Analogue
An analogue is an equivalent or counterpart in an analogy. When President Bush said that "Saddam Hussein is another Hitler" he was claiming that the President of contemporary Iraq is the analogue of the Fuhrer of WWII Germany. Whether such comparisons are strong and reasonable is a matter for logical analysis. What matters here is that Peirce is providing an explanation of a difference between doubt and belief by comparing them to the difference between stimulation of a nerve and our responses to conditioned stimuli. If we stimulate the nerves (say by electric shock or tickling) we get an automatic reaction; e.g. contraction of the muscle. Peirce is comparing doubt to such nerve stimulation, we react reflexively to get rid of it. By contrast, he compares belief to "nervous association" in which a reflex reaction is set up by conditioning or habit. In psychology it is well recognized that these are two very different mechanisms for producing behaviors. What matters here is that Peirce is endeavoring to express how different the effects of doubt and belief on us are. It may be tempting to think of doubt and belief as similar, but opposite, psychological states. Peirce seems to be arguing that they are different kinds of states entirely.

Annihilation
Annihilation is to be wiped completely out of existence. Some people believe that with death, we simply cease to exist. This view is contrasted with various conceptions of an afterlife, such as heaven, hell, and reincarnation.

A Priori
We must be careful here in providing explanation of the concept a priori because this is one of the key terms Peirce employs. Were we to substitute someone else's use of the term, we could risk confusion. A priori reasoning is distinguished from a posteriori reasoning which drawing inferences from observed phenomena, or experience. Many philosophers have held that some truths must be prior to and not dependent on experience. Peirce's examples indicate that when we take beliefs to be demonstrated as true because they are "agreeable to reason" rather than based on experience, we are using the a priori method. An example of the a priori method in practice occurs in the U.S. Declaration of Independence which states; "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty, and the pursuit of Happiness." The authors of this document are not basing their beliefs on observation but upon reasoning alone. Moreover, they hold the truths to be self-evident (i.e. to supply their own evidence).
Assassins
The Assassins were a cult founded by Hasan bin Sabbah in 11th century Persia. Contact with this cult during the crusades brought the word "assassin" into the European languages. The Assassins waged their campaigns for over 200 years against the Turks, Crusaders, rival religious groups, and others by the assassinations of key political figures. Legend has it that followers of Hasan bin Sabbah, the Old Man of the Mountain, were sometimes drugged and carried to a beautiful secret garden in which fountains flowed with wine and honey, lovely women lounged, and every pleasure was catered to. After a night in the garden, the men would be drugged again and brought before the Old man. He explained that he had the power to transport them to "felicity" (paradise) at any time and that if they died serving his commands they would be transported by angels to the garden of pleasure. By these and other means, he was able to command their loyalty completely. Crusaders told stories of meeting with Hasan bin Sabbah in which he would demonstrate his follower's fanaticism by ordering a pair of them to jump to their deaths from the castle. They immediately obeyed. Peirce is using this story to point out how powerful belief can be, as well as how completely our beliefs can determine our actions and lives.

Bacon
Sir Francis Bacon (1561-1626) was an English philosopher, statesman, and scientist. Bacon made an improvement in the process of inductive reasoning that is a fundamental contribution to scientific method. Inductive reasoning, or induction, proceeds from particular instances to the general claims. Induction is based in the assumption that if something is true in a number of observed instances, it is also true unobserved instances of the same kind. Prior to Bacon, logicians used a simple form induction by enumeration. This form was too weak to base knowledge upon. Bacon supplied the method of inferring from the features of the class to which the individual cases belong, then using ongoing observations to correct the inference. Peirce cites Bacon here to emphasize his own commitment to an inductive (i.e. experience-based) philosophy.

Candour
Candour is honesty. Other philosophers have noted, as Peirce here asserts, that experience with the variety of beliefs and practices of the world may lead us to doubt the authority of our own. Interestingly, by invoking candour, Peirce seems to have inserted the value of truth into the study. Since part of the purpose of this essay is to examine the relation of belief and truth, this is a significant development.
Caprice
To act out of caprice is to behave on an impulse or whim. The implication here is that forethought is lacking. In this section Peirce begins by considering the origins of our beliefs. Surely you have beliefs and hold them faithfully (some people are willing to die for their beliefs.) But it is worth considering how you got those particular beliefs in the first place. In some cases you may have inherited them as you grew up. The religious and political beliefs of children often directly mimic the views of their parents. Those early influence may well stay with us to define the whole of our lives. If that is the case, then our strongest beliefs may be the result of chance and our holding to them is not a matter of forethought or even by choice.

