1. Introduction

The word *veda* means "knowledge." In the modern world, we use the term "science" to identify the kind of authoritative knowledge upon which human progress is based. To the ancient people of Bharatavarsha (Greater India), the word *veda* had an even more profound import that the word science has for us today. That is because in those days scientific inquiry was not restricted to the world perceived by the physical senses. And the definition of human progress was not restricted to massive technological exploitation of material nature. In Vedic times, the primary focus of science was the eternal, not the temporary; human progress meant the advancement of spiritual awareness yielding the soul's release from the entrapment of material nature, which is temporary and full of ignorance and suffering.

Vedic knowledge is called *apauruseya*, which means it is not knowledge of human invention. Vedic knowledge appeared at the dawn of the cosmos within the heart of Brahma, the lotus-born demigod of creation from whom all the species of life within the universe descend. Brahma imparted this knowledge in the form of *sabda* (spiritual sound) to his immediate sons, who are great sages of higher planetary systems like the Satyaloka, Janaloka and Tapaloka. These sages transmitted the Vedic sabda to disciples all over the universe, including wise men of earth in ancient times. Five thousand years ago the great Vedic authority Krishna Dvaipayana Vyasa compiled the *sabda* into Sanskrit scripture (*sastra*) which collectively is known today as the *Vedas*.

In the India of old, the study of the *Vedas* was the special prerogative of the *brahmanas* (the priestly and intellectual class). There were four degrees of education in Vedic knowledge that corresponded to the four *ashramas* of brahminical culture (the *brahmacari* or student *ashrama*, the *ghastha* or householder *ashrama*, the *vanaprastha* or retired *ashrama* and the *sannyasa* or renounced *ashrama*). The first degree of learning was the memorization of the Vedic *Samhita*, which consists of 20,000 *mantras* (verses) divided into four sections -- *Rg*, *Sama*, *Yajur* and *Atharva* --
that are chanted by priests in glorification of various aspects of the Supreme Being during sacrificial rituals. The second degree was the mastery of the \textit{Brahmana} portion of the \textit{Vedas}, which teaches rituals for fulfillment of duties to family, society, demigods, sages, other living entities and the Supreme Lord. The third degree was the mastery of the \textit{Aranyaka} portion, which prepares the retired householder for complete renunciation. The fourth degree was the mastery of the \textit{Upanisads}, which present the philosophy of the Absolute Truth to persons seeking liberation from birth and death.

The texts studied in the four stages of formal Vedic education are collectively called \textit{sruti-sastra}, "scripture that is to be heard" by the \textit{brahmanas}. But \textit{sruti-sastra} is not all there is to the Vedic literature. \textit{Chandogya Upanisad} 7.1.2 declares that the \textit{Puranas} and \textit{Itihasas} comprise the fifth division of Vedic study. The \textit{Puranas} and \textit{Itihasa} teach the same knowledge as the four \textit{Vedas}, but it is illustrated with extensive historical narrations. The fifth \textit{Veda} is known as \textit{smrti-sastra} ("scripture that must be remembered"). \textit{Smrti-sastra} study was permitted to non-\textit{brahmanas}.

Traditionally, six schools of thought propagated Vedic wisdom, each from a different philosophical perspective. Each of these perspectives or \textit{darshanas} is associated with a famous sage who is the author of a \textit{sutra} (code) expressing the essence of his \textit{darshana}. Vyasa’s \textit{Vedanta-sutra}, which carefully examines and judges the six systems of Vedic philosophy (as well as other philosophies), forms the third great body of Vedic literature after the \textit{sruti-sastra} and \textit{smrti-sastra}. This is known as the \textit{nyaya-sastra}, "scripture of philosophical disputation."

The \textit{sad-darshana} (six philosophical views) are \textit{nyaya} (logic), \textit{vaisesika} (atomic theory), \textit{sankhya} (analysis of matter and spirit), \textit{yoga} (the discipline of self-realization), \textit{karma-mimamsa} (science of fruitive work) and \textit{vedanta} (science of God realization).

The \textit{sad-darshanas} are termed \textit{astika} philosophies (from \textit{asti}, or "it is so"), because they all acknowledge the \textit{Veda} as authoritative, as opposed to the \textit{nastika} philosophies of the Carvakas, Buddhists and Jains (\textit{nasti}, "it is not so"), who reject the \textit{Vedas}. Beginning with \textit{nyaya}, each of the \textit{sad-darshanas} in their own turn presents a more developed and comprehensive explanation of the aspects of Vedic knowledge. \textit{Nyaya} sets up the rules of philosophical debate and identifies the basic subjects under discussion: the physical world, the soul, God and liberation. \textit{Vaisesika} engages the method of \textit{nyaya} or logic in a deeper analysis of the predicament of material existence by showing that the visible material forms to which we are all so attached ultimately break down into invisible atoms. \textit{Sankhya} develops this analytical process further to help the soul become aloof to matter. Through \textit{yoga}, the soul awakens its innate spiritual vision to see itself beyond the body. \textit{Karma-mimamsa} directs the soul to the goals of Vedic ritualism. \textit{Vedanta} focuses on the supreme spiritual goal taught in the \textit{Upanisads}.

Originally, the six \textit{darshanas} were departments of study in a unified understanding of the \textit{Veda}, comparable to the faculties of a modern university. But with the onset of Kali-yuga (the Age of Quarrel), the scholars of the \textit{darshanas} became divided and contentious. Some even misrepresented Vedic philosophy for their own selfish ends. For instance, \textit{karma-mimamsa} (which by 500 BC had become the foremost
philosophy of the brahmana class) was misused by bloodthirsty priests to justify their mass slaughter of animals in Vedic sacrifices. But the unexpected rise of a novel non-Vedic religion challenged the power of karma-mimamsa. This new religion was Buddhism. By 250 BC, the influence of karma-mimamsa and other darshanas had weakened considerably. When King Ashoka instituted the Buddha’s doctrine as the state philosophy of his empire, many brahmanas abandoned Vedic scholarship to learn and teach nastika concepts of ahimsa (nonviolence) and sunyata (voidism).

Buddhism in its turn was eclipsed by the teachings of the Vedantist Shankara, who revived the Vedic culture all over India in the seventh century after Christ. But Shankara’s special formulation of Vedanta was itself influenced by Buddhism and is not truly representative of the original vedanta-darshana taught by Vyasa (the last chapter will take this up in greater detail).

After Shankara, vedanta was refined by the schools of great teachers (acaryas) like Ramanuja and Madhva. Having shed the baggage of Shankara’s crypto-Buddhism, Vedanta philosophers soared to heights of dialectical sophistication that has been much appreciated by many Western intellectuals.

It is through the dialectics of the major schools (sampradayas) of Vedanta that students can best observe the six systems of Vedic philosophy "in action." In dialectical Vedanta, arguments are taken from nyaya, vaisesika, etc. to 1) demonstrate that Vedanta is the most comprehensive of all the darshanas, and 2) to clarify the points of controversy that arise between the different schools of Vedanta itself. Vedantic dialectics are represented in the bhasyas (commentaries) of the acaryas and the tikas (subcommentaries) of their disciples. All possible philosophical positions, including some bearing remarkable resemblance to the ideas of European philosophers, are therein proposed, analyzed and refuted.

The study of the six systems of Vedic philosophy is itself a form of yoga: jnana-yoga, the yoga of theoretical knowledge. But from jnana one must come to vijnana, practical realization of the ultimate truth. The sad-darshana are six branches of theoretical dialectics (sastratha) that twist and turn from thesis (purvapaksa) to antithesis (uttarapaksa) to synthesis (siddhanta) like the gnarled branches of a tree. But the ways of philosophical disputation do not themselves add up to the Absolute Truth. The Absolute Truth, being transcendental, is only indirectly framed in the branches of jnana, like the rising full moon may be framed by the branches of a tree. A friend who wishes us to see the moon may first draw our attention to that tree. This may be compared to the indirect or theoretical stage of knowledge. Seeing the moon is vijnana.

There is a straightforward path to vijnana. It is explained in the Mahabharata, Vana-parva 313.117: "Dry arguments are inconclusive. Philosophers are known for their differences of opinion. Study of the branches of the Vedas will not bring one to the correct understanding of dharma. The truth is hidden in the heart of a self-realized person. Therefore one should follow the path of such great souls."

The Sanskrit word acarya is derived from acara, "behavior." The great teachers of Vedanta, the acaryas, were much more than just theoreticians: by their exemplary God-conscious behavior they marked out the path of practical transcendental
realization. This is the path from \textit{jnana} to \textit{vijnana}. In India, the \textit{sampradayas} (schools of \textit{Vedanta}) established by the great \textit{acaryas} are bastions of \textit{sadacara}, spiritual life. Students who enter these schools cultivate divine qualities -- cleanliness, austerity, truthfulness and mercy -- without which divine knowledge cannot manifest. Cleanliness is destroyed by illicit sex, austerity is destroyed by intoxication, truthfulness is destroyed by gambling and mercy is destroyed by meat-eating; one who cannot restrain himself from these bad habits has no business calling himself a Vedantist or a \textit{yogi}. There is much enthusiasm today for theoretical \textit{yoga} and mysticism, but until one follows the path of \textit{sadacara} set down by the \textit{acaryas}, one’s inquiry into Indian spirituality will be like like licking the glass of a sealed jar of honey: the higher taste (\textit{param drstva}) will be missed.

The Brahma-Madhva-Gaudiya Sampradaya first introduced genuine \textit{Vedanta} theory and practice in the Western world in 1966, when \textit{acarya} Sri Srimad A.C. Bhaktivedanta Swami Prabhupada opened the first branch of the International Society for Krishna Consciousness (ISKCON) in New York. ISKCON now has centers world-wide. This work is but an introduction to Vedic philosophy; those who wish to practice this philosophy and realize the goal of \textit{Vedanta} -- the Form of the Supreme Eternal Being -- should contact ISKCON.

\textbf{Common Features of the Six Systems of Vedic Philosophy}

It has already been explained that the \textit{sad-darshana} accept the authority of the \textit{Vedas}, and thus they are classified as \textit{astika} philosophies. Each \textit{darshana} was codified by a great Vedic sage -- \textit{nyaya} by Gautama, \textit{vaiesika} by Kanada, \textit{sankhya} by Kapila, \textit{yoga} by Patanjali, \textit{karma-mimamsa} by Jaimini and \textit{vedanta} by Vyasa. Because the sages drew their arguments from the same source -- the Vedic \textit{sastra} -- their \textit{darshanas} share many of the same basic philosophical principles, for instance: the self is understood to be an individual spiritual being of the nature of eternal consciousness; the self acquires a succession of physical bodies through reincarnation under the law of \textit{karma}; the self suffers because of its contact with matter; the end of suffering is the goal of philosophy. A person who adheres to any one of the six systems observes the same \textit{sadhana} as the followers of other systems. \textit{Sadhana} consists of the basic practices of purification and self-control that is the foundation of brahminical culture.

The major philosophical differences among the systems will be summed up in the final chapter on \textit{Vedanta}.

\textbf{2. Nyaya: The Philosophy of Logic and Reasoning}

The \textit{nyaya} system of philosophy was established by the sage Gautama. As he was also known as Aksapada, this system is also sometimes referred to as the \textit{aksapada} system. \textit{Nyaya} philosophy is primarily concerned with the conditions of correct knowledge and the means of receiving this knowledge. \textit{Nyaya} is predominantly based on reasoning and logic and therefore is also known as \textit{Nyaya Vidya} or \textit{Tarka Sastra} -- "the science of logic and reasoning." Because this system analyzes the
nature and source of knowledge and its validity and nonvalidity, it is also referred to as *anviksiki*, which means "the science of critical study." Using systematic reasoning, this school of philosophy attempts to discriminate valid knowledge from invalid knowledge.

This philosophy asserts that obtaining valid knowledge of the external world and its relationship with the mind and self is the only way to attain liberation. If one masters the logical techniques of reasoning and assiduously applies these in his daily life, he will rid himself of all suffering. Thus, the methods and conditions of determining true knowledge are not the final goal of *nyaya* philosophy; logical criticism is viewed only as an instrument that enables one to discriminate valid from invalid knowledge. The ultimate goal of *nyaya* philosophy, like that of the other systems of Indian philosophy, is liberation -- the absolute cessation of pain and suffering. *Nyaya* is a philosophy of life, even though it is mainly concerned with the study of logic and epistemology.

All six schools of Vedic philosophy aim to describe the nature of the external world and its relationship to the individual, to go beyond the world of appearances to ultimate Reality, and to describe the goal of life and the means for attaining this goal. In this attempt, the six philosophies divide their course of study into two major categories: the study of unmanifested reality, and the study of manifest reality. In *nyaya* philosophy, both aspects of reality are divided into sixteen major divisions, called *padarthas* (see chart below). These sixteen philosophical divisions are: *pramana*, the sources of knowledge; *prameya*, the object of knowledge; *samsaya*, doubt or the state of uncertainty; *prayojana*, the aim; *drstanta*, example; *siddhanta*, doctrine; *ayayava*, the constituents of inference; *tarka*, hypothetical argument; *nirnaya*, conclusion; *badha*, discussion; *jalpa*, wrangling; *vitanda*, irrational argument; *hetvabhasa*, specious reasoning; *chala*, unfair reply; *jati*, generality based on a false analogy; and *nirgranthana*, the grounds for defeat. The subjects discussed under *pramana*, the source of knowledge, are the most important and the most thoroughly and profoundly expounded of all the divisions. For this reason, *pramana* will be explained in detail after the other fifteen divisions of studying reality have been described.

**Nyaya's Sixteen Divisions (Padarthas) of Studying Reality**

- **I. Pramana**, four sources of valid knowledge (prama):
  - 1. Perception (*pratyaksa*)
    - Ordinary (*laukika*)
    - Indeterminate (*nirvikalpa*)
    - Extraordinary (*alaukika*)
      - Classes (*samanyalaksana*)
      - Association (*jnanalaksana*)
      - Intuition (*yogaja*)
  - 2. Inference (*anumana*)
    - Statements (*pratijna*)
    - Reason (*hetu*)
    - Example (*udaharana*)
    - Universal proposition (*upanaya*)
    - Conclusion (*nigamana*)
  - 3. Comparison (*upamana*)
  - 4. Testimony (*sabda*)
- **II. Prameya**, twelve objects of knowledge:
The Object of Knowledge. Prameya may be translated as "that which is knowable," or "the object of true knowledge." That which is the object of cognition is prameya, and whatever is comprehended or cognized by buddhi is categorized into the twelve objects of cognition known as the prameyas. These twelve divisions are: atman, the self; sarira, the body -- the abode of the experience of pain and pleasure that is the seat of all organic activities; indriyas, the five senses -- smell, taste, sight, touch and hearing -- which contact external objects and transmit the experience to the mind; artha, the objects of the senses; buddhi, cognition; manas, the mind -- the internal sense that is concerned with the perception of pleasure, pain, and all other internal experiences and that, according to nyaya, limits cognition to time and space. The mind is compared to an atom (not the atom of modern physics; see vaisesika philosophy) because it is minute, everlasting, individual, and all-pervading; pravrtti, activity -- vocal, mental, and physical; dosa, mental defects that include attachment (raga), hatred (dvesa), and infatuation or delusion (moha); pretyabhava, rebirth or life after death; phala, the fruits or results of actions experienced as pain or pleasure; dukha, suffering -- the bitter or undesired experiences of mind; and apavarga, liberation or complete cessation of all suffering without any possibility of its reappearance.

According to nyaya philosophy the goal of life is to understand these twelve aspects of reality, the prameyas, as they actually are. Bondage is born of the isunderstanding of these twelve knowable objects, and one obtains freedom from bondage when he attains the correct knowledge of these twelve aspects of reality. Most of the time, however, this knowledge remains incomplete, and the means for attaining an integral comprehension of reality is not learned, so defective or invalid knowledge is maintained. In order to cast off this invalid knowledge, nyaya provides a profound method for determining valid knowledge. This is studies under the category of
pramana, which will be discussed following brief descriptions of the other fourteen components in the nyaya process for attaining valid knowledge.

**Doubt.** Samsaya means "doubt." It is the state in which the mind wavers between conflicting views regarding a single object. In a state of doubt, there are at least two alternative views, neither of which can be determined to lead to a state of certainty. Samsaya is not certain knowledge; neither is it a mere reflection of knowledge; nor is it invalid knowledge. It is a positive state of cognition, but the cognition is split in two and does not provide any definite conclusions. For example, in the dark of the night a person may be looking at a plant, but because he cannot see clearly he does not recognize the plant for what it is and falsely perceives it as a man. However, if it would be logically impossible for a man to be present at that place, then the mind does not accept that the figure is a man. The mind becomes confused at that moment, questions whether it is a man or a plant, and cannot come to a decision about what it actually is. Thus, doubt is a product of a confused state of mind that is not able to perceive with clarity.

**Aim.** The word prayojana means "aim." Without an aim or a target, no one can perform any action. It does not matter whether that aim is fully understood or just presumed. One acts either to achieve desirable objects or to get rid of undesirable ones; these desirable and undesirable objects that motivate one's activities are known as prayojana.

**Example.** Drstanta is the use of an example to illustrate a common fact and establish an argument. This is a very important aspect of reasoning, for frequently a useful example can be accepted by both parties involved in a discussion without any disputation or difference of opinion. For instance, when one argues that there must be fire because there is smoke, he may use the example of smoke in the kitchen to confirm the permanent relationship between fire and smoke. The relationship between fire and smoke in the kitchen is a common occurrence and may be readily accepted by both parties. Therefore, the example of the kitchen for confirming the existence of fire inferred from the presence of smoke is potentially very helpful.

**Doctrine.** Siddhanta means "doctrine." It is an axiomatic postulate that is accepted as the undisputed truth and that serves as the foundation for the entire theory of a particular system of philosophy. This accepted truth might be derived either from direct experience or from reasoning and logic. For example, it is the doctrine of nyaya philosophy that there is a God (nimitta karana) who is the operative cause of the universe and who organizes and regulates the atoms.

**Constituents of inference.** The term avayaya literally means "constituents" or "parts," and in this context it refers to the constituents of inference. This is an important topic in nyaya philosophy because nyaya strongly emphasizes describing the minute complexities of the pramanas, the sources or methods of receiving correct knowledge. Among these methods, inference is the most important source of correct knowledge, and nyaya therefore provides a technical method to test the validity of inference. If an inference contains five necessary constituents, then it can give correct knowledge. These five requisite components of inference are pratijña (statements); hetu (reason); udaharana (example); upanaya (universal proposition);
and nigamana (conclusion). These are discussed later in this chapter in the section on inference.

**Hypothetical argument.** Tarka may be translated as "hypothetical argument." All the systems of Indian philosophy agree that it is simply the mind's jabbering that creates confusion and misunderstanding within and without. Because the mind is clouded by its own modifications, it is very important to wash out these confusions before attempting to understand something solely through the mind. For this purpose, nyaya philosophy discusses the possible problems of the mind and clarifies its confusions, using such processes as tarka. Tarka is the process of questioning and cross-questioning that leads to a particular conclusion. It is a form of supposition that can be used as an aid to the attainment of valid knowledge. Tarka can become a great instrument for analyzing a common statement and for discriminating valid knowledge from invalid knowledge.

**Conclusion.** Nimaya, conclusion, is certain knowledge that is attained by using legitimate means. If the mind has doubts concerning the correctness or validity of a conclusion it has drawn, then employing the process of tarka (hypothetical argument) can help to resolve those doubts. But it is not always necessary for a conclusion to pass through a doubtful state. It may be indubitably perceived, either through direct perception, inference, testimony, or intuition. Nimaya is this ascertainment of assured truth about something that is attained by means of recognized and legitimate sources of knowledge.

**Discussion.** Badha, discussion, is a kind of debate between two parties -- the exponent and the opponent -- on a particular subject. Each party tries to establish its own position and to refute that of the other, arguing against any theory propounded by the other. Both, however, are trying to arrive at the truth by applying the methods of reasoning and logic. This is an effective and efficient way to reach valid knowledge if both parties are honest and free from prejudices.

**Wrangling.** Jalpa, or wrangling, is the process by which the exponent and opponent both try to attain victory over the other without making an honest attempt to come to the truth; there is an involvement of ego instead of a search for knowledge. Jalpa contains all the characteristics of a valid debate except that of aiming to discover truth. It is that type of discussion in which each party has a prejudice for his own view and thus tries to gather all possible arguments in his own favor. Lawyers sometimes apply this method to win their cases in court.

**Irrational reasoning.** Vitanda is irrational reasoning. Specifically, it is argumentation that is aimed exclusively at refuting or destroying an antagonist's position and that is not at all concerned with establishing or defending one's own position. It is mere destructive criticism of the views of one's opponent. Whereas in wrangling both the exponent and opponent try to establish their own position, in irrational reasoning either or both tries to refute the other's position instead of establishing his own. This usually occurs when one or both parties realize that his own case is weak and that he cannot defend his point of view. Consequently, he irrationally attacks the other's case with destructive intent.
Specious reasoning. Hetvabhasa means "irrational argument." It is reasoning that appears to be valid but is really unfounded. This specious reasoning is a fallacy of inference, and it is therefore discussed later in this chapter in the section on inference.

Unfair reply. Chala means "unfair reply." Here it is used to designate a statement that is meant to cheat or to fool someone. In unfair reply one takes a word or phrase that has been used in a particular sense, pretends to understand it in a sense other than that which was intended, and then denies the truth of this deliberate misinterpretation of the original speaker's words. For example, suppose someone's name is Bizarre, and in referring to this person, someone says, "He is Bizarre." If the listener knowingly misconstrues this statement and replies, "He is not bizarre; he is just a common ordinary man," then that person is using chala.

Generality based on a false analogy. Jati means generality, but as used here, it is a technical term used to describe a debate in which an unfair reply or conclusion is based on a false analogy. Suppose, for example, that someone is arguing that sound is noneternal because it is an effect of a certain cause, just as a pot is produced from clay. But another argues that sound must be eternal because it is nonmaterial, like the sky. This counter argument of trying to prove the eternity of sound by comparing it with the nonmaterial sky is fallacious, because there is not necessarily a universal relationship between the nonmaterial and the eternal. (In the nyaya system itself, sound is considered to be a noneternal quality because it is produced and can be destroyed. Some other systems, however, do not agree with this view.)

Grounds for defeat. Nigrahasthana may be translated as "the grounds on which a person is defeated in his argument." When a proponent misunderstands his own or his opponent's premises and their implications, then he becomes helpless and must eventually admit his defeat in the debate. The point at which he accepts his defeat is called nigrahasthana.

Pramana -- The Sources of Valid Knowledge

Pramana is that through which or by which the prama (valid knowledge) is received. It is the last of nyaya's philosophical divisions to be discussed. There are four distinct fountains of correct knowledge. These four pramanas are: perception (pratyaksa); inference (anumana); comparison (upamana); and testimony (sabda). Before discussing these sources of knowledge, the nature or definition of knowledge should first be examined and the method for distinguishing correct knowledge from false knowledge should be determined.

In nyaya philosophy, knowledge is divided into two major categories, anubhava (experiential knowledge) and smrti (memory). Experiential knowledge is received through the four pramanas mentioned above -- perception, inference, comparison, and testimony. The second type of knowledge, that which is based on memory, is derived from the storehouse of one's own mind, but ultimately these memories also depend on experiential knowledge because no one can remember something that he has not experienced. During the process of remembering, a memory is called up from its storehouse and is then received as knowledge of an object. These two major
categories of knowledge can be divided into two parts: valid and invalid. In the language of nyaya philosophy, valid experiential knowledge is called prama, and nonvalid experiential knowledge is called aprama. Prama can be received through perception, inference, comparison, and testimony; therefore there are four types of valid knowledge based on these four means. Aprama is divided into doubt (samsaya), faulty cognition (bhrama or viparyaya), and hypothetical argument (tarka). Certain and unerring cognition (such as the visual perception of a chair) is valid knowledge because the knowledge is presented directly to the senses as it really is. Memory is not original knowledge because it is not experiential; it is a mere reproduction of experiential knowledge. Knowledge based on memory may be either valid or invalid, depending on the correctness of the recollection of the experiential knowledge that occurred in the past. A doubtful cognition cannot be called valid (prama) because it is not definite knowledge. Faulty cognition likewise cannot be pramana because it is not true to the nature of its object. Tarka (hypothetical argument) cannot be called prama because in itself it is not knowledge. Although it may help in drawing some conclusions about a fact, it is only a means of attaining knowledge.

According to nyaya philosophy true knowledge is that which corresponds to the nature of its object; otherwise the knowledge is false. To perceive a thing in its true nature is true knowledge. For example, the knowledge of a red rose is true if the rose is really red, but the knowledge of a red rose as white is not true because the rose is not white. How can one know if the rose is truly red and not white? How is it possible to prove the validity or falsity of knowledge? Nyaya philosophy says that the validity or invalidity of knowledge depends on its correspondence or non-correspondence to the facts. For example, if one wants to have correct knowledge of sugar, one tastes it. If there is some powdery white crystal in the kitchen and one puts a pinch of it in his mouth thinking that it is sugar, he will be surprised and disappointed if he finds that it is salty and not sweet. But he will have certain knowledge that what he had thought to be sugar is instead salt. True knowledge leads a person to successful practical activity, while false knowledge makes one helpless and leads to failure and disappointment.

Perception

As mentioned earlier, according to nyaya there are four sources of valid experiential knowledge or prama -- perception, inference, comparison, and testimony -- among which perception is foremost. Most people believe that whatever is experienced through perception must be true, and they do not further test the data that are received via the senses. Nyaya philosophy, however, is very critical in this respect and makes a thorough examination of perception.

Perception is knowledge produced by the contact of the senses with the objects of the world. For example, one has perceptual knowledge of a table when a table comes in contact with the eyes. To be considered valid, the contact of the senses with their objects must be clear and doubtless. The perception of something a long distance away as being either a bush or a bear is a doubtful and indefinite cognition and is, therefore, not true perception. Mistakenly perceiving a rope as a snake may be neither doubtful nor indefinite, but it is a false and therefore invalid perception.
Nyaya philosophy has several different systems of classification of perception. According to the first kind of classification, there are two types of perceptions: laukika (ordinary) and alaukika (extraordinary). When a perception is derived from direct contact with a sense object, that is ordinary perception. When the object is not directly present to the senses but is conveyed to the senses through unusual modes, then that perception is called alaukika -- extraordinary. Modes of perception are either external (bahya) or internal (manasa). In external perception, any or all of the faculties of sight, hearing, touch, taste, and smell are involved in bringing the object to the mind. Thus, there are five kinds of external perceptions (bahya): visual, auditory, tactile, gustatory, and olfactory. The five senses of hearing, touching, seeing, tasting, and smelling are all gross senses. While mind is the subtle sixth sense. Mind is the internal faculty that perceives the qualities of soul such as desire, aversion, pleasure, pain, and cognition.

