Chapter One: Questions, Problems, and World Views

Before getting into any of the more analytic details of logical reasoning, let's consider the ways in which ideas 'play out' in the world, and the way we arrive at most of our beliefs. Most textbooks on modern logic assert that the basic unit of logic is the statement – a simple sentence which can be either true or false. But it seems to me that statements have to come from somewhere, and that they do not emerge from nothing. People do not come to believe things at random, or by magic. To my mind, the most obvious places where statements are born are one's intellectual environments, one's problems, and the questions that you and others in your environment tend to ask. Good thinking also begins in situations which prompt the mind to think differently about what it has taken for granted so far.

1.1 Intellectual Environments

Where does thinking happen? This may sound as if it's a bit of a silly question. Thinking, obviously, happens in your mind. But people do more than just think their own thoughts to themselves. People also share their thoughts with each other. Thoughts do not remain confined within your own brain: they also express themselves in your words and your actions. I'd like to go out on a bit of a limb here, and say that thinking happens not only in your mind, but also any place where two or more people gather to talk to one another and share their ideas with each other. In short, thinking happens wherever two or more people could have a dialogue with each other. In that dialogue, at least two people (but possibly many more) can express, share,

trade, move around, examine, criticize, affirm, reject, modify, argue about, and generally communicate their own and each other's ideas.

The importance of dialogue in reasoning is perhaps most important, and also most obvious, when we are reasoning about moral matters. The philosopher Charles Taylor said:

Reasoning in moral matters is always reasoning with somebody. You have an interlocutor, and you start from where that person is, or with the actual difference between you; you don't reason from the ground up, as though you were talking to someone who recognized no moral demands whatever. ¹

What Taylor says about moral reasoning also applies to other things we reason about. Whenever you have a conversation with someone about whether something is right, wrong, true, false, partially both, and so on, you do not start the conversation from nothing. Rather, you start from your own beliefs about such things, and the beliefs held by your partner in the conversation, and the extent to which your beliefs are the same, or different, as those of the other person. It is not by accident that Plato, one of the greatest philosophers in history, wrote his books in the form of dialogues between Socrates and his friends. Similarly, French philosopher Michel Foucault observed that especially among Roman writers, philosophy was undertaken as a social practice, often within institutional structures like schools, but also through informal relations like friendships and families. This

social aspect of one's thinking was considered normal and even expected:

When, in the practice of the care of the self, one appealed to another person in whom one recognised an aptitude for guidance and counseling, one was exercising a right. And it was a duty that one was performing when one lavished one's assistance on another...²

So, to answer the question 'Where does thinking happen?' we can say: 'any place where two or more people can have a conversation with each other about the things that matter to them'. And there are lots of such places. Where the Romans might have listed the philosophy schools and the political forums among those places, we today could add:

- Movies, television, pop music, and the entertainment industry
- Internet-based social networks like Facebook and YouTube
- Streets, parks, and public squares
- Pubs, bars, and concert venues
- Schools, colleges, and universities
- Mass media
- Religious communities and institutions
- The arts
- The sciences
- · Courtrooms and legal offices
- Political settings, whether on a small or large scale
- The marketplace, whether local or global
- · Your own home, with your family and friends
- Can you think of any more places like this?

In each of the places where thinking happens, there's a lot of activity. Questions are asked, answers are explored, ideas are described, teachings are presented, opinions are argued over, and so on. Some questions are treated as more relevant than others, and some answers meet with greater approval than others. It often happens that in the course of this huge and complicated exchange, some ideas become more influential and more prevalent than others. You find this in the way certain words, names, phrases or definitions

get used more often. And you find it as certain ways to describe, define, criticize, praise, or judge things are used more often than others. The ideas that are expressed and traded around in these ways and in these places, and especially the more *prevalent* ideas, form **the intellectual environment** that we live in.

Most of the time, your intellectual environment will roughly correspond to a social environment: that is, it will correspond (at least loosely) to a group of people, or a community that you happen to be part of. Think about all the groups and communities that you belong to, or have belonged to at one time or another:

- Families
- Sports teams
- The student body of your college
- The members of any social club you have joined
- The people at your workplace
- Your religious group (if you are religious)
- People who live in the same neighbourhood of your town or city
- People who speak the same language as you
- People who are roughly the same age as you
- People who come from the same cultural or ethnic background
- People who like the same music, movies or books as you
- · People who play most of the same games as you
- Can you think of any more?

An intellectual environment will have a character of its own. That is, in one place or among one group of people, one idea or group of related ideas may be more prevalent than other ideas. In another place and among other people, a different set of ideas may dominate things. Furthermore, several groups may have very similar intellectual environments, or very different ones, or overlapping ones. Also note that you probably live in more than one social environment, and so you are probably hearing ideas from more than one intellectual environment too.

An intellectual environment, with its prevalent ideas, surrounds everyone almost all the time, and it profoundly influences the way people think. It's where we learn most of our basic ideas about life and the

world, starting at a very early age. It probably includes a handful of stock words and phrases that people can use to express themselves and be understood right away. This is not to say that people get all of their thoughts from their environment. Obviously, people can still do their own thinking wherever they are. And this is not to say that the contents of your intellectual environment will always be the same from one day to the next. The philosopher Alasdair MacIntyre observed that an intellectual tradition is often a continuity of conflict, and not just a continuity of thought. But this is to say that wherever you are, and whatever community you happen to be living in or moving through, the prevalent ideas that are expressed and shared by the people around you will influence your own thinking and your life in profound and often unexpected ways.