Concordance
A concordance is a list of words used in a book or by an author. The listings are usually given with citations to the appropriate passages. In this concordance, however, you do not have to go to a separate list. When reading the work of major writers, be aware that many were produced in cultures and circumstances very different from your own. Some readers find these differences to be obstacles and frustrations. What it is important to keep in mind is that it is possible to improve your understanding of any work by careful attention and interpretation. One reason this is worth doing, is that the practice of understanding others requires you to recognize and act upon your own assumptions. That is will be an advance in your own growth of self-knowledge, which is a perennial aim of philosophy. Stick with it! When you find yourself becoming frustrated or angry with a writer, it is likely that his/her words have struck a sensitive spot in your system of beliefs.

Egypt
Egypt is famous for the pyramids, each of which took decades and tens of thousands of people to produce. Peirce introduces the examples of world architecture (Siam, Egypt, Europe) as the results of the method of authority. Without a strong central authority, such grand scale and long term works could not be produced.

End
An end is a goal or aim. Peirce seems to be saying just the same thing here as he said in the early claim; "the sole object of inquiry is the settlement of opinion."

External Permanency
You may better understand the phrase External permanency by taking it apart. Something External is situated outside, apart, or beyond. A permanency is something with a stable or
continuous existence. Peirce defines the phrase as "something upon which our thinking has no effect." Moreover he says that an external permanency must affect everyone. It will be a constant and common standard of belief; i.e. it is objective. The concept of objective reality takes many forms. Many people assert God as the ultimate external permanency. Others regard ideals such as Justice to have objective and eternal meaning. Pierce goes on to posit "Reals" or "Real things" as the external permanents. (See Reals)

**Europe**
In Europe the strongest examples of grand scale architecture are the cathedrals. The effort and resources that went into building these monoliths is remarkable. The cathedral of Notre-Dame in Paris, for instance, took 100 years to complete. Note that these extraordinary works of civilization are often the products of organized religion. Perice points to religious architecture to support his claim that the method of authority is capable of producing works far greater in scale and complexity than any individual can accomplish. Clearly this method has wielded great power in human cultures.

**Free Trade**
When Peirce published The Fixation of Belief in 1877, a potent political issue waged over the policies of trade with other countries. Many nations imposed tariffs (taxes on imported goods) imposed to protect domestic industries against foreign competition and to achieve a favorable balance of trade. By the late 19th century, tariffs had risen to high rates. An exception was Great Britain's free-trade policy. Proponents of free-trade in the U.S. argued for establishing a similar policy. Peirce is using an example here that his contemporary readers will surely recognize. For the sake of the example, you could substitute any politically charged debate (e.g. abortion, capital punishment, etc.) However, it is worth noting how well the free-trade idea with it's open policy of exchange, connects with the concepts Peirce is dealing with in this essay. The free-trade of goods and the free-exchange of beliefs (the marketplace of ideas) has much in common. (see protection)

**Hindoo**
Practitioners of the Hindu faith, largely in India. Hindu is a major world faith with nearly one billion followers. The Vedas are among the major sacred Hindu texts.
Glossary

The Fixation of Belief
C.S. Peirce

**Ingesta**
Ingest has two common meanings:
(1) to take in food and
(2) to absorb ideas and knowledge.
Peirce gives an example here of a very strange belief; that a person must receive their food 
through a medical feeding tube (stomach pump) or else be damned to hell. There are people who 
have beliefs just as odd. In such cases it is very difficult to persuade them to any other belief.

**Interrogative Form**
The interrogative form is the class of questions. Peirce says that putting a proposition (or claim) 
into a question does not create real doubt, nor does it create any movement in our beliefs. He says 
"there must be a real and living doubt, and without this all discussion is idle." In reading this 
article the best source is your own experience. Can you think of a case of a "real and living 
doubt" that you have dealt with? Can you make yourself doubt any of your beliefs just by asking 
a question about it? This calls into consideration just how far we are capable of affecting our own 
beliefs and how far we are the products of, what Peirce calls, our belief habits.