In nyaya philosophy, ordinary perception (laukika) is either indeterminate (nirvikalpa) or determinate (savikalpa). Indeterminate perception is the primary cognition of a thing before judgment is used to specify diverse characteristics. For example, in the first glance at a table, one perceives the mere existence of the table without comprehending its color, shape, and other specific characteristics; one perceives only a general appearance without details. Only upon further inspection does one recognize that it is, say, a round wooden table with a drop leaf. This determinate perception is the cognition of an object that registers some definite characteristics about it. Determinate perception is always preceded by indeterminate perception, and determinate perception is always valid knowledge because it is definite and explicit.

Nyaya claims that there are three kinds of extraordinary (alaukika) perceptions: perception of classes (samanya laksana); perception based on association (jnana laksana); and intuitive perception (yogaja). The realization that all people are mortal is an instance of the external perception of classes (samanya laksana). How does one know that all people are mortal? One cannot come to this realization by ordinary perception because the mortality of all people in all times cannot be physically perceived by the senses. But because a person is never perceived without his personhood -- that is, the class essence or universality all human beings share -- then a conclusion can be made based on that essence. A person is known as a person because of the presence of personhood in him. This direct perception of personhood is the medium through which all people, or the class of people, are perceived. To perceive personhood means to perceive all people as individuals in which this characteristic resides. The perception of all people is due to the perception of the universality of humanity in all people. Therefore, this type of knowledge is called the extraordinary perception of classes.

A different type of extraordinary perception -- jnana laksana (association) -- is involved when one says that something looks delicious, or that a block of ice looks cold, or that a stone looks hard. These assertions imply that the taste of food, the coldness of ice, and the hardness of stone can be perceived by the eyes. But how can the eyes perceive the qualities of taste and touch? Nyaya says that the past experience of touch and taste are so closely associated with the visual appearance of the causative agents of those experiences that whenever these sources come in contact with the eyes they bring about the perception of taste and touch.
simultaneously with that of their color. This present perception of taste and touch due to the revived past knowledge of the color of the food, ice, or stone is called jnana lakṣana -- perception based on association. This type of knowledge is extraordinary because it is conveyed by a sense organ that ordinarily is not capable of perceiving that type of knowledge. Because the mind incorporates previously associated experiences, it is able to perceive such knowledge.

The third kind of extraordinary perception is called yogaja, the knowledge born of yoga practices. It is intuitive knowledge that never depends on sense-object contact and is never false; it is perceived after the mind is cleansed through yogic practices. This knowledge from within is divided into two categories, depending on the degree of perfection of yogi attainments. Those who have completed their inward journey and have attained spiritual perfection, who perceive intuitive knowledge of all objects constantly and spontaneously, are called yukta yogins. Those who are still on the path of the spiritual journey, for whom concentration and other auxiliary conditions are required to attain an intuitive knowledge, are called yunjan yogins.

**Inference**

Nyaya philosophy provides a detailed and systematic description of inference. Inference is the process of knowing something not by means of contact between the senses and the objects of the world and not by observation but rather through the medium of a sign, or linga, that is invariably related to it. Inference involves the process of analyzing memories, correlations, and uncontaminated arguments. There is a systematic method for testing the validity of inferential knowledge, for there are always some inseparable constituents to an inference, and if any of these parts are missing or if there is any defect in the parts, then the knowledge inferred is invalid.

The Sanskrit word for inference is anumana, and may be defined as "the cognition or knowledge that follows from some other knowledge." Two examples are: "The hill is on fire because there is smoke on the hill, and where there is smoke there is fire," and "John is mortal because he is a man, and all men are mortal." In the first example, we perceive smoke on the hill and arrive at the knowledge of the existence of fire on the hill on the basis of our previous knowledge of the universal relationship between smoke and fire. In the second example, we begin with the perception of a man, John, which inspires the knowledge of the mortality of John based on our previous knowledge of the universal relationship between men and mortality. Thus, it is apparent that inference is a process of reasoning in which one passes through certain necessary stages to reach a conclusion, which is called inferential knowledge. The necessary stages are the conditions for a valid inference. In the process of inference, one reaches a conclusion regarding a particular fact through the knowledge of a sign and of the sign's universal relationship to the conclusion.

In the example of the inference of fire on a hill, one ascertains the presence of the unperceived fire on the hill through the perception of the smoke on the hill, because one already has the knowledge of the universal relationship between smoke and fire. A primary condition of this inference is the knowledge of smoke on the hill; this part of the inferential process is called linga, or sign. Next arises the awareness of the universal relationship between smoke and fire based on past observations; this is
known as vyapti. As a result of this, knowledge of the existence of the unperceived fire on the hill arises. This stage is called nirmaya or conclusion. In the terminology of logic, the hill is the minor term pakṣa) in this inference because the hill is the subject under consideration. Fire is the major term (sadhya) because this is what we want to prove in relation to the hill. The presence of smoke on the hill is the middle term (linga) because it is the sign that indicates the presence of fire. This middle term is also called hetu or sadhana, meaning "the reason or grounds for inference."

Three parts of inference. Thus, an inference contains three parts: the minor term (pakṣa), the major term (sadhya), and the middle term (hetu or linga). In the process of inference, the first step is the apprehension of smoke (hetu) on the hill (pakṣa); the second step is the recollection of the universal relationship between smoke and fire (hetu and sadhya); and the third step is the cognition of fire (sadhya). When used as a formal statement or verbal expression designed to convince others, however, the structure of inference is changed. In stating an inferential verbal expression for others, the first step will be the predication of the major term in relation to the minor term: "There is fire on the hill." The second step will be the formation of the middle term in relation to the minor term: "There is visible smoke on the hill." The third step will be the formation of the middle term in its universal or invariable relationship with the major term: "Where there's smoke, there's fire." In this last step it is sometimes helpful to use a specific example to confirm the relationship between the middle term and major term. For instance, "Where there's smoke there's fire, as in the kitchen."

Thus, inference may be said to be a syllogism consisting of at least three categorical premises. But when one is analyzing the whole process of an inference, and especially when one is using inference to prove or demonstrate something, then it is necessary to state the inference in a systematic and comprehensive chain of arguments. One must then state a syllogism in the form of five premises. These five premises (avayavas) that constitute a valid inference are pratijñā (fact); hetu (reasons); udaharana (example); upanaya (application); and nigamana (conclusion). Here is an example: (1) John is mortal (fact); (2) Because he is a man (reason); (3) All men are mortal -- for example, Napoleon, Lincoln, Socrates, and so on (example); (4) John is a man (application); (5) Therefore John is mortal (conclusion). The first premise states a positive fact. The second premise states the reason for this assertion. The third premise then confirms the relationship between the reason for the assertion and the asserted fact itself as supported by a well-known example. The fourth constituent of the syllogism represents the application of the universal proposition to the present case. The fifth part, or conclusion, is drawn from the preceding four parts.

To gain a proper understanding of the workings of logic, it is necessary to examine more closely how a systematic syllogism functions. For this purpose, the following example may be reanalyzed. "There is fire on the hill because there is smoke, and where there is smoke, there is fire." As was previously discussed, fire is the major term, hill is the minor term, and smoke is the middle term. The middle term (smoke) is so-called because, on the one hand, it is connected to the minor term (hill), and, on the other hand, it is universally related to the major term (fire). This middle term is also called reason or grounds since it is because of its perception that the major term is inferred. Thus, an inference has two conditions: the knowledge of the middle term must exist in the minor term; and a relationship must exist between the middle and
the major terms. It is not possible to realize the existence of fire on the hill as a conclusion based on inferential reasoning if the invariable concomitance between the middle and major terms is not established. This invariable concomitance between these two terms of an inference is called vyapti, the logical ground for inference. Concomitance guarantees the validity of the conclusion; the validity or invalidity of an inference depends on the validity or invalidity of vyapti. Therefore, nyaya philosophy goes into great detail concerning the nature of concomitance and the fallacies related to it.

Logical ground for inference. Vyapti, meaning "the state of pervasiveness," implies both that which pervades and that which is pervaded. For example, in the inference of fire and smoke, smoke is the pervaded and fire is the pervader. Here smoke is always accompanied by fire -- wherever there is smoke, there will also be fire. The reverse, however, is not necessarily true: it is possible to have fire without smoke -- for example, a Bunsen burner. But there are examples in which both the pervader and the pervaded coexist permanently -- for example, fire and heat. There are, therefore, two kinds of concomitance: equivalent and nonequivalent. Nonequivalent concomitance (asamavyapti) is an invariable concomitance between two unequal entities (such as smoke and fire). It has already been shown that in this type of concomitance, one entity may be inferred from the other, but not vice versa. Equivalent vyapti (samuvyapti) is an invariable concomitance between two coexistent terms, either of which can be inferred from the other. For example, a chair is a nameable thing because a chair is knowable, and whatever is knowable, is nameable. Here nameable and knowable can both be inferred from each other.

Concomitance denotes a relationship of coexistence (sahacarla). But not every instance of coexistence is an example of concomitance. Fire, for example, often coexists with smoke, yet it may exist without smoke. The coexistent relationship of fire and smoke depends on certain conditions -- temperature and wetness, for instance. The condition on which the relation of coexistence depends is called upadhi, and for an inference to be valid, the relation between the middle and major terms of a syllogism must be independent of any and all conditions. In other words, a valid concomitance represents an invariable and unconditional concomitant relation (nitya anaupadika sambandha) between the middle and major terms of a syllogism.

But how does one know that a relation is invariable and unconditional? Vedantins reply that concomitance is established by the uncontradicted experiences of the relationships between two things. But according to nyaya, concomitance is established through the perception of classes (samanya laksana perception), which has been discussed earlier in this chapter in the section on extraordinary perceptions. Actually, the nyaya method of inference uses inductive reasoning; that is, it draws a particular conclusion on the grounds of a general and universally known truth. The universal truth is considered to fall within the range of vyapti. In nyaya, there are three types of inductive analysis, or generalization. The first is anvaya, or uniform agreement in presence. This type of inductive process arises from observing a relationship in which if one constituent is present, then in every instance the other constituent is also present -- for example, wherever there is smoke there is fire. The second type of inductive analysis is the obverse of the first, and is called uniform agreement in absence (vyatireka). In this method, a negative universal relationship or invariable concomitance is observed -- for example, wherever there is no fire, there is
no smoke. The third kind of inductive process is a combination of the first and second methods. In this method, known as uniform agreement in both presence and absence (anvaya-vyatireka or vyabhicaragraha), both constituents of a relationship are always found together; neither is ever present without the other. From this, it is induced that there must exist a natural relationship of invariable concomitance between them.

These three methods of generalization demonstrate a systematic technique for inductive reasoning. The most crucial concern, however, in any systematic inference is how to make certain that concomitance, the logical basis for the inference, is valid - - that is, free from limiting conditions (upadhis). This process of insuring that vyaptis are free from all vitiating conditions is called upadhinirasa. One way of insuring this is by the repeated observation of both constituents of a relationship under all possible circumstances to make certain that the relationship is in fact invariable. Another way is to employ hypothetical critical argumentation or tarka. But nyaya places the greatest emphasis on samanya laksana -- the perception of classes -- as the major means for insuring the validity of vyaptis.

Classifications of inference. Nyaya provides three general classification systems for inference. The first classification system is based on psychological grounds; the second is based on the nature of vyapti or the universal relationship between the middle and major terms; and the third is based on the logical construction of the inference.

According to the first system of classification, there are two kinds of inference: svartha, meaning "for oneself," and parartha, meaning "for others." In svartha, the purpose of the inference is for one to gain correct knowledge by oneself and for himself. In this kind of inference, the whole process of reasoning is internal -- one employs systematic logical reasoning to protect oneself from confusion and doubt and to arrive at correct inferential knowledge. In parartha, on the other hand, the inference is meant for others. Here someone is trying to prove the truth of his view. For instance, a man who is convinced of the existence of fire on a hill would use parartha when attempting to convince others of the fire's existence.

The second classification system divides inferences into three categories: purvavat, sesavat, and sanmanyatodrsta. Both purvavat and sesavat inferences display causal uniformity between the middle and major terms, while sanmanyatodrsta inferences exhibit non-causal uniformity of the middle and major terms. Here the term cause refers to an invariable and unconditional antecedent of an effect, and effect refers to an invariable and unconditional consequence of a cause. When an unperceived effect is inferred from a perceived cause, that inference is deemed a purvavat inference. For example: "It will rain because there are dark heavy clouds in the sky, and whenever there are dark heavy clouds, it rains." Here the future rain (effect) is inferred from the appearance of dark heavy clouds (cause). Sesavat is the reverse type of reasoning, in which an unperceived cause is inferred from a perceived effect. For instance: "It has rained recently because there is a swift muddy current in the river, and whenever there is a swift muddy current in the river, it has recently rained." Here we infer the cause (the past rain) from the effect (the swift muddy current). And finally, in sanmanyatodrsta, the third type of inference in this system of classification, the invariable concomitance between the middle term and the major term does not
depend on a causal uniformity. One term is not inferred from the other because they
are uniformly related. In this kind of reasoning, conclusions are based on direct
experience and on generally known truths. An example of this sort of inference is the
movement of the moon which is inferred on the basis of its changing position in the
sky, although the movement of the moon is not perceived directly by the senses.

The last general classification system is based on the nature of induction, by which
one obtains the knowledge of the invariable concomitance between the middle and
the major terms of an inference. This system distinguishes among three types of
inference. In the first, kevalanvayi, the middle term is only positively related to the
major term. For example: "All knowable objects are nameable." In the second,
kevalavyatireka, the middle term is only negatively related to the major term. For
example: "Whoever is dead has no pulse: this person has a pulse; therefore he is not
dead." In the last category, anvayatireki, the middle term is both positively and
negatively related to the major term. This is the joint method of both anvaya and
vyatireka. For example: "All smoky objects are on fire: the hill is smoky; therefore, the
hill is on fire. No nonfiery object is smoky; the hill is smoky; therefore the hill is on
fire."

The fallacies of inference. In the nyaya system, fallacies of inference are called
hetvabhasa. This term literally means "a reason (hetu) that appears to be valid but is
not really so." There are five kinds of fallacies, called sabyabhicara, viruddha,
satpratipaksa, asiddha, and badhita. The first, sabyabhicara, means "irregular
middle." In a correct inference, the middle term is uniformly and without exception
related to the major term. An irregular middle term is destructive to an inference
because it can lead to a wrong conclusion. For example: "All Himalayan beings are
saints; tigers are Himalayan beings; therefore, tigers are saints." The conclusion of
this inference cannot be said to be correct, because the middle term, Himalayan
beings, is not invariably related to the major term, saints. Himalayan beings come in
many different varieties. Instead of leading to one single valid conclusion, such an
irregular middle term leads to varied opposite conclusions.

Viruddha, the second kind of fallacy, means "contradictory middle." A contradictory
middle is one that dismisses the very proposition it is meant to prove. For example:
"Sound is eternal, because it is caused." Whatever has a cause is noneternal, and so
here the middle term, caused, does not prove the eternity of sound but rather
confirms its non eternity. The distinction between an irregular middle and a
contradictory middle is that while the irregular middle fails to prove its conclusion, the
contradictory middle proves the opposite of what is intended.

The third type, satpratipaksa, means "inferentially contradictory middle." This type of
fallacy arises when the middle term of an inference is contradicted by the middle term
of another inference that proves a completely opposite fact about the major term. For
example, the argument "Sound is eternal because it is audible" is contradicted by the
inference "Sound is noneternal because it is produced, as a pot is produced." The
distinction between a contradictory middle and an inferentially contradictory middle is
that in the former, the middle term itself proves the contradiction of its conclusion,
while in the latter, the contradiction of the conclusion is proved by another inference.
The fourth type of fallacy is *asiddha*, an unproved middle. In this type of fallacy, the middle term is not an established fact but is an unproved assumption. For example: "The sky-lotus is fragrant because it has lotusness like a natural lotus." Here the middle term, lotusness, does not have any substantial existence because such a thing as a sky-lotus actually does not exist.

The fifth is *badhita*, a noninferentially contradicted middle. Here the middle term is contradicted by some other source of knowledge. Examples are: "Fire is cold because it is a substance," and "Sugar is sour because it produces acidity." Here "cold" and "sour" are the major terms and "substance" and "acidity" are the middle terms. The existence of heat in the fire and sweetness in sugar is directly perceived by the senses, so one has to consider substance and acidity as contradictory middle terms. Therefore, the inference is fallacious.

**Comparison**

According to *nyaya*, comparison is the third valid source of experiential knowledge. This kind of knowledge comes when one perceives the similarity between the description of an unfamiliar object and its actual appearance before one's senses. For example, suppose that a trustworthy person has told you that there is such a thing as a crabapple that looks like a regular red apple but is smaller and has a longer stem. One day in the woods you come upon a tree bearing fruit that you have never seen before but that reminds you of apples. You then remember your friend's description of crabapples, and you come to the conclusion that this must be a crabapple tree.

This source of knowledge, *upamana*, is not recognized as valid in many of the other systems of Indian philosophy. The *carvaka* system of philosophy, for instance, does not accept this as a source of knowledge, because this system maintains that perception is the sole source of valid knowledge. The Buddhist system of philosophy recognizes *upamana* as a valid source of knowledge but regards it as a mere compound of perception and testimony. The *vaísesika* and *sankhya* systems explain *upamana* as simply a form of inference, and the Jain system maintains that it is merely a kind of recognition. The *mimamsa* and *vedanta* systems agree with *nyaya* in considering *upamana* as an independent source of knowledge, but they explain it in a different way, which will be discussed in the chapter on *mimamsa*.

**Testimony**

*Sabda* or testimony literally means "words"; it is the knowledge of objects derived from words or sentences, and is, according to *nyaya*, the fourth and final source of valid experiential knowledge. Not all verbal knowledge, however, is valid. In *nyaya* philosophy, *sabda* is defined as the statement of an *apta*, a person who speaks and acts the way he thinks. Such a person's mind, action, and speech are in perfect harmony, and he is therefore accepted as an authority. Thus his verbal or written statement is considered to be a valid source of knowledge. The *Veda* is considered to be the expression of certain venerable *aptas*, great sages who realized the truth
within and who transmitted their experiences into words. The validity of the Veda is derived from the authority of these aptas.

The validity of verbal knowledge depends upon two conditions: first, the meaning of the statement must be perfectly understood, and, second, the statement must be the expression of a trustworthy person, that is, an apta. There are two main ways of classifying sabda, or testimony. The first method of classification divides testimonial knowledge into two categories based on the nature of the object of the knowledge. The first category consists of the trustworthy assertions of ordinary persons, saints, sages, and scriptures on matters related to the perceptible objects of the world. Examples are the evidence given by expert witnesses in court, the statements of reliable physicians about physiology, and scriptural declarations concerning the performance of certain rites. The second type of testimony consists of the trustworthy assertions of persons, saints, sages, and scriptures on matters concerning the supersensible realities. Examples are a physicist's assertions about atoms, a nutritionist's statements regarding vitamins, a prophet's instructions on virtue, and scriptural statements about God and immortality.

The second way of classifying sabda is based on the nature of the source of the knowledge. This method categorizes all testimony as being either scriptural or secular. Here the word scriptural refers only to the sacred writings related to the Veda and to the Veda itself. The words of scriptural testimony are considered to be perfect and infallible. Secular sabda is the testimony of fallible human beings and therefore may be either true or false; secular testimony that comes from a trustworthy person is valid, but the rest is not.

The nyaya system gives a detailed description of the nature of sabda because testimony is considered to be a valid source of knowledge and should therefore be analyzed thoroughly. In a scripture or a testimony, words and sentences are used -- but what is a sentence, what is a word, and what is the nature of their construction? Here, a sentence may be viewed as a group of words arranged in a certain manner, and a word as a group of letters or phonemes arranged in a specific order. The essential nature of any word lies in its meaning, and there must be specific rules governing the arrangement of words in the formation of sentences. Without such rules, the words spoken even by a trustworthy person -- an apta -- could be reordered to convey a different meaning from the one intended or could mislead a common person because of their lack of clarity of meaning.

**The Potency of Words**

The nyaya system states that all words are significant symbols and that all words have the capacity to designate their respective objects. This capacity of words is called shakti, potency, and in the nyaya system, potency is said to be the will of God. The words used in a sentence have certain meanings because of the potencies within them, and that is why they express certain meanings in a particular context. So the ordering of words in a sentence is very important. In addition, nyaya maintains that there are four other factors that are essential in the proper functioning of sentences, and without the fulfillment of these four conditions a sentence cannot express the intended meaning. These conditions are: akamksa (expectancy), yogyata (fitness), sannidhi (proximity), and tatparya (intention).
Akamksa, the first condition, means "expectancy." Akamksa is the quality by which all the words of a sentence imply or expect one another; it is the need that each word has for the other words in that sentence. According to the nyaya system, a word is not in itself capable of conveying a complete meaning; it must be brought into relationship with other words in order to express the full meaning intended. For example, when someone hears the word "bring," he asks or he thinks about what to bring. It could be a jar, a book, a pencil, a doughnut, or anything else. Thus, expectancy is the interdependence of the words in a sentence for expressing a complete meaning.

Yogyata, the second condition, means "fitness." It refers to the appropriateness of the words in a sentence, to the absence of contradiction in its terms. For example, sentences like "Moisten with fire," or "He is frustrated because of his inner peace," make no sense because there is a contradiction between fire and moistening, between frustration and peace. Fire has no ability to moisten anything, and inner peace cannot engender frustration. Therefore, although these sentences may be grammatically correct, they do not express valid knowledge.

Sannidhi, the third condition, means "proximity." It is very important for words to be used within the limits of an appropriate time and space. If the duration of their use is prolonged, then words no longer have the capacity to give the desired meaning. For example, if someone who desires to make a statement speaks one word today, another word tomorrow, and a third the day after, his efforts at effective communication are certain to fail. The same holds true for the written word. If someone writes one word on page one, another on page three, one more on page five, and another on page ten, then his meaning will not be communicated effectively. Continuity of time and space is therefore essential for a sentence to convey meaning.

Tatparya, the fourth condition, means "intention", and it refers to the meaning one intends a sentence to convey. A word may have various meanings depending on its context, so one has to be careful to determine the real intention of the person who uses the word. This is also the case with scriptural testimony -- even the greatest scholars have disagreements concerning some passages because they do not understand the original intention of those sentences. A very simple illustration is this: Suppose someone tells you to bring him a bat; you have no way of knowing whether you are being asked to provide a particular type of flying mammal or a wooden club. To understand the real intention of a sentence, one has to comprehend accurately the context in which the words are used. Because of the unique nature of the Sanskrit language and its symbolic usages, the Veda and related ancient religious-philosophical scriptures are full of this kind of complexity and indeterminability of intention. In order to clarify this and understand the Vedic testimony properly, nyaya recommends that one study the mimamsa philosophy because it provides systematized rules and interpretations for understanding the real meaning of the Veda.

The Nature of the Physical World

As mentioned previously, the nyaya system groups all the objects of the world into twelve major categories: soul, body, senses, objects of the senses, cognition
(buddhi), mind (manas), activity, mental modifications, rebirth, feelings, suffering, and absolute freedom from all sufferings. Not all these objects of knowledge are found in the physical world because the physical world is composed only of the four gross elements -- earth, water, fire, and air. Although the soul and the mind are involved in the physical world, they are not physical elements. Likewise, time and space are completely nonmaterial, but they nonetheless belong to the physical world. Akasa (space or ether) is considered to be a physical substance, but it is not considered to be a productive cause of anything. In fact, the ultimate constituents of earth, air, fire, and water are eternal and unchanging atoms. Ether and time and space are also eternal and infinite substances, each being one single whole. All in all, the nyaya theory of the physical world is very similar to that of the vaishesika school, and a more detailed discussion of this world view will be provided in the next chapter.

**The Concept of the Individual Soul**

There are many apparently different concepts of the soul among the various schools of Indian philosophy. The carvaka system states that the soul consists of the living physical body and its attributes. According to Buddhist philosophy, there is no soul. Buddhism teaches that the stream of ever-changing thoughts and feelings is the ultimate reality. This may be termed soul, but it is not considered to be a permanent entity, as is maintained by other philosophies.

According to the concept of soul held by the nyaya and vaishesika systems, the soul is a unique substance, of which all desires, aversions, pleasures, pains, and cognition are qualities. There are different souls in different bodies. The soul is indestructible and eternal, and its attribute is consciousness. Because it is not limited by time and space, the soul is also seen as infinite or all-pervading. There are many souls, because one person's experiences do not overlap those of another person; one's experience is completely distinct from any other's.

Nyaya gives numerous arguments to prove the existence of the soul. It first argues that the body is not the soul because immaterial consciousness cannot be said to be an attribute of the material body, which in itself is unconscious and unintelligent. Neither can the functioning of the senses explain the process of imagination, memory, and ideation -- none of these functions depends on any external sense. The mind can also not be the soul because the mind is considered to be an imperceptible substance. Nor can the soul, as the Buddhists maintain, be identified as the ever-changing series of cognition. The soul cannot be said to be an eternal and self-effulgent consciousness because consciousness cannot subsist without a certain locus. At the same time, the soul is not mere consciousness or knowledge but is the knower of knowledge and the enjoyed of objects. In sum, the soul is not consciousness but is a substance having consciousness as its attribute.

The soul experiences the external world through the mind and senses. All the cognition and conscious states arise in the soul when the soul is related to the mind, the mind to the senses, and the senses to external objects. It is because of this sequential contact or relationship that the whole process actuates; otherwise there would be no consciousness in the soul. In its disembodied or disintegrated state, the soul has no knowledge or consciousness. How then can one know whether there is
such a thing as an individual soul? The nyaya system answers that the soul is not known by sensory perception but rather by inference or testimony. The existence of the soul is inferred from the functions of desire, aversion, and volition, from the sensations of pain and pleasure, and from memories of these. These memories cannot be explained unless one admits a permanent soul that has experienced pain and pleasure in relation to certain objects in the past. The process of knowledge based on memory requires toje existence of a permanent self that desires to know something and then desires to attain certain knowledge about it. Desire, volition, pain, and pleasure cannot be explained by the body, senses, or mind. Just as the experiences of one person cannot be remembered by another person, the present states of the body or the senses or the mind cannot remember their past states. The phenomenon of memory must depend upon a permanent entity -- the soul. One's own soul can be known through mental perception, but someone else's soul in another body can only be inferred.