By itself, this fact is not something to be troubled about. Indeed, in your early childhood it was probably very important for you to learn things from the people around you. For instance, it was better for a parent to tell you not to touch a hot barbecue with your bare hand, than for you to put your hand there yourself and find out what it feels like. But as you grow into adulthood, it becomes more and more important to know what one's intellectual environment is really like. It is very important to know what ideas are prevalent there, and to know the extent to which those ideas influence you. For if you know the character and content of the intellectual environment in which you live, you will be much better able to do your own thinking. You might end up agreeing with most, or even all of the prevalent ideas around you. But you will have agreed with them for your own reasons, and not (or not primarily) because they are the ideas of the people around you. And that will make an enormous difference in your life.

Some intellectual environments are actually hostile to reason and rationality. Some people become angry, feel personally attacked, or will deliberately resist the questioning of certain ideas and beliefs. Indeed, some intellectual environments hold that intellectual thinking is bad for you! Critical reasoning sometimes takes great courage, especially when your thoughts go against the prevalent ideas of the time and place where you live.

1.2 World Views

Eventually, the ideas that you gathered from your intellectual environment, along with a few ideas of your own that you developed along the way come together in your mind. They form in your mind a kind of plan, a picture, or a model of what the world is like, and how it acts, and so on. This plan helps you to understand things, and also helps you make decisions. Philosophers sometimes call this plan a **world view**.

Think for a moment about some of the biggest, deepest and most important questions in human life. These questions might include:

- What should I do with my life? Where should I go from here? Should I get married? What career should I pursue? Where is my place in the world? How do I find it? How do I create it?
- Is there a God? What is God like? Is there one god, or many gods? Or no gods at all? And if there is, how do I know? And if there's not, how do I know?
- Why are we here? Why are we born? Is there any point to it all?
- What is my society really like? Is it just or unjust? And what is Justice?
- Who am I? What kind of person do I want to be?
- What does it mean to be an individual? What does it mean to be a member of society?
- What happens to us when we die?
- What do I have to do to pass this course?
- Just what are the biggest, deepest and most important questions anyway?

These are philosophical questions. (Well, all but one of them.) Your usual way of thinking about these questions, and others like them is your world view. Obviously, most people do not think about these questions all of the time. We are normally dealing with more practical, immediate problems. What will I have for dinner tonight? If the traffic is bad, how late might I be? Is it time to buy a new computer? What's the best way to train a cat to use the litter-box?

But every once in a while, a limit situation will appear, and it will prompt us to think about higher and

deeper things. And then the way that we think about these higher and deeper things ends up influencing the way that we live, the way we make choices, the ways that we relate to other people, and the way we handle almost all of our problems. The sum of your answers to those higher and deeper questions is called your 'world view'.

The word 'world view' was first coined by German philosopher Albert Schweitzer, in a book called "The Decay and Restoration of Civilization, first published in 1923. Actually, the word that Schweitzer coined here is the German word Weltanshauung. There are several possible ways to translate this word. In the text quoted above, as you can see, it's translated as "theory of the universe". It could also be translated as "theory of things" or "world conception". Most English speakers use the simpler and more elegant sounding phrase "world view". Here's how Schweitzer himself defined it:

The greatest of the spirit's tasks is to produce a theory of the universe. What is meant by a theory of the universe? It is the content of the thoughts of society and the individuals which compose it about the nature and object of the world in which they live, and the position and the destiny of mankind and of individual men within it. What significance has the society in which I live and I myself in the world? What do we want to do in the world? What do we hope to get from it? What is our duty to it? The answer given by the majority to these fundamental questions about existence decides what the spirit is in which they and their age live. (Schweitzer, The Decay and Restoration of Civilization, pg. 80-1)

Schweitzer's idea here is that a world-view is more than a group of beliefs about the nature of the world. It is also a bridge between those scientific or metaphysical beliefs, and the ethical beliefs about what people can and should do in the world. It is the intellectual narrative in terms of which the actions, choices, and purposes of individuals and groups make sense. It therefore has indispensable practical utility: it is the justification for a way of life, for individuals and for whole societies. In this sense, a world view is not just something you 'have'; it is also something

that you 'live with'. And we cannot live without one. "For individuals as for the community," Schweitzer said, "life without a theory of things is a pathological disturbance of the higher capacity for self-direction." (Schweitzer, ibid, pg. 86)

Let's define a world view as follows: A world view is the sum of a set of related answers to the most important questions in life. Your own world view, whatever it is, will be the sum of your own answers to your philosophical questions, whatever you take those questions to be, and whether you have thought about them consciously or not. Thus your world view is intimately tied to your sense of who you are, how you want to live, how you see your place in your world and the things that are important to you. Not only your answers to the big questions, but also your choice of which questions you take to be the big questions, will form part of your world view. And by the way, that's a big part of why people don't like hearing criticism. A judgment of a world view is often taken to be a judgment of one's self and identity. But it doesn't have to be that way.

Some world views are so widely accepted by many people, perhaps millions of people, and are so historically influential, perhaps over thousands of years, that they have been given names. Here are a few examples:

Modernism: referring to the values associated with contemporary western civilization, including democracy, capitalism, industrial production, scientific reasoning, human rights, individualism, etc.

Heliocentrism: the idea that the sun is at the centre of our solar system, and that all the planets (and hundreds of asteroids, comets, minor planets, etc.) orbit around the sun.

DEMOCRACY: the idea that the legitimacy of the government comes from the will of the people, as expressed in free and fair elections, parliamentary debate, etc.

CHRISTIANITY: The idea that God exists; that humankind incurred an 'original sin' due to the events in the Garden of Eden, and that God became Man in the person of Jesus to redeem humanity of its original sin.

ISLAM: The idea that God exists, and that Moham-

med was the last of God's prophets, and that we attain blessedness when we live by the five pillars of submission: daily prayer, charity, fasting during Ramadan, pilgrimage to Mecca, and personal struggle.

MARXISM: The idea that all political and economic corruption stems from the private ownership of the means of production, and that a more fair and just society is one in which working class people collectively own the means of production.