**Judgement**
Peirce starts by contrasting doubt and judgement. He does not say what kinds of judgements (or doubts) he has in mind. In the next paragraph he contrasts doubt and belief. This indicates that he 
regards judgement and belief to be aspects of the same thing. This observation is important for 
two reasons: (1) it shows how interpretation of a text may be had by comparing parts of the text, 
(2) the word "judgement" has a powerful meaning for many people, even a negative meaning for 
some. "Judgement" sometimes means to set a value on something or someone; e.g. "Judge not 
least thee be judged". There are less volatile forms of judgement however, such as judging a 
distance or using good judgement when buying stocks. We may take Peirce's meaning in the 
widest interpretation here, that to pronounce a judgement is merely to state a belief. Whether that 
judgement has positive value, negative, value, great, or small, is a matter dependent on what the 
belief is.

**Kepler**
Johannes Kepler (1571-1630) was a German astronomer and natural philosopher. He developed 
the three laws of planetary motion now known as Kepler's laws. He was assistant to Danish 
astronomer Tycho Brahe. Kepler used Tycho Brahe's extensive planetary observations to develop 
his laws. Kepler's theory (the proposed laws) holds that the planets have eliptical orbits around
The sun, that the closer to the sun the faster the orbital period (circuit around the sun), and that the squares of the period of the orbit is proportional to the cubes of their mean distances from the sun. This third law is what Peirce describes in this passage. The big difference here is that Kepler established the mathematical mechanics of planetary motion. This stands in contrast to the mystical idea of the music of the spheres (see Celestial Spheres).

Methods
The four methods of fixing belief being:
1. The Method of Tenacity
2. The Method of Authority
3. The A Priori Method
4. The Method of Science
Peirce claims that the Method of Science is unique among these. In one regard he is surely right. In Method of Science we are able to (indeed, required to) test our beliefs. None of the other methods provide for a process of testing. Consider this contrast: in the first two methods we are led to shape our observations in conformance with our beliefs. In the methods of science, however, we are instructed to change our beliefs to fit our observations. What other merits and demerits of these methods pertain is open to discussion.

Monogamy
Monogamy is the social practice in which two people only may be united in marriage. (see polygamy)

Mystics
All through history there are individuals who have expressed a contact or insight with a source of higher truth. Some mystics are religious, some are spiritual, some are methodical, but all lay claim to a form of knowledge that is not available to the senses or reason. Mystical writing has tremendous influence on culture and many people today believe in a mysterious supernatural, spiritual, or abstract reality beyond normal experience.

Object
Object here means the aim or purpose of an effort. Peirce says above that; "the sole object of inquiry is the settlement of opinion." Thus, the only purpose we have for making an inquiry is to settle the matter (by getting rid of any doubts). This is a bold statement since much of intellectual history has considered the object of inquiry to be truth or justice.
Opinion
"Opinion" here is used interchangeably with "belief". We sometimes use the word "opinion" when we have a belief that remains open such as; "this is only my opinion." Though we also use "opinion" in cases where a person's belief is completely solid, such as in an opinion poll. Perhaps Peirce considers a belief that is not entirely settled for us to be open to inquiry and debate -- thus still subject to doubt. You may have encountered people for whom some matters are not open to debate or inquiry at all. For then the matter is settled on the basis of their own belief. Peirce here claims that we are naturally more motivated to reach a state of settled belief than we are to determine the truth of a matter. For he points out that once we reach satisfaction with our belief, we lose interest in pursuing the matter at all. He has a point. As a philosopher I have encountered many people who reject the philosophical analysis and investigation of ideas because they are already "firm in their beliefs and see no reason to go on about it." This is perhaps why so many philosophers in history have been regarded as trouble makers.

Pius Nonus
Pius Nonus (Pius IX) was the Catholic Pope (supreme leader of the church) in the late 1800's when Peirce write The Fixation of Belief. Peirce claims that the method of authority "...has been practiced from the early days of Nunus Pompilius to those of Pius Nonus." That is, from the start of the Roman empire (8th Century B.C.) to the present Roman Catholic Church. Peirce is clearly giving Catholicism as an example of a practice of the method of authority. It is clear that he does not mean the Catholic church to be the only instance of this method. Rather he states; "where there is an aristocracy, or a guild, or any association of a class of men whose interests depend, or are supposed to depend, on certain propositions, there will be inevitably found some traces of this natural product of social feeling."

Polygamy
Polygamy is the social practice which a person has more than one mate. Polygamy is illegal in most of the world, though has been widely practiced at various times by many peoples. Polygamy is still practiced in Muslim countries, some parts of Africa, and Utah.

