4.2 First Steps in Analysis

4.2.1. Overcoming the ‘natural attitude’

The term ‘natural attitude’ was used by the philosopher Alfred Schutz to describe the practical, common-sense approach that we all adopt in our daily lives.

We assume that our senses provide us with accurate information, and that our experiences of the world are shared by others. In practical terms, this is most useful.

However, if we carry over such an attitude into the process of thinking in preparation for academic writing, we may actually close down the possibilities of effective analysis.

In order to maintain a thoroughly analytical approach, we have to assume that the objects we encounter are not easily understood, not fully known – even if, at first, they appear readily understandable to us. To do so is to move beyond the ‘natural attitude’, and open our minds to the rich possibilities of analysis.

4.2.2. Acknowledging the limitations of perception

As an extension of this ‘natural attitude’, we generally assume that our five senses give us accurate information of ‘the world’ – that is, of the ‘data’ which we encounter. However, as we have already shown in the first section (‘Introduction to Critical Thinking) our perception is often unreliable. In other words, we will need guiding principles in order to systematically organize what we encounter.

4.2.3 Analysis is all about relations

If we pause to think about it, all of our academic activities at university are concerned with identifying the most important pieces of information and considering how these are related to each other. Ultimately, our three academic ‘apps’ of analysis, critique and argument are concerned with identifying and understanding the significance of relations.

If analysis is all about relations, the obvious question arises: what are the important kinds of relations that we should be looking for?
4.2.4 Correspondence and Correlation

The idea of **correspondence** suggests an apparent connection, agreement or similarity between things. Another way of describing correspondence is in terms of ‘correlation’. This word expresses accurately the notion of ‘co-relation’, and students working with data which is expressed numerically (so-called ‘quantitative’ data), will be familiar with the ideas of **positive** and **negative** correlation. Correlation between variables is described as ‘positive’, if both variables move in the same direction. If the variables move in opposite directions, then the appropriate description is ‘negative correlation’.

![A graph representing positive correlation](image1)

![A graph representing negative correlation](image2)

4.2.5 Sameness and Difference

Another way of talking about correspondence and correlation is to describe relations between things in terms of ‘sameness’ and ‘difference’. For example, if we take two things called ‘A’ and ‘B’, and think about possible relations between the two, we can imagine the following possibilities:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>is the same as</td>
<td>sameness</td>
</tr>
<tr>
<td>is different to</td>
<td>difference</td>
</tr>
<tr>
<td>is to some extent the same, to some extent different to</td>
<td>sameness &amp; difference</td>
</tr>
<tr>
<td>is neither the same as B nor different to B</td>
<td>neither sameness nor difference (something else; implies that expressing this relation is not useful; like comparing apples and oranges)</td>
</tr>
</tbody>
</table>
For example, imagine you are undertaking an analysis and critique of a document outlining a new government policy on immigration. After identifying the main elements of the old and new policies, you may conclude that the new policy:

(i) is **essentially the same** as the previous policy;
(ii) is **entirely different** to the previous policy;
(iii) is **to some extent the same, to some extent different** to the previous policy;
(iv) is **neither the same as nor different to** the previous policy – it cannot be compared – it is something entirely in another category. (Like comparing apples and oranges).

**Activity: Think about it...**

As noted above, the same procedure can be applied to any object of analysis. Think about your own area of study. How could the steps for identifying sameness and difference be applied to a question, issue or topic in that area?

### 4.2.6 Identifying contradictions, oppositions and anomalies

(i) A **contradiction** is said to occur when there are two conflicting claims about the same object, issue or topic.

For example:

(i) “There is much evidence to suggest that global warming is caused by human activity.”

(ii) “There is no evidence to suggest that global warming is caused by human activity.”

In this example, the logic of cause and effect is used to attempt to substantiate a claim. With a contradiction, there is really no room to ‘meet half way’. Aristotle’s famous ‘Law of Non-Contradiction’ (LNC) states that a statement cannot be both true and untrue at the same time and in the same way.

The Law of non-contradiction has its practical uses. However, it has been criticised for being too rigid in that it disallows the possibility of variations in **the extent to which something may be true or untrue**.

(ii) **Binary oppositions** (like contradictions) have a two-part structure which contrasts two opposing ideas or concepts.
Identifying and listing binary oppositions can be a very useful starting point in analysis. It allows some broad categories to be specified. It also immediately presents a set of analytical possibilities in relation to your position or point of view (which could be expressed as a thesis statement).

One way to list binary oppositions is to draw a line down the centre of the page and list the opposing terms, as in the example below.

<table>
<thead>
<tr>
<th>Nature</th>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>White</td>
</tr>
<tr>
<td>Life</td>
<td>Death</td>
</tr>
<tr>
<td>Open</td>
<td>Closed</td>
</tr>
<tr>
<td>Tradition</td>
<td>Modernity</td>
</tr>
</tbody>
</table>

Activity: Have a go at Activity One on the right-hand side of the screen.

WARNING:

Although the binary opposition is a very useful tool of analysis, it is important to note that any argument built on identifying binary oppositions should not ignore the dividing line between the two terms.

Most subjects which require analysis cannot be reduced to simple ‘black and white’ terminology. After identifying and discussing an apparent binary opposition, a thorough analysis may challenge the terms of the opposition itself. For example, isn’t there an ‘in-between’ space in the transition from the urban to the rural? Can culture be clearly defined as merely the absence of nature? Are all aspects of tradition negated by modernity?
An anomaly indicates a deviation from the normal order - something which does not fit the usual pattern. Anomalies challenge our stereotypical ways of thinking. For example, in an advertisement, we may see a child dressed in a business suit reading a financial newspaper. The newspaper company wants to make the point that financial newspapers can and should be read by everybody.

Another example of an encounter with an anomaly might be when looking at the ways in which cells respond to certain types of chemicals, we notice irregularities in internal structure.

Usually, we try to avoid information that challenges what we already think. But if we do this, we may miss the opportunity to develop a new approach, theory or model in relation to a specific topic.

Looking for anomalies will be of great value when you are formulating a research question, looking for a gap in the research, or simply trying to develop a thesis statement for a shorter piece of writing.

### 4.2.7 Using key words to find themes and threads

When performing an initial analysis on a piece of writing, it is useful to identify certain key words and phrases which indicate the more significant topics or themes which are being addressed.

**Activity:** Have a go at Activity Two on the right-hand side of the screen.

### 4.2.8 Discovering an argument

In the previous section, we considered how we could detect an argument by identifying inference and conclusion indicators. It was suggested that caution be exercised, because some of these words may also appear in a discussion, description or explanation.

In some cases, the ‘raw data’ we are looking at is itself data which has already been analysed, interpreted and evaluated. Often, this ‘secondary’ data is presented in the form of an argument, and this means that we will be analysing the claims of someone else, before constructing our own argument.

The process of discovering patterns in an argument will be similar to what we do when we are looking for patterns in numbers or other ‘unprocessed’ information. However, because the data is presented in natural language, it will require a different approach.

**NOTE:**

The process of developing a critique of the formal and informal aspects of an argument will be considered in detail in the next two sections of this program.