DEEP ECOLOGY: The idea that there is an important metaphysical correlation between the self and the earth, or that the earth forms a kind of expanded or extended self; and that therefore protecting the environment is as much an ethical requirement as is protecting oneself.

The Age of Aquarius/The New Age: The idea that an era of peace, prosperity, spiritual enlightenment, and complete happiness is about to dawn upon humankind. The signs of this coming era of peace can be found in astrology, psychic visions, Tarot cards, spirit communications, and so on.

And some of these world views may have other, sub-views bundled inside them. For instance:

Democracy a. Liberalism

b. Conservatism

c. Democratic Socialism

Buddhism

a. Mahayana

b. Theravada

c. Tibetan Bon-Po

d. Zen

Clearly, not all world views are the same. Some have different beliefs, different assumptions, different explanations for things, and different plans for how people should live. Not only do they produce different answers to these great questions, but they often start out with different great questions. Some are so radically different from each other that the people who subscribe to different world views might find it very difficult to understand each other.

In summary, your world view and the intellectual environment in which you live, when taken together,

form the basic background of your thinking. They are the source of most of our ideas about nearly everything. If you are like most people, your world view and your intellectual environment overlap each other: they both support most of the same ideas. Sometimes there will be slight differences between them; sometimes you may find differences so large that you may feel that one of them must be seriously wrong, in whole or in part. Differing world views and differing intellectual environments often lead to social and personal conflict. It can be very important, therefore, to consciously and deliberately know what your own world view really is, and to know how to peacefully sort out the problems that may arise when you encounter people who have different world views.

1.3 Framing Language

One of the ways that your intellectual environment and your world view expresses itself is in the use of framing language. These are the words, phrases, metaphors, symbols, definitions, grammatical structures, questions, and so on which we use to think and speak of things in a certain way. We frame things by describing or defining them with certain interpretations in mind. We also frame things by the way we place emphasis on certain words and not on others. And we frame things by interpreting and responding selectively to things said by others.

As an example, think of some of the ways that people speak about their friendships and relationships. We say things like "We connected," "Let's hook up," "They're attached to each other," and "They separated." We sometimes speak of getting married as "getting hitched." These phrases borrow from the vocabulary of machine functions. And to use them is to place human relations within the frame of machine functions. Now this might be a very useful way to talk about relationships, and if so, then it is not so bad. But if for some reason you need to think or speak of a relationship differently, then you may need to invent a new framing language with which to talk about it. And if this is the only framing language you've ever used to talk about relationships, it might be extremely difficult for you to

As a thought experiment, see if you can invent a framing language for your friendships and relationships based on something else. Try using a framing language based on cooking, or travel, or music, or house building, as examples.

Here's another example of the use of framing language. Consider the following two statements:

"In the year 1605, Guy Fawkes attempted to start a people's revolution against corruption, inherited privilege, and social injustice in the British government."

"In the year 1605, Guy Fawkes planned a terrorist attack against against a group of Protestant politicians, in an attempt to install a Catholic theocracy in Britain."

Both of these statements, taken as statements of fact, are true. But they are both framed very differently. In the first statement, Fawkes is portrayed as a courageous political activist. In the second, he is framed (!) as a dangerous religious fanatic. And because of the different frames, they lead the reader to understand and interpret the man's life and purposes very differently. This, in turn, leads the reader to draw different conclusions.

In other situations, the use of framing language can have serious economic or political consequences. Consider, as an example, the national debate that took place in the United States over the Affordable Health Care Act of 2009. The very name of the legislation itself framed the discussion in the realm of market economics: the word 'affordable' already suggests that the issue has to do with money. And most people who participated in that national debate, including supporters and opponents and everything in between, spoke of health care as if it is a kind of market commodity, which can be bought or sold for a price. The debate thus became primarily a matter of questions like who will pay for it (the state? individuals? insurance companies?), and whether the price is fair. But there are other ways to talk about health care besides the language of economics. Some people frame heath care as a human right. Some frame it as a form of organized human

compassion, and some as a religious duty. But once the debate had been framed in the language of market economics, these other ways of thinking about health care were mostly excluded from the debate itself.

As noted earlier, it's probably not possible to speak about anything without framing it one way or another. But your use of framing language can limit or restrict the way things can be thought of and spoken about. They can even prevent certain ways of thinking and speaking. And when two or more people conversing with each other frame their topic differently, some unnecessary conflict can result, just as if they were starting from different premises or presupposing different world views. So it can be important to monitor one's own words, and know what frame you are using, and whether that frame is assisting or limiting your ability to think and speak critically about a particular issue. It can also be important to listen carefully to the framing language used by others, especially if a difference between their framing language and yours is creating problems.

And speaking of problems: this leads us to the point where the process of critical thinking begins.

1.4 Problems

Usually, logic and critical thinking skills are invoked in response to a need. And often, this need takes the form of a **problem** which can't be solved until you gather some kind of information. Sometimes the problem is practical: that is, it has to do with a specific situation in your everyday world.

For example:

- Perhaps you have an unusual illness and you want to recover as soon as possible.
- Perhaps you are an engineer and your client wants you to build something you've never built before.
- Perhaps you just want to keep cool on a very hot day and your house doesn't have an air conditioner.

The problem could also be theoretical: in that case, it has to do with a more general issue which impacts

your whole life altogether, but perhaps not any single separate part of it in particular. Religious and philosophical questions tend to be theoretical in this sense.

For example:

- You might have a decision to make which will change the direction of your life irreversibly.
- You might want to make up your mind about whether God exists.
- You might be mourning the death of a beloved friend.
- You might be contemplating whether there is special meaning in a recent unusual dream.
- You might be a parent and you are considering the best way to raise your children.

The philosopher Karl Jaspers described a special kind of problem, which he thought was the origin of philosophical thinking. He called this kind of problem a *Grenzsituationen*, or a "limit situation".

