (New York Post, July 24, 2009) Betsy McCaughey argues that Dr. Ezekiel Emanuel (one of President Obama’s top health advisors) has dangerous ideas on reducing health care costs.

... Emanuel bluntly admits that the cuts will not be pain-free ... Savings, he writes, will require changing how doctors think about their patients: Doctors take the Hippocratic Oath too seriously, “as an imperative to do everything for the patient regardless of the cost or effects on others ...
... Yes, that’s what patients want their doctors to do. But Emanuel wants doctors to look beyond the needs of their patients and consider social justice, such as whether the money could be better spent on somebody else.

Many doctors are horrified by this notion; they’ll tell you that a doctor’s job is to achieve social justice one patient at a time.”

“The United States spends substantially more per person on health care than any other country, and yet US health outcomes are the same as or worse than those in other countries ... The most important contributor to the high cost of US health care, however, is overutilization ...”

*[Note: overuse is defined as treatment with little or no medical benefit -- RJ]*
At least 7 factors drive overuse, 4 related to physicians and 3 related to patients. First, there is the matter of physician culture. Medical school education and postgraduate training emphasize thoroughness. When evaluating a patient, students, interns, and residents are trained to identify and praised for and graded on enumerating all possible diagnoses and tests that would confirm or exclude them. The thought is that the more thorough the evaluation, the more intelligent the student or house officer. Trainees who ignore the improbable “zebra” diagnoses are not deemed insightful. In medical training, meticulousness, not effectiveness, is rewarded.
This mentality carries over into practice. Peer recognition goes to the most thorough and aggressive physicians. The prudent physician is not deemed particularly competent, but rather inadequate. This culture is further reinforced by a unique understanding of professional obligations, specifically, the Hippocratic Oath's admonition to “use my power to help the sick to the best of my ability and judgment” as an imperative to do everything for the patient regardless of cost or effect on others ...