

# Chapter 1

## The Pre-Socratics

The cradle of Greek philosophy was Ionia, on the coast of Asia Minor. The philosophers of the Pre-Socratic period lived at Miletus, Ephesus, Klazomenai, Kolophon, and Samos. Pre-Socratic philosophy is therefore sometimes called Ionian philosophy, although strictly speaking this is not correct inasmuch as there were famous names in southern Italy and Sicily. It is also strictly speaking incorrect to call the philosophy of the Pre-Socratics simply natural philosophy (or Ionian natural philosophy), as is sometimes done, because although their reflection started from the natural world around them, what really interested them was the essence and laws of *being*. It was therefore a metaphysics and even a theology, because it inquired into the ultimate reasons or causes of being and becoming. But as Aristotle said, their method differed from that of Homer and Hesiod, who had also, in their own way, “theologized”, because while Homer and Hesiod still resorted to mythical images and ideas in their language and thinking, the Pre-Socratics adopted an “inferential” or “demonstrative” style of thought which was not content with stories but set out to understand and so prove something through its own critical observation and reflection. This emergence of conceptual thought in the Pre-Socratics was at the same time, we may say without exaggeration, the emergence of western philosophy.

### 1.1 The Problems of the Pre-Socratics

Many of concepts which we still use today were forged by the Pre-Socratics; for example principle, element, atom, matter, spirit, substance, form. These thinkers created a mental currency the validity of which has lasted two thousand years. Their attempts at coining an effective philo-

sophical language were admittedly defective and to our way of thinking somewhat rudimentary, but in my view they are not to be dismissed as cumbersome relics from the past which distort our thought and cramp our mental style. However that may be, the decisive feature of this period was not the words and ideas so much as the *method of questioning*. The problems the Pre-Socratics set out to answer and the approach they adopted are more important than their concepts and terminology.

The main problem which engaged their attention was the question of the *arche* or principle of things. *Arche* means origin or beginning, but for the Pre-Socratics this was taken less in a temporal than in an essential sense. The real question, in other words, was: what constitutes the inmost being of the things which look so varied and so different to our senses? Is what we see any more than an appearance, an outer skin, a surface? Is the inner core of things quite different? Does this inner core “appear” to the senses, or is it accessible only to thought? Do the data of sense-experience yield the truth?

This distinction between externals and internals, between appearances accessible to the senses and a proper being accessible only to thought, between the incidentals and the essentials of a thing, led to another distinction. Outwardly everything was particular and individual, but in essence things were alike: being was universal. And this universal element now came to be thought more important (and therefore also more essential) than individual things.

And then a third distinction seemed to follow naturally from this: the inner essence, which is the same in everything, is the permanent, enduring, calculable, knowable factor in the universe as opposed to the transient, accidental, uncertain and shadowy factor, which cannot be the object of knowledge but at most the object of imagination and opinion. When Thales of Miletus (ca. 624–546 B.C.), the first of these thinkers, said that the principle of everything was water: water was the source, the element, from which everything arose and to which everything could be reduced, he was talking not about the individual entities which are the objects of sense-experience and the special sciences, but about being in general, which he made the object of knowledge. He created what Aristotle was later to call the science of being *qua* being, “first philosophy”, wisdom or theology, and what later thinkers, following Aristotle’s lead, were to call metaphysics. The answers of western philosophy to this question are innumerable. Reflection on being, beings, essences, phenomena (appearances), universals, the basis of things, will never now come to an end.

The Pre-Socratics adopted a number of different directions in their search for answers. A first attempt to solve the question of the primary element in being was the dual concept of *matter* and *form*. According to the three Milesian philosophers, the primary element was matter: water for Thales, as we have mentioned, *apeiron* for Anaximander, and air for Anaximenes. That water and air are material is clear. *Apeiron* was equally material. Literally it meant the unlimited, the infinite, but it was pictured as a sort of limitless store of substance from which everything that is ultimately draws whatever materiality it possesses (not directly, only after a great many transformations). We should not see in this prime element of the Milesians the merely material—they were no materialists; we have to notice equally importantly that their “stuff” of the universe had something prepotent, basic, eternal, divine about it. This is particularly evident in Anaximander (ca. 624–545 B.C.). Aristotle informs us that his *apeiron* “embraces everything, controls everything”, is “immortal, incorruptible and divine”. In the solemn hymnodic style in which Anaximander speaks of his *apeiron*, the reader glimpses something of his veneration for it and begins to understand the respect in which this theological inquirer among the early Greek thinkers has been held.