Limit situations are moments, usually accompanied by experiences of dread, guilt or acute anxiety, in which the human mind confronts the restrictions and pathological narrowness of its existing forms, and allows itself to abandon the securities of its limitedness, and so to enter new realm of self-consciousness. ³

In other words, a limit situation is a situation in which you meet something in the world that is unexpected and surprising. It is a situation that more or less forces you to acknowledge that your way of thinking about the world so far has been very limited, and that you have to find new ways to think about things in order to solve your problems and move forward with your life. This acknowledgement, according to Jaspers, produces anxiety and dread. But it also opens the way to new and (hopefully!) better ways of thinking about things.

In general, a limit situation appears when something happens to you in your life that you have never experienced before, or which you have experienced very rarely. It might be a situation in which a long-standing belief you have held up until now suddenly

shows itself to have no supporting evidence, or that the consequences of acting upon it turn out very differently than expected. You may encounter a person from a faraway culture whose beliefs are very different from yours, but whom you must regularly work with at your job, or around your neighbourhood. You may experience a crisis event in which you are at risk of death. A limit situation doesn't have to be the sort of experience that provokes a nervous breakdown or a crisis of faith, nor does it have to be a matter of life and death. But it does tend to be the type of situation in which your usual and regular habits of thinking just can't help you. It can also be a situation in which you have to make a decision of some kind, which doesn't necessarily require you to change your beliefs, but which you know will change your life in a non-trivial way.

1.5 Observation

Thus far, we have noted the kinds problems that tend to get thinking started, and the background in which thinking takes place. Now we can get on to studying thinking itself. In the general introduction, I wrote that clear critical thinking involves a process. The first stage of that process is *observation*.

When observing your problem, and the situation in which it appears, try to be as **objective** as possible. Being objective, here, means **being without influence from personal feelings, interests, biases, or expectations, as much as possible**. It means observing the situation as an uninvolved and disinterested third-person observer would see it. (By 'disinterested' here, I mean a person who is curious about the situation but who has no personal stake in what is happening; someone who is neither benefitted nor harmed as the situation develops.) Although it might be impossible to be totally, completely, and absolutely objective, still it certainly is possible to be objective *enough* to understand a situation as clearly and as completely as needed in order to make a good decision.

When you are having a debate with someone it is often very easy, and tempting, to simply accuse your opponent of being **biased**, and therefore in no position to understand something properly or make

decisions. If someone is truly biased about a certain

- Take stock of how clearly you can see or hear what is going on. Is something obstructing your vision? Is it too bright, or too dark? Are there other noises nearby which make it hard for you to hear what someone is saying?
- Describe your situation in words, and as much as possible use value-neutral words in your description. Make no statement in your description about whether what is happening is good or bad, for you or for anyone else. Simply state as clearly as possible what is happening. If you cannot put your situation into words, then you will almost certainly have a much harder time understanding it objectively, and reasoning about it.
- Describe, also, how your situation makes you feel. Is the circumstance making you feel angry, sad, elated, fearful, disgusted, indignant, or worried? Has someone said something that challenges your world view? Your own emotional responses to the situation is part of what is 'happening'. And these too can be described in words so that we can reason about them later.
- Also, observe your instincts and intuitions. Are you
 feeling a 'pull', so to speak, to do something or not do
 something in response to the situation? Are you already
 calculating or predicting what is likely to happen next?
 Put these into words as well.
- Using numbers can often help make the judgment more objective. Take note of anything in the situation that can be counted, or measured mathematically: times, dates, distances, heights, shapes, angles, sizes, monetary values, computer bytes (kilobytes, megabytes, etc.), and so on.

- Take note of where your attention seems to be going. Is anything striking you as especially interesting or unusual or unexpected?
- If your problem is related to some practical purpose, take note of everything you need to know in order to fulfill that purpose. For instance, if your purpose is to operate some heavy machinery, and your problem is that you've never used that machine before, take note of the condition of the safety equipment, and the signs of wear and tear on the machine itself, and who will be acting as your "spotter", and so on.
- If other people are also observing the situation with you, consult with them. Share your description of the situation with them, and ask them to share their description with you. Find out if you can see what they are seeing, and show them what you are seeing. Also, try to look for the things that they might be missing.

Separating your observations from your judgments and opinions can often be difficult. But the more serious the problem, the more important it can be to observe something non-judgmentally, *before* coming to a decision. With that in mind, here's a short exercise: which of the following are observations, and which are judgments? Or, are some of them a bit of both?

- That city bus has too many people on it.
- The letter was delivered to my door by the postman at 10:30 AM.
- The two of them were standing so close to each other that they must be lovers.
- The clothes she wore suggested she probably came from a very rich family.
- The kitchen counter looked like it had been recently cleaned.
- He was swearing like a sailor.
- The old television was too heavy for him to carry.
- There's too much noise coming from your room, and it's driving me crazy!
- The latest James Bond film was a lot of fun.
- The latest James Bond film earned more than \$80 million in its first week.
- I hate computers!

 The guy who delivered the pizza pissed me off because he was late.

1.6 Questions

Perhaps more than the problems do, good questions get the mind thinking as well. Questions express doubts, identify problems, call for solutions and demand answers. Indeed we might not fully understand the nature of a given problem until we have asked a decent question about it. Moreover, the best answers to one's questions tend to become ideas, beliefs, propositions, theories, arguments and world views. These, in turn, guide our lives and our choices in numerous ways. But some kinds of questions are better than others, and it can be important to discern the differences between them.

