Beliefs - a priori, a posteriori, synthetic a priori

1. Knowledge just by Thinking

Suppose you have three kittens and two baskets, and you are going to put some of the kittens in one basket and some in the other. How many ways are there of doing this? You could find out by trying all the ways and counting them. Or you could find out by thinking. You could reason as follows. Consider the first kitten, it could go in either the right basket or the left one. This gives two ways of starting. Each of them can be continued by putting the second kitten in either the right basket or the left basket. So that makes two times two, or four ways of going on. Then the third kitten can be put in either the right basket or the left one, giving four times two, or eight, ways of distributing the kittens between the baskets.

This could be a fact about three particular real kittens and two particular real baskets. And you can see that it is true without having to collect evidence. You know in advance, prior to any evidence, what the answer has to be. Philosophers refer to knowledge that we can have in advance of any evidence as **apriori** knowledge. (The standard term is ‘a priori’. It comes from two Latin words meaning prior to the evidence. Students find the term confusing, since it sounds like it is talking about a thing called a priori. So this book will join a small trend of writing ‘apriori’ as one word.) The opposite of apriori knowledge is **apostetiori** knowledge, knowledge which can be gained only after, posterior to, seeing the evidence. (Traditionally two words, ‘a posteriori’. ) Mathematics, as in the mini-proof about the kittens and the baskets, is one of the main sources of apriori knowledge. Or, to put it more carefully, mathematics gives many examples that philosophers use when explaining their theories about apriori knowledge. But there are many examples which do not come from mathematics.

Suppose, for example, that someone tells you that they have a moose in their pocket. You find this hard to believe, and challenge them to produce it. They reach into their pocket and bring out a pebble. When the person claims that this is a very unusual moose, you are more than sceptical. You know the person must be either joking, or lying, or crazy, or mean something very different by the word ‘moose’. You do not need to consider any further evidence to know that a small piece of stone cannot be a large mammal. If you did not know things like that, you would not be able to understand any evidence. The question here is: ‘How many of our beliefs can we base on reasoning rather than on evidence from perception?’ These ideas have a long history in philosophy starting with Immanuel Kant, and contemporary philosophy is profoundly influenced by challenges to those traditional views of them begun by W.V. Quine.
2. Analytic

Consider again the moose example of the previous section. You know "that a moose is not a stone, just because you know that ‘moose’ means ‘large North American mammal of the deer family’, as you know that no stones are large mammals of the deer family. (A complete definition of ‘moose’ would have to say more: this is only part of the meaning of moose’.) So you can know that a moose is not a stone just by understanding the meanings of the words you use. Philosophers have considered many similar examples. ‘All bachelors are unmarried, ‘All sisters are female’, ‘Your mother’s mother is your grandmother’ are all examples that have been suggested. In all of these it is hard to see how someone can doubt the belief as long as they understand what the words mean. All these are analytic beliefs. (The sentences that express them are called analytic truths, or analytic propositions.) Analytic beliefs are apriori, because knowing how to speak a language makes it unnecessary to consider evidence for them.

A special case of analyticity is logical truth. Suppose you believe that it will either rain or snow and it will not snow, but do not believe that it will rain. Then there is something very wrong with your beliefs, because anyone who understands the meaning of the words ‘and’, ‘not’ and ‘or’ knows that if it will either rain or snow and it will not snow, then it will rain. This is a fact not about the weather but about logic. There are many similar examples. You can know that either all moose are chipmunks or there is a moose that is not a chipmunk, without ever having seen a moose or a chipmunk. In all these cases knowing the meaning of a few words, ‘logical’ words such as ‘and’, ‘not’, ‘or’ and ‘all’, allows you to know that very many beliefs must be true. (Duncan Note: we will cover logic and analytic philosophy later in the course)

All analytic beliefs are apriori. But what about the other way round?

3. Synthetic Apriori

This leads to the idea first proposed by Kant (1724 - 1804) from the book Critique of Pure Reason. Kant famously pointed out that collecting evidence for or against our beliefs is something that itself needs to be guided by beliefs. For example, someone who had no beliefs about distances in space would not be able to begin to use a telescope, or interpret what she saw through it. And someone who had no beliefs about numbers and counting would not be able to make or use any measurements, and so would be unable to understand almost all scientific experiments. So, Kant reasoned, behind our ability to collect evidence through perception for our beliefs, there must be a body of fixed beliefs, which we have to assume in order to get the enterprise of finding and interpreting evidence started. Kant called these beliefs synthetic apriori. Kant’s own list
of synthetic apriori beliefs included the propositions of arithmetic and geometry, the belief that events have causes, the belief that there are laws of nature that we can discover, and the belief that people and physical objects persist through time. We can see how these explain the examples about cause and arithmetic at the beginning of his section. Why should the fact that we have to have some beliefs before we can begin to collect and consider evidence give us any confidence that these beliefs are true? His answer was that they are true because we make them so. They are not true because of the way the world around us is, but because of the way our minds are. Some later philosophers have thought that this was a very deep insight into the relation between thought and reality. Others have thought that it was mistaken. The important point for us is the claim, accepted by most philosophers now, that without some prior beliefs we could not even begin to describe what we perceive. We have to have some beliefs before we consider evidence.


**Questions on Beliefs**

1. Which of the following are a priori beliefs, and which of the following are a posteriori?

   * Vancouver is smaller than Montreal
   * Four orcas and two humpbacks swimming together are six animals.
   * Ottawa is between Montreal and Vancouver.
   * If Vancouver is west of Ottawa, and Montreal is east of Ottawa, then Montreal is east of Vancouver.
   * Vancouver, Ottawa and Montreal are in Canada.

2. Kant came up with (what he thought) were some fixed beliefs common to all people.

   List three of them and come up with two of your own.