The Concept of Liberation

Like all the other systems of Indian philosophy, the nyaya system maintains that the ultimate goal of human life is to attain liberation. By liberation is meant absolute freedom from all pain and misery. This implies a state in which the soul is completely released from all bondage and from its connection with the body. It is impossible for the soul to attain the state of complete freedom from pain and misery unless the soul is totally disconnected from the body and senses. In liberation, the soul is unconditionally and absolutely freed from all shackles forever.

To attain the state of liberation, one has to acquire true knowledge of the soul and of all the objects of experience. This knowledge is called tattva-jnana, which means "to know reality as completely distinct from unreality." Nyaya philosophy prescribes a three-stage path for reaching the goal of liberating knowledge. The first step is sravana, the study of the scriptures. One has to study the spiritual scriptures and listen to authoritative persons and saints. Following this, one must use his own reasoning powers to ponder over what he has learned. This process of rumination is called manana. Finally, one must contemplate on the soul, confirm his knowledge, and practice that truth in his life. This is called nididhyasana. Through the practice of sravana, manana, and nididhyasana, a person realizes the true nature of the soul as being totally distinct from the body, mind, senses, and all other objects of the world. The truth realized within dispels the darkness of self-identification and misunderstanding (mithya-jnana) concerning "I-ness" and "Thy-ness." When this happens, a person ceases to be moved by his passions and impulses and begins to perform his duties selflessly without having any desire to reap the fruits of these actions. The fire of true knowledge roasts one's past karma like seeds, thereby making them unable to germinate. Thus, true knowledge leads a person to the state where there is no cycle of birth and death. This state is called liberation.

The Concept of God

According to nyaya, God is considered to be the operative cause of creation, maintenance, and destruction of the universe. God does not create the world out of
nothing or out of himself but rather out of the eternal atoms of space, time, mind, and soul. The creation of the universe refers to the ordering of these eternal entities, which are in coexistence with God, into a mortal world. Thus God, as the first operative cause of the universal forces, is the creator of the world. And God is also the preserver, as he causes the atoms to hold together and continue their existence in a particular order that maintains the physical universe. God is also called the destroyer of the universe, because he lets loose the forces of destruction when the energies of the mortal world require it. God is one, infinite, and eternal, and the universe of space and time, of mind and soul, does not limit him. God is said to possess six perfections: infinite glory, absolute sovereignty, unqualified virtue, supreme beauty, perfect knowledge, and complete detachment.

Nyaya provides a few arguments to establish the theory of God. The first is the causal argument. According to this line of reasoning, the entire universe is formed by the combination of atoms. Mountains, fields, rivers, and so on must have a cause, for they are made up of parts, possess limited dimensions, and are not intelligent. This being so, they cannot be the cause of themselves; they require the guidance of an intelligent cause. That intelligent cause must have direct knowledge of all matter and of the atoms that underlie all matter. He must be omnipresent and omniscient. This intelligent entity cannot be the individual soul because the knowledge of the soul is limited -- a soul, for instance, does not have the knowledge of other souls. Therefore, there must he an ultimate intelligent entity, which is termed God.

The second argument is based on adrsta, which means "the unseen" or "the unknown," and may be translated as providence or fate. The philosophers of the nyaya system inquire as to why some people are happy and others are not, why some are wise and others ignorant. One cannot say that there is no cause, because every event has a cause. The causes of pain and pleasure must therefore be one's own actions in this life or in previous lives. People enjoy or suffer according to the merits or demerits produced by their past good or bad actions. This law of karma, which governs the life of every individual soul, requires that every human being must reap the fruits of his own actions.

There is often a long interval of time between an action and its effect, however, and many pleasures and sorrows cannot be traced to any action performed in this life. Likewise, many actions performed in this life do not produce fruits immediately. The subtle impressions of all one's actions persist long after the actions themselves and are collected in the soul in the form of credits or merits (punya) and deficiencies or demerits (papa). The sum total of all merits and demerits that are accrued from good or bad actions is called adrsta, fate, and this produces present pain and pleasure. Adrsta is not an intelligent principle, however, and it cannot inspire its own fructification. It must therefore be guided or directed by some intelligent agent to produce the proper consequences. The individual soul cannot be said to be the director or controller of adrsta because souls do not know anything about their adrsta. Thus, the almighty intelligent agent who guides or directs adrsta through the proper channels to produce the proper consequences is the eternal, omnipotent, and omnipresent supreme being termed God.

A third nyaya argument for the existence of God is based on scriptural testimony. According to this reasoning, the Vedas, Upanisads, and all other authoritative
scriptures state the existence of God. These scriptures were not written by common
people but were formulated by great sages who experienced truth from within. Thus,
the authority of testimony depends on direct experience, which is the only source of
knowledge about any and all facts. The fact of the existence of God is experienced
directly by individual souls, and some of these individuals have expressed their God-
realizations. The Veda expresses such direct experiences of God. Therefore, God
exists.

3. Vaisesika: Vedic Atomic Theory

An Analysis of the Aspects of Reality

The founder of vaisesika philosophy is the sage Kanada, who was also known as
Uluka. So this system is sometimes called aulukya. Kanada wrote the first systematic
work of this philosophy, Vaisesika-sutra. This work is divided into ten cantos, each
canto containing two sections. Prasastapada wrote a commentary on this sutra
entitled Svartha Dharma Samgraha that is so famous that it is called bhasya, which
means simply "commentary." In Indian philosophical discourse, whenever the word
bhasya is used by itself without further specification, it is understood to refer to this
commentary. Two well-known explications of Prasastapada's work are Udayana's
Kirana-vali and Sridhara's Nyayakandali. The significant feature of this system is the
introduction of a special category of reality called uniqueness (visesa). Thus, this
system is known as vaisesika.

Vaisesika is allied to the nyaya system of philosophy. Both systems accept the
liberation of the individual self as the end goal; both view ignorance as the root cause
of all pain and misery; and both believe that liberation is attained only through right
knowledge of reality. There are, however, two major differences between nyaya and
vaisesika. First, nyaya philosophy accepts four independent sources of knowledge --
perception, inference, comparison, and testimony -- but vaisesika accepts only two --
perception and inference. Second, nyaya maintains that all of reality is
comprehended by sixteen categories (padarthas), whereas vaisesika recognizes only
seven categories of reality (see chart below). These are: dravya (substance), guna
(quality), karma (action), samanya (generality), visesa (uniqueness), samavaya
(inherence), and abhava (nonexistence). The term padartha means "the object
denoted by a word," and according to vaisesika philosophy all objects denoted by
words can be broadly divided into two main classes -- that which exists, and that
which does not exist. Six of the seven padarthas are in the first class, that which
exists. In the second class, that which does not exist, there is only one padartha,
abhava, which stands for all negative facts such as the nonexistence of things. The
first two categories of reality -- substance and quality -- are treated in greater detail in
the following discussion than are the remaining five.

Vaisesika's Seven Categories (Padarthas) of Reality

- Substance (nine dravyas)
  - Earth
The Category of Substance -- Nine Dravyas

Dravya, substance, is that in which a quality or an action can exist but which in itself is different from both quality and action. Without substance, there cannot be a quality or an action because substance is the substratum of quality and action, and it is also the material cause of the composite things produced from it. A cloth, for example, is formed by the combination of a number threads of certain colors. The threads are the material or constitutive causes of the cloth because it is made of the threads that subsist in the cloth.

There are nine kinds of substances: earth, water, fire, air, ether, time, direction, soul, and mind. The first five of these are called physical elements because each of them possesses a specific quality that can be perceived by an external sense faculty. Each of the senses is composed of elements, whose distinguishing qualities are registered by specific sensory receptors. For example, smell is the particular property of the earth, and it is apprehended by the nostrils. Taste is the particular property of water, which is perceived by the tongue. Color is the particular property of fire or light, and it
is discerned by the eyes. Touch is the particular property of air, which is experienced by the skin. And sound is the particular property of akasa (ether), which is received by the ears.

**Paramanu** -- the smallest particle of earth, water, fire, and air. In vaisesika the smallest indivisible part of matter is called paramanu, or atom. This is not to be confused with the modern scientific term atom because an atom as described in nuclear physics is itself composed of many parts. The vaisesika usage of the word is different. It simply refers to the most minute indivisible state of matter. The atoms of earth, water, fire, and air are eternal because an atom is partless and cannot be produced or destroyed. The common elements of earth, water, fire, and air, however, are noneternal because they are produced by combinations of atoms and therefore can disintegrate or change. The existence of atoms is proved by inference -- not by perception -- in the following way. All the composite objects of the world are made up of parts. In separating the parts of a composite object, one passes from the larger to the smaller, and then from the smaller to the smallest part. But when one comes to the smallest part that cannot be further divided in any way, then the process of separation has to stop. That indivisible and minute part in vaisesika is called the atom.

If one does not accept the concept of indivisibility, then he will commit the fallacy of infinite regression. Because it has no parts, the atom cannot be said to be produced. and it cannot be destroyed because destruction means to break a thing down into its parts, and in an atom there are no parts. Atoms, therefore, can be neither produced nor destroyed; they are eternal.

**Akasa** -- ether. There are four kinds of atoms -- atoms of earth, atoms of water, atoms of fire, and atoms of air -- each having its own peculiar qualities. Akasa (ether), the fifth substance, is the substratum of the quality of sound; it is not made up of atoms. Akasa is also translated as space. Sound can be perceived, but akasa cannot be perceived because it lacks two conditions necessary for the perception of an object: perceptible dimension and manifest color. Akasa is unlimited, so it does not have a perceptible dimension, and it is formless, so does not have any color. Therefore, Akasa cannot be perceived, but it can be inferred from the perception of the quality of sound which it contains. It cannot be said that sound is the quality of time, direction, soul, or mind because these exist even when there is no sound to qualify them. Therefore, there must be some other substance that has the quality of sound in it; that substance is called akasa. Akasa is one and eternal because it is not made up of parts and does not depend on any other substance for its existence. It is all-pervading in the sense that it has an unlimited dimension and that its quality (sound) is perceived everywhere.

**Direction and time.** Direction and time are also imperceptible substances and they are likewise single, eternal, and all pervading. Direction is inferred on the basis of such concepts as here, there, near, far, on this side, by that way, and so on. Time is inferred from the concepts now, today, tomorrow, past, present, future, older, younger, and so forth. Although space, direction, and time are singular and all-pervading, indivisible and partless, they are spoken of as many because of certain limiting conditions, known as upadhis. For example, when the all-pervading, indivisible space is limited by the walls of a jar, that space is known as the space of
the jar (ghatakasa). In the same way, direction and time are also thought of as multiple because of the notions of variety and specificity expressed as east, west, one hour, two hours, and so on.

Soul. The eighth kind of substance, the soul or atman, is also considered to be eternal and all-pervading and is the substratum of the phenomenon of consciousness. According to vaisesika philosophy, there are two kinds of souls: individual and supreme. Individual souls are known as jivatman, and the Supreme Soul is known as paramatman, or isvara. The Supreme Soul is inferred to be the creator of the world in the same manner as has been explained in the discussion of nyaya philosophy. In contrast to the Supreme Soul, the individual soul is perceived as possessing mental qualities, such as "I'm happy, I'm sorry" and so forth. Individual souls do not perceive other individual souls, but they do infer their existence in the manner described in the nyaya section.

Mind. The mind is considered to be the ninth kind of substance. It is the eternal sense faculty of the individual soul and the soul's qualities, such as pleasure and pain. Like the soul, the mind is atomic and indivisible -- there is one in each body. The existence of the mind is not perceived but is inferred from the following propositions. First, it is apparent that external sense faculties are necessary for the perception of external objects of the world. Likewise, an internal sense faculty is required for the perception of internal objects, such as soul, cognition, feeling, pleasure, pain, and so on. The mind is this internal sense faculty. Second, it is apparent that the five external senses may all be in contact with their respective objects simultaneously, but not all of these perceptions are received at the same time. This demonstrates that there must be some other agent besides the external senses that both limits the number of received perceptions to one perception at a time and that orders the perceptions in sequential succession. In other words, although two or more external senses may be simultaneously receiving data, only that which is being attended to is actually perceived. Attention therefore represents the coordination of the mind with the senses, and every perception requires the contact of the mind with an object by means of the senses. We must, therefore, admit the existence of mind as an internal sense faculty. Additionally, if the mind were not a partless entity, then there would be simultaneous contact of many parts of the mind with many senses, and many perceptions would subsequently appear at one time. The fact that this never happens proves that the mind is a partless, atomic, and internal sense faculty of perception.

The Category of Quality -- Twenty-four Gunas

Guna, quality, the second of the seven categories of reality, cannot exist by itself but exists only in a substance. * It cannot, therefore, be the constituent or material cause of anything's existence. It may be considered a nonmaterial cause of things, however, because it determines the nature of a thing. It differs

* In vaisesika "guna" refers to quality, whereas in sankhya this term is used to denote an essential feature of prakrti, nature. From both substance and action in that it is an unmoving property. There are twenty-four kinds of qualities: rupa (color), rasa (taste), gandha (smell), sparsa (touch), sabda (sound), sankhya (number), parimana (magnitudes), prthaktva (distinctness), samyoga (conjunction or unions), bibhaga (separation), paratva (remoteness),
aparatva (nearness), buddhi (cognition), sukhā (pleasure), dukha (pain), iccha (desire), dvesa (aversion), prayatna (effort), gurutva (heaviness), dravatva (fluidity), sneha (viscidity), samskara (tendency), dharma (merit or virtues), and adharma (demerit or nonvirtue). A brief description of these follows.

According to vaisesika there are six colors -- white, black, red, blue, yellow, and green -- and there are also six tastes -- sweet, sour, bitter, pungent, astringent, and salty. Smell is divided into two categories -- good and bad -- and touch is divided into three -- hot, cold, and neither hot nor cold. There are two kinds of sound: dhvani (inarticulated) and varna (articulated). Number is that quality by virtue of which a thing can be counted. Many numbers starting from one and stretching out beyond the imagination are used, but actually there is only one number which is used as many. Magnitude is the quality by which things are distinguished as big or small. There are four orders of magnitude: extremely small (the atom), extremely big, small, and large. Distinctness is the quality by which one knows that one thing is different from another. Conjunction, or union, is the quality by which one knows the existence of two or more things at one place or in one time, such as a book being on a table at noon. Disjunction, or disunion, is that quality by which a substance is perceived as being either remote or near in time or space. Older, younger, before, and after are temporal examples; far, near, here, and there are spatial examples.

Buddhi, a quality of the self, means "knowledge" or "cognition" in vaisesika and should not be confused with the concept of buddhi that is explained in sankhya philosophy as "intellect." Pleasure is a favorable experience of mind, and pain is an unfavorable experience of mind. Effort is the quality by virtue of which a substance is capable of changing its position. There are three kinds of effort: striving toward something (pravṛtti); striving against something (nivṛtti); and vital functioning (jīvanayoni). Heaviness is that quality by virtue of which a substance is capable of falling, while fluidity is the quality by virtue of which it flow. Viscidity is the quality -- belonging exclusively to the element of water -- by which different particles of matter can be absorbed and formed into particular shapes.

Samskaras are innate tendencies; they can be of anything, not just the mind. There are three kinds of samskaras in a substance: activity, which keeps a thing in motion (vega); elasticity, which makes a thing tend toward equilibrium when it is disturbed (sthitiṣṭhapakatva); and mental impressions, which enable one to remember and recognize a thing (bhavana). This last category is exclusive to the mind. Dharma and adharma mean, respectively, that which is in accordance with conscience, and that which is not in accordance with conscience. Dharma leads to happiness, and adharma leads to pain and misery. The remaining five categories of reality are only briefly described.

The Category of Action -- Karma

Karma, action, is viewed in the vaisesika school as being physical movement, but the term physical here refers to more than just bodily movements because in vaisesika mind is also considered to be a kind of substance. Just like quality, the second category of reality, action also exists only in a substance and cannot exist by itself. It is, however, completely different from both quality and substance. The substance of a thing supports both quality and action. Quality is the static character of things, and
action is their dynamic character, which is regarded as the independent cause of their union and disunion. Action or movement is always dependent on substances -- earth, water, fire, air, and mind. It is impossible to find action in the intangible substances -- space, time, direction, and soul -- because each is an all-pervading substance, whose position cannot be changed. There are five kinds of action: upward, downward, inward, outward, and linear. The action of perceptible substances like earth, water, fire, and air can be perceived by the five senses, but not all of the actions of tangible substances can be perceived. The movement of the Earth, for example, cannot be perceived; it can only be inferred.

The Category of Generality -- Samanya

Generality. Samanya, refers to an abstract characteristic that is singular and eternal (nitya) and yet pervades many. For example, leadership is a single characteristic, but it resides in many individuals. Leadership is also eternal because it was already in existence before the first leader emerged, and it will continue to exist even if there are no more leaders. All the things of a certain class -- such as men, or cows, or puppies, or horses -- share common name because of the common nature they possess. Samanya, generality, is the essence of the common characteristic that unites different entities into one class. Hence, modern scholars sometimes translate samanya as “universality.”

Vaisesika recognizes three levels of generality or universality: highest, lowest, and intermediate. The highest kind of generality is existence itself (satta). Beingness or the state of being is the highest generality because all other universals are subsumed under it; it is all-pervading, and nothing is excluded from it. The lowest kind of generality has the most limited referents (such as American-ness, Indian-ness, pot-ness, and chair-ness, which are the generalities present in all Americans, Indians, pots, and chairs, respectively). Concepts such as substantiality (having the nature of substances) represent the intermediate level of generality because they do not include many other categories of reality like quality, actions and so on.

The Category of Uniqueness -- Visesa

Visesa, or uniqueness, is that characteristic of a thing by virtue of which it is distinguished from all other things. Like the imperceptible substances of space, time, direction, soul, and mind, visesa is abstract and is therefore eternal. Everything in the world, regardless of whether it is existent or non-existent, is accompanied by uniqueness. Generality (samanya) and uniqueness (visesa) are opposite concepts.

The Category of Inherence -- Samavaya

There are two kinds of relationships between things: conjunction (samyoga), and inherence (samavaya). Conjunction is one of the twenty-four qualities (gunas) of vaisesika, but inherence is one of the seven categories of reality described in this system. Conjunction is a temporary, noneternal relationship between two things that may be separated at any time. In this kind of relationship, two or more things exist
together, but each remains essentially unaffected by the other(s). For example, when a chair and a table are conjoined together, this does not change the existence of the chair or table. Thus, conjunction is an external relationship existing as an accidental quality of the substances related to it. Inherence on the other hand, is a permanent relation between two entities, one of which inheres in the other, as for example in the relation of the whole in its parts, a quality in its substance, or the universal in the individual. A conjunctional relation is temporary and is produced by the action of either or both of the things related to it. For example, the relation between a man and a chair on which he is sitting is temporary.

An inherent relation, in contrast, is not temporary and is not produced. The relation that exists between a whole and its parts, for instance, is not produced because the whole is always related to its parts. As long as the whole is not broken up, it must exist in the parts. Thus inherence is an eternal or permanent relation between two entities, one at which depends for its existence upon the other (the whole cannot exist separate from its parts). Two terms within an inherent relationship cannot be reversed, as can those that are related by conjunction. For example, in order for there to be a conjunctional relation of hand and pen, pen and hand must both be in some kind of contact with each other, but in an inherent relation this is not necessary. A quality or action is in a substance, but the substance is not in the quality or action; there is color in cloth, but no cloth in color; there is action in a fan but no fan in the action.

The Category of Nonexistence -- Abhava

Abhava, nonexistence, the seventh and last category of reality is negative in contrast to the first six categories, which are positive. Nonexistence is not found in any of the six positive categories, and yet according to vaisesika philosophy nonexistence exists, just as, for instance, space and direction do. To illustrate: How does one know that there is no chair in a room? Looking into the room, one can feel as sure of the nonexistence of the chair as of the existence of the carpet or of the people. Therefore, nonexistence also exists as such.

There are two kinds of nonexistence: the absence of something in something else (samsargabhava), and mutual nonexistence (anyonyabhava). The absence of something in something else is of three kinds: antecedent nonexistence (pragbhava), the nonexistence of a thing after its destruction (pradhvamsabhava), and absolute nonexistence (atyantabhava). Antecedent nonexistence refers to the nonexistence of a thing prior to its creation. For example, in the sentence, “A book will be written using this paper,” the book is nonexistent in the paper. This type of nonexistence does not have a beginning, but it does have an end. The book never existed before it was written; therefore, there is a beginningless nonexistence of the book. But when it does come to be written, its previous nonexistence will come to an end. In direct contrast to antecedent nonexistence, the nonexistence of a thing after its destruction has a beginning but does not have an end. For instance, when a jar is broken into pieces, then there is nonexistence of that jar. The nonexistence of the jar begins with its destruction, but this nonexistence cannot be ended in any way, because the same jar cannot be brought back into existence.
The type of nonexistence that does not belong to a particular time and space but is in all times is called absolute nonexistence. This type of nonexistence is neither subject to origin nor to end. It is both beginning less and endless. Examples are the nonexistence of the son of a barren couple or the nonexistence of color in the air.

Mutual nonexistence (anyonyabhava), the second of the two major divisions of nonexistence, is the difference of one thing from another. When one thing is different from another, they mutually exclude each other, and there is the nonexistence of either as the other. For example, a pen is different from a book, so there is nonexistence of the book in the pen and of the pen in the book.

The Concept of the Creation and Annihilation of the World

Vaisesika holds to the atomic theory of existence, according to which the entire universe is composed of eternal atoms. But at the same time, vaisesika does not ignore the moral and spiritual laws that govern the process of union and separation of atoms. In this way, the atomic theory of vaisesika is different from the atomic theory of modern science. Modern science’s theory proposes a materialistic philosophy; it explains the laws of the universe as mechanical, as being the result of the motions of atoms in infinite time, space, and direction. According to this view, the operation of the atoms is governed by mechanical laws, but according to vaisesika the functioning of atoms is guided or directed by the creative or destructive will of the Supreme being. The will of the Supreme Being directs the operation of atoms according to the past samskaras of individual beings.

Vaisesika states that the universe has two aspects, one eternal and one noneternal. The eternal constituents of the universe are the four kinds of atoms (earth, water, fire, and air) and the five substances (space, time, direction, mind, and self). These are not subject to change, and they can be neither created nor destroyed. Another part of the universe is noneternal, that is, subject to creation and destruction in a particular time and spaces In the beginning of creation two atoms are united into a dyad, which is noneternal because it can be divided again into two. The dyads and atoms cannot be perceived but are known through inference. The combination of three dyads is called a triad (tryanuka), which is the smallest perceptible object. It is from these triads that other larger compounds develop. Thus the common elements comprised of eternal atoms are noneternal because they can be broken down into smaller units.

The entire universe is a systematic arrangement of physical things and living beings that interact with one another in time, space, and direction. Living beings are the souls of the selves who enjoy or suffer in this world, depending on their meritorious or nonmeritorious past impressions. Thus, according to vaisesika philosophy, the world is a moral stage on which the life and destiny of all individual beings is governed, not only by the physical laws of time and space but also by the moral law of karma. In the performance of present karma, an individual is free and is thus the creator of his own destiny, but the starting and ending point of the universe depends on the creative or destructive will of the Supreme Being, God. The universal law (adrsta) of the process of creation and annihilation influences the individual selves to function or to be active in the direction of the creative will. Directed by this unknown force of adrsta, the soul makes contact with an atom of air; thus, the primeval motion comes into being. That
primeval activity in air atoms creates dyads, triads, and all the rest of the gross physical manifestations of air elements (mahabhutas). In a similar manner, there arises motion in the atoms of fire, water, and earth, which then compose the gross elements of fire, water, and earth. In this way the vast expansion of the physical world comes into existence.

The Supreme Lord is endowed with perfect wisdom, detachment, and excellence (jnana, vairagya and aivarya). He releases the adrsta related to individual beings, which guides the individuals in their flow through the currents of life. At the end of life, the process of dissolution and annihilation also depends on the will of God. He inspires the adrsta corresponding to the individuals or to the universe, and then a destructive motion in the atoms of the body and senses or in the cosmos starts vibrating. On account of this destructive motion, there arises the process of disjunction and disintegration of the body and senses or of the universe. Compound things break down into simpler and simpler components, finally devolving into the state of triads and dads and ultimately into atoms. In this manner the physical elements of earth, water, fire, and air, and the related sense organs, are disintegrated. After the dissolution of the manifest universe, there remain the four kinds of atoms of earth, water, fire, and air as well as the eternal substances of space, time, direction, mind, and soul, with their attendant meritorious and non-meritorious samskaras.

Thus, according to the vaisesika system of philosophy, there is no creation or annihilation but rather an orderly and morally systematized composition and decomposition of compounds. An individual self or soul is involved in the universe because of adrsta. The karma of each soul is its own earnings, deposited in the safe of the Supreme Being, which come back to the self with interest. The vaisesika concepts of God, of the liberation of the soul, and of the path to liberation are all basically the same as the nyaya concepts, which have already been discussed in the preceding chapter.

### 4. Sankhya: Nontheistic Dualism

Sankhya philosophy, considered by some to be the oldest of all the philosophical schools, was systematized by an ancient thinker named Kapila (different from the Devahuti-putra Kapila of the Srimad-Bhagavatam whose sankhya system does not exclude God). The first work of nontheistic sankhya, the Sankhya-sutra, is traditionally attributed to Kapila, but in its present form it is not his original work. So the Sankhya-karika of Isvarakrishna is actually the earliest available sankhya text. Among its more well-known commentaries are Gaudapada's bhasya, Vacaspati Misra's Tattva-kaumudi, Vijnanabhiksu's Sankhya-pravacanbhasya, and Mathara's Matharavrtti. Topics traditionally emphasized by Kapila, Isvarakrishna, and other sankhya commentators are the theory of causation, the concept of prakrti (the unconscious principle) and purusa (the conscious principle), the evolution of the world, the concept of liberation, and the theory of knowledge. The special feature of sankhya is its summing up of all of the nyaya and vaisesika constituents of reality -- with the exception of isvara, God, Who is simply excluded from the system -- into two
fundamental principles: purusa and prakrti. Nirisvara sankhya (nontheistic sankhya) is therefore a dualistic philosophy.

The Sankhya Theory of Cause and Effect

All Indian philosophies base their explanation of the evolution or manifestation of the universe on two fundamental views of cause and effect: satkaryavada and asatkaryavada. According to satkaryavada, the effect exists in its cause prior to its production or manifestation, but the asatkaryavada position maintains that the effect does not exist in its cause prior to manifestation. This latter theory is also called arambhavada, which means "the doctrine of the origin of the effect." All other theories related to cause and effect are based on one or the other of these two fundamental positions. Sankhya philosophy accepts the satkaryavada view of causation.