Good questions are:

- 1. Tenacious. We cannot easily put them away or ignore them.
- 2. DIRECT. They address the actual problem that you are facing, and not a tangential or unrelated issue.
- 3. SEARCHING. When you pose a good question, you don't already know the answer. You might have a rough or vague idea of what the answer might be, but you don't know for sure yet, and you are committed to finding out. Or, you might have several possible answers, and you want to find out whether any of them are good answers, or which one is the best.
- 4. Systematic. Although you don't have a clear answer to your question, still your question is associated with a method or a plan, even if only a loose one, with which you can search for an answer. In other words: even when you don't know the answer, you still know what you're doing, and you're not scrambling in the dark. You have an idea where to look for an answer. And you are covering every place where a useful answer could be found, leaving nothing out.
- 5. USEFUL. The process of answering a good question actually helps you solve your problem.
- 6. Open. There might be more than one possible correct answer. (There can also be more than one possible wrong answer.) With several good answers

to your question, you may have to do a lot more work to find which of them is the best one, if your circumstance requires you to pick just one answer. But that work is ultimately very useful, and almost always leads us to better quality answers.

- 7. Fertile. Some of the better answers to the question prompt more good questions. In this way, good questions can keep the mind active.
- 8. Controversial. A good question is often one which addresses itself to beliefs, ideas, ways of living, etc., which people normally take for granted. It may even be a question that no one else or very few others are asking. This does not necessarily mean that the questioner is being aggressive or confrontational. It should still be a searching question, and a direct question, and so on. But with a controversial question, the questioner often places herself at odds, in some way, with those who are committed to the beliefs being questioned, or who might not want the question asked at all. Indeed a controversial question can sometimes place the questioner in some danger by the very act of asking it. That danger might be social: by asking the question, she might risk being cold-shouldered or ostracized by her friends. Or it might be physical: by asking the question, she might place herself at odds against politically or economically powerful people and institutions, such as the law or one's employer.

The more of these qualities that a question has, the better a question it is. There are also several kinds of bad questions. Here are a few examples:

RHETORICAL QUESTIONS. This is a question in which the questioner already knows the answer, and is trying to prompt that same answer from his or her listeners. Although rhetorical questions can be interesting and perfectly appropriate in poems or storytelling, in a nonfiction text or in a more 'straight talk' conversation they are stylistically weak. Rhetorical questions are often plain statements of belief or of fact merely phrased in the form of a question. So it is generally better to state the belief or the fact directly as a proposition. Also, it's always possible that someone else will answer the rhetorical question in an unexpected

way. Rhetorical questions can also be used as forms of verbal aggression. They position the questioner as the controller of the debate, and they place others on the defensive, and make it harder for them to contribute to the debate as an equal.

LEADING QUESTIONS. These are questions that are designed to manipulate someone into believing something that they may or may not otherwise believe. Normally, leading questions come in a series, and the series is designed to make someone predisposed to respond to the last question in the series in a particular way. Leading questions are often used in a form of political campaigning called 'push polling' (to be discussed in the chapter on Reasonable Doubt).

LOADED OR COMPLEX QUESTIONS. A loaded question is one that cannot be given a straight answer unless the person answering it accepts a proposition that he or she might not want to accept. (More discussion of this kind of question appears in the chapter on Fallacies.) Like rhetorical questions, loaded questions can also be used aggressively, to control a debate and to subordinate the other contributors.

OBSTRUCTIONIST QUESTIONS. This is the kind of question that someone asks in order to interrupt someone else's train of thought. Obstructionist questions often look like good questions, and in a different context they may be perfectly reasonable. But the obstructionist question is designed distract a discussion away from the original topic, and prevent the discussion from reaching a new discovery or a clear decision. Typically, the obstructionist question asks about definitions, or pushes the discussion into a very abstract realm. It may also involve needlessly hair-splitting the meaning of certain words. In this sense an obstructionist question is much like the fallacy of 'red herring'. As an example, someone might obstruct a discussion of whether same-sex couples should be allowed to marry by saying: "Well, that all depends on what you mean by 'marriage'. What is marriage, anyway?"

FRAMING QUESTIONS. The framing question uses specific words, terms, and phrases to limit the way a certain topic can be discussed. There's probably no such thing as a question that doesn't frame the answers that flow from it, even if only in a small way. But it is

possible to 'cook' or to 'rig' a question such that the only direct answers are ones which remain within a certain limited field of assumptions, or within a certain limited world view. Framing questions may even share some of the qualities of good questions: they might allow more than one answer, or they might open the way to further questions. But they are also like loaded questions in that they presuppose a certain way of thinking or talking about the topic, and you can't give a straight answer unless you reply within the bounds of that way of thinking and talking.

EMPTY QUESTIONS. A question is empty when it has no answer. Sometimes people will declare a question to be empty when in fact it is 'open': but a question with more than one possible good answer is not an empty question. So it is important to understand the difference between the two. A question is empty when all its answers lead to dead ends: when, for instance, the best answers are neither true nor false, or when different answers are nothing more than different descriptions of the same situation, or when the question cannot be given a direct answer at all. Such questions might be interesting for artistic or religious or similar purposes, and they can be the basis for some beautiful poems and meditations, or some very enjoyable comedy. But reasoning about such questions in a logical or systematic way doesn't produce any new discoveries. An empty question cannot tell you anything you don't already know.

By the way: when you are trying to observe a situation as objectively as possible before making a decision about it, you can also try to observe the way other people are talking about it. What kind of questions are they asking? What kind of framing language are they using in their descriptions? This, too, is part of the first stage in the process of reasoning.

And before moving on: there are things you should look for in a good answer to a good question. One of those things is that a good answer can be expressed in the form of a proposition. But we will see more about propositions a little later on.

1.7 Differing World Views

Perhaps the most difficult things to observe and question are your own beliefs. So let's look at how to do exactly that.

Once in a while, you are going to encounter differences between your world view and the intellectual environment in which you live. And you are also likely to encounter differences between your world view and other people's world views, and differences in the intellectual environments of different religions, political arrangements and cultures. And in some of those situations, you will not be able to just stand back and 'live and let live'. A judgment may have to be made, for instance about which world view you are personally prepared to live by, or which one you will support with your money or your votes or your actions in your community. You are also going to occasionally discover places where your world view doesn't "work", that is, places where it clearly does not help you understand the world, nor do what you want it to do.