Despite the many advantages, however, in talking about infinite matter or living matter (hylozoism), the concept of a basic matter was not enough to explain the world’s reality. It was to the merit of the Pythagoreans (after Pythagoras, who was born on Samos in 570 B.C.) to have seen this. They referred to the idea at the opposite pole to that of matter, namely form. They did not deny the validity of the idea of matter, but they understood its limitations better than the Milesians. Matter was always shaped or formed, it was water or air or fire or some other thing, never just pure matter. The Pythagoreans set about reflecting on this phenomenon. Like Anaximander they called matter the unlimited element at the basis of the world’s reality (*apeiron*), and to their mind there immediately emerged “determination” or “limit” (*peras*) as a necessary complement. Determination set limits to what was in itself unlimited and turned it into something concrete. The difference between things therefore depended on their form or, as the Pythagoreans said, on their number. This is the significance of their famous dictum that “everything is number”. It did not mean that everything was only number or form or limit without also being matter. As well as the numerical factor, there was also what was numbered: matter, which was in itself without number. Even today modern natural science, working with numbers and math-

emational means of thought, has to accept that there is something that cannot be grasped by numbers, that remains beyond them and continues to defy analysis.

As well as the idea of number, the Pythagoreans developed another important concept, that of harmony. The forms which give order to being do not emerge arbitrarily; they follow a system and form a meaningful whole, a cosmic harmony. "The whole heaven is harmony and number." "The sages teach that heaven and earth, gods and men foster community and friendship and order and measure and justice, and they therefore call it all the cosmos." It has rightly been said that the Pythagoreans' discovery has had the very greatest influence on science.

One thing had not yet been examined: the changes undergone by matter and form, the phenomenon of transition, or, in a word, *becoming*. According to Heraclitus (ca. 544–484 B.C.), becoming was a more fundamental principle than matter or form. Things are what they are only because there exists the eternal restlessness of becoming. He thought of fire as the symbol of this becoming: "No god or man created this world, it always was and will ever be an eternally living fire measures of which light up and measures of which die down." Becoming was therefore not without its rules. It was controlled by measure, by *logos* (law). Even opposition and dialectic came under this law. Heraclitus did not, like modern vitalism which frequently appealed to him, relativize everything. He did not maintain that every age and every person, and so ultimately every situation and moment, was no more than itself, and that there was no overlapping truth or law since everything was subject to time. It was not until the Heraclitans that the phrase "Everything is in motion", attributed by Aristotle to Heraclitus himself, took on this radical sense. Heraclitus rejected the relativizing tendencies of individual and collective subjectivity: "All laws", he said, "feed on the divine." One may not act as if each of them had its own meaning: the universal *logos* with its truth and law is decisive. This is properly the origin of all reflection on natural law.

The opposite pole of Heraclitism was Eleatism. Its father, Parmenides, from Elea in southern Italy (ca. 540–470 B.C.), denied becoming and placed being at the centre of his philosophy. Only being is. Becoming can be no more than a flux and so cannot be; it does not remain, it is impermanent. It is only our senses that register the appearance of change and with it the Many. Only if there are the Many can there be transition, becoming, and vice versa. If, however, the philosopher rejects this illusory path of "common sense", that is, of sense-experience, and treads the