Regarding satkaryavada, there are two schools of thought: vivartavada and parinamavada. The first is accepted by Advaita vedantins, who hold that the change of a cause into an effect is merely apparent. For example, when one sees a snake in a rope, it is not true that the rope is really transformed into a snake; it simply appears to be that way. This theory serves as the basis for the Advaitist explanation of God, the universe and the individual soul. Sankhya philosophy upholds the view of parinamavada, according to which there is a real transformation of the cause into the effect, as in wood being transformed into a chair, or milk into yogurt.

Sankhya philosophy developed elaborate explanations to argue the parinamavada version of satkaryavada that a cause actually changes into its effect. These explanations are central to the whole sankhya system, which proceeds from the premise that the effect exists in its material cause even before the effect is produced. There are five basic arguments for this premise. The first, asadakaranat, states that the effect exists in its material cause before its production because no one can produce an effect from a material cause in which that effect does not exist. For example, no one can turn the color blue into the color yellow, nor can anyone produce milk from a chair, because yellow does not exist in blue and a chair does not exist in milk. The second argument is upadanagrahanat, which states that because there is an invariable relationship between cause and effect, material cause can produce only that effect with which it is causally related. Only milk can produce a yogurt because milk alone is materially related to yogurt. If an effect does not exist in any way before its production, then it is impossible for an effect to be related to its cause. Therefore, an effect must already exist in its cause before it is produced. The third argument, sarvasambhavabhavat, states that there is a fixed rule for the production or manifestation of things. A certain thing can be produced only by a certain other thing; it cannot be produced from just anything or anywhere. This impossibility proves that all the effects exist within their particular causes. The fourth argument, saktasya-sakya-karanat, states that an effect exists in its cause in an unmanifested form before it is produced. This is the case because only a potent cause can produce a desired effect, and the effect must therefore be potentially contained in the cause. The potentiality of cause cannot, however, be related to an effect if the effect does not exist in that particular cause in some form. The fifth argument, karanabhavat, states that if the effect does not exist in the cause, then that which was non-existent would be coming into existence out of nothing. This is as absurd as saying that the son of a barren woman once built an empire, or that people
decorate their homes with flowers of the sky. Such statements have no logical correspondence to reality.

By means of these arguments, the sankhya philosophers established the theory of parinamvada or manifestation, according to which an effect is already existent in unmanifested form in its cause. The process of producing an effect from the cause or the process of manifestation and annihilation can be clarified with the analogy of the tortoise, which extends its limbs from its shell. The tortoise does not create its limbs; it merely brings that which was hidden into view. Sankhya philosophers hold that, similarly, no one can convert nonexistence into existence; nor can that which exists be entirely destroyed. A tortoise is not different from its limbs, which are subject to appearance or disappearance, just as golden ornaments such as rings and earrings are not different from the gold used to make them. The theory of manifestation is essential to sankhya philosophy and indeed serves as the basic foundation upon which all its other theories are constructed.

Prakrti -- The Unconscious Principle

The sankhya system holds that the entire world -- including the body, mind, and senses -- is dependent upon, limited by, and produced by the combination of certain effects. Various other schools of philosophy -- such as Carvaka, Buddhism, Jainism, Nyaya, and Vaisesika -- maintain that atoms of earth, water, fire, and air are the material causes of the world. But according to the sankhya system, material atoms cannot produce the subtler products of nature, such as mind, intellect, and ego. Therefore, one has to seek elsewhere for that cause from which gross objects and their subtler aspects are derived. If one examines nature, it becomes obvious that a cause is subtler than its associated effect and that a cause pervades its effect. For example, when a seed develops into a tree, whatever latent quality the seed contains will be found in the tree. The ultimate cause of the world must also be a latent principle of potential, and it must be uncaused, eternal, and all-pervading. It must be more subtle than the mind and intellect, and at the same time it must contain all the characteristics of the external objects as well as of the senses, mind, and intellect. In sankhya philosophy this ultimate cause is called prakrti. To prove its existence, sankhya offers the following five arguments. First, it is accepted that all the objects of the world are limited and dependent on something else, so there must be an unlimited and independent cause for their existence. That cause is prakrti. Second, all the objects of the world possess a common characteristic: they are capable of producing pleasure, pain, or indifference. Therefore, something must exist as the cause of the universe that possesses the characteristics of pleasure, pain, and indifference. That is prakrti. Third, all the objects of the world have a potential to produce something else or to convert themselves into something else. Therefore, their cause must also have the same potential, which implicitly contains the entire universe. That is prakrti. Fourth, in the process of evolution an effect arises from its cause, and in dissolution it is reabsorbed or dissolved into its origin. The particular objects of experience must therefore arise from a certain cause, which must in turn have arisen from a certain cause, and so on until one reaches the primal cause of the creative process itself. A similar process takes place in involution or annihilation. Here, physical elements are broken down into atoms, atoms are dissolved into gross energies, and gross energies into finer ones until all of these dissolve into the
unmanifested One. That unmanifested One is called prakrti -- the primordial nature.
Fifth, if one attempts to go further and imagine the cause of this ultimate cause, he
will land himself in the fallacy of infinite regression. Ultimately one has to stop
somewhere and identify a cause as the first cause of the universe. In sankhya
philosophy that supreme root cause of the world is called prakrti.

The Gunas

Prakrti is not to be comprehended as merely the atomic substance of matter. Nor can
it be taken as a conscious principle behind the material substance. And it is not a
hypothetical construct of the mind (a creation of philosophy and nothing more).
Prakrti means literally "exceptional ability;" it is the wonderful nature out of which the
vast material world in all of its levels of intricate permutation takes shape. Prakrti is
characterized by the three gunas of sattva, rajas, and tamas. The word guna may be
translated as "a quality or attribute of prakrti," but it is important to note that the three
gunas are not to be taken merely as surface aspects of material nature. They are,
rather, the intrinsic nature of prakrti. The balanced combination of sattva, rajas, and
tamas is prakrti, and thus they cannot be prakrti's external attributes or qualities.
They are called gunas (that is, "ropes") because they are intertwined like three
strands of a rope that bind the soul to the world. One can say that a rope is the name
for three intertwined strands, but if one analyzes the strands separately, he does not
apprehend prakrti, since it is a balanced state of the three gunas.

According to sankhya philosophy, sattva, rajas, and tamas are the underlying
qualities from which the universe we perceive is derived. These gunas can be
inferred from the fact that all features of the material world -- external and internal,
both the physical elements and the mind -- are found to possess the capability of
producing pleasure, pain, or indifference. The same object may be pleasing to one
person, painful to another, and of no concern to a third. The same beautiful girl is
pleasing to her boyfriend, painful to another girl who is attracted to the same boy, and
of no concern to many other people not involved. These qualities of the girl,
appearing in relation to other people around her, arise from the gunas that underlie
the manifested world. This example can help one see how the cause of all
phenomena, prakrti, contains all the characteristics found in worldly objects.

Sankhya philosophy posits that the whole universe is evolved from the gunas. The
state in which they are in their natural equilibrium is called prakrti, and when their
balance is disturbed they are said to be in vikrti, the heterogeneous state. The three
gunas are said by the nontheistic sankhya philosophers to be the ultimate cause of
all creation. Sattva is weightlessness and light (laghu); rajas is motion or activity
calam); and tamas is heaviness, darkness, inertia, or concealment (guru and
avarana). The gunas are formless and omnipresent when in a state of equilibrium,
having completely given up their specific characteristics when thus submerged in
each other. In a state of imbalance, however, rajas is said to be in the center of
sattva and tamas, and this results in creation because manifestation in itself is an
action. Action depends on motion, the force of activity that is the very nature of rajas,
and so sattva and tamas are dependent on rajas to manifest themselves and thus
produce pairs of opposites. Rajas also depends on sattva and tamas, however,
because activity cannot be accomplished without the object or medium through which it becomes activated. In the state of manifestation, one *guna* dominates the other two, but they are never completely apart from each other or completely absent because they are continually reacting with one another. By the force of *rajas*, sattvic energy evolves with great speed and its unitary energy becomes divided into numerous parts. At a certain stage, however, their velocity decreases, and they start to come closer and closer together. With this contraction in sattvic energy, *tamas* is naturally manifested, but at the same time another push of the active force (*rajas*) occurs also on *tamas*, and within the contraction a quick expansion occurs. Thus do the *gunas* constantly change their predominance over one another. The predomination of *sattva* over *tamas* and of *tamas* over *sattva* is always simultaneously in process; the conversion of each of them into one another is taking place at every moment.

*Sattva* and *tamas* have the appearance of being in opposition to each other because one is light and weightless and the other is dark and heavy. But these pairs actually cooperate in the process of manifestation and dissolution as things move from subtle to gross and from gross to subtle. The expansion of power stores up energy in some relatively subtle form, from which it manifests to form a new equilibrium. These points of relative equilibrium constitute certain stages in the evolutionary process. It might at first seem that there is constant conflict among the *gunas*, but this is not the case. They are in perfect cooperation during the process of manifestation because it is through their constant interaction that the flow of cosmic and individual life continues. They are essentially different from but interrelated with one another. Just as the oil, wick, and flame of a lamp work together to produce light, so the different *gunas* cooperate to produce the objects of the world. The *gunas* play the same role in one's body and mind as they do in the universe as a whole. An individual's physical appearance is simply a manifestation of the *gunas* that has been brought about by consciousness. This intention of consciousness to cause *prakrti* to manifest disturbs the state of equilibrium in *prakrti*, thus causing the *gunas* to interact and manifest the universe.

The *gunas* are always changing or transforming into one another. This occurs in two ways: *virupaparinama*, "change into a heterogeneous state," and *svarupaparinama*, "change into a homogeneous state." *Svarupaparinama*, the first kind of transformation, takes place when one of the *gunas* dominates the other two and begins the process of manifestation of a particular objects. This type of transformation or interaction of the *gunas* with each other is responsible for the manifestation of the world. *Svarupaparinama*, the other kind of transformation of the *gunas*, refers to that state in which the *gunas* change internally without disturbing each other. In this state, the *gunas* cannot produce anything because they neither oppose nor cooperate with one another. This type of change occurs in the balanced state of *prakrti*. In describing the process of involution, *sankhya* states that all gross elements dissolve into subtle elements and finally they all dissolve into their origin -- *sattva*, *rajas* and *tamas*. Ultimately these three *gunas* also come to a state of perfect balance called *prakrti*. Then there remains no weight of *tamas*, no weightlessness of *sattva*, and no activity of *rajas* because the *gunas* no longer have a separate existence in the sense of predominance of any single attribute. This state -- *prakrti* -- cannot be perceived by one's ordinary perception; it can only be inferred. One can only imagine a state in which all of nature is balanced and there is no levity, no
motion, no heaviness; no light, no darkness, no opposing forces; in which the imagination itself, being a product of the mind, is dissolved. *Sankhya* philosophers describe this state as uncaused, unmanifested, eternal, all-pervading, devoid of effect-producing actions, without a second, independent, and partless.

**Purusa -- Consciousness**

As was previously stated, *sankhya* is a dualistic philosophy that acknowledges two aspects of reality: the unconscious principal (*prakrti*) and consciousness (*purusa* or the self). Each body contains a self, but the self is different from the body, senses, mind, and intellect. It is a conscious spirit, at once both the subject of knowledge and the object of knowledge. It is not merely a substance with the attribute of consciousness, but it is rather pure consciousness itself -- a self-illumined, unchanging, uncaused, all-pervading, eternal reality. Whatever is produced or is subject to change, death, and decay belongs to *prakrti* or its evolutes, not to the self. It is ignorance to think of the self as body, senses, mind, or intellect, and it is through such ignorance that *purusa* confuses itself with the objects of the world. Then it becomes caught up in the ever flowing stream of changes and feels itself to be subject to pain and pleasure.

*Sankhya* offers five arguments to prove the existence of *purusa*. First, all the objects of the world are meant to be utilized by and for someone other than themselves. All things that exist serve simply as the means for the ends of other beings. (A chair is not made for the chair itself, nor is a house made for the house itself.) Therefore, there must be something quite different and distinct from such objects. Objects cannot enjoy their own existence, nor can one material object be utilized and enjoyed by another material object; therefore, there must be some other enjoyed of the objects. That enjoyed who utilizes the objects of the world is consciousness, *purusa*.

Second, it cannot be said that all objects are meant for *prakrti* because *prakrti* is unconscious and is the material cause of all objects. It is the balance of the *gunas*, of which all the objects of the world are composed. *Prakrti* is thus the potential or essence of all pain, pleasure, and neutral states and cannot therefore be the enjoyer of itself, just as even the greatest of men cannot sit on his own shoulders. The proprietor or utilizer of all worldly objects must consequently be a conscious being who does not possess the three *gunas* and who is completely different from them in both their balanced and heterogeneous states. That transcendent Reality is *purusa*.

Third, all the objects of the external world -- including the mind, senses, and intellect -- are in themselves unconscious. They cannot function without guidance from some intelligent principle, and they must be controlled and directed by it in order to achieve anything or realize any end. That conscious self who guides the operation of *prakrti* and its manifestations is *purusa*. Fourth, nonintelligent *prakrti* and all its evolutes, which are by nature pleasurable, painful, or neutral, have no meaning if they are not experienced by some intelligent force. That experience is *purusa*.

Fifth, every human being wants to attain liberation and be free from pain and misery, but whatever is derived from *prakrti* brings pain and misery. If there is nothing different from *prakrti* and its evolutes, then how is liberation attainable? If there were
only prakrti, then the concept of liberation and the will to liberate or to be liberated, which is found in all human beings, in the sayings of sages, and in the scriptures, would be meaningless. Therefore, there must be some conscious principle that strives for liberation. That principle is the self, purusa.

Proof of the Existence of Many Selves

According to sankhya, there are many selves or conscious principles -- one in each living being. If there were only one self related to all bodies, then when one individual died, all individuals would simultaneously die, but this is not the case. The birth or death of one individual does not cause all other individuals to be born or to die; blindness or deafness in one man does not imply the same for all men. If there were only one self pervading all beings, then if one person were active, all the selves would be active; if one were sleeping, then all would sleep. But this does not happen, and there is therefore not one self but many selves. Secondly, human beings are different from God and from animal and vegetable life as well. But this distinction could not be true if God, human beings, animals, birds, insects, and plants all possessed the same self. Therefore there must be a plurality of selves that are eternal and intelligent. Thus it becomes clear that there are two realities: prakrti, the one all-pervading (unconscious) material cause of the universe, and purusa, the many pure conscious intelligent entities who are not subject to change. It is from the interaction of these two principles that evolution occurs.

The Process of the Evolution of the Universe

According to sankhya, the entire world evolves from the interaction of prakrti with purusa. This interaction does not refer to any kind of orderly conjunction, as in the contact of two finite male and female material substances. It is rather a sort of effective relationship through which prakrti is influenced by the mere presence of purusa, just as sometimes one’s body is influenced or moved by the presence of a thought. Evolution cannot occur by the self (purusa) alone because the self is inactive; nor can it be initiated only by prakrti because prakrti is not conscious. The activity of prakrti must be guided by the intelligence of purusa; this cooperation between them is essential to the evolution of the universe.

Given this, two questions yet arise: how can two such different and opposing principles cooperate, and what is the interest that inspires them to interact with one another? Sankhya replies that just as a blind man and a lame man can cooperate with each other in order to get out of a forest -- by the lame man’s guiding while the blind man carries him -- so do nonintelligent prakrti and inactive purusa combine with each other and cooperate to serve their purpose. What is their purpose? Prakrti requires the presence of purusa in order to be known or appreciated, and purusa requires the help of prakrti in order to distinguish itself from prakrti and thereby realize liberation. Thus, according to sankhya philosophy, the goal of the manifestation of the universe is to attain liberation. Through the interaction of purusa and prakrti, a great disturbance arises in the equilibrium in which the gunas are held prior to manifestation. In this process, raja, the active force, first becomes irritated, and through this, the two other gunas begin to vibrate. This primeval vibration releases a tremendous energy within prakrti, and the “dance” of these three energies
becomes more and more dense, thus manifesting the universe in various grades and degrees. The process of manifestation originates from the unmanifested unity and completes its cycle in twenty-four stages.

The process of manifestation begins with the infusion of purusa (consciousness) into prakrti (the material cause of the universe). Metaphorically it is said that prakrti is the mother principle, and purusa is the father principle. The mother is fertilized by the father; prakrti is the soil in which consciousness can take root. Thus prakrti, the material cause of all existence, embodies consciousness.

Sankhya's Twenty-three Evolutes of Prakrti

Mahat or Buddha. The first evolute of prakrti is mahat or buddhi, the intellect. This is the great seed of the vast universe -- therefore the name, mahat, which means "great one." This is the state of union of purusa and prakrti. Though prakrti is unconscious material substance, it seems to be conscious and realizes itself as conscious because of the presence of the conscious self. Mahat is the state in which prakrti receives light from purusa, the fountain of light, and sees itself; and this process of seeing is the beginning of the manifestation of the universe. The individual counterpart of this cosmic state, mahat, is called buddhi, the intellect, the finest aspect of a human being that has the capacity to know the entire personality in its full purity. Buddhi is the immediate effect of prakrti resulting from the guidance of purusa; therefore buddhi is the evolute closest to purusa. Buddhi is manifested from the sattvic aspect of prakrti because the nature of sattva -- weightlessness, clarity, and light -- is affected sooner by the active force of manifestation than would be the heavy and unclear nature of tamas. Because of the sattvic quality of buddhi, the light of the self reflects in the intellect similarly to the way an external object reflects in the clear surface of a mirror. The self, seeing its reflection in the mirror of buddhi, identifies itself with the reflected image and forgets its true nature. Thus the feeling of "I-ness" is transmitted to buddhi. In this way the unconscious buddhi starts functioning as a conscious principle.

According to the sankhya system, buddhi possesses the following eight qualities: virtue (dharma); knowledge (jnana); detachment (vairagya); excellency (aisvarya); nonvirtue (adharma); ignorance (ajnana); attachment (avairagya); and imperfection or incompetency (anaisvarya). The first four are sattvic forms of buddhi, while the last four are overpowered by inertia (tamas). All of its attributes except knowledge bind prakrti and involve the self in buddhi, thereby entangling it in worldly concerns and miseries. The pure self falsely identifies with buddhi and thereby thinks it is experiencing what buddhi is experiencing. But through the use of the buddhi's eighth attribute, knowledge, it reflects pure and well-filtered knowledge onto purusa from its mirror, and purusa comes to realize its false identification with buddhi's objects and to recognize its transcendent nature in all its purity. Thus buddhi, the discriminating or decision-making function, stands nearest to the self and functions directly for the self, enabling it to discriminate between itself and prakrti and thereby achieve realization of its liberated nature.

Ahankara: The Sense of "I"
Ahankara is a derivative of mahat or buddhi; it is the mundane property of individuation that generates a material boundary of "I-ness." This false sense of identity separates one's self from all others and focuses it upon matter, leading a person to think, "I am this body, this is mine, and this is for me." There are three categories of ahankara -- sattvika, rajasa and tamasa -- determined by which of the three gunas is predominant in ahankara. Eleven senses arise from the sattvika ahankara: the five senses of perception (hearing, touching, seeing, tasting, and smelling), the five senses of action (verbalization, apprehension, locomotion, excretion, and procreation), and the mind (manas). The five tanmatras or subtle elements (sound, touch, color, taste, and smell) are derived from the tamasa ahankara. The function of the rajasa ahankara is to motivate the other two gunas, and thus it is the cause of both aspects of creation: the eleven senses and the five tanmatras.

This explanation of the manifestation of ahankara is based on the Sankhya-karika, the major text of sankhya philosophy (see chart above). The commentators of this text hold various views. Some state that the mind is the only sense derived from the sattvika ahankara, that the other ten senses are derived from the rajasa ahankara, and that the five subtle elements are derived from the tamasa ahankara. Irrespective of the origin of the senses, all the scholars view the nostrils, tongue, eyes, skin, and ears as the physical organs that are the sheaths of the cognitive senses. Likewise, the mouth, arms, legs, and the organs of excretion and reproduction correspond to the five senses of action -- verbalization, apprehension, locomotion, excretion, and procreation. These physical organs are not the senses; rather, they are given power by the senses. Thus the senses cannot be perceived but can only be inferred from the actions of the physical organs powered by them. The mind, the ego, and the intellect are called the internal senses, while the five cognitive senses and five senses of action are called external. The mind is master of all the external senses, and without its direction and guidance, they could not function. The mind is a very subtle sense indeed, but it also has many aspects, and it therefore comes into contact with several senses at the same time. According to sankhya philosophy, the mind is neither atomic nor eternal, but it is rather a product of prakrti and is therefore subject to origin and dissolution. The cognitive senses contact their objects and supply their experiences to the mind, which then interprets the data as desirable or undesirable perceptions. In turn, ahankara attaches itself to the objects of perception, identifying itself with the desirable ones and resenting the undesirable ones. The intellect then decides how to deal with those external objects.

The five tanmatras of sound, touch, color, taste, and smell are the subtle counterparts to the gross elements; they can be inferred but not perceived. They evolve after the ten senses have come into being and they are the cause of the five gross elements, which are derived in a gradual step-by-step process. First to evolve is the tanmatra that is the essence of sound (sabda), from which in turn ether (akasa), the space element, is derived. Therefore, the space element contains the quality of sound, which is perceived by the ear. The air element is the derivation of the essence of touch (sparsa tanmatra), which combines with that of sound. Therefore, the air element contains the attributes of sound and touch, although touch is the special quality of air and is sensed by the skin. The fire element is derived from the essence of color (rupa tanmatra). It combines the qualities of sound, touch, and color, and its special property is sight, which is sensed by the eyes. The water
element is derived from the essence of taste (rasa tanmatra). All three preceding qualities -- sound, touch, and color -- are found in it, as well as its special quality, taste, which is sensed by the tongue. The essence of smell (gandha tanmatra) produces the earth element, whose special property is odor, which is sensed by the nostrils. This grossest element contains all of the four previous qualities.

Thus the course of evolution takes place in twenty-four stages. It starts from the root cause, prakrti, and it ends with the earth element, the grossest manifestation. This process is broken down into two major categories: the development of prakrti as buddhi, ahankara, and the eleven senses, and the evolution of the five subtle elements and five gross elements.

The first category is divided again into two parts: the internal senses (antahkarana) and the external senses (bahyakarana), which are the five cognitive and five active senses, respectively. The second category is also divided into two main parts: nonspecific qualities (avisesa) and specific qualities (visesa). The five tanmatras, or subtle elements are said to be nonspecific because they cannot be perceived and enjoyed by ordinary beings. But the five gross elements are said to be specific because they possess specific characteristics of being pleasurable, painful, or stupefying. These specific manifestations can be categorized into two major parts: the external gross elements, and the three bodies -- physical, subtle, and causal.

The Sources of Valid Knowledge

Sankhya philosophy accepts only three independent sources of valid knowledge: perception, inference, and testimony. Included within these three are other sources of knowledge such as comparison, postulation, and non cognition, which are therefore not recognized as separate sources of knowledge. According to sankhya, there are three factors present in all valid knowledge: pramata, the subject; prameya, the object and pramana, the medium. Pramata is a conscious principle that receives and recognizes knowledge. It is none other than the self, pure consciousness. Prameya is the object of knowledge that is presented to the self. Pramana is the modification of the intellect through which the self comes to know an object; thus it is the source or the medium of knowledge. Valid knowledge is therefore the reflection of the self in the intellect which is modified into the form of an object.

The sankhya concept of perception (pratyaksa) as a source of valid knowledge is different from those posited by other systems of Vedic philosophy. In sankhya, valid knowledge means a definite and unerring cognition that is illuminated or made known by the self through its reflected light in buddhi. The mind, intellect, and senses are unconscious material entities and therefore cannot perceive or experience any object. For perception or experience, consciousness is needed, and consciousness belongs only to the self. But the self cannot directly apprehend the objects of the world because the self is niskriya, meaning "motionless" or "without action," and without motion or activity apprehension is not possible. If consciousness alone could apprehend the objects of the world, then, because the self is infinite and ever-present, one would know all the objects of the world. But this is not the case. The self knows objects only through the mind, intellect, and senses. True knowledge of an external object is attained when the impression of the object is perceived through the
senses and reworded in the intellect, which then reflects the light of consciousness onto those objects. Perception is the direst cognition of an object through the contact of the senses. When an object, such as a hair, comes within the range of vision, there is contact between the chair and the eyes. The impression of the chair is produced in the eyes, and that impression is then analyzed and synthesized by the mind. Through the activity of the mind, the intellect then becomes modified and transformed into the form of the chair. The predominance of sattva in the intellect enables it to reflect the modification of the chair in the self. It is then reflected back to the intellect. Thus the unconscious intellect, which is modified by the object chair, becomes illumined into a conscious state in which perception is possible. Just as a mirror reflects the light of a lamp and therefore illuminates other objects, so the intellect, an unconscious principle, reflects the consciousness of the self and recognizes objects.

Two major proponents of the sankhya theory of reflectionism -- Vijnanabhiksu and Vacaspati Misra -- hold differing views. According to Vijnanabhiksu, the knowledge of an object takes place when there is a reciprocal reflection of the self in the intellect (the intellect having been modified into the form of the object) and of the intellect in the self. The senses contact the object and supply the impression of it to the mind, which transmits this impression to the intellect. The intellect then becomes modified by the object, but because the intellect is unconscious substance, it cannot analyze the experience of the object by itself. Its predominance by sattva guna, however, enables the intellect to be reflected in the self, and the self is in turn also reflected in the mirror of the intellect, which contains the modification of the object. In this way, the intellect then experiences the object. This theory of reflectionism is also accepted by Vyasa in his commentary on the Yoga-sutras.

According to the second view, held by Vacaspati Misra, perception is a process of one-sided reflection: There is a reflection of the self in the intellect, but there is no reflection of the intellect back into the self. He maintains that an object comes into contact with the senses, that its impression reaches the mind, that it is transmitted to the intellect, and that the intellect then becomes modified into the form of that object. It is at this stage that the ever-radiating light of the self illuminates the clean sattvic mirror of the intellect, which reflects the same light onto the object. The intellect then experiences the object as if the intellect were a conscious being. The intellect is just like a mirror that reflects the light of a lamp and itself becomes capable of illuminating other objects as well. This means that the intellect, but not the self, experiences the pain, pleasure, or neutrality of worldly objects, while according to Vijnanabhiksu, the pleasure, pain, and indifference are experienced by the self because the self and the intellect are reflecting each other.