Remember, you probably subscribe to several world views at the same time, some religious, some political, some cultural, some philosophical or scientific. In fact you probably subscribe to two or three world views at the same time, without consciously realizing it. Again, there's nothing wrong with that: we probably wouldn't be able to think about anything if we didn't have one.

But not all world views are created the same. Some are problematic, whether in great or small ways. Some are seriously faulty. If some part of your world view is faulty, this can muddle your thinking, and create conflict between you and other people. Thus it is very important to learn to tell the difference between a faulty world view and an acceptable one.

Some world views are faulty because their ideas concerning the nature of the world have been proven wrong through scientific discovery, such as the Ptolemaic model of the solar system, the 'four elements' theory of matter or the 'four humours' theory of medicine. Others are faulty because their political and moral consequences have turned out to be very destructive. Mediaeval feudalism, Soviet communism,

Nazism, racism, sexism, and prejudice, are the bestknown examples of morally faulty world views. Some world views that are deeply faulty may have one or two features that seem very appealing and plausible. The way the sun rises in the east and sets in the west certainly makes it look as if the earth is standing still and the sun is traveling around it, as the Ptolemaic world view suggests. The 'four humours' theory of medicine seems to correspond elegantly to the 'four elements' theory of matter. Under Soviet communism, from Stalin's time in the early 1940's until the fall of the Berlin Wall in 1989, nobody was unemployed. And in Nazi Germany, productive and high-achieving workers could receive a free holiday trip, paid for by the government. But these apparent benefits should not blind you to the moral and empirical failures of a faulty world view.

Schweitzer described three properties that he thought an acceptable world view had to have. In his view, an acceptable world view had to be: rational, ethical, and optimistic. Let's see how Schweitzer explains each of these points in turn.

First, an acceptable world view is rational when it is the product of a lot of careful thinking about the way things really are.

"Only what has been well turned over in the thought of the many, and thus recognised as truth, possesses a natural power of conviction which will work on other minds and will continue to be effective. Only where there is a constant appeal to the need of a reflective view of things are all man's spiritual capacities called into activity." (Schweitzer, ibid pg. 86-7.)

This is stipulated in order that the world view may help people come to an understanding of the world and of one another. A world-view derived from unreflective instincts and impulses, in his view, cannot properly reflect reality, nor will it have sufficient power to motivate people to take action when they should.

Now, Schwitzer's words in that quotation might seem very circular. It may look as if he's saying 'a world view is rational when it's rational'. But what I suspect Schweitzer had in mind is something like this. A

world view is rational when lots of people examine it carefully and critically, and in so doing, they determine whether or not it is actually able to explain things. Thus an acceptably rational world view **corresponds appropriately and usefully to the world as people actually experience it**. In that sense, a rational world view is a highly realistic one.

Second, an acceptable world view is ethical when it can tell us something about the difference between right and wrong, and when it can help us become better human beings.

"Ethics is the activity of man directed to secure the inner perfection of his own personality... From the ethical comes ability to develop the purposive state of mind necessary to produce action on the world and society, and to cause the co-operation of all our achievements to secure the spiritual and moral perfection of the individual which is the final end of civilization." (ibid pg. 94-5)

It's important to note here that when Schweitzer speaks of a world view as 'ethical', he is not saying that an acceptable world view has to include certain specific moral statements. He is not saying, for example, that an ethically acceptable world view must be Christian, or that it must be Liberal, or whatever. Rather, he is saying that it has to have something to say about what is right or wrong, and something to say about how we can become better human beings, whatever that something might be. One world view might say that it is always wrong to harm animals, for instance. Another might say it can be right to harm animals under certain conditions. A third might claim that it is never wrong to harm animals. The point is not that one of these three possibilities is acceptable and the others aren't. The point is that all three of them are robust propositions about morality, regardless of whether you agree or disagree with them. Thus all three of those examples can be part of an acceptable world view.

It can often be tempting to say that a world view is unacceptable or invalid because it asserts moral claims that you find disagreeable. Doing so can make you look strong-willed and more certain of your values. But it can also create unnecessary conflict with others who are just as strongly committed to their own different world views. Remember, it is possible to acknowledge that a world view is 'acceptable' in Schweitzer's sense, while at the same time disagreeing with it.

Schweitzer's third criteria for an acceptable world view is that it must be optimistic. By this he means that it must presuppose that life on earth is valuable and good.

"That theory of the universe is optimistic which gives existence the preference as against non-existence and thus affirms life as something possessing value in itself. From this attitude to the universe and to life results the impulse to raise existence, in so far as our influence can affect it, to its highest level of value. Thence originates activity directed to the improvement of the living conditions of individuals, of society, of nations and of humanity." (Schweitzer, ibid, pp. 93-4)

Overall, according to Schweitzer, a world view that is not rational, not optimistic, and not ethical, whether in whole or in part, is (to that extent) a problematic or a faulty world view.

1.8 Value Programs

One important type of faulty world view is the kind which Canadian philosopher John McMurtry called a "value program? Value programs are world views which have the following two qualities:

- There's at least one proposition about values that cannot be questioned under any circumstances or for any reason, even when there is evidence available which shows that the proposition is weak, open to reasonable doubt, or even clearly false.
- Acting on the unquestionable proposition, and behaving and making choices as if that proposition is true, tends to cause a lot of preventable harm to people, or to their environments.

