5.8.1 Fallacies in informal arguments

Whereas a formal argument relies, for validity, on the formal relations between its elements (premises and conclusion), so-called ‘informal arguments’ use the persuasive power of natural language to establish their validity. However, such arguments often contain reasoning which is faulty - even if the language used sounds very convincing. These are known as fallacious arguments.

Some kinds of common fallacies in informal arguments are as follows:

- Sweeping generalisation
- False cause
- False or weak analogy
- Against the person
- Popular appeal
- Appeal to authority
- Slippery slope
- Straw man
- Begging the question
- False dichotomy
- Equivocation

Each of these will now be defined and examples given.

**Sweeping generalisation**

Applying the characteristics of one sample or example to an entire category or class of things.

Example

“Several friends of mine who have travelled in that country complained of the rudeness of the locals. So, I certainly won’t be visiting the place.”

**False cause (post hoc)**

Claiming that because Q appears after P, P is the cause of Q.

Example

“The government relaxed immigration restrictions and then the numbers of illegal immigrants increased. Therefore, the government is directly responsible for the increase.”
5.8 Common Fallacies in Informal Arguments

- **False (or weak) analogy**
  Comparing two things whose features are not really similar – or, not really relevant to each other.
  
  **Example**
  
  "Unhealthy diets indirectly kill more Australians annually than smoking-related diseases. Therefore, like tobacco sales, sales of junk food to children should be restricted."

- **Against the person (ad hominem)**
  Attacking the personal characteristics rather than the claims or arguments of the person you disagree with.
  
  **Example**
  
  "Apparently, the minister for health is a heavy drinker, so his views on preventative health measures cannot be trusted."

- **Popular appeal (ad populam)**
  An appeal to accept the validity of an argument based on the claim that a majority of people are said to support it.
  
  **Example**
  
  "Seventy two per cent of people are against an inheritance tax, therefore the government is wrong in planning to introduce it."

- **Appeal to authority**
  An appeal to accept the validity of an argument based on the claim that it is supported by an expert or prominent person.
  
  **Example**
  
  "Three prominent scientists from the Royal Academy of science support the view that climate change is not caused by human activity. Therefore, their claim must be true."
5.8 Common Fallacies in Informal Arguments

- **Slippery slope**
  An argument which proposes that once a particular step is taken, it will lead to an inevitable worsening of the situation with highly undesirable results.
  
  **Example**
  
  “If the government provides compensation for the victims of this particular flood, then it will have to provide compensation for all future natural disaster victims.”

- **Straw man**
  Setting up an exaggerated or less convincing version of your opponent’s argument in order to be able to easily attack it.
  
  **Example**
  
  “Environmentalists would like to ban the use of all private cars in inner-city areas. This is an outrageous demand, and therefore an attack on individual freedom in a modern democracy.”

- **Begging the question**
  A form of ‘circular reasoning’ in which an important assumption of the argument is glossed over or ignored.
  
  **Example**
  
  “Vegetarianism is really the only correct ethical stance to take towards animals, therefore non-vegetarians are acting in an unethical way.”

- **False dichotomy**
  An argument which reduces a set of complex possibilities to a simple choice between two alternatives.
  
  **Example**
  
  “Blended health care systems cannot work, so the government should either have a fully comprehensive free public health system — or, legislate for the private sector to completely take over the health system.”
Equivocation

An argument which repeats a key word or phrase in ways which suggest different meanings of that word or phrase.

Example

“All citizens have the right to an education, so it is right that the Ministry of Education has abolished fees for all government-funded schools.”

5.8.2 How to avoid fallacies in your own arguments

- Make sure your premises are true.
- Make sure your evidence is adequate.
- Make sure your examples and evidence are relevant.
- Make sure your argument is logically valid.
- Make sure your terms are not ambiguous.
- Make sure all your assumptions are explicit.