Both of these views are possible within the major theory of reflectionism because the self's experience of external objects, or pain and pleasure, depends on the intensity of its identification with the intellect. One-sided reflection and reciprocal reflection are both valid views because whatever comes to the intellect is experienced by the self. A self-created state of oneness between the self and the intellect exists, but if the identification is loosened a bit, then the consciousness radiating from the self allows the intellect to appear as though it were conscious, and thus the intellect experiences the external object. The more the identification is loosened, the more the intellect experiences and the more the self watches the experiencing intellect as a witness.
Sankhya recognizes two kinds of perception: indeterminate and determinate. The first is called *alocana*, which means "merely seeing the object." It arises at the moment of contact between the senses and the object and is antecedent to all mental analyses and syntheses of sensory data. In this state there is recognition of the object as a mere "something" without any recognition of it as a specific object. Determinate perception, in contrast, is the result of the analysis, synthesis, and interpretation of sensory data by the mind. This type of perception is called *vivecana*, meaning "interpretation of the object," because it is the determinate cognition of an object as a particular identifiable thing.

Inference

Knowledge derived through the universal or invariable relationship between two things is called *anumana* (inference). The *sankhya* concept of inference is slightly different from that held by *nyaya* philosophy. In *sankhya*, inference is of two kinds: *vita* and *avita*. *Vita* is based on a universal affirmative proposition and *avita* is based on a universal negative proposition. *Vita*, positive inference is of two types: *purvavat* and *samanyatodrsta*. *Purvavat* inference is based on previously observed uniform concomitance between two things. For example, one can infer the existence of fire from the existence of smoke because one has already observed that smoke is always accompanied by fire. *Samanyatodrsta* inference is not based on any previously observed concomitance between the middle and major terms (see the *nyaya* chapter for an explanation of the terms of inference). This type of inference does, however, require facts that are uniformly related to the middle and major terms. For example, how can we know that we have senses? One cannot perceive his senses because they are beyond their own reach, so one must accept the existence of the senses by inference. Their existence can be inferred in the following way: for all action, some kind of instrument is needed; seeing, hearing, smelling, tasting, and touching are actions that must have their corresponding instruments; the senses are these instruments.

Negative inference, *avita*, is explained in the *nyaya* system as *sesavat*, in which an inference results by the elimination of all other possible alternatives. For example, a certain whole number is inferred to be two because it has been determined that it is not three or more, nor is it one or less. Yet it is a certain positive integer; therefore, it is two.

Testimony

Testimony (*sabda*) is the third source of valid knowledge. *Sankhya* holds the same view of *sabda* as *nyaya*, and so the reader is referred to the discussion of this subject in the chapter on *nyaya*.

The Concept of Liberation

According to *sankhya* philosophy, the universe is full of pain and misery, and even what is thought of as pleasure is mingled with sorrow because all pleasures
ultimately end in disappointment, which is the basis of misery. It is the natural inclination of all living beings to rid themselves of pain and misery, but sankhya states that this can be achieved only through the correct discriminative knowledge of reality.

The entire external world and all internal phenomena belong to prakrti, but pure consciousness, purusa, is free from the limitations of space, time, and causation. All activity, change, thought, feeling, pain, and pleasure belong to the body/mind organism, not to the self. The self is pure ever-illumined consciousness that transcends the entire phenomenal world, including the body/mind complex. The self has a body, but the body is not the self. In the same way, the self has a mind, ego, and intellect, but it is quite distinct from all of these. Pleasure and pain, virtue and vice, merit and demerit do not color the pure self; they color the intellect as it becomes involved with its surroundings. All the experiences of the phenomenal world are received by purusa because of its false identification with the mind, intellect, and ego. The intellect is responsible for all experiences, but whenever purusa ignorantly identifies itself with the intellect, it thinks it experiences as the intellect does, even though purusa is actually always and forever beyond the evolutes of prakrti.

The manifestation of the universe into the twenty-three evolutes of prakrti is not meant to create bondage for purusa but rather to help purusa realize that it is free and distinct from prakrti. Although it may seem that external objects are meant for physical, mental, or internal enjoyment, that is not really the case because the mind, ego, and intellect do not function for themselves; they exist to provide experiences to purusa. Feelings of pain and misery are experienced because purusa falsely identifies with rajas and tamas and forgets its capacity to see through its false identification. Thus, also, purusa fails to use prakrti’s satvic manifestations as efficient instruments for discriminating the self from the non-self. The predominance of rajas and tamas in the mind, ego, and intellect does not allow these instruments to filter external experiences properly, so purusa receives unfiltered, contaminated experiences and ignorantly thinks it is suffering the pain and misery reflected by the intellect.

Sankhya views prakrti as a compassionate mother that provides everything to purusa that he needs to understand his true nature distinct from prakrti in her manifested and unmanifested states. Prakrti manifests herself out of compassion for purusa, just as a mother’s milk is produced out of compassion for her child. Unless it is somehow contaminated, the milk from the mother’s breast is always healthful to the child, and likewise the evolutes of prakrti are healthful to purusa unless they are contaminated by the predominance of rajas and tamas, false identification, selfish action, possessiveness, or lack of discrimination.

Both prakrti and purusa are infinite and eternal, and when prakrti is in her unmanifested state, she is so intermingled with purusa that he becomes anxious to realize his own true nature. Purusa’s anxiety allows him to come even closer to prakrti, and it is this move or intention toward her that inspires the latent forces in prakrti to function. Thus purusa initiates the manifestation of the universe, and thus prakrti helps purusa realize himself as distinct from her. But when through ignorance purusa forgets his purpose in coming closer to prakrti, then instead of discriminating himself from the unconscious principle, he entangles himself with it. The moment he remembers his purpose and discriminates himself from this manifest world and from
its cause, he realizes his true nature and recognizes his freedom. Just as a chef
continues cooking until the food is cooked and stops the moment it is ready, so
purusa continues to flow in the current of life until his purpose is fulfilled. The moment
the highest goal of life -- realization -- is attained, he stops flowing in that current.
Likewise, a dancer performing to entertain her audience continues to dance until the
audience is satisfied. The moment the course of dance (which depends on the
audience’s duration of enjoyment) is fulfilled, the dancer stops her dance. In the
same way, the great dancer prakrti continues her dance until her discriminating
function is accomplished. The moment she accomplishes her job she withdraws
herself back into her unmanifested state. The purpose of the manifestation of prakrti
is to show herself to purusa so he can realize that he is distinct from her. The
moment purusa realizes that he is not the external objects, then the entire
manifestation is withdrawn.

In actuality, pure consciousness, purusa, is subject neither to bondage nor to
liberation, because he is never really in bondage. The concepts of bondage and
liberation, pain and suffering, are the result of ignorance or false understanding.
Prakrti binds herself with the rope of her own manifestation, and when purusa
recognizes her as distinct from him, she liberates herself. As has previously been
stated, there are eight attributes of mahat or buddhi (the intellect), which is the prime
evolute of prakrti. These eight are attachment and detachment, vice and virtue,
nonmeritorious and meritorious actions, and ignorance and knowledge. Prakrti binds
herself with the first seven attributes and liberates herself with the eighth -- the light of
knowledge. Thus bondage and liberation are both concepts of the intellect. Through
the practice of the yoga of discrimination -- that is, the repeated affirmation of
nonidentification with the body, senses, or mind (such as, for instance, "I am not the
experiencer, I am not the doer; whatever is going on is in prakrti") -- one polishes
one’s intellect and becomes more consciously aware of one’s true nature. This type
of knowledge or understanding leads one to the state of freedom from all confusions
and false identifications, and thus one attains the knowledge of the true self. After the
self realizes its true nature, all anxieties are dissolved. Then the self becomes
disinterested in seeing prakrti, and prakrti becomes disinterested in showing herself,
because she has seen and her purpose has been fulfilled. Prakrti and purusa are
both infinite and all-pervading and are therefore eternally together, like two sides of
the same coin, but when their purpose is fulfilled the process of manifestation
ceases.

In the sankhya philosophy, there are two kinds of liberation: jivana mukti and videha
mukti. The liberation attained in one’s lifetime is called jivana mukti. In this kind of
liberation, a person continues his existence on this platform as a liberated being. He
lives in this world and enjoys the worldly objects until he casts off his body. He
continues his journey through worldly life just as a fan continues to revolve, due to its
previously generated speed, for a short while after it has been switched off. When all
the samskaras -- the impressions of past actions -- are finished, then he casts off his
body and is said to enter into videha mukti, which is liberation after death.

The Concept of God
The earliest available text of *Nirisvara sankhya*, the *Sankhya-karika*, does not discuss the existence of God at all. The absence of any reference to God led the proponents of this system to conclude that the early *sankhya* philosophers did not accept the existence of God. They argued that because the entire universe is a system of cause and effect, it could not be caused by God because by definition God is eternal and immutable. That which is unchanging cannot be the active cause of anything, so the ultimate cause of the universe is eternal but ever-changing. That cause is *prakrti*, the eternal and ever-changing unconscious material principle. In reply to this, one could argue that *prakrti* is not intelligent and must, therefore, be controlled and directed by some intelligent principle in order to produce the universe. But because there are many *purusas*, they cannot guide and lead the infinite, all-pervading *prakrti*, so one must therefore conclude that there is a God. But this is not possible, the proponents of nontheistic *sankhya* reply, because the act of controlling or guiding *prakrti* means to do something or to be active. In addition, if God controls *prakrti*, then what inspires God to make her create a world full of pain and misery? Moreover, one cannot say that God has desires because desire implies imperfection, which is a quality God cannot have. Therefore, there is no such thing as God. *purusa* is sufficient to inspire the unconscious *prakrti* to manifest herself in the form of the universe.

Later, a section of *sankhya* philosophers were persuaded to accept the existence of God. In debates with theistic opponents they found it very difficult to explain the creation without including a Supreme Being in their system. One logical weakness of *Nirisvara sankhya* that was attacked by theists is the belief in many *purusas* but only one *prakrti*. Was it one *purusa* or all the *purusas* together that inspired *prakrti* to manifest? If only one, then creation occurred against the wish of the other *purusas*. Why did the desire of only one soul implicate all others in birth and death? If all the *purusas* together inspired *prakrti* to create, then there must be some communication and agreement among the *purusas*. But there is no record of a cosmic conference of all the *purusas* to make such a decision. Therefore, there must be one Supreme Being who guides *prakrti* independently.

### 5. Yoga: Self-Discipline for Self-Realization

The word *yoga* is derived from the Sanskrit root *yuj*, which means “to unite.” The *yoga* system provides a methodology for linking up individual consciousness with the Supreme Consciousness. There are various schools of *yoga*, among which *bhakti-yoga*, *jnana-yoga*, *karma-yoga*, and *kundalini-yoga* are especially well known. The *yoga* system that is counted as one of the six systems of Vedic philosophy is the *patanjala-yoga* system, which will be reviewed here. This school of *yoga*, also known as *astanga-yoga* (the *yoga* of eight parts), is closely allied to *sankhya* philosophy. Indeed, *astanga-yoga* is the practical application of *sankhya* philosophy for the attainment of liberation. It is called *patanjala-yoga* because it was systematized by the sage Patanjali. His work is known as *Patanjala-yoga-sutra*. There are various commentaries on this text, Vyasa’s being the most ancient and profound. This *yoga* system attempts to explain the nature of mind, its modifications, impediments to growth, afflictions, and the method for attaining what is described as the highest goal of life: *kaivalya* (absoluteness).
The Yogic View of Mind

According to Patanjali, *yoga* is the control of the modifications of the subtle mental body. He proposes that the mental body leads a person to bondage or to liberation, that most human problems are mental, and that the only remedy to solve them is mental discipline. Among all human instruments that serves one in attaining one's goals, the mental body is the finest. The mental body is also the link between consciousness and the gross physical body. For these reasons, Patanjali places great emphasis on the study of the mental body. His *yoga* system attempts to provide all possible means to control the mental body's modifications and unfold its great power for higher attainment.

Theoretically, the *yoga* system is based on the same tenets as *sankhya* philosophy, and it also incorporates some of the teachings of Vedanta. In *sankhya* philosophy, the mental body is defined in terms of three functions or parts (mind, intelligence and false ego), but in *vedanta* philosophy the mental body is divided into four parts (mind, intelligence, false ego and *citta* or conditioned consciousness, the storehouse of memories). In *yoga*, however, the mental body is equated with the mind, and the intelligence and false ego are considered to be aspects of that mind. *Citta* denotes all the fluctuating and changing phenomena of the mind. According to *yoga*, the mind is like a vast lake, on the surface of which arise many different kinds of waves. Deep within, the mind is always calm and tranquil. But one's thought patterns stir it into activity and prevent it from realizing its own true nature. These thought patterns are the waves appearing and disappearing on the surface of the lake of the mind. Depending on the size, strength, and speed of the waves, the inner state of the lake is obscured to a greater or lesser degree. The more one is able to calm one's thought patterns, the more the inner state of the mind is unveiled. It is not very difficult to calm down the waves of thought patterns on the surface of the lake of mind, but it is very difficult to calm down those unrhythmic and destructive waves of thought patterns that arise from the bottom. Memories are like time bombs buried in the lake bed of mind that explode at certain times and disturb the entire lake.

There are two main sources for the arising waves of thoughts: sense perceptions and memories. When the waves of a lake are stilled and the water is clear, one can look deep down and see the bottom of the lake. Likewise when one's thought patterns are quieted, one can see one's innermost potentials hidden deep within the mind. Because the mind is an evolute of *prakrti* (see the previous chapter on *sankhya* philosophy), it is composed of the elements of *sattva*, *rajas*, and *tamas*. The relative proportions of these three qualities determine the different states of *citta*, conditioned consciousness. The turmoil caused by the interaction of the *gunas* is responsible for the arising thought patterns in the mind.

Five Stages of Mind

The mind is described in five stages, depending on the degree of its transparency: disturbed (*ksipta*); stupefied (*mudha*); restless (*viksipta*); one-pointed (*ekagra*); and well-controlled (*niruddha*). The predominance of *rajas* and *tamas* causes the mind to be disturbed (*ksipta*). Because of the predominance of *rajas*, the mind becomes
hyperactive; because of the predominance of tamas, it loses its quality of discrimination. Thus it flits from one object to another without resting on any. It is constantly disturbed by external stimuli, but it does not know how to discriminate what is beneficial from that which is useless. In the second stage (mudha), the mind is dominated by tamas, which is characterized by inertia, vice, ignorance, lethargy, and sleep. In this state, mind is so sluggish that it loses its capability to think properly and becomes negative and dull. In the restless stage (viksipta), there is a predominance of rajas. In this state, the mind runs from one object to another but never stays anywhere consistently. This is an advanced stage of the disturbed mind.

These first three stages of mind are negative and act as impediments in the path of growth and exploration. At this level, one experiences pain and misery and all kinds of unpleasant emotions, but the next two stages are more calm and peaceful. All the modifications are found in the earlier three stages. In the one pointed and well-controlled states there are no modifications at all. In the one-pointed state of mind (ekagra), there is a predominance of sattva, the light aspect of prakrti. This is a tranquil state near to complete stillness in which the real nature of things is revealed. This fourth state is conducive to concentration, and the aim of the yoga system is to develop or to maintain this state of mind for as long and as consistently as possible. In the well-controlled state of mind (niruddha), there is no disturbance at all but a pure manifestation of sattvic energy. In this state, consciousness reflects its purity and entirety in the mirror of mind, and one becomes capable of exploring one's true nature. Only the last two states of mind are positive and helpful for meditation, and many yogic practices are designed to help one attain these states. When all the modifications cease and the state of stillness is acquired, then purusa (pure consciousness) sees its real nature reflecting from the screen of the mind.

The Modifications of the Mind

The yoga system categorizes the modifications of mind into five classes: valid cognition, invalid cognition, verbal cognition, sleep, and memory. All thoughts, emotions, and mental behaviors fall into one of these five categories, which are further divided into two major types: those that cause afflictions (klista) and those that do not cause afflictions (aklista). False cognition, verbal cognition and sleep always cause afflictions and are in themselves afflictions: they are harmful modifications. Valid cognition and memories (depending on their nature) are not considered to be causes of affliction and are not harmful for meditation.

The sources of valid cognition are perception, inference, and authoritative testimony, which have already been described in detail in the sankhya chapter. False cognition is ignorance (avidya). Ignorance is mistaking the non-eternal for the eternal, the impure for the pure, misery for happiness, and the non self for the Self. It is the modification of mind that is the mother of the klesas, or afflictions. Ignorance has four offshoots: asmita, which is generally defined as I-am-ness; raga, attachment or addiction, which is the desire to prolong or repeat pleasurable experiences; dvesa, hatred or aversion, which is the desire to avoid unpleasurable experiences; and abhinivesa, fear of death, which is the urge of self-preservation.
Verbal cognition is the attempt to grasp something that actually does not exist but is one's own projection. An example of such a projection is the fantasy of marrying a gossamer-winged fairy and together flying through the empyrean to the most wondrous paradise. All such fantasies are mere verbal cognition that do not correspond to facts and only cause the mind to fluctuate. Sleep is a modification of mind in which one's relationship with the external world is cut off. One might ask: If sleep is a modification of mind, aren't the dreaming and waking states also accepted as modifications? The answer would be no; the dreaming state is occupied with verbal cognition, and the waking state is occupied mainly with valid cognition and invalid cognition. Memory, the fifth and final mental modification, is the recall of impressions stored in the mind.

Overcoming the Modifications

The modifications of the mind are caused by nine conditions or impediments, namely sickness, incompetence, doubt, delusion, sloth, nonabstention, confusion, nonattainment of the desired state, and instability in an attained state. These impediments disturb the mind and produce sorrow, dejection, restlessness, and an unrhythmic breathing pattern. Yoga provides a method for overcoming these problems and controlling the modifications of the mind. Patanjali states that the mind and its modifications can be controlled through practice (abhyasa) and detachment (vairagya). The mind is said to be like a river that flows between two banks. One bank is positive and is the basis for liberation, while the other bank is negative and is the basis for indiscrimination and infatuations with sense objects. When the current of the river is controlled by practice and detachment, it tends to flow toward the side of liberation. Abhyasa, practice, means a particular type of effort or technique through which the mind maintains stillness. Practice does not mean engaging in mental gymnastics; it is, rather, sincere effort for maintaining steadiness of the mind. Perfection in practice is attained through sincerity and persistence. Methods of practice will be discussed in conjunction with the discussion of the eight limbs of yoga. Vairagya, detachment or dispassion, does not mean to renounce the world or to withdraw oneself from one's environment; rather it means to have no expectations from external objects. Detachment means to eliminate identification with the evolutes of nature and to understand oneself as pure self, as a self-illuminating conscious being. Patanjali also describes another method, called kriya-yoga, to help students attain a higher state of consciousness while dealing with a restless mind. Kriya-yoga, which means the yoga of purification, is a threefold discipline composed of the practice of austerity, study of the scriptures, and surrender to God. By practicing the path of kriya-yoga, students learn to perform their duties skillfully and selflessly while dedicating the fruits of their actions to the Supreme.

The Eightfold Path of Yoga

The eight components (asta-anga) of this yoga system (see chart below) are: restraints (yamas); observances (niyamas); posture (asana); breath control (pranayama); sense withdrawal (pratyahara); concentration (dharana); meditation (dhyana); and spiritual absorption (samadhi).
The Eight Limbs of Patanjala Yoga

- **Yamas (five restraints)**
  - nonhurting (*ahimsa*)
  - nonlying (*satya*)
  - nonstealing (*asteya*)
  - sensory control (*brahmacarya*)
  - nonpossessiveness (*aparigraha*)

- **Niyamas (five observances)**
  [austerity, study, surrender = *kriya-yoga*]
  - purity (*sauca*)
  - contentment (*santosa*)
  - austerity (*tapas*)
  - study (*svadhyaya*)
  - surrender (*isvara pranidhana*)

- **Asana (yoga postures)**

- **Pranayama (control of vital force: *prana, apana, samana, udana, vyana*)**
  [From yamas to pranayama = *hatha-yoga*]

- **Pratyahara (withdrawal of the senses)**

- **Dharana (concentration)**

- **Dhyana (meditation)**
  [dharana, dhyana, samadhi = *samyama*]

- **Samadhi (spiritual absorption)**

Success in *yoga* requires a one-pointed and well-controlled mind free from all worldly desires. Attachment to worldly objects is the main cause of and is the direct evolute of ignorance, which produces all the modifications of the mind. According to *patanjala-yoga*, attachment to world objects is the archenemy of the individual who wants to understand his inner self. The necessary qualities and conditions for reaching the subtler levels of consciousness include will power, discrimination, full control of the mind, conscious direction of one's potentials toward the desired end, a firm resolution to turn away from all worldly attachments, determination to obliterate the ego, control over all inharmonious processes, and constant awareness of the ultimate goal.

### Yama -- Restraints

To fulfill the above conditions, *patanjala-yoga* begins by prescribing an ethical code designed to calm one's relationship with oneself and others. The first two limbs of *patanjala-yoga* -- the *yamas* and *niyamas* -- consist of ten commitments that constitute this code. The five *yamas* (restraints) are nonviolence (*ahimsa*), truthfulness (*satya*), nonstealing (*asteya*), celibacy (*brahmacarya*), and nonpossessiveness (*aparigraha*). They replace animalistic urges with saintly virtues and thus break the four legs of *adharma* (sinful life), which stands on meat-eating (counteracted by *ahimsa*), illicit sex (counteracted by celibacy outside of procreation within marriage), gambling (counteracted by truthfulness) and intoxication (counteracted by self-restraint).

**Ahimsa.** *Ahimsa* literally means "non injury" or "non-violence." Generally, one thinks of nonviolence as merely restraining from the physical act of violence, but in *yoga* scriptures nonviolence is to be practiced in thought, speech, and action.
Satya. According to *patanjala-yoga*, one should be truthful to oneself and to others in thought, speech, and action. The *yoga* student is taught to speak what he thinks and to do what he says. Sometimes one lies without awareness or sometimes just for fun or for the sake of creating gossip. These simple lies are like seeds that create habits that will one day become one's nature. Thus one cannot even trust in himself because of his untruthful nature. The day a person becomes totally truthful, his whole life becomes successful and whatever he says or thinks comes true. He gains inner strength through which he overcomes all fear in his life.

Asteya. *Asteya*, nonstealing provides a great opportunity for the practice of nonattachment and nonpossessiveness. Actually, nonstealing is a negative explanation of contentment, because when one is self-satisfied he is not tempted to desire others' things. Such a person considers whatever he has as sufficient and he does not allow himself to be enslaved by lust and greediness in order to attain desired objects by illegitimate means. The *yoga* system advises that nonstealing be practiced mentally, verbally, and physically. An honest author writes original thoughts, and if some material is borrowed from others, the author honestly and respectfully gives references. That is an example of nonstealing at the thought level. In the same way, nonstealing practiced at every level of the personality helps maintain purity of life, and purity of life allows one to shine and grow in all dimensions.

Brahmacarya. *Brahmacarya* literally means "to act in brahman." One whose life's actions are always executed in the consciousness of "I am not the body" is called a *brahmacari*. The word *brahmacarya* is commonly translated as "sexual abstinence," but celibacy is only a partial explanation of this word. Sexual continence in itself is not the goal; the goal is to control the senses in order to achieve deeper levels of inner awareness. *Patanjala-yoga* takes *brahmacarya* in a wider sense to mean selectively performing only those activities that are helpful in achieving the highest goal of life. *Brahmacarya* is possible only when the mind is free from all sensuous desires, especially the sexual urge, which is the most powerful and which can be most destructive if not directed and channeled properly. Illicit sexual activity dissipates vital energy that is to be utilized for the attainment of higher consciousness. For achieving this goal, the *yoga* system advises one to organize all his sensory forces and to utilize them in a proper and beneficial way. It teaches control of sensual cravings in order to attain that inner peace and happiness that is greater than all transient bodily pleasures. Uncontrolled senses weaken the mind, and a weakened mind has no capacity to concentrate in one direction or on one object. A person with a mind weakened by lust fails to think properly, to speak properly, or to act properly. For higher attainment, one therefore has to withdraw his energies from the petty charms and temptations of sensory objects and convert the flow of the life force toward higher consciousness.

Aparigraha. *Aparigraha*, nonpossessiveness, is generally misunderstood to mean denying oneself all material possessions, but the word actually indicates an inward attitude rather than an outward behavior. The feeling of possessiveness is an expression of dissatisfaction, insecurity, attachment, and greed. One who strives his whole life to gain more and more worldly objects is never satisfied because that desire can never be quenched. One who is constantly greedy for more forgets that it is impossible to eat more than the stomach can hold to sleep on more ground than
the body covers, or to wear more clothes than the body requires. Whatever one possesses that exceeds the essential requirements becomes a burden, and instead of enjoying it one suffers in watching and taking care of it. A person who desires more than that which is required is like a thief who covets that which belongs to others. Nonpossessiveness does not mean that one should not plan for the future or that one should give away all one's money; it simply means that one should not be attached to what he has. An attitude of possessiveness excludes one from all that one does not have, but the practice of nonpossessiveness expands one's personality, and one acquires more than he has mentally renounced.

**Niyamas -- Observances**

The five *niyamas* regulate one's habits and organize the personality. They consist of purity (*sauca*), contentment (*santosa*), austerity (*tapas*), self-study (*svadhyaya*), and surrender to the Supreme Being (*isvara pranidhana*). These observances allow a person to be strong physically, mentally, and spiritually.

**Sauca.** In the context of *yoga* science, *sauca* refers to both physical and mental purity. Physical purity protects the body from diseases, and mental purity presents mental energy from being dissipated. Physical purity can be achieved easily, but one has to pay close attention to purity of mind, which depends on spiritual thinking, mindfulness, and discrimination. The *yoga* system places great emphasis on developing purity of the mind because concentration and inward exploration are impossible without it and because psychosomatic disease and emotional disturbance result from its absence.

**Santosa.** *Santosa*, contentment, is a mental state in which even a beggar can live like a king. It is one's own desires that make one a mental beggar and keep one from being tranquil within. Contentment does not mean one should be passive or inactive, for practice of contentment must be coordinated with selfless action.

**Tapas.** The word *tapas* literally means the generation of heat. A *yogi* who burns with the zeal for austerity is able to generate heat from within his body that keeps him warm and fit even in the icy wastes of the Himalayas. Therefore tapas is not to be understood as self-torture. The *Bhagavad-gita* clearly states that *yoga* is not for one who indulges the flesh nor for one who tortures it. One who is a real *yogi* enthusiastically takes up a life of healthy asceticism. He may thus gradually unlock mystical powers within himself. By these powers, the *yogi* is able to easily withstand intense cold or to go for long periods of time without eating, drinking or even breathing. But until such powers are unlocked, it is useless to try to imitate the accomplishments of *tapas*. Actually, supernatural powers are not the goal of *tapas*. The real goal is the development of a sincere enthusiasm for a life of austerity.