Here are McMurtry's own words, to describe what value programs are like:

In the pure-type case, which will be our definition of a value program, all people enact its prescriptions and functions as presupposed norms of what they all ought to do. All assume its value designations and value exclusions as givens. They seek only to climb its ladder of available positions to achieve their deserved reward as their due. Lives are valued, or not valued, in terms of the system's differentials and measurements. All fulfill its specified roles without question and accept its costs, however widespread, as unavoidable manifestations of reality. In the strange incoherence of the programmed mind, the commands of the system are seen as both freely chosen and as laws of nature, or God... Those who are harmed by the value program are ignored, or else blamed for falling on its wrong side, because its rule is good and right. Its victims must, it is believed, be at fault. A value program's ideology is in great part devoted to justifying the inevitability of the condition of the oppressed. 4

McMurtry added to his discussion that world views become value programs not due to a fault in human nature, but rather due to a kind of social or psychological conditioning: "...it is not "human nature" that is the problem. The problem is not in how we are constructed, but in the inert repetition of the mind, a condition that does not question socially conditioned value programs." 5

It's usually easy to identify value programs from history: mediaeval feudalism, for instance. But perhaps the more important questions are:

- What are the value programs of our time?
- Are you, or the people around you, unknowingly subscribing to a value program?
- Are there propositions in your intellectual environment which cannot be questioned, or which can be questioned but only at great personal risk?
- Is anyone harmed through the ways you live your life in accordance with the teachings of your world view? How are those harms explained? And are those explanations justifiable? Why or why not?
- In what ways, if at all, does your world view meet, or fail to meet, Schweitzer's three criteria for acceptability?

As an exercise, have a look at this short list of world views of our time, and think about whether any of them are value programs, and why (or why not):

- Representative parliamentary democracy.
- Free-market capitalism.
- Human rights.
- The 'trickle-down' theory of economics.
- The right to bear arms.
- The pro-choice movement.
- The pro-life movement.
- Manifest Destiny.
- The 'fandom' of any professional sports team.
- The official platform of any major political party.
- The teachings, doctrines, and creeds of any major religion.

1.9 World Views, Civilization, and Conflict

In 1993, American historian and political scientist Samuel Huntington published a paper called "A Clash of Civilizations?" In that paper he defined 'civilization' as "the highest cultural grouping of people and the broadest level of cultural identity people have short of that which distinguishes humans from other species." 6 The idea here is like this. Think of the biggest grouping of people that you feel part of, such that the only grouping of people that is larger than that one is the human race as a whole. You will probably find yourself thinking about more than just your country or your religion, or those who speak the same language as you. Rather, you will find yourself thinking of people who share a few simple concepts in their world views, even while they live in different countries or speak different languages. With this definition in mind, Huntington thought that there are nine civilizations active in the world right now: Western, Latin American, Slavic, Middle Eastern, African, Hindu, Chinese, Buddhist, and Japanese. Huntington also thought that some countries, such as Ethiopia, and Turkey, are 'torn' countries. In a torn country, some forces in that country are working to transition the country from one civilization to another, while at the same time other forces in the same country resist that transition.

Huntington further argued that differences in world view and civilization are going to be the basis for all future armed conflict.

"...the fundamental source of conflict in this new world will not be primarily ideological or primarily economic. The great divisions among humankind and the dominating source of conflict will be cultural. Nation states will remain the most powerful actors in world affairs, but the principal conflicts of global politics will occur between nations and groups of different civilizations." (Huntington, ibid.)

Finally, Huntington also gives a particular privilege to religion. In his view, economic globalisation has had the effect of reducing the importance of the nation-state in shaping and defining personal identity. Religion, he says, has taken its place, since religion "... provides a basis for identity and commitment that transcends national boundaries and unites civilizations." (*ibid.*)

The important question here, of course, is whether or not Huntington's claim about the inevitability of conflict is correct.

1.10 Exercise for Chapter One: How Much Variety Is In Your World?

I have more than one thousand people on my Face-book list. So I see lot of "memes" every day. Memes are ideas, expressed in pictures and videos and quotations and so on, which people share with each other, and the more they are shared the more their movements seem to take on a life of their own. One day I thought it would be fun to save them to a database, and tag them according to the kind of messages they express. What would I discover? Were there some kinds of memes that are more popular than others? What are these things really telling me about the thoughts and feelings of the people around me? And what are they telling me about myself?

The original idea was to take a kind of "snapshot" of the content of my (online) intellectual environment over four days to see what was in it. My basic rules

were simple. I would take only the pictures which appeared while I happened to be online. That way, I wouldn't have to be online all day. And I also promised myself not to deliberately change my web surfing habits during those days, so that I wouldn't get an artificial result. I also didn't track the links to blog posts, news articles, videos, or other online media. Just to be simple, I only tracked the photos and images. And I only tracked the ones that someone on my list shared after having seen it elsewhere. That way, each of these pictures had passed a kind of natural selection test. Someone had created the image and passed it on to someone who thought it worthy of being passed on to a third person.

After the first few hours, I had about 50 memes for my collection. And I already noticed a few general trends. So I started tagging the samples into what appeared to be the four most obvious categories: Inspirational, Humorous, Political, and Everything Else. The Humour category was already by far the largest, with more samples than the other categories combined. At the end of the first day, there was enough variety in the collection that I could create sub-categories. The largest of which was "Humour involving cats or kittens". No surprise there, I suppose.

But at the end of the second day, with about 200 samples in my collection, I started to notice something else, which was much more interesting. A small but significant number of these samples had to with social, political, or religious causes other than those that I personally support. Some promoted causes that were reasonably similar to my values, but I have never done all that much to support them. For instance, I've nothing against vegetarianism, but I'm not vegetarian myself. So I labeled those ones the "near" values, because they are not my values, but they are reasonably close, and I felt no sense of being in conflict with them. Then I noticed that some of my samples were for causes almost directly opposed to the ones I normally support. So instead of "un-friending" people with different political views than me, I saved and tracked their political statements just as I did everybody else's. And I labeled those statements the "far" values, because they expressed values fairly distant from my own.