path of truth by relying on thought, he will discover true and real being, which is one: i.e. Being, not beings. “Thought and being are the same.” Did Parmenides anticipate the later idea that the people who submerge themselves in the Many, even the Many of the natural sciences, are in danger of losing the One: being, truth, the real world, because they allow what is not specifically human, namely material existence which animals share, to absorb their energies? *Thought* is peculiarly human, and only thought raises us above the world of experience and enables us to grasp the One, truth and being. As Bertrand Russell was to say two thousand years after Parmenides: “Men fear thought as they fear nothing else on earth—more than ruin, more even than death. Thought is subversive and revolutionary, destructive and terrible; thought is merciless to privilege, established institutions and comfortable habits; thought is anarchic and lawless, indifferent to authority, careless of the well-tryed wisdom of the ages. Thought looks into the pit of hell and is not afraid. It sees man, a feeble speck, surrounded by unfathomable depths of silence; yet it bears itself proudly, as unmoved as if it were lord of the universe. Thought is great and swift and free, the light of the world, and the chief glory of man” (*Principles of Social Reconstruction* p.5). Parmenides must be numbered among the great metaphysicians who would like to offer more than mere erudition. His theme was wisdom, because he sought the Whole and the One. This programme has persisted in philosophy from his time.

What in Parmenides was still a sort of mystical gaze of higher reason bringing opposites together, his direct disciples, the Eleatics (Zeno, Melissus and others), tried to support with verbal and conceptual gymnastics. Because of this Aristotle saw in Zeno the inventor of a dialectic confined to words, or eristic (the art of controversy) as the ancients called it.

A completely different direction was taken by another group of Pre-Socratics called *Mechanists*. They seized on the concept of matter which the Milesians had used as a principle of being and developed it. One of these was Empedocles (ca. 492–432 B.C.) from Akragas (modern day Agrigento in Sicily), who, in the words of Matthew Arnold,

... could stay swift diseases in old days,  
Chain madmen by the music of his lyre,  
Cleanse to sweet airs the breath of poisonous streams,  
And in the mountain chinks inter the winds.

Empedocles worked out the notion of an element. He was, as we now know, wrong in positing only four elements (which he called “roots”), fire, water, air and earth, but he had the inspired idea, quite acceptable still to modern minds, that there must be ultimate material particles which make up the corporeal world. These particles were the principles of all the variety we see in nature and enabled that variety to be reduced to a few basic elements. Until well into modern times the four elements were accepted. (The fifth one, or *quinta essentia*, quintessence, was the matter of the eternal stars.) The specifically mechanistic slant was furnished by Empedocles when he maintained that these four roots, which were to some extent daemonic-divine, functioned according to a higher mechanical law; of the alternating play of Love and Hate in the rotation of the four cosmic periods.

Anthropomorphism, which was still accepted by Empedocles, was completely absent and replaced by a pure mechanism, which was also pure materialism, in Democritus of Abdera (ca. 460–370 B.C.). There were no gods for Democritus and no ideas apart from man’s. His *archai* were atoms, tiny indivisible (a-tomos) ultimate particles exactly alike in quality and differing only in shape and size. Subsidiary concepts invoked by Democritus were empty space (the Void) and eternal motion. The atoms had been falling in empty space from eternity, and everything which now existed was composed of them. As far as our senses were concerned, things varied in shape, form, colour etc., but in themselves (*physei* = according to their nature) they were no more than agglomerations of atoms. Things contained nothing else. For Democritus, therefore, nature was nothing but “atoms hurled about in empty space”. There was no god in charge, no providence, no meaning, no purpose, but no chance either; everything happened “of itself” (automatically) according to laws built into the quantum of matter. The ability to foresee the workings of nature depended on a knowledge of these laws. This is also the ideal of modern natural science. Against Democritus Aristotle objected that his talk of the eternity of movement altogether evaded the question of movement’s ultimate foundation; and that if similar shapes continue to appear in nature, it is because behind them lies a principle that cannot be explained on materialistic grounds, that is, form.

Anaxagoras (ca. 500–420 B.C.) referred to both matter and form, and introduced a new principle, mind (*nous*). It was mind, an external power, which caused movement and guided everything on a meaningful pattern. Aristotle was lavish in his praise of Anaxagoras: “When he maintained that there was Reason in nature as in rational beings like

ourselves, and that it was the origin of the cosmos and of all order, he distinguished himself from his predecessors like a wise man among fools." Anaxagoras