**Svadhyaya.** *Svadhyaya* includes studying the scriptures, hearing from saints and sages, and observing the lessons of experience through the eyes of spiritual revelation. Proper *svadhyaya* requires discrimination, which means neither blind acceptance nor critical analysis of the sources of knowledge. One should glean the essence of the transcendental teachings and utilize this essence for practical advancement. Without discrimination, one may become confused by the apparent
contradictions among different teachings from various scriptures and authorities. Therefore proper study is a skill that must be learned from one who has mastered the scriptures.

Iswara pranidhana. Isvara pranidhana, surrender to the Supreme Being, is the best method for protecting oneself from the dangers of attachment, false identification, and the idea of "I am the doer". Surrender is possible through cultivation of faith and devotion to the Lord within the heart.

Asana -- Posture

Asanas, physical postures, ensure physical health and mental harmony. They are used in conjunction with the yamas and niyamas and the other limbs of patanjala-yoga, for without the other elements of the system, mere physical exercise cannot provide the desired benefits. Nowadays, because many so-called students of yoga do not understand the importance of mastering the yamas and niyamas before attempting the asanas, the yogic postures have largely degenerated into mere physical culture. The yoga asanas are not means of improving physical beauty but are important prerequisites for the attainment of the higher goals of this yoga system. The highest aim of yoga is to attain samadhi. The meditative postures enable one to sit comfortably and steadily for a long time with the head, neck, and trunk properly aligned so that breathing may be regulated, the mind may be withdrawn from the senses, the mind may be concentrated within, and samadhi (unbroken trance) may at last be attained.

The postures are broadly divided into two major categories: postures for physical well-being and postures for meditation. The commentators on Patanjali's sutras mention only a few postures that are helpful in meditation, but later yoga scriptures describe a complete science of postures for physical and mental well-being. There are eighty-four classical postures, but only four of these are suggested for the practice of meditation. These are sukhāsana (the easy pose), svastikāsana (the auspicious pose), padmāsana (the lotus pose), and siddhāsana (the accomplished pose). In all meditative postures, the emphasis is on keeping the head, neck, and trunk straight. The spine being thus aligned provides steadiness and comfort in the posture and minimizes the consumption of oxygen.

Pranayama -- Control of the Vital Force

After practicing physical exercises, the student becomes aware of a deeper level of personality -- prana, the life force -- functioning in the body. The word prana is derived from the Sanskrit root ana and the prefix pra. Ana means "to animate or vibrate," and pra means "first unit." Thus the word prana means "the first unit of energy." Whatever animates or moves is an expression of prana -- the life force. All the forces in the world, including individual beings, are different manifestations or expressions of this life force.

This vital force animates all the energies involved in the physical and mental processes, and thus it is prana that sustains and activates the body and mind. Prana
is the basic principle underlying all biophysical functions. Later writings of yoga explain a highly advanced science of prana, which yogis claim establishes the link between body and mind and vitalizes both. Because the breath is the grossest manifestation of this vital function, the science of prana is also called the science of breath. Continuous regulation of the breath strengthens the nervous system and harmonizes all mental activities.

Yoga texts say that prana is the creator of all substances and the basis of all functions. The Brhadaranyaka Upanisad says that the thread of prana (vayu) runs through and holds together the whole universe. This thread is the cause of the creation, sustenance, and destruction of all substances in the world. The same life force on which humankind depends also sustains the animal and vegetable kingdoms. Prana sustains bodily functions as the subtle airs, which are energies of the subtle body that are controlled by the devas (demigods). Thus prana is the link between human beings and the controllers of the universe. The breath is the thread through which prana travels from the cosmos to the individual and from the individual to the cosmos.

Depending on its function in different organs, prana is divided into ten types of subtle airs. The ten pranas are prana, upana, samana, udana, vyana, naga, kurma, krkala, devadatta, and dhnanjaya. Of these ten, the first five are of most importance to the practice of patanjala-yoga.

Prana. Prana here is used to designate a specific type of prana, the vital force of inspiration. In this context the word prana (pra + ana) means "that which draws in or takes in." The life force that receives the fresh cosmic vitality from the atmosphere activating the diaphragm, lungs, and nostrils, is called prana. The head, mouth, nostrils, chest (heart and lungs), navel, and big toes are said to be the main centers of prana. This important vital force resides in the brain and governs the functions of the senses and the process of thinking. Certain physical activities -- such as the ability of the cerebrum to receive the sensations of smell, sound, taste, touch, and vision, the function of the cranial nerves, and the power that governs all mental activities -- are the functions of prana. Primitive instincts, emotions, intelligence, self-control, memory, concentration, and the power of judgment or discrimination are manifestations of prana. As long as prana is in its normal state, all the organs function properly. Bodily toxins, intoxicants, malnutrition, the aging process, frustration, fatigue, restlessness, and physical and mental shocks disturb the vital force. When the vitality of the mind starts to decay due to such conditions, then higher abilities such as intelligence, memory, concentration, discrimination, and patience start to diminish, and the lower instincts or emotions become predominant.

In the cosmos and in the body there is a continuous flow of solar and lunar energy, also referred to in yoga texts as positive and negative energy, as pitta and kappa, bile and phlegm, fire and water, light and darkness, male and female, and so on. When prana is predominated by solar energy, it is active and the right nostril is open. But when lunar energy predominates, it is passive and the left nostril is open. The flow of prana through the right or the left nostril provides specific conditions and changes in mood and behavior.
Apana. Apana is the excretory vital force. Expulsive movements occurring in the bowels, bladder, uterus, seminal glands, and pores during defecation, urination, menstruation, ejaculation, perspiration, and all other kinds of excretions are due to the function of apana. The reproductive organs, anus, thighs, ribs, root of the navel, and the abdomen are said to be the abode of apana. When the excretory vital force, which functions through the thoracic and abdominal muscles, is disturbed, then symptoms such as sneezing, asthma, croup, or hiccups are observed.

Samana. Samana is the digestive and assimilating force that makes food suitable for absorption and then assimilates it. This vital force is seen in the entire body, not just in the digestive system. Because of samana’s presence in the skin, vitamin D can be absorbed from the ultraviolet rays of the sun. The region between the heart and the navel center is predominantly involved in the absorption and digestion of food, and this part of the body is therefore considered to be the main center of this vital force. This vital force is responsible for growth and nourishment. Abnormalities of the assimilating vital force result in nervous diarrhea, dyspepsia (impaired digestion), intestinal colic, spasmodic or nervous retention of urine, constipation, and the like.

Udana. Udana means "energy that uplifts." It is the force that causes contraction in the thoracic muscles, thereby pushing air out through the vocal cords. It is, therefore, the main cause of the production of sound. All physical activities that require effort and strength depend on this vital force. It is said to be situated in the larynx, the upper part of the pelvis, all the joints, and the feet and hands.

Vyana. Vyana is the contractile vital force. All rhythmic or nonrhythmic contractions take place because of this vital force. It pervades the whole body and governs the process of relaxing and contracting the voluntary and involuntary muscles. This force also governs movements of the ligaments and sends sensory and motor impulses through the nervous tissues. It is involved in the opening and closing of the eyes as well as the opening and closing of the glottis. The ears, eyes, neck, ankles, nose, and throat are said to be the main centers of this vital force in the body. Fibrosis, sclerosis, atrophy, and pain in muscular and nervous tissues are the result of abnormalities in the contractile vital force.

Food and breath are the main vehicles through which prana enters the body. Food contains a grosser quality of prana than does the breath; one can live for a few days without food, but without breath one cannot function normally for even a minute. This is the reason that the yoga system places so much importance on the science of breath. The regulation of the movement of the lungs is the most effective process for cleansing and vitalizing the human system. It purifies and strengthens the nervous system, which coordinates all the other systems in the body. Yogis have developed a most intricate and deep science related to the nervous and circulatory systems, but this science goes beyond the mere study of nerves, veins, and arteries. The science of breath is related to subtle energy channels called nadis. According to yogis, the body is essentially a field of energy, but only a very small part of that energy is utilized, and so a great part of it remains dormant. With the help of pranayama (the science of prana), however, a student of yoga can unveil that energy field, expand it, and channel it to explore higher states of consciousness. Yogi texts say, "One who knows prana knows the Veda’s highest knowledge," and one of the Upanisads
proclaims that *prana* is *brahman*. The science of *prana* and the science of breath are thus of central importance in the *yoga* system.

According to Patanjali, *pranayama* means to refine and regulate the flow of inhalation and exhalation. When one can breathe deeply and noiselessly without jerks or pauses, one can allow one's *prana* to expand and to be awakened for higher attainments. Patanjali does not advise the practice of *pranayama* until one has achieved a still and comfortable posture. Postures that remove physical tension and provide stillness are therefore the prerequisites to *pranayama*. Patanjali lists four kinds of *pranayama*: external (*bahya vrtti*), in which the flow of prana is controlled during the exhalation; internal (*abhyantara vrtti*), in which the flow of prana is controlled during inhalation; and intermediate (*bahya-abhyantara-visayaksepi*) in which the other two *pranayamas* are refined, and the fourth (*caturtha*), in which *pranayama* is transcended. The first three *pranayamas* must be regulated within space and time, but the fourth *pranayama* is highly advanced and transcends these limitations. When the external and internal *pranayamas* become very subtle, then, because of intense concentration in a perfect, relayed state, one loses awareness of time and space, and thus the fourth *pranayama* happens automatically. In this *pranayama*, the breath becomes so fine and subtle that an ordinary breathing movement cannot be observed. Without practical instruction from a competent teacher, it is not possible to understand and apply this method of *pranayama* successfully. The practice of *pranayama* prepares fertile ground for concentration. The first four stages of *yoga* discussed thus far -- that is, *yama*, *niyama*, *asana*, and *pranayama* -- are sometimes collectively known as *hatha-yoga*.

**Pratyahara -- Withdrawal of the Senses**

The fifth limb of *yoga* is *pratyahara*, the withdrawal or control of the senses. In outward activities the mind contacts external objects through the five senses of sight, hearing touch, taste, and smell. The interaction of the senses with their objects is like the blowing wind that disturbs the surface of the lake of mind and causes waves to arise. Withdrawal of the senses is a technique through which a student acquires the ability to voluntarily draw his attention inward and keep his mind from distractions.

Patanjali defines *pratyahara* as the withdrawal of the senses from their objects and their establishment in the mind. The senses are constantly wandering from one object to another, and the mind also wanders with them, although the mind is more subtle than the senses. The senses are the vehicles of the mind as it travels on its journey, but the mind is master of the senses because without it, the senses could not contact or experience any objects. Wherever there is contact of the senses with their objects, the mind is necessarily involved, so withdrawal of the senses actually means withdrawal of the mind. Vyasa, the *Yoga-sutras*’ commentator, therefore says that when the senses are disconnected from their objects, they dwell in or dissolve into the mind. Once the modifications of the mind are controlled, it is not necessary to make any extra effort to control the senses. When the queen bee (mind) flies, all the bees (senses) fly, and when she sits, all the bees sit around her.

Relaxation is actually the practice of *pratyahara*. When one wants to relax a limb of his body, he simply disconnects the communication of the mind and the senses to
that particular limb. This is called releasing tension, and when one has mastered voluntary relaxation in this way, he attains perfect control over the senses and mind and enters a state of concentration. The process of withdrawing the senses and the mind is actually the process of recollecting the scattered forces of the senses and mind. When these forces are no longer dissipated, concentration naturally takes place.

Dharana -- Concentration

Having withdrawn the senses and the mind from external objects, the mind must then carry a single thought pattern in a desired direction. Concentration, the sixth limb of yoga, is a process through which one withdraws the mind from all directions and focuses its powers for further journey inward. To facilitate this process, one selects a suitable object for concentration such as a mantra, a form, or a center in the body, to name a few. In a relaxed state, past impressions accumulated in the mind rise to the surface, disturbing the mind's ability to stay on one thought pattern. In daily life, one unconsciously and involuntarily concentrates in many ways. In extreme happiness or sorrow, for example, the mind becomes concentrated on one single thought pattern. But such external concentration is motivated by emotion, instinct, or impulse and is therefore not considered to be yogi concentration. According to Patanjali, concentration is an internal process that takes place in the mind and is volitionally directed by the will.

There are five factors that are helpful in bringing the mind to a state of concentration. One cannot focus the mind unless one has interest in the object on which one wants to concentrate, so developing interest is the first step. With interest, attention can then be developed. Voluntary focusing based on interest and directed by will power and strengthened by determination results in paying full attention to an object. Practice is the next requisite. Regular repetition of techniques that help the mind to flow spontaneously without a break helps form the habit of concentration. For example, setting a specific practice time, choosing a favorable environment, keeping a proper diet, and regulating sleep make it easier to concentrate the mind. Next, using the same straight, steady, and comfortable seated posture every time one practices and using a smooth, deep, and regular diaphragmatic breathing pattern help one keep the mind and body calm, yet alert. Finally, a calm mind is necessary because an emotionally disturbed mind cannot concentrate. An attitude of detachment from external objects and of witnessing one's own physical and mental activity calms the mind and develops emotional maturity. When the student practices concentration, he is advised not to exert undue effort because effort leads to tension, and tension dissipates or disturbs the nervous system and senses as well as the mind.

There are various kinds of concentration: gross and subtle, outer and inner, subjective and objective, and so on. According to Vyasa's commentary on the Yoga-sutras, one can concentrate internally on some point within the body, such as the cardiac center, the base of the bridge between the nostrils, or the tip of the tongue; or one can concentrate externally on any selected object. If the object of concentration is pleasant, beautiful, and interesting, then it is easy for the mind to focus on it for a long time. Using a mantra or the breath for the object of concentration is considered
to be the best method for learning to focus the mind one-pointedly in preparation for attaining a meditative state.

**Dhyana -- Mediation**

The seventh step in the practice of *yoga* is meditation. Meditation is an advanced state of concentration in which one single object of concentration flows without interruption. In this state, the mind becomes fully one-pointed, and by one-pointedness the yogi can approach the Supersoul. The process of withdrawal of the senses, concentration, and meditation can be compared to a river that originates when many small streams gather and merge into one large flow of water. The river then flows through hills and valleys without being stopped by bushes and rocks, and it then finds the plains, where it flows smoothly and harmoniously, passing through forests and villages until it reaches its final destination and merges with the sea. So it is with the process of meditation. At the initial stage, the senses and mind are withdrawn and made one-pointed. Then that one-pointed mind flows constantly toward one object without being distracted by petty emotions, thoughts, memories, and anxieties. Then it enters into the smooth, uninterrupted flow of the meditative state in which, *siddhis* (supernatural powers) are experienced. These are analogous to the villages through which the river flows undistractedly. At last the mind ultimately enters *samadhi* and connects with the consciousness of the Supreme Soul.

**Samadhi -- Spiritual Absorption**

The word *samadhi* is closely related to the word *samahitam*, which means "the state in which all questions are answered," or "the state in which one is established in one's true nature." Out of curiosity regarding the basic questions that the mind wants to solve, the mind flits from one thought to another and becomes restless. But the moment the mind resolves its curiosity, it has no reason to wander here and there, and thus it naturally establishes itself in its true nature. Then the mind is in a state beyond the concept of language in which it is accustomed to think or produce modifications. *Samadhi* is a state beyond thinking and feeling in which the individual soul is linked with the Supreme Soul. In *samadhi* one casts away all limitations and causations and enjoys eternal bliss and happiness. It is not a state of the dissolution of individuality. *Yogis* know *samadhi* as a mystical fulfillment of individuality.

In different *yoga* traditions this state is called soundless sound, the state of silence, or the highest state of peace and happiness. There are two stages of *samadhi: sabija* and *nirbija*. *Sabija samadhi* means samadhi "with seeds." In this state, the sense of individual interest separate from the Supersoul is retained and the seeds of desire and attachment still remain in latent form. In the state of *nirbija* or seedless *samadhi*, however, the individual consciousness is completely united with the Supreme Soul. This may understood in two ways. If the *yogi* surrenders all separate interests and serves only the interests of the *paramatma*, he becomes a pure devotee of God and by the Lord's mercy gains entry into the eternal spiritual realm (Vaikuntha). But if the *yogi* identifies with the *paramatma* as his own self, he is absorbed into the body of the Lord. This is called *isvara-sayuja* (merging into the Supreme Lord Vishnu). The
first is a devotional union with God, the second is nondevotional. Generally the followers of the patanjala-yoga system aspire for the second kind of union.

Samyama

Patanjali uses the term samyama to describe the combined state of concentration, meditation, and samadhi. According to Patanjali, one can achieve whatever one wants to through the practice of samyama because it expands human potentials and allows one to explore higher and higher states of consciousness. Through the practice of samyama it is said that one can develop supernatural powers or perfections, called siddhis, which are described in the third chapter of the Yoga-sutras. Because the body is a miniature presentation of the cosmos, whatever exists in the cosmos is present in the body. Microcosm and macrocosm being one, an individual can thus have access to the powers of the universe. The practice of samyama upon any object brings perfection regarding that object. By practicing samyama on latent mental impressions (samskaras), for example, one can realize their content and achieve knowledge of previous births. By the practice of samyama on the navel center, one can understand one's entire physiology. By the practice of samyama on the throat center one can eliminate hunger and thirst. By the practice of samyama on the distinction between purusa and prakrti, one can attain knowledge of purusa, the Supreme Consciousness. Many other kinds of supernatural powers, such as enhanced powers of sight, sound, smell, touch, taste, and the powers of minuteness, lightness, greatness, and lordship also mentioned. One who attains these partial perfections still has to go beyond their charms and temptations to establish himself in the state of perfect samadhi.

The Concept of God

Patanjali accepts the existence of God (isvara). According to him God is the perfect supreme being who is eternal, all-pervading, omnipotent, omniscient, and omnipresent. God is that particular purusa who is unaffected by the afflictions of ignorance, egoism, desire, aversion, and fear of death. He is also free from all karma (actions), from the results of action, and from all latent impressions. Patanjali says that the individual has the same essence as God, but because of the limitations produced by afflictions and karma, one separates oneself from God-consciousness and becomes a victim of the material world. There is only one God. It is ignorance that creates duality from the one single reality called God. When ignorance is dissolved into the light of knowledge, all dualities are dissolved and full union is achieved. When one overcomes ignorance, duality dissolves and he merges with the perfect single Being. That perfect single Being always remains perfect and one. There is no change in the ocean no matter how many rivers flow into it, and unchangeability is the basic condition of perfection.

6. Karma-mimamsa: Elevation Through the Performance of Duty
The word *karma* refers to any action that results in a reaction, whether it be good or bad. The word *Mimamsa* means to analyze and understand thoroughly. The philosophical systems of *karma-mimamsa* and *vedanta* are closely related to each other and are in some ways complimentary. *Karma-mimamsa* may be understood as a stepping stone to *vedanta*. It examines the teachings of the *Veda* in the light of *karma-kanda* rituals, whereas *vedanta* examines the same teachings in the light of transcendental knowledge. The *karma-mimamsa* system is called *purva-mimamsa*, which means the earlier study of the *Veda*, and *vedanta* is called *uttara-mimamsa*, which means the later study of the *Veda*. *Karma-mimamsa* is to be taken up by householders, and *vedanta* is reserved for wise men who have graduated from household life and taken up the renounced order (*sannyasa*).

The main goal of the *karma-mimamsa* philosophy is to provide a practical methodology for the utilization of the Vedic religion (*dharma*) for the satisfaction of the urges for wealth (*artha*) and sensual pleasure (*kama*). In so doing, *karma-mimamsa* provides a materialistic explanation of the Vedic rituals for persons whose material desires have blinded them to spiritual understanding. In the *Veda*, numerous gods and goddesses are invoked. The *karma-mimamsa* system interprets these deities and their worship in terms of a highly "human-centered" rather than "God-centered" rationale. The *karma-mimamsa* system also discusses the science of sound and the science of *mantra*, but the major concern of this system is to combine the self-discipline established by the *yoga* system (discussed previously) with the ritualistic portion of the *Vedas*. The aim of all this is to situate the selfish and skeptical human being in a mode of dutiful subordination to the Vedic injunctions in order to prepare him for further advancement as taught in the *vedanta* system. Therefore *karma-mimamsa* presents the Vedic religion as a science of mechanistic principles, and not as a faith of adoration of divinities aimed at receiving benedictions from on high. The Vedic *dharma* is justified to materialists as being "useful to humanity" in that it can satisfy human worldly desires in this life and in the next when properly executed. And proper execution of Vedic *dharma* requires *karma-yoga*, or selfless adherence to duty.

The first systematic work on this school of Vedic thought is the *Mimamsa-sutra* of Jaimini, which is divided into twelve chapters. Sabara Swami wrote a major commentary on the *Mimamsa-sutra*, and many other commentaries and independent works on this philosophy exist. Kumarila Bhatta and Prabhakara, the revivalists of this system in post-Buddhist India, founded two branches of *karma-mimamsa* (the major teachings of these branches are the same).

### The Concept of Duty

Many people are very concerned about their rights but little aware of their duties. Unless one knows what one's duties are, he cannot understand what his rights are. Demanding rights without accepting duty leads to many problems, as is evinced by today's chaotic global society. Duty may be defined as a tradition of responsibility incumbent upon human beings everywhere that ultimately has divine origin. It is because of the law of duty that the family, society, the nation, and the entire universe continue to exist. The execution of duty handed down by higher authority is the path of honor in all human cultures; conversely, the path of dishonor is the neglect of duty.
for the satisfaction of animal urges. History teaches that when the family, society, and
nation fail to fulfill traditional duties and instead follow the whims of lust as their only
value system, they are soon destroyed.

The term *dharma* is variously translated as "virtue," "duty," "morality," "righteousness," or "religion," but no single English word conveys the whole meaning of *dharma*. According to the *karma-mimamsa* system, *dharma* is the intrinsic nature of *rta*, the breath of cosmic life. One who wants to breathe and live properly is not supposed to disturb the breath of cosmic life. Disturbing other living beings disturbs the rhythm of the cosmic breath, and that is called *adharma*. The performing of *dharma* establishes peace and harmony in the breath of cosmic life. All those activities that coordinate one's individual life with universal life constitute one's duty or *dharma*. These activities are prescribed in the Vedic scriptures.

There is always a hierarchy in one's duties. Everywhere and at every moment a
human being is faced with some kind of duty, and one has to be very discriminating
to understand the appropriate duty that is to be performed at a particular time and
place. One's scripturally authorized role in life provides the key to knowing one's
primary duty. For example, under the codes of Vedic *dharma* it is the highest duty of
a mother to take care of her child. The highest duty of a teacher is to teach, that of a
student is to study, and that of a doctor is to take care of his patients. *Karma-
mimamsa* proclaims that the Vedic rituals are the highest duties a *brahmana* has to
perform. The science of Vedic rituals is handed down by ancient sages, who hid its
methodology in arcane language that is understandable only to the initiate. The
efficacy of this science is determined by the subtleties of the time, place and
circumstance of the performance of the rituals, and especially by the brahminical
qualifications of the performer of the rituals. Therefore entrance into the practice
science depends completely upon the sanction of higher authorities.

**Ritual Duty and Philosophy**

Most people lack a positive attitude of inspiration toward their daily duties, performing
them only to earn money or status. Ritualism illumined by philosophy gives one
awareness of the deep significance of the even the small duties of life. Everyone has
a morning routine composed of various steps. For example, a working man awakens
early, goes to the toilet, brushes his teeth, washes his face, shaves, takes a shower,
dresses, and finally eats breakfast. He does none of this with any sense of
consecration -- his actions have no higher end or aim than simply to reach the office
at exactly nine o'clock. As a result he does not experience any particular fulfillment
from the activities he performs from bathroom through breakfast. His whole life
rotates through a mechanical framework because of his mundane view of existence.
But viewing the daily, unexceptional routines of life as rituals linked to the cycles of
the cosmos helps expand the consciousness beyond the shallowness of workaday
life. In short, a ritual is a meditation. When a *brahmana* makes breakfast as an
offering or oblation to the fire of digestion within, remembering that the same cosmic
principle of fiery energy burns within the bellies of all creatures and within the sun
and electricity and the sacrificial fire, then the whole process is transformed, although
the activities are the same as always.
In the *karma-mimamsa* concept, rituals are performed not to worship or please any deity but rather simply because the *Veda* commands one to perform them. Thus, rituals are practiced for the sake of duty. Food is cooked and through the use of *mantras*, the Cosmic Deity (*mahapurusa*) in whom the demigods and all beings dwell is invited to partake of the food and grant blessings in return. But the offering is not made as an act of devotion. Rather, the *karma-mimamsa* believes the *mahapurusa* is obliged by the ritual to accept the offering and give benedictions. Mastery of the ritual is mastery over the powers of the universe. By proper execution of ritual, the performer expects to enjoy prosperity on earth and be promoted to heaven (higher planets within this universe where the standard of sensual happiness is much superior to earth). The *karma-mimamsa* system teaches that one can cut one's own poisonous plant of past bad *karma* with the powerful ax of present good *karma* in the form of the performance of Vedic rituals.

**The Karma-mimamsa Analysis of the Veda**

Just as in English there are various types of sentences -- interrogatory, declarative, imperative, exclamatory -- so too the *Veda* is composed of various types of sentences. These include *vidhi* (imperative), *nisedha* (negative), and *stuti*, which are the devotional sentences of praise. Just as any language can be analyzed and understood by the nature and structure of its sentences, *karma-mimamsa* studies the *Veda* according to the nature of its sentences. Having analyzed them, it declares that imperative statements are more valid than devotional sentences. The teachings of imperative sentences can therefore be accepted and practiced, but the teachings of devotional sentences must be further analyzed to determine their implied core meanings. The system for interpreting Vedic texts is laid down in such works as the *Mimamsa-anukramanika* of Mandana Misra.

**The Science of Mantra**

The generic term for all Vedic verses and sentences is *mantra*. The *Veda* is the embodiment of knowledge expressed in the form of sound and symbolically represented in script. *Karma-mimamsa* accepts sound (*sabda*) as eternal. It places greater emphasis on *mantras* than it does on gods and goddesses because it only believes in the validity of the science of sound on which the science of *mantra* is based. This belief accounts for *karma-mimamsa's* trust in the efficacy of systematic rituals. *Karma-mimamsa* states that the Vedic rites are grounded in empirical science rather than religious faith; it does not view the performance of rituals as a means for imploring favors from deities.

*Karma-mimamsa* does not study sound only at its articulated level but explores the subtle levels of sound by delving into its origin and realizing its various vibrational patterns. Sound is called *vak* in Sanskrit, but this word cannot be translated merely as "sound", or "speech." *Vak* refers to both thought and expression, while speech is the communication of thoughts and feelings through spoken words. *Vak shakti*, the power of speech, is actually a law of communication that is responsible for conveying thoughts and concepts, both individually and collectively. When one talks with someone else, the law of communication (*vak shakti*) is already present before one
speaks and after one has spoken. Vak shakti is the force flowing from a higher level of consciousness through the articulated level of speech, which is its gross expression. Karma-mimamsa categorizes vak shakti at four levels: para, (transcendent), pasyanti (concentrated thought pattern), madhyama (formulated through thought patterns ready for expression), and vaikhari (expression with the help of words).