So now I could look at all these images and put them in three broad groups: Common values, Near values, and Far values. And in doing so, I had discovered a way to statistically measure the real variety of my intellectual environment, and the extent to which I am actually exposed to seriously different world views. Let's name this measurement your 'Intellectual Environment Diversity Quotient'. Or, to be short about it, your 'DQ'.

At the end of four days, I had 458 pictures, and I had tagged them into six broad categories: Inspirational, Humour, Religion, Causes, Political, and Foreign Language. Here's how it all turned out. (Note here that if some of these numbers don't seem to add up, that is because some samples were tagged more than once, as they fit into two or (rarely) three categories.)

Total size of the dataset: 458 (100.0%)

Inspirational images: 110 (24.0%) Humour: 225 (49.1%)

Religion: 36 (7.8%) Causes: 148 (32.3%) Political: 47

(10.2%) Foreign language: 11 (2.4%)

And by the way, only 5 of them asked the recipient to "like" or "share" the image.

Now, for the sake of calculating how much real difference there is in my intellectual environment, we have to look at just the images expressing social, political, religious, or philosophical values of some kind. This doesn't necessarily exclude the inspirational or comic pictures that had some kind of political or moral message, because as mentioned, a lot of the pictures got more than one tag. As it turned out, around half of them were making statements about values. (That, by the way, was also very interesting.)

Here's the breakdown of exactly what my friends were posting pictures about. And as you can see, there's a lot of variety. But what is interesting is not how different they are from each other. What's interesting is how many of them are different from my own point of view. You can figure this for yourself by comparing the memes in your own timeline to what you say about yourself in your own FB profile, or by just deciding with each image, one at a time, how far you agree or

disagree with each one. But in either case you have to be really honest with yourself. In this way, calculating your DQ is not just about taking a snapshot of your intellectual environment. It's also about knowing yourself, and making a few small but serious decisions about what you really stand for.

TOTAL RELIGION, CAUSES, & POLITICAL: 231 (100.0%)

Total religious: 36 (15.5%)

Buddhism: 4 (1.7%) Christianity: 6 (2.5%) Pagan:
8 (3.4%) Northern / Asatru: 6 (2.5%) Aboriginal
/ First Nations: 3 (1.2%) Taoism: 1 (0.4%) Hindu:
1 (0.4%) Any: 6 (2.5%) Atheism: 1 (0.4%)

TOTAL CAUSES: 148 (64.0%)

Against cruelty to animals: 3 (1.2%) Against religious proselytization: 3 (1.2%) Support education, science, critical thinking: 19 (8.2%) Pro-vegetarian: 1 (0.4%) Organic and/or backyard gardening: 3 (1.2%) Feminism / antiviolence against women: 3 (1.2%) Feminism / sexual power relations: 7 (3.0%) Feminism / body image: 5 (2.1%) Anti-war: 4 (1.7%) Israel-Iran antiwar solidarity: 3 (1.2%) Support for soldiers / war veterans: 8 (3.4%) Support for retired military dogs: 2 (0.8%) Support gun ownership: 3 (1.2%) Race relations, anti racism: 1 (0.4%) Support gay marriage / LGBT pride: 10 (4.3%) Support environmentalism: 5 (2.1%) Support universal health care in America: 1 (0.4%) Support the student protest in Quebec: 3 (1.2%) Against fascism and Neo-Nazism: 1 (0.4%)

Total party political: 47 (20.3%) Right wing: 8 (3.4%) Left wing: 36 (15.5%) Centre: 3 (1.2%)

Now for the sake of figuring your DQ, we need to look at the percentage of value-expressing memes that are near to my values, and the percentage of those which are distant. That's the measure of how much of the intellectual environment you live in could really challenge you, if you let it.

TOTAL: 231 / 100.0% Common values = 150 / 64.9% Near values = 64 / 27.7% Far values = 17 / 7.3% So, my DQ, rounded off, is 28 and 7.

Now, you might be thinking, if I did the experiment on a different day, I'd collect different samples, and I'd get a different result. This was especially clear in the humorous pictures, because some of them depended on the time of year for their effect. For example, I got a lot of Douglas Adams references, because one of the days I was collecting the images was "Towel Day". I also got a lot of Star Wars images because I was collecting my samples on May the 4th. Similar effects can also influence the memes that were expressing values, for instance if the dataset is collected during a religious holiday. Therefore, the figure I just quoted above might not be very accurate. Well, to address that possibility, I ran the experiment again two weeks later. And here's what I got the second time.

SECOND SET = 470
TOTAL RELIGION, CAUSES, POLITICAL, SECOND
SET: 243 (100.0%)
Common values = 157 (64.6%)
Near values = 77 (31.6%)
Far values = 9 (3.7%)

As you can see, it's a slightly different result. The total collection was larger, and there were a lot fewer distant values represented. And among the comic pictures, there were a lot more references to Doctor Who. But overall it wasn't a big difference. In fact the fraction of pictures which expressed some kind of value was still about 50%, just as before. So if I add the second set to the first, and do the math again, I can get a more accurate result, like this:

BOTH SETS COMBINED = 474 (100.0%)

Common values = 307 (64.7%)

Near values = 141 (29.7%)

Far values = 26 (5.4%)

New DQ = **30** and **4**.

Now, I don't know whether that figure is high or low, because I have no one else's data to compare it to. And I also don't know whether it would be good or bad to have a high DQ, or a low one, because, well, that's a value statement too!

But what I do know is that I can now accurately measure the extent to which my intellectual environment has a real range of different ideas and opinions. I can measure how much "otherness", social or religious or political "other-ness", exists in my world. I can also measure how much I prefer the somewhat less stressful company of people who think more or less the same way I do. Or, I can also measure the extent to which my intellectual environment serves only as a kind of echochamber, repeating back to me my own ideas without examining them very deeply.

But the really fun part of this experiment is that you can do it too! What's your DQ?