Numa Pompilius
Numa Pompilius is the second legendary king of early Rome (715-673 B.C.). He is said to have formulated the Roman religious calendar which we still use; (e.g, June is for Juno, the ruler of the gods). Nuna Pompilius founded of nearly all the earliest religious institutions of Rome, esp. the Vestal Virgins, cults of Mars, Jupiter, and Romulus (legendary founder of Rome.) Peirce uses
these figures to indicate the practice of organized religion from the earliest to the present (see Pius Nonus). That is, the method of authority has been in use for most or all of human history.

**Premisses**

Premisses are claims from which we draw conclusions. When part of a logical argument, the premises are also called "reasons" or "evidence." More generally, the premisses are what belief is based on. The interesting question here is what the premises of our most basic beliefs may be. Does there have to be some level at which our reasons come to an end and we simply accept (do not doubt) the bases of our beliefs? If so, this will be the philosophically interesting matter (for this course, anyway): to investigate the foundations of our most cherished beliefs.

**Protectionism**

Protection or protectionism was the opponent position in the free-trade debate (see free-trade). It is interesting here to consider Peirce's selection of this example. I find the protectionist position similar in ways to the method of tenacity. Protectionism seeks to protect domestic markets by discouraging foreign products from getting into the country. Tenacity seeks to protect present beliefs by discouraging alternate ideas from getting into the believer's consciousness. If this interpretation of the example is correct, it is meaningful that Peirce asserts himself a proponent of free-trade. It is certainly valuable to note that in reading the work of a great writer, we should strive not to take things for granted. Most of what a powerful writer produces is deliberate and meaningful.

**Public**

Peirce points out below that an objective reality (external permanency) cannot be restricted to certain individuals. It must be universal if it is to be external to our thought. Some systems of thought rely upon the idea of secret knowledge that is only available to select worth individuals. But Peirce is asserting here that truth cannot be private property. Either there is a public (available to everyone) source of truth, or there is no external permanency (objective reality) at all. Some people do deny the existence of objective reality. On Peirce's analysis they will have to support their beliefs by means of the method of tenacity, authority, or a priori.

**Reals**

Well, here we are up against one of the fundamental issues of all philosophy: what is the relation of thought and reality. Please be aware that opening this issue leads to deeper and deeper investigation. Consider why Peirce raises the issue. He is analyzing various methods by which
we may base our beliefs. The method of science relies upon a particular picture of thought and reality: i.e. that reality consists of Real things that exist external to our thought and that those Real things affect our senses creating perceptions of the world. By studying our perceptions (experience, observation) we can make inferences about the way the world really is. And we can test our inferences by comparing them to new observations. This is a basic description of classic scientific method. The problem remains, however, to provide a basis for believing in the real things (objective reality) in the first place. What method settles that belief? Perice devotes the rest of this section of his essay to that question.

Siam
Present day Thailand is South-East Asia was once known as Siam. Among the most celebrated works of architecture in Thailand are the more than 400 wats, or Buddhist temples, in Bangkok. The most famous of these is Chapel of the Emerald Buddha, completed in 1785. Consider the level of social organization a culture must have to produce so many large-scale public works of art.

Spheres
Celestial spheres are the planets in motion. An early view of planetary motion, as found in Plato, held that the orbits of the planets (which appear to earthly observers as paths across the sky) are regulated by the same principles of musical harmony. This gives planetary motion a mystical order. (see Kepler's theory)

Tar
To smear (a person) with tar and cover with feathers often used punishment for breaking social rules. This does not occur much anymore, but we still say that a person is tarred by a scandal. Tar is very difficult to remove.

Tautology
A tautology is the logical opposite of a contradiction (that helps a lot, eh?) A contradiction is a statement (or set of statements) that is necessarily false because it contradicts itself (i.e. denies what it claims). For instance, "All swans are white and no swans are white" is a contradiction given that we are using the words "swan" in the same way and "white" in the same way here. A tautology is a statement (or set of statements" that is necessarily true because it affirms what it claims. For instance; "All plane triangles are three-sided figures" or "Bachelors are unmarried males." To say that a claim is a tautology often is to point out that it says exactly the same thing
twice. Peirce is saying so about the claim; "We think each one of our beliefs to be true." If to believe something is the same as thinking that it is true, then he is correct. Indeed, it would be odd for anyone to say; "I believe x, but I don't think x is true." It is also important to note that while tautologies are necessarily true, they are also trivial - they do not add any new information. This is why Pierce says the claim; "We think each one of our beliefs to be true" is a mere tautology.

The State
The state is a common phrase for a centrally organized political body, such as a nation (or nation-state). When "the will of the state" acts, we get laws.