According to karma-mimamsa there are two universally intertwined factors in manifestation: sabda, the sound; and artha, the object denoted by that sound. One signifies the name, and the other signifies the form. They are inseparably associated; there can be no sabda without artha, no artha without sabda. Together, they are the self-existent reality which is not subject to change, death, and decay. As they manifest, a double line of creation -- words and objects -- is formed.

External sound, sensed by hearing, is of two types: sound with meaning and sound without meaning. Sound with meaning consists of the phonemes and words that make up language, but sound without meaning is not formulated into words and is not recognized as an element of communication. According to karma-mimamsa, external sound is transient, but it is also a manifestation of the eternal sound in akasa (ether). The nyaya school does not accept the mimamsa theory of sound; it holds that words are transitory in every regard. Karma-mimamsa counters that the perception of sound that begins when vibrating air contacts the ear drums must be distinguished from the sound itself. For sound to exist, one object must contact another and that is an external event. But the karma-mimamsa theory of sound with meaning goes beyond this, including also the internal mental movement of ideas that seeks outward expression through audible sound in phonemes, letters, words, and sentences. Thus the perception of sound is transient, but sound itself is eternal. The moment at which sound can be perceived is not the same moment at which it is produced; sound is manifested prior to being audible.

The finest state of sound, called para vak, is perfect. The karma-mimamsa philosophy holds the eternal para vak to be the cause of all causes. [In Gaudiya Vaisnava philosophy, this para vak is the sound of Maha Vishnu's breathing, which precedes the appearance of the universe.] Any vibration that can be perceived by physical instruments such as the ears is only a gross manifestation; physical sound is inadequate for attainment of the ultimate state of consciousness signified by para vak. The next phase of sound is called pasyanti vak. There is only a slight difference between the state of para and that of pasyanti. Both are transcendental, but in pasyanti, the subtle form of the universe is "seen" within sound as the primeval artha, or object of desire. The word pasyanti means "one who sees." [Note: prior to his act of creation, Lord Brahma sees the subtle universal form after meditating upon the divine sound "tapa tapa."] In this state the power of desire still remains dormant, but it is nonetheless the direct cause of the universe, which will be manifested as both idea and speech. This language of silence is a universal language; it is the source of all language and speech. The third state of vak is called madhyama, meaning "that which is intermediate." This state of speech is neither transcendent, as in pasyanti, nor completely manifest, as is vaikhari (the grossest state of sound); it is between these two stages. Finally, the fourth state of speech is completely manifest and audible. At this stage, a sound that belongs to a specific language can be perceived through the sense of hearing. This state of sound is always accompanied by
geographical, cultural and social diversities and distinctions that form different languages composed of articulated and distinguishable sounds.

The origin of speech is transcendent and eternal, and the flow of *pasyanti*, *madhyama* and *vaikhari* from the state of *para* is also the flow of the forceful stream of energy from *vak shakti*. Like a river hidden in the mountains that comes gurgling forth as it rushes to the valleys where streams merge with it and the flows on to the plains before dissolving its identity into the ocean, similarly similarly speech emerges from its hidden source in the state of silence (*para*), flows downward into more and more manifested stages, and then at last dissolves into infinity, its origin. This is the process of the unfoldment and enfoldment of *vak shakti*.

All speech that passes through the human mind becomes contaminated with the limitations of time, space, and causation. The ultimate truth is therefore veiled in everyday speech, but this is not the case with *mantras*. *Mantras* are not mere words but are specific sound vibrations that have been experienced by sages in the deepest state of meditation. They are said to be the sound-bodies of certain aspects of the cosmic forces. A *mantra* is therefore referred to as a *setu*, a bridge, that the student can use to cross over the mire of delusion and reach the other shore of the Absolute Truth. *Mantras* are capable of lighting in every human heart the eternal lamp of knowledge that does not flicker with the severe winds of worldly charms and temptations.

The potential of a *mantra* lies in a dormant state until it is awakened. The secret of awakening and utilizing *mantras* lies in the rhythmic vibrations in which the *mantra* is meant to be pronounced and repeated. The proper use of *mantras*, with their prescribed rituals, is designed to lead one to experience the bliss and happiness contained within the *mantra* itself. The power of *mantra* and its awakening can be explained by the following analogy: In the rainy season in some tropical countries the humidity may be one hundred percent, but one cannot quench his thirst with atmospheric water alone because it is not concentrated in usable form. Likewise the great potential of *mantras* is hidden and diffuse. One must therefore learn how to awaken, concentrate, and utilize their potential.

**The Karma-mimamsa Concept of Gods and Goddesses**

Modern scientists have developed mathematical equations and scientific laws to describe the order and lawfulness of the universe and thereby increase man's power and control over its phenomena. Likewise, the Vedic sages developed immense powers of knowledge of the underlying order, lawfulness, structure, and dynamics of the phenomenal world. According to the *karma-mimamsa* system, the universal controllers who wield cosmic power and maintain the universal order are to be scientifically comprehended through the sound of *mantras*. The deities or gods are the personified forms of principles that correspond to the vibrating sound patterns of *mantras*. For an uneducated person, the equation E=MC2 is just a meaningless arrangement of lines on a piece of paper. But for those with a sufficient understanding of physics, this formula can help one to comprehend the nature and dynamics of the universe. The *karma-mimamsakas* have a similar conception of Vedic *mantras* as do physicists of their formulas.
Some critics of *karma-mimamsa* philosophy accuse the system of promoting polytheism. But there is an underlying unity. The *mimamsakas* believe in an all-pervading consciousness that manifests itself in different stages, each of which has a different form (deity) and sound vibration (*mantra*). Thus exists the apparent diversity of deities and *mantras* to represent the unitary consciousness. The process of manifestation begins with the emergence of the most subtle forms, from which the grosser or more delineated forms are then manifested. This process has been described and in various ways in different scriptures. In the Vedic tradition, prototypic entities are invoked as deities -- demigods and demigoddesses -- each characterized by a particular set of superhuman qualities. The Vedic demigods radiate from the source of energy that generates all forms and names. *Karma-mimamsakas* see them as thought-forms that represent the cosmic powers. *Karma-mimamsa* philosophy does not conceive of the demigods as being identical to particular physical forms. If they were physically embodied, it would not be possibly for a single deity to be present at many different rituals being performed in different places at the same time. Yet it would not be correct to conclude that *karma-mimamsakas* think the forms of the demigods are imaginary. In this philosophy the deities emerge as primal forms and sound-bodies (*mantras*) endowed with perfect bliss and happiness beyond all mundane experiences. Though it seems that deity and *mantra* are two distinct principles operating on two different levels, in reality they are one and the same. A deity is a gross physical form of a *mantra*, and a *mantra* is a subtle form of a deity. When the sequence of vibration of a *mantra* is materialized into a particular form or shape, that is called a deity. Likewise, a materialized form can be dematerialized and reduced to certain frequencies of vibration that will be heard as a *mantra*.

There are certain rules by which a *mantra* converts into a deity and a deity converts into *mantra*. Both deities and *mantras* operate on a principle similar to the conversion of energy into matter and matter into energy in physics. Wherever a particular ritual is performed with the proper utilization of *mantras*, the deity related to those *mantras* is present because when the vibration is concentrated, the materialized form of the deity appears. According to the *karma-mimamsa* system, the vision of a deity does not therefore depend on the grace of that deity. Rather, the deity, or form, is manifested wherever the *mantra* related to it is pronounced in a prescribed manner, and it then has to yield the desired objects that are believed to be provided by it. The *karma-mimamsa* system does not rely on the grace of God for attaining worldly things or achieving liberation. Adepts of *karma-mimamsa* philosophy have full confidence that the cosmic powers can be utilized at will by proper execution of ritual. *Karma-mimamsa* identifies two purposes of ritual: to attain and expand one's own inner potential and unite it with the cosmic force, and to pay respect and show gratitude to the cosmic forces that are constantly supplying light and life to all sentient beings. This is considered to be one of the foremost duties of human beings and should be an inseparable part of everyone's life.

**The Physical is Divine**

*Karma-mimamsa* applies a theory of the all-pervading presence of divinity by providing specific practices designed to remind the student of this truth. For example, the use of common objects such as water, fruit, incense, grass, stones, and fire in rituals links the mundane with the divine. There is a prescribed way for gathering
these items for the ritual and for handling and using them during the ceremony. For instance, before a blade of grass is uprooted, one is to recite a specific mantra to revere and glorify the divinity within the grass and to ask permission to uproot the grass and use it in the ceremony. When the grass is uprooted one recites another mantra, explaining the process in the following sense: "I am uprooting my negativities symbolized by the grass. Even within negativities, there is divinity. I am uprooting it for use in the ritual, in which the real nature of divinity is going to be unveiled." Thus a pantheistic conception of God is encouraged in karma-mimamsa for those who are unable to conceive of the divine in any other way. The idea of seeing everything as divine is to check the mind from being overcome by hatred, jealousy, anger, greed, and all other negative attitudes. This practice helps one to arrive at the impersonal realization expressed in such Vedic statements as "The whole universe is Brahman" and "Thou art That."

The Sources of Valid Knowledge

Mimamsa, like many other philosophical systems, places great importance on the study of nature and the sources of valid knowledge (pramanas). According to mimamsa there are six different sources of valid knowledge: perception, inference, comparison, testimony, postulation, and non perception. (Nonperception is recognized as a source only by the school of Kumarila Bhatta and not by that of Prabhakara). Karma-mimamsa emphasizes testimony as a source of knowledge because it believes exclusively in the authority of the Veda. The karma-mimamsa theories of perception and inference are very similar to those of the nyaya system, but the karma-mimamsa theory of comparison is quite different from that of nyaya, although both ultimately base their theories on the similarity of two things, of which one is already known.

Postulation (arthhapatti) is the necessary supposition of an unperceived fact to explain some apparently conflicting phenomena. For example, a person who does not eat during the day but constantly grows fat can be suspected of eating at night. One cannot solve the contradiction between fasting and growing fat unless he assumes that the person eats at night. Knowledge of the person eating at night cannot come under the category of perception or inference, nor can it be reduced to testimony or comparison. Nonperception (anupalabdhi) is the source of one's immediate cognition of nonexisting things. One can know the nonexistence of a thing by the absence of its cognition, that is, if it is not present in the senses and it cannot be understood by any other source of valid knowledge. For instance, one can feel the absence of a jar that does not exist because it is not perceived by the senses, but one cannot say that the nonexistence of a jar is inferred by its nonperception, because an inference is based on the universals relationship between middle and major terms. And in this case there is no universal relationship between nonperception (middle term) and the nonexistence of a jar (major term). Therefore direct knowledge of the nonexistence of a jar can be explained only if non perception is recognized as a separate and independent source of knowledge.

The Concept of Soul
Karma-mimamsa does not pursue metaphysics but instead emphasizes the practical approach of karma-yoga, the yoga of action. Rituals have three components: the performer, the object of the action, and the process of performing it. The main doctrine of karma-yoga is: "As you sow, so shall you reap." Accordingly, one is the master of his own destiny and is free to enjoy his karma as either master or slave. Karma-mimamsa considers the soul to be an eternal, infinite substance with the capacity for consciousness. Implicit in the karma-mimamsa philosophy is the belief that the soul is meant to enjoy matter. The soul's perfection is attained through perfectly following the karma-kanda process by which all enjoyable things within this universe may be realized.

7. Vedanta: The Conclusion of the Vedic Revelation

In the introduction of this book it was explained that the Upanisads are the subject of the fourth and final degree of Vedic scholarship. Therefore the Upanisads are known as vedanta, "the conclusion of the Veda." Karma-mimamsa philosophy arose from the earlier study of the ritualistic portions of the Vedas, and so it is also known as purva-mimamsa, "the prior deliberation." Vedanta is called uttara-mimamsa, "the higher deliberation", and also as brahma-mimamsa, "deliberation on Brahman, the Absolute Truth."

The word upanisad means "that which is learned by sitting close to the teacher." The texts of the Upanisads are extremely difficult to fathom; they are to be understood only under the close guidance of a spiritual master (guru). Because the Upanisads contain many apparently contradictory statements, the great sage Vyasadeva (also known as Vedavyasa, Badarayana and Dvaipayana) systematized the Upanisadic teachings in the Vedanta-sutra or Brahma-sutra. The Vedanta-sutra is divided into four chapters: Samanvaya, which explains the unity of the philosophy of the Upanisads; Avirodha, which dispels apparent contradictions; Sadhana, which describes the means to attain the Supreme; and Phala, which indicates the goal. Vyasa's sutras are very terse. Without a fuller explanation, their meaning is difficult to grasp. In India there are five main schools of vedanta, each established by an acarya who explained the sutras in a bhasya (commentary).

Of the five schools or sampradayas, one, namely Shankara's, is impersonalist. This means that the Supreme Being is explained in impersonal terms as being nameless, formless and without characteristics. The schools of Ramanuja, Madhva, Nimbarka and Vishnusvami explain God in personal terms; these acaryas and their followers have very exactly formulated a philosophy that dispels the sense of mundane limitation associated with the word "person" and establishes transcendental personalism in terms of eternity, endless knowledge, complete bliss, absolute all-attractive form and all-encompassing love. Each of the five Vedantist sampradayas is known for its siddhanta or "essential conclusion" about the relationships between God and the soul, the soul and matter, matter and matter, matter and God, and the soul and souls. Shankara's siddhanta is advaita, "nondifference" (i.e. everything is one, therefore these five relationships are unreal). All the other siddhantas support the reality of these relationships from various points of view. Ramanuja's siddhanta is visistadvaita, "qualified nondifference." Madhva's siddhanta is dvaita, "difference."
Vishnusvami’s siddhanta is suddhadvaita, "purified nondifference." And Nimbarka’s siddhanta is dvaita-advaita, "difference-and-identity."

The Bengali branch of Madhva’s sampradaya is known as the Brahma-Madhva-Gaudiya Sampradaya, or the Caitanya Sampradaya. In the 1700’s this school presented Indian philosophers with a commentary on Vedanta-sutra written by Baladeva Vidyabhusana that argued yet another siddhanta. It is known as acintya-bedabhedatattva, which means "simultaneous inconceivable oneness and difference." In recent years this siddhanta has become known to people from all over the world due to the popularity of the books of Sri Srimad A.C. Bhaktivedanta Swami Prabhupada.

Shankara and Buddhism

Sometimes Shankara’s advaita vedanta commentary is presented in books about Hinduism as if it is the original and only vedanta philosophy. But a closer look at the advaita doctrine shows it to be in opposition to many of the fundamental tenets of the Vedanta-sutra. In his landmark work "The Brahmasutras and Their Principal Commentaries" the eminent Indian scholar B.N.K. Sharma chronicles how Shankara and his followers go so far as to "openly rebuff" Vyasa in his wording of the original text of the Vedanta-sutra. The advaitists are not shy about overturning the original sense of the text in order to push through their own impersonal philosophy.

That Shankara's philosophy is more akin to Buddhism than vedanta is widely acknowledged. A Japanese Buddhist professor of Sanskrit, Hajime Nakamura, has presented strong historical evidence that the ancient pre-Shankara Vedantists were purusa-vadins (purusa = "person", vadin = "philosopher"). Purusavadins understood the goal of vedanta philosophy to be personal and termed God the mahapurusa (Greatest Person). Bhavya, an Indian Buddhist author who lived centuries before Shankara, wrote in the Madhyamika-hrdaya-karika that the Vedantists of his time were adherents of the doctrine of bhedabheda (simultaneous oneness and difference), which is personalistic. Another Indian Buddhist writer, Bhartrhari, who lived at the same time as Shankara, stated that although Shankara was a brahmana scholar of the Vedas, his impersonal teachings resembled Buddhism. This is admitted by the followers of Shankara themselves. Professor Dr. Rajmani Tigunait of the Himalayan Institute of Yoga is a present-day exponent of advaita vedanta; he writes that the ideas of the Buddhist sunyavada (voidist) philosophers are "very close" to Shankara's. Sunyavada is one of four important schools of Buddhism that developed in India before Shankara's time. The word sunya (void) refers to the impersonal emptiness that the Buddhists believe pervades all things. When one attains the Buddha-consciousness, the forms of the world fade away like dreams and only emptiness remains. In his Vedanta commentary, Shankara maintained the same idea of ultimate emptiness, substituting the Upanisadic word brahman (the Absolute) for sunya. Because Shankara argued that all names, forms, qualities, activities and relationships are maya (illusion), even divine names and forms, his philosophy is called mayavada (the doctrine of illusion).

But it is not that Shankara himself is utterly disrespected by the Vedantists of other sampradayas. Shankara’s purpose was to revive an interest in vedanta philosophy in
an India that had largely rejected the Vedas in favor of Buddhism. This task he accomplished brilliantly, albeit by artificially incorporating Buddhist ideas into his commentary so as to make it acceptable to the intellectuals of his time. It became the task of later Vedantists in other sampradayas to rid vedanta philosophy of the last vestiges of Buddhism. Though they attacked the mayavadi conception as non-Vedic, they owed Shankara a debt for having brought vedanta to the forefront of Indian philosophical discussion.

**The nature of God in Vedanta philosophy**

If, as the mayavadis argue, God is an impersonal absolute that is indifferent to its worshipers, then God cannot be the goal of the Vedic religion. And if knowledge of God cannot be expressed in words, then God cannot be the goal of the texts of the Upanisads either. Thus the mayavadi conception of God undermines the very purpose of the Vedas. The Vedantists of the four personalist schools therefore set out to establish a truly Vedic theology.

The first code of the Vedanta-sutra (atha brahma-ijnasa, which means "Now, therefore, let us inquire into Brahman, the Absolute"), is Vyasa's directive to brahmanas who have tired of the Vedic kamyakarmas (the rituals aimed at material benefits) which yield only limited and temporary fruits. Brahma-ijnasa (inquiry into Brahman) is Vedic metaphysics (meta = beyond, physic = matter). The term jijnana (inquiry) indicates that God is not a being so radically divorced from sensory experience that He can only be known in terms of what He is not (the "via negativa" of European theology, which is the method the mayavadis call neti-neti, "not this, not this"). Quite to the contrary, God may be positively understood by a human being who properly uses his senses and mind to inquire about His positive existence beyond matter.

God as the object of positive inquiry is defined in the second code of Vedanta-sutra: janmadasya-yatah, "He, from whom proceeds the creation, maintenance and dissolution of this universe, is Brahman." The universe is full of qualities that emanate from God -- hence God Himself must be full of qualities. Mayavadi philosophy denies the reality of the qualities of the universe. This in turn denies the very definition the Vedanta-sutra gives for God, for if the universe is unreal, then the God who is said to be the source of the universe must also be unreal. By what authority can we be sure that the universe is real and that God is the source of it? The third code of Vedanta-sutra answers, sastra-yonitvat, "It is revealed in the Vedic scriptures."

The universe has form; if God is the origin of the universe, then He must Himself possess form. But the Vedic scriptures declare that this form is not limited and imperfect like the forms of the material creation. From the Upanisads we learn that God's qualities are satyam jnanam anantam sundaram anandamayam amalam: "eternity, knowledge, endlessness, beauty, bliss, perfection." This means that God's form is one of infinite and all-pervasive sublime consciousness. A materialistic thinker may object that "all-pervasive form" is a contradiction of terms. The answer is that it is not, once the spiritual substance of God's form is accepted. Spirit is the most subtle energy; even in our experience of subtle material energy, we see there is no
contradiction between pervasiveness and form. For instance, the pervasiveness of sound is not impeded when sound is given form (as in the form of beautiful music).

God's form is one, but is understood differently from difference angles of vision, just as a mountain is seen differently by a person as he approaches it from a great distance and climbs to the top. From the great distance of theoretical speculation, God is known as brahman, a vague and impersonal being. A closer look at God is made possible by yoga, by which He is perceived as paramatma, the Supersoul who dwells within the heart of every living being and who inspires the soul with knowledge, remembrance and forgetfulness. And finally, from the perspective of bhakti (pure devotion), one may know God in His feature of personal perfection called bhagavan. Vedanta-sutra 1.1.12 states, anandamaya-bhyasat: "The para brahman (highest God) is anandamaya." Anandamaya means "of the nature of pure bliss." This is a clear reference to God's bhagavan feature, which is all-blissful due to its being the reservoir of unlimited positive transcendental attributes such as beauty, wealth, fame, strength, knowledge and renunciation. The mayavadis take anandamaya to mean merely "absence of sorrow", but as Baladeva Vidyabhusana writes in the Govinda-bhasya, "The affix mayat indicates "abundance" (an abundance of ananda or bliss). The sun is called jyotirmaya, "of the nature of abundant light" (and not merely "of the nature of the absence of darkness"). Similarly anandamaya means "He whose essential nature is abundant bliss". The Taittiriya Upanisad (2.7.1) states, raso vai sah, "He is of the nature of sweetness; the soul who realizes Him attains to that divine sweetness."

Relation of God to the world

In our study of the other systems of Vedic philosophy we have seen various explanations of the existence of the world. In nyaya, God is the operative cause of the world, but atoms are the material cause. (Note: in philosophy there are four ways to explain causation, as in this example of the causation of a house: the construction company is the "operative cause", the bricks, cement and other building materials are the "material cause", the original type of house upon which this house is modelled is the "formal cause", and the purpose of the house, i.e. that someone wants to live in it, is the "final cause"). In sankhya, creation is regarded as the spontaneous result of the contact between prakrti and purusa. The sankhya philosopher says "there is no need for God" in his system, but he fails to explain what governs the coming together of prakrti and purusa in the first place. Patanjali says God is the Supreme Self distinguished from other selves, and He is the intelligent governor of prakrti and purusa. But Patanjali nonetheless accepts the sankhya view that prakrti and purusa have no origin. God as creator plays no essential role in the mimamsaka system, which believes that the world as a whole is eternal, though its gross manifestations may come and go. Discounting all these theories, Vedanta-sutra defines God as He among all beings who alone is simultaneously the operative, material, formal and final causes of the cosmos. As the intelligence behind creation, He is the operative cause; as the source of prakrti and purusa, He is the material cause; as the original transcendental form of which the world is but a shadow, He is the formal cause; as the purpose behind the world, He is the final cause.
Mayavadi philosophy avoids the issue of causation by claiming that the world, though empirically real, is ultimately a dream. But since even dreams have a cause, the mayavadi "explanation" explains nothing. In the visistadvaita explanation, the material world is the body of God, the Supreme Soul. But the dvaita school does not agree that matter is connected to God as body is to soul, because God is transcendental to matter. The world of matter is full of misery, but since vedanta defines God as anandamaya, how can nonblissful matter be said to be His body? The truth according to the dvaita school is that matter is ever separate from God but yet is eternally dependent upon God; by God's will, says the dvaita school, matter becomes the material cause of the world. The suddhadvaita school cannot agree with the dvaita school that matter is the material cause because matter has no independent origin apart from God. Matter is actually not different from God in the same way an effect is not different from its cause, although there is an appearance of difference. The dvaitadvaita school agrees that God is both the cause and effect, but is dissatisfied with the suddhadvaita school's proposition that the difference between God and the world is only illusory. The dvaitadvaita school says that God is neither one with nor different from the world -- He is both. A snake, the dvaitadvaita school argues, can neither be said to have a coiled form or a straight form. It has both forms. Similarly, God's "coiled form" is His transcendental non-material aspect, and His "straight form" is His mundane aspect. But this explanation is not without its problems. If God's personal nature is eternity, knowledge and bliss, how can the material world, which is temporary, full of ignorance and miserable, be said to be just another form of God?

The Caitanya school reconciles these seemingly disparate views of God's relationship to the world by arguing that the Vedic scriptures testify to God's acintya-shakti, "inconceivable powers." God is simultaneously the cause of the world in every sense and yet distinct from and transcendental to the world. The example given is of a spider and its web. The material of the web comes from the spider's body, so in a sense the spider may be taken as the material cause of the web. Yet again the spider and the web are always separate and distinct entities. While the spider never "is" the web, at the same time because the spider's body is the source of the web, the web is not different from the spider.

In terms of vedanta, the substance of the web is God's maya-shakti (power of illusion), which is manifest from the real but is not real itself. "Not real" simply means that the features of maya (the tri-guna, or three modes of material nature -- goodness, passion and ignorance) are temporary. Reality is that which is eternal: God and God's svarupa-shakti (spiritual energy). The temporary features of the material world are manifestations of the maya-shakti, not of God Himself. These features bewilder the souls of this world just as flies are caught in the spider's web. But they cannot bewilder God.

The Christian view of creation compared with Vedanta

Christian theologians have not attempted to explain their doctrine of the relationship of God to the world in the rigorous philosophical fashion as have India's Vedantists. Augustine's doctrine is called creation ex nihilo, "creation out of nothing." In this view, God is eternal and transcendental and creation had a beginning in point of time. But
God created the world out of nothing. Augustine argued that if God created the world out of some pre-existent substance, this substance would either be God Himself or something other than God. Since God is immutable, the substance could not be Him. And it could not be a substance other than God, for in the beginning only God existed. So Augustine's conclusion is that the world arose out of nothing at all by the will of God. Thus God is the operative cause of the world but there is no material cause whatsoever. This attitude is a statement of faith, but hardly meets the needs of philosophy. A Vedantist would reply, "If it is the nature of reality that something arises from nothing, then this process should be visible today. But we see that all effects must have a material cause. Furthermore, if something can come out of nothing, then it would logically follow that anything could come out of anything -- a human being could hatch from a hen's egg or a woman could give birth to a chicken. But we observe that creation follows the rule known in Vedic logic as satkaryavada: like cause, like effect. By this rule, nothing must come from nothing, and something must come from something. This rule is not a limitation of God's supreme power, rather it is a statement of His power, because it is given by God Himself."

What about the final cause i.e. the purpose of creation? According to Augustine, God does not create to attain something, for He is infinitely perfect. He was not compelled to create, but His love inclined Him to create as an expression of His goodness. All creatures represent and participate in divine goodness. This doctrine has given rise to "the problem of evil" that has bedeviled European philosophers for centuries: if God is good and the creation is good, why is there evil? The Christian answer is that God did not create evil but permitted it to oblige man to choose between good and bad. By choosing good, man becomes more exalted and he could be in a world that was all-good.

