Treating information critically

In extracting factual information from source materials, your focus will be on the details of what is being said: you will need to know the facts, a fact being information that is accepted as true and is not contested in the literature as some so-called facts are. Questions in the order of what? when? where? and who? tend to stimulate the recall of information for the purpose of reproducing knowledge. This is a legitimate and important purpose in writing, which may at times dominate the process and at other times may complement critical appraisal, which is fundamental to all academic writing and communication.

Critically appraising source materials

Critical appraisal involves evaluating strengths and weaknesses of discussions/arguments across a range of authors or sources, bearing in mind that the generation of knowledge turns on the clash of ideas emanating from the community of world scholars.

It is indeed vital to realize that, however well intentioned they may be, authors do have 'prejudices, assumptions and beliefs' (Wallace and Wray, 2006: 26) just as we all do. You will therefore need to exercise your critical intelligence when reading: question the underlying assumptions, consider the possibility of theoretical, methodological and other biases, assess the soundness of the data or evidence presented, the rigour of authors' analyses, the logic of their arguments and so forth. In short, you will need to extend your range of questions when dealing with source materials to engage questions to do with the why? and the how? of the research: to hold your sources in relation, to compare and contrast the positions of different authors, to draw out the issues being debated and so on. If you are unpractised in critical appraisal, refer to the next exercise (see also \rightarrow 'Critical appraisal of the literature' in Chapter 8).



exercise: critical appraisal

The scenario

Imagine you are required to read reports, articles and other studies about the topic 'Greenhouse effects on the global environment' in order to produce a report advocating

measures to reduce greenhouse emissions. On reading, you discover that there is considerable disagreement among scholars about which measures should be introduced, and why.

The challenge

How then do you begin to evaluate the experts? If your previous tertiary experience was one in which critiquing was not common, this could prove challenging. But the challenge will seem less if you recognize that where there is difference of opinion in scholarship the different viewpoints themselves will provide material for your critique. It is often explicit or implicit in one author's discussion what is problematic in another's.

The critique (question-raising)

In conducting the critique, you would be drawing on your knowledge of the subject, which may include valuable general, specialist, experiential and/or cultural knowledge that you have.

At the same time, you would be raising questions of this type in order to map central issues in the arguments and debates surrounding the subject:

What is the full range of measures identified by the different authors? List these as you read, and perhaps categorize them too in a way that seems useful. To what extent do the authors agree or disagree about which measures should be implemented: is there considerable agreement? A reasonable amount? Hardly any? Draw up a list of measures commonly agreed on, another where there seems to be a reasonable amount of agreement, and another where there seems to be strong disagreement, presuming this sort of division applies.

In the process of clarifying what is being said, think about why authors take the positions they do. The first question to ask yourself is: what are the issues here? What are the points on which authors disagree and why? Identify and consider these carefully: list points and reasons. One issue on which authors might disagree could be the division of costs across state boundaries; another, whether or not there should be compulsory reduction targets for all nations.

Continue your questioning like so:

What reasons do authors give for the measures they prefer? Is there any overlap here? How do these measures line up in terms of advantages and disadvantages, and for whom? From where do these authors draw their evidence? Are their sources reliable? What types of evidence do they present in advocating different measures? Do they use statistics, examples from scientific reports, or what, as evidence? Are the statistics sound? Do the examples make sense to you: why? Why not? Could a discussion be too narrow (or too broad) because important information

(Continued)

is left out? Perhaps you can recognize this from reading other authors. Can you see any biased assumptions behind the evidence, perhaps because of the methodology or theory framing their discussions, or cultural biases (for example, the East/West divide)? In short, how convincing are the reasons they give for the measures they advocate?

During reading, you will generate further questions as you refine your understanding of the subject.

The outcome

By the end of the critique a transformation will have taken place in your knowledge base, as you will have used a range of authors to deepen and clarify your thinking about the subject. The intelligence and creativity with which you handle source materials, and the subtlety of your insights, are matters of individual judgement that will influence the position or point of view you take on any topic. You have to decide which authors or aspects of their studies convince you and why they do, and which do not and why they do not. In rearranging all that you have taken apart in the analysis of a subject or topic – any topic – when you write your paper you will be making a new synthesis, with your own position at the centre of that synthesis.

Critically evaluating theory

If theory does feature in your writing, you will need to critically engage with it. Reading and critically evaluating theory, or philosophical works applied in analysis, can be particularly challenging, as can the appraisal of models or methodologies. It could be that your course includes much new theory so that you do not feel you have a sound knowledge base from which to exercise your critical judgement. Or you may be unpractised in critiquing theory, having never before done this in an academic context.

The term 'theory' is often used loosely in the academic community. The meaning followed here is: 'The formulation of abstract knowledge or speculative thought; systematic conception of something' (New Shorter Oxford English Dictionary). Theory then, is a clearly identifiable, abstract body of knowledge that has been conceived systematically.

Theories are abstract systems in which certain aspects (the key ideas or principles of a theory) are privileged by an author over other possibilities. Theorists abstract from the chaotic, actual world of everyday events and activities that which they consider most significant to explain that world, or some aspect of it. Theories are useful for their explanatory value, and sometimes their predictive value. They can open up different possibilities in ways of perceiving and understanding complex events and happenings important