

TUTORIAL 1: Identifying Arguments

1.1 What is an argument?

To be able to think critically, it is very important that you can identify, construct, and evaluate *arguments*.

We shall be using the word "argument" in a way that is somewhat different from its ordinary meaning. In its ordinary usage, the word is often used to refer to a quarrel between two or more parties. But here we shall understand an argument as a piece of language. In particular, we shall take an argument to be a list of statements, one of which is the *conclusion* and the others are the *premises* or *assumptions* of the argument.

To give an argument is to provide a set of premises as reasons for accepting the conclusion. To give an argument is not necessarily to attack or criticize someone. Arguments can also be used to support other people's viewpoints.

As an example, suppose I want to convince you that you should be hardworking. I might give the following argument:

If you want to find a good job, you should be hardworking. You do want to find a good job. So you should be hardworking.

The first two sentences here are the premises of the argument, and the last sentence is the conclusion. To give this argument is to offer the premises as reasons for accepting the conclusion.

Dogmatic people tend to make assertions without giving reasons. When they are criticized they often fail to give arguments to defend their own opinions. To become a good critical thinker, you should develop the habit of giving good arguments to support your claims. Giving good arguments is one of the most important ways to convince other people that certain claims should be accepted.

1.2 Exercises

See if you can give arguments to support some of your beliefs. For example, do you think the economy is going to improve or worsen in the next six months? Why or why not? What arguments can you give to support your position? Or to think about something different, do you think computers can have emotions? Again, what arguments can you give to support your viewpoint? Make sure that your arguments are composed of statements.

1.3 How to look for arguments

How do we identify arguments in real life? There are no easy mechanical rules, and we usually have to rely on the context in order to determine which are the premises and the conclusions. But sometimes the job can be made easier by the presence of certain premise or conclusion indicators. For example, if a person makes a statement, and then adds "this is because ...", then

it is quite likely that the first statement is presented as a conclusion, supported by the statements that come afterwards. Other words in English that might be used to indicate the premises to follow include :

- since
- firstly, secondly, ...
- for, as, after all,
- assuming that, in view of the fact that
- follows from, as shown / indicated by
- may be inferred / deduced / derived from

Of course whether such words are used to indicate premises or not depends on the context. For example, "since" has a very different function in a statement like "I have been here since noon", unlike "X is an even number since X is divisible by 4".

Conclusions, on the other hand, are often preceded by words like:

- therefore, so, it follows that
- hence, consequently
- suggests / proves / demonstrates that
- entails, implies

Here are some examples of passages that do not contain arguments.

When people sweat a lot they tend to drink more water. [Just a single statement, not enough to make an argument.]

Once upon a time there was a prince and a princess. They lived happily together and one day they decided to have a baby. But the baby grew up to be a nasty and cruel person and they regret it very much. [A chronological description of facts composed of statements but no premise or conclusion.]

Can you come to the meeting tomorrow? [A question that does not contain an argument.]

1.4 Exercises

Do these passages contain arguments? If so, what are their conclusions?

Cutting the interest rate will have no effect on the stock market this time round as people have been expecting a rate cut all along. This factor has already been reflected in the market.

So it is raining heavily and this building might collapse. But I don't really care.

Virgin would then dominate the rail system. Is that something the government should worry about? Not necessarily. The industry is regulated, and one powerful company might at least

offer a more coherent schedule of services than the present arrangement has produced. The reason the industry was broken up into more than 100 companies at privatisation was not operational, but political: the Conservative government thought it would thus be harder to renationalise. *The Economist* 16.12.2000

Bill will pay the ransom. After all, he loves his wife and children and would do everything to save them.

All of Russia's problems of human rights and democracy come back to three things: the legislature, the executive and the judiciary. None works as well as it should. Parliament passes laws in a hurry, and has neither the ability nor the will to call high officials to account. State officials abuse human rights (either on their own, or on orders from on high) and work with remarkable slowness and disorganisation. The courts almost completely fail in their role as the ultimate safeguard of freedom and order. *The Economist* 25.11.2000

Most mornings, Park Chang Woo arrives at a train station in central Seoul, South Korea's capital. But he is not commuter. He is unemployed and goes there to kill time. Around him, dozens of jobless people pass their days drinking soju, a local version of vodka. For the moment, middle-aged Mr Park would rather read a newspaper. He used to be a brick layer for a small construction company in Pusan, a southern port city. But three years ago the country's financial crisis cost him that job, so he came to Seoul, leaving his wife and two children behind. Still looking for work, he has little hope of going home any time soon. *The Economist* 25.11.2000

For a long time, astronomers suspected that Europa, one of Jupiter's many moons, might harbour a watery ocean beneath its ice-covered surface. They were right. Now the technique used earlier this year to demonstrate the existence of the European ocean has been employed to detect an ocean on another Jovian satellite, Ganymede, according to work announced at the recent American Geo-physical Union meeting in San Francisco. *The Economist* 16.12.2000

There are no hard numbers, but the evidence from Asia's expatriate community is unequivocal. Three years after its handover from Britain to China, Hong Kong is unlearning English. The city's gweilos (Cantonese for "ghost men") must go to ever greater lengths to catch the oldest taxi driver available to maximize their chances of comprehension. Hotel managers are complaining that they can no longer find enough English-speakers to act as receptionists. Departing tourists, polled at the airport, voice growing frustration at not being understood. *The Economist* 20.1.2001

A01.5 Presenting arguments in the standard format

When it comes to the analysis and evaluation of an argument, it is often useful to label the premises and the conclusion, and display them on separate lines with the conclusion at the bottom :

(Premise 1) If you want to find a good job, you should be hardworking.

(Premise 2) You do want to find a good job.

(Conclusion) So you should be hardworking.

Let us call this style of presenting an argument a presentation in *the standard format*. Here we rewrite two more arguments using the standard format:

We should not inflict unnecessary pain on cows and pigs. After all, we should not inflict unnecessary pain on any animal with consciousness, and cows and pigs are animals with consciousness.

(Premise 1) We should not inflict unnecessary pain on any animal with consciousness.

(Premise 2) Cows and pigs are animals with consciousness.

(Conclusion) We should not inflict unnecessary pain on cows and pigs.

If this liquid is acidic, the litmus paper would have turned red. But it hasn't, so the liquid is not acidic.

(Premise 1) If the liquid is acidic, the litmus paper would have turned red.

(Premise 2) The litmus paper has not turned red.

(Conclusion) The liquid is not acidic.

In presenting an argument in the standard format the premises and the conclusion are clearly identified. Sometimes we also rewrite some of the sentences to make their meaning clearer, as in the second premise of the second example. Notice also that a conclusion need not always come at the end of a passage containing an argument, as in the first example. In fact, sometimes the conclusion of an argument might not be explicitly written out. For example it might be expressed by a rhetorical question:

How can you believe that corruption is acceptable? It is neither fair nor legal!

In presenting an argument in the standard format, we have to rewrite the argument more explicitly as follows:

(Premise) Corruption is not fair and it is not legal.

(Conclusion) Corruption is not acceptable.

If you want to improve your reading and comprehension skills, you should practise reconstructing the arguments that you come across by rewriting them carefully in the standard format.

1.6 Exercises

Rewrite these arguments in the standard format.

1. He is either in Hong Kong or Macau. John says that he is not in Hong Kong. So he must be in Macau.

2. If the Government wants to build an incinerator here they should compensate those who live in the area. Incinerators are known to cause health problems to people living nearby. These people did not choose to live there in the first place.