The Vedanta-sutra takes up the question of the purpose of creation and the problem of evil in the second chapter, part one, codes 32-37. First it is established that God has no need to fulfill in creating the material world. The motive is lila, "play" -- not the play of a man who is bored or otherwise in need of recreation, but the play of exuberance of spirit. This lila is natural to God, because He is full of self-bliss. But how can causing suffering to others by placing them in a world of birth, old age, disease and death be the sport of God? The answer is that the jivas (individual souls) who fall into the material world have their own motive for entering the creation; this motive is distinct from lila. Their motive is karma, action meant to fulfill material desires left over in the subconscious mind from actions in previous lifetimes. Karma is beginningless. It extends into the past even beyond the beginning of the universe to a previous universe, now destroyed, and universes before that one ad infinitum. Due to karma, some living entities are born into enjoyment and others into suffering. God is responsible for neither good nor evil, which are the fruits of the jivas' own work. Indeed, good and evil are merely dualities of material sense perception which, being temporary, are ultimately unreal. This duality arises from the souls' being divided from God. From the purely spiritual point of view, any condition in material existence is evil because it is the condition of the soul's selfish forgetfulness of God. The absolute good is love of God. God favors his devotees with His absolute goodness by delivering them from material realm of duality and endless karma and situating them in the spiritual realm of eternal loving service.
Relation of God to the individual soul

Indian philosophy abounds with speculations about the self, or soul. The doctrine of Carvaka, an ancient thinker who opposed the Vedic teachings, is thoroughly materialistic. He thought the body itself to be the soul and consciousness to be a product of material combination. There is no God, and the purpose of life is to gratify the senses. Carvaka philosophy was strongly opposed by Buddhism which is yet no less materialistic in its outlook on the soul. Buddhism says that soul does not exist. The very concept of "selfness" is false. The body is but a wave in a stream of events. There is no purpose to existence, not even the purpose of sense gratification. There is no God. The only truth is emptiness. These two philosophies represent the extremes of human materialistic mentality: Carvaka is a "sankalpa doctrine" arising from the mental phase of accepting (sankalpa) the material world for enjoyment, and Buddhism is a "vikalpa doctrine", arising from the mental phase of rejecting (vikalpa) the world in frustration. Sankalpa and vikalpa are mere dualities of the mind which inevitably bewilder one who has no knowledge of what is beyond matter, i.e. spirit.

The six darshanas of the Vedic scriptures all confirm that the individual self is non-material and eternal. The goal of existence is liberation, and each darshana proposes a means by which the soul may be liberated from material existence. In vedanta, there are two basic explanations of the soul, one given by the mayavadis and the other given by the four personalist schools. Mayavadis say that there is only one soul -- the Supreme Soul, God. The the conception of a plurality of individual souls is an illusion. Personalists refute the mayavadi view by pointing out that if it were true that God is the only soul, then that would mean that illusion is more powerful than God -- because the so-called One Soul fell under the spell of maya and became the unlimited living entities subject to repeated birth and death. This is tantamount to saying that there is no Supreme Being at all. The personalists’ version is that although God and the souls share the same spiritual qualities (sat-cid-ananda vigraha, "formed of eternity, knowledge and bliss"), still a difference remains between them. God is vibhu (all-pervading) whereas the souls are anu (infinitesimal). The exact relationship between soul and God is described differently by each of the four personalist schools. These viewpoints are synthesized by the Caitanya school, which gives an example of the sun and sunshine to show how God and the souls share the same qualities in oneness and difference simultaneously. Just as the sunshine is the marginal energy of the sun, so the souls are the marginal (tatastha) shakti of God. As sunshine is made up of unlimited photons (infinitesimal particles of light), God’s tatastha-shakti is made up of unlimited infinitesimal spiritual particles, each one an individually conscious personal being. The soul is called ksetrajna (ksetra = field, jna = knower), because each soul is conscious of his particular field of awareness, i.e. his own body and mind. The soul is like a candle-flame, the limit of his luminescence being the limit of his field of awareness. God is called vyasti-kstrajna and samasti-ksetrajna. As vyasti-ksetrajna, God knows everything about each individual soul's individual existence (i.e. He knows unlimitedly more about the soul than does the soul himself -- for instance, God knows all of the past incarnations of each soul). And as samasti-ksetrajna, God is the knower of all souls at once in their totality. Because the soul is infinitely small, its power of knowledge can be obscured by maya, just as a ray of the sun can be blocked by a cloud. But clouds are created and destroyed by the influence of the sun on the earth's atmosphere. Similarly, maya
is always subordinate to God. The individual souls may come under the control of maya, but maya is always under the control of God.

The Caitanya school of vedanta teaches that the soul has an eternal function which is to serve God. This service may be rendered directly or indirectly. In direct service, the ecstasy (bhava) of spiritual love shared by soul and God is fully manifest in a transcendental personal relationship called rasa (sweet exchange). In indirect service, the soul serves God under the illusion of forgetfulness. Under maya, the soul is attracted by forms of matter instead of forms of spirit. He is overwhelmed by emotions such as lust, anger, greed, madness, illusion and envy which are nothing but perverted reflections of spiritual emotions. These emotions impel him to try to control and exploit the material world as if it belonged to him. The result of the soul's false lordship over matter is endless entanglement in samsara, the cycle of repeated birth and death.

The soul is meant to love God, but God grants the soul a minute independence of choice whether to love God or not. Love is voluntary. If God forced the souls to love Him, then "love" as we understand it would have no meaning. By loving God the soul automatically attains mukti (liberation); conversely, by not loving God the soul comes under the maya-shakti. There are two kinds of liberation -- jivanmukti and videhamukti. Jivanmukti is attained even before the demise of the physical body. When the embodied soul dedicates all his activities to God as an offering of love, he is freed from the bondage of karma. After death he attains videhamukti, an eternal situation of devotional service within the realm of svarupa-shakti, the divine energy. Videhamukti is described in Chandogya Upanisad 8.12.3: "Thus does that serene being, arising from his last body, appear his own form, having come to the highest light by the grace of Supreme Person. The liberated soul moves about there laughing, playing and rejoicing, in the company of women, vehicles and other liberated souls." As Baladeva Vidyabhusana explains in his Govinda-bhasya commentary on Vedanta-sutra, the liberated souls are in threefold union with the Lord: 1) they are in the spiritual realm of God, which is not different from God Himself; 2) by their constant meditation upon Him, God is ever-within their souls, and 3) they are in union of love with the personal form of God that appears before them. From this state, the concluding code of Vedanta-sutra declares, anavrittih sabdat, anavrittih sabdat, "There is no return (to the material world). Verily there is no return, for the Vedas so declare."

The spiritual form of God

Vedanta-sutra 3.2.23 states, tat avyaktam aha: "The form of brahman is unmanifest, so the scriptures say." The next code adds, api samradhane pratyaksa anumanabhyam: "But even the form of brahman becomes directly visible to one who worships devoutly -- so teach the scriptures" (api = but, samradhane = intense worship, pratyaksa = as directly visible, anumanabhyam = as inferred from scripture). The mayavadis hold that the form of God is a material symbol imagined by the devotee as a meditational aid. When the devotee attains liberation he realizes that God is formless. But this idea is contradicted by Vedanta-sutra 3.2.16, aha ca tanmatram: "The scriptures declare that the form of the Supreme consists of the very essence of His Self." And furthermore Vedanta-sutra 3.3.36 asserts that within the
realm of brahman the devotees see other divine manifestations which appear even as physical objects in a city (antara bhuta gramavat svatmanah: antara = inside, bhuta = physical, gramavat = like a city, svatmanah =to His own, i.e. to His devotees).

The personalist schools of vedanta identify the personal form of God indicated here as the transcendental form of Vishnu or Krishna. The brahma-pura (city within brahman) is identified as the divine realm of Vishnu known as Vaikuntha. This conclusion is corroborated by the Srimad-Bhagavatam, written by Vyasa as his own "natural commentary" on Vedanta-sutra. The first verse of Srimad-Bhagavatam begins with the phrase om namo bhagavate vasudevaya janmadyasya yatah, which means "I offer my respectful obeisances to Bhagavan Vasudeva (Krishna), the source of everything." Vyasa employs the words janmadyasya yatah, which comprise the second sutra of the Vedanta-sutra, in the first verse of the Srimad-Bhagavatam to establish that Krishna is brahman, the Absolute Truth. This is clear testimony of the author’s own conclusion about the ultimate goal of all Vedic knowledge.

Vedanta-sutra 4.1.6. states, adityadi matayah ca angopapatteh: "Reason dictates that the sun and other cosmic manifestations be thought of as originating from the limbs of the Lord." The "reason" referred to here may be termed (in Western philosophical language) "the argument of design": that because the cosmos is arrayed as if according to design, it is logical to seek a designer as its cause. Scripture explains that the design of the universe (the visvarupa, "universal form") is based upon the eternal transcendental form of Krishna. The sun and the moon are said to be the eyes of the universal form; they derive their splendor from the spiritual eyes of Krishna. In turn, the eyes of all creatures are derived from the eyes of the visvarupa. Krishna is the original designer. He draws the design of the material universe from His personal nonmaterial form, which is the source of everything. The form of the Lord may be meditated upon in this way as long as the soul is embodied in matter.

As mentioned, the mayavadis believe that meditation upon the form of the Lord is to be given up when the soul is at last freed of matter. But Vedanta-sutra 4.1.12 states, aprayanat tatrapi hi drstam: "scripture reveals that worship of the form of the Lord should be done up to liberation (aprayanat) and even thereafter (tatrapi)." Baladeva Vidyabhusana writes in his commentary, "The liberated souls are irresistibly drawn to worship the Lord because He is so beautiful and attractive. The force of His beauty compels adoration. A person suffering from jaundice is cured by eating sugar; but he continues eating sugar even after the the cure -- not because he has any disease, but because the sugar is sweet. So also is the case of liberated souls and worship of the form of the Lord."

Refutation of other systems of Vedic philosophy

The systems of nyaya, sankhya, yoga, etc. all apparently accept the Veda as authority, and each system puts forward the claim of being the most meaningful formulation of that which is to be learned from the Veda. The second and third chapters of Vedanta-sutra go to considerable length in pointing out the fallacies and shortcomings of these competing philosophies.
**Nyaya.** The followers of Gautama (i.e. the nyaya philosophers) are rejected as being *aparigrahah*, "they who do not accept the Veda," because they rely on logic rather than on scriptural testimony in defending their theories. Unaided logic has no power to describe the beginning of all things, which is the purpose of vedanta. Where the senses fail in perceiving the source, logic must resort to guesswork. This in turn gives rise to contradictory speculations even within the camps of the nyayas and other logicians, such as the vaisesikas and the Buddhists. Some say atoms are the eternal and only material cause of the universe. Others say the atoms are ultimately temporary and unreal. Others say the atoms are ultimately thoughts. Others say that the void behind the atoms is the only reality. Others say the atoms are simultaneously real and unreal.

Vedanta says that the Supreme Personality of Godhead is the material cause. Logicians attempt to defeat this by arguing, "This position makes out the potent (the Lord) and His potency (spirit and matter, which together are the ingredients of creation) to be identical. Thus vedanta, when examined logically, is shown to hold that the individual soul and God are one and the same. But this contradicts the evidence of the Veda, for instance *Svetasvatara Upanisad* 4.6-7, wherein the body is compared to a tree and the soul and Supersoul are compared to two birds within the tree. So how can Vedanta philosophy be said to be based upon the statements of the Veda? Nyaya upholds the distinction of God, the souls and matter which is asserted by the Vedic scriptures. Therefore this system is truly Vedic, whereas vedanta is anti-Vedic."

The Vedic scriptures assert *acintya-bhedabheda-tattva*, not the erroneous notions of nyaya. A man may hold a stick. The stick is his potency. In one sense, he and the stick are one; but then again they are also different. In the same way the Lord is one and different from His potencies. So while the Lord is the material cause of creation -- because the ingredients of creation have their source in Him and are not utterly separate co-existing entities that have no source -- the Lord is simultaneously distinct from his energies. Some Vedic statements assert the oneness of the Lord and His energies and others assert the difference. The validity of both viewpoints must be accepted, understood and explained by a true Vedic philosopher. Logicians accept only the Vedic statements of difference, which is like accepting only half a hen. In fact nyaya philosophers do not accept the Veda at all.

**Vaisesika.** This philosophy may be briefly restated as follows. Atoms are eternal and indivisible, possess form and other qualities, and are spherical. There are four kinds of atoms. During the cosmic dissolution, before the creation, they are dormant. At the time of creation, impelled by the invisible fate (*adrsta-karma*) of the souls, the atoms begin to vibrate and then combine into dyads (molecules of two atoms each). Three dyads combine into triads, and four triads combine into quaternary molecules. In this way larger and larger molecular structures are formed that comprise the stuff of the manifest universe. Atoms, therefore, are the immediate material cause of creation; their initial movement and combination into dyads is the remote material cause. The operative cause is *adrsta-karma*. The Lord is the destroyer of the material manifestation. He nullifies the connecting force that joins the atoms and thus dissolves the cosmic creation.
Vedanta philosophy asserts that the Lord and He alone is the cause of creation. The *adrsta-karma* theory will not suffice as an explanation for the combination of the atoms, for *vaisesika* states that during dissolution, the souls lie dormant without possessing any intelligence. So how can their innate *karma* influence the atoms? The dormant souls, being inert, are in no way superior to the atoms. Though the *vaisesikas* do say that the will of the Lord is the starting point of creation because He awakens the *adrsta-karmas*, this still does not explain the motion of the atoms and their subsequent combination.

Another failing of the *vaisesika* philosophy is its reliance upon the *samavaya* theory to explain why the single atoms form dyads. *Samavaya* (the theory of intrinsic relationship) is a category of fundamental reality that determines atomic conjunction and the qualities, actions and distinctions inseparably associated with material elements. The *vaisesikas* speak of *samavaya* as eternal and inherent, whereas other relationships (*samyoga*) such as seen between functionally connected objects (table and chair or automobile and road) are temporary and external. But in a universe that itself is temporary, as the material world is admitted to be also by the *vaisesikas* themselves, this appeal to "eternal and inherent" material relationships as the determining factor in the combination of atoms is contradictory.

Another weakness is the assignment of qualities such as form, taste, aroma and touch to the atoms. Experience demonstrates that material objects possessing these qualities are temporary: when these objects cease to exist, the qualities associated with them also cease. Since, at the time of the dissolution of the universe, all material qualities cease to exist, it follows that the atoms themselves cease to exist. But in *vaisesika*, atoms are held to be eternal. If the *vaisesika* philosopher adjusts his doctrine by saying that atoms actually possess no qualities, then he is at a loss to explain the origin of the qualities perceived in the elements the atoms make up.

**Sankhya.** The *sankhya* philosophers say, "The *Upinisads* directly glorify our Kapila with the words *rsim prasutam kapilam*, "He was the great sage Kapila." He spoke the *Sankhya-smrti* as a commentary on the *jnana-kanda* portion of the *Veda*, and he firmly approved of the *agnihotra-yajnas* and other rituals described in the *karma-kanda* portion. Kapila explained that insentient *prakrti* is the independent creator of the material universes, just as milk spontaneously creates cheese. If the Vedantists argue that the Supreme Personality of Godhead is the material, operative, formal and final cause of everything, they contradict Kapila, the great Vedic sage. Therefore to truly uphold Vedic tradition, Vedantists should interpret the Vedic texts in such a way that they do not contradict his writings.

But the explanation of *prakrti* as the cause of creation is not supported by the statements of great sages like Manu and Parasara found in other *smrti-sastras*. They declare that the material world was manifested from Lord Vishnu. The Kapila whom the *sankhya* philosophers follow is not a Vedic sage at all. The *Padma Purana* says, "One Kapila Muni, who was named Vasudeva, taught the *sankhya* doctrine fully supported by Vedic evidence to the demigods Brahma and others and the sages Brghu, Asuri and others. But another person named Kapila taught a form of *sankhya* that contradicts the *Veda*. He also had a disciple named Asuri, but this was a different Asuri. This *sankhya* is full of false reasoning and bad arguments." The statement, *rsim prasutam kapilam* (from *Svetasvatara Upanisad* 5.2), refers to
Vasudeva Kapila who appeared as the son of Kardama Muni and Devahuti. The other Kapila, whom the atheistic sankhya philosophers revere, is an imposter.

The atheistic sankhya system is to be completely rejected as non-Vedic, not only because of its doctrine of "prakrti as the cause," but also because it holds that 1) the individual souls are all-pervading consciousness and no more than that; 2) the souls are bound or liberated by the arrangement of prakrti alone -- indeed, liberation and bondage are simply features of material existence; 3) there is no being who is the Supreme Soul, the Lord of all; 4) time is not eternal; 5) the five pranas are identical with the five senses.

The atheistic Kapila tried to prove with logic that prakrti is both the material and operative cause of creation. Yet his position is illogical and inconsistent. If prakrti is both the material and operative cause, then nothing apart from prakrti has the power to make prakrti act or stop it from acting because it is both the prime mover and first ingredient. But when the logic that "a cause will continue to be seen in its effect" is rigorously pursued, this premise breaks down. If it were so that prakrti is both the material and operative cause, then in the effect (the material creation), the same principle should be observed: that ingredients (e.g. the building materials of a house) spontaneously assemble themselves. Belief in the spontaneous assembly of complex material structures is universally deemed illogical. Moreover, this belief is inconsistent with other statements of the pseudo-Kapila. Prakrti is said elsewhere in the Sankhya-smrti to only become creative when spirit comes near it. Then how is inert matter alone the only cause? This gives rise to a new problem: at the time of devastation, spirit and matter are also near to one another. Why doesn't creation continue at the time of devastation? The sankhya philosophers may say, "During devastation, the karma of the living entities is not awakened," but there is no provision within their system that prevents it from awakening.

Sankhya philosophers give many examples to illustrate how prakrti alone creates, but none are valid. They say, "Just as milk spontaneously becomes yogurt, rainwater spontaneously becomes both bitter and sweet fruits, grass spontaneously becomes milk in the belly of a cow, and a pile of rice spontaneously gives birth to little scorpions, so inert prakrti alone generates all varieties of creation." In each of these examples, the factors of the living force (spirit soul) and the superior direction of the Supreme Soul have been excluded. Thus the arguments of the sankhya philosophers are unintelligent to the point of silliness.

The atheist Kapila claimed prakrti to be the final cause (the very purpose) of creation: "First, the living entity enjoys prakrti, then after experiencing her many defects he renounces her and attains liberation." In other words, souls are conditioned only because of experiencing the attractions of matter, and they are liberated only because of experiencing the defects of matter. Thus it would appear that the soul is a helpless pawn in the grip of matter, subject to bondage or release at her whims. Kapila tried to depict matter's purpose as beneficial because in the end the soul is released by her. But if both bondage and release are up to matter, then a soul so "liberated" may be bound by matter again at any time.

Sankhya theory states that prakrti is the equilibrium of the three modes of nature. When the modes compete for dominance over one another, the process of creation
begins. But how this upset in the balance of the modes begins is not explained. God does not set it into motion, because God plays no role in sankhya philosophy (isvarasiddheh, "God has not been proved," said the pseudo-Kapila). Even time cannot be the reason, because Kapila said, dik-kalav akasadibhyah: "space and time are manifested from ether", i.e. time is a much later effect of a creation already set into motion. The spirit souls also play no part, because they are neutral and aloof from prakrti.

There are many more strange contradictions in the statements of the pseudo-Kapila. In one place he is quoted as saying, "spirit is conscious, for it is different from matter." In another place he says, "Because it has no qualities at all, the spirit soul must be devoid of consciousness." He asserts that the souls who understand they are different from matter are liberated and those who do not understand this are conditioned. But elsewhere he says that material bondage occurs whenever matter approaches the spirit soul, who then becomes pasu-vat, "just like a helpless animal."

**Yoga.** The adherents of patanjala-yoga cite passages from the Upanisads that praise the practice of yoga to support their claim that the vedanta can be grasped through the Yoga-smrti (the Patanjala Yoga-sutra and allied writings). But they hold that in order to use Patanjali's philosophy as the key for unlocking the highest meaning of the Veda, the Vedic scriptures should not be interpreted in a literal sense. This is because the Yoga-smrti: 1) depicts the individual souls and the Supreme Soul as being only all-pervading consciousness, with no further characteristics; 2) says that prakrti is the original independent cause of all causes; 3) says that liberation is simply the cessation of pain, obtainable only through the Patanjala system; 4) presents theories of sensory perception and the workings of the mind that are different from the explanations given in the Veda. Therefore, whenever contradictions are seen between the Yoga-smrti and the Veda on these points, the Patanjalas argue that the Vedic version must give way to the version of yoga.

**Vedanta-sutra** 2.1.3 replies, etena yoga-prayuktah: "As sankhya was refuted, so also is yoga." Sankhya and yoga are closely allied systems. As they share the same philosophy of purusa and prakrti, they share the same philosophical defects in their understanding of the origin of the universe. Though the Upanisads do employ the terms "sankhya" and "yoga," it is wrong to assume that the speculations of pseudo-Kapila and Patanjali are being praised. sankhya simply means knowledge, and yoga simply means meditation. There is no possible harmony between yoga and vedanta on the subject of liberation, which yoga claims is attained only through discrimination of spirit from matter. Vedanta teaches that liberation is attainable only by knowledge of the Supreme Lord and by His Divine Grace. Though the Yoga-smrti is not atheistic in that it admits the existence of God in several sutras, these theistic sutras are not essential to the system as a whole, which is mostly based upon principles imported from atheistic sankhya philosophy.

**Karma-mimamsa.** Vedanta-sutra 3.2.41 cites the viewpoint of Jaimini (the author of the karma-mimamsa philosophy) on the fruits of karma. He thinks that karma alone awards fruits to the performer of Vedic rituals, because after an act is completed, it leaves behind a force called apurva. After a lapse of time, this apurva force gives the reward that is consistent with the karma to the performer of the ritual. Where there is good karma, there is good fruit. Where there is no good karma, there is no good fruit.
Jaimini concludes that it is wrong to think that *karma* is rewarded by God. *Dharma* comes from the Lord, *karma* comes from the Lord, but the fruit comes from *karma* itself.

Badarayana Vyasa gives his reply to this in *Vedanta-sutra* 3.2.42: *purvam tu badarayanah hetu vyapadesat*, "But Badarayana holds that the Supreme Lord is the bestower of rewards, because that is the version of the Vedic scriptures." The Lord is proclaimed in the scriptures as the cause of all causes. Therefore it is unintelligent to isolate *apurva* -- an unintelligent material principle without any force of its own -- as the cause of fruitive rewards. *Apurva* is given no such credit in the scriptures. If it is argued that the demigods are the givers of karmic fruits, and therefore the Lord Himself need not be dragged down to their level of being a mere order-supplier, the reply is that the Lord is the indwelling ruler of all these inferior demigods. They punish or reward only as He impels them to do within.

*Vedanta-sutra* 3.4.2-7 cites sage Jaimini’s objection to the cultivation of *brahma-vidya* (knowledge of *brahman*) as recommended in the *Upanisads*. He says that *vidya* is subordinate to *karma*. Indeed, whatever glory is given to *vidya* (purification, elevation and liberation) is really the result of performance of Vedic *karma-kanda* rituals. Worship of Vishnu is also accomplished only by *karma*. The passages in the *Veda* recommending renunciation (*sannyasa*) apply only the enfeebled, blind and crippled persons who are unable to perform rituals. It is seen in the *sastra* that the best among the learned and wise men of old used to perform *karma*. In fact, there are direct sastric statements declaring that *vidya* is but an aspect of *karma*. The *Bhrad-aranyaka Upanisad* 4.4.2. says that when a man dies, his *vidya* and *karma* take hold of him and carry him to his next destination -- therefore, since *vidya* cooperates with *karma* to yield results, it is subordinate. *Sastra* directs persons having *vidya* to perform *karma* -- therefore also *vidya* is subordinate to *karma*. There is also an injunction directing a person to perform scripturally authorized *karma* through his whole life. Therefore *vidya* is to be cultivated through *karma*, not that *karma* is to be renounced so that *vidya* may be cultivated.

Sage Badarayana Vyasadева be begins his rebuttal of Jaimini’s *karma-mimamsa* arguments with *Vedanta-sutra* 3.4.8. It is true that *vidya* is cultivated by *karma*, but it is not true that therefore *karma* is greater than *vidya*. *Vidya* is the goal of *karma*. When the end is accomplished, the means is no longer required. Some authorities like Janaka continued *karma* after attaining *vidya* solely for the benefit of mankind. But many great sages (Yajnavalkya and the Kavaseyas) abandoned *karma* and retired to the forest to devote themselves to *vidya* alone. Regarding Vedic statements that *vidya* is just an aspect of *karma*, these do not refer to *brahma-vidya* but to specific *vidyas* related to specific rituals (e.g. the *udgitha-vidya*, the science of chanting Vedic hymns). Regarding statements that *vidya* and *karma* cooperate to yield results, these are like the statement, "I sold a cow and a goat and received 100 coins." This means that 90 coins were received for the valuable cow and only 10 coins were received for the not-so-valuable goat. Similarly, though both the fruits of *vidya* and *karma* accrue at the time of death, they are not the same fruit, not are they two fruits of equal value. The value of *vidya* is much greater. The statement (from *Taittiriya Upanisad*) that directs one in knowledge to perform *karma* is addressed to the *brahmanistha*, he who is well-versed in the *Veda*. But a *brahmanistha* is merely a *sabda-jnanin*, a knower of words. He is not a *brahmavit*, a knower of *brahman* (God).
A brahmavit is an upasaka (enlightened devotee), and his vidya is anubhava (consciousness of intense joy). The difference between a brahmanistha and a brahmavit is like the difference between one who says "honey is sweet" and one who tastes honey. The brahmavit is a naiskarmi (he does not perform rituals). He engages in transcendental acts of pure devotion to Lord Vishnu. The claim that puja to Lord Vishnu is merely karma is hereby refuted. The statement directing a person to perform karma throughout his life is a nonspecific recommendation. It does not apply to everyone. And even when it does apply, it is meant as a glorification of vidya, because by vidya a person is saved from the binding effects of karma, even though he continues to perform karma through his whole life. For example, a saintly devotee retains his body (the vehicle of active or prarabha-karma) to spread the glories of the Lord throughout the world. But in this embodied activity, he is liberated.

In Vedanta-sutra 2.3.15, the science of the potency of sound is explained. The words which in ordinary use are the names of things movable and immovable are really all names of God. All things get their particular names because He abides within all things. All words have power of denotation (tad-bhava) because they are nothing else than names of God, although common men do not know this. Only one who understands Vedanta understands that every word is really the name of the Supreme Lord. The karma-mimamsa theory of sabda, which holds that the personal God is but a visual manifestation of impersonal sound, is hereby refuted.

There are other refutations of karma-mimamsa misconceptions in the Vedanta-sutra, but as they are of a more specific or technical nature, they will not be mentioned here. Besides the five other systems of Vedic philosophy, Vedanta-sutra refutes four systems of Buddhist thought, the theories of the Jains and the pasupata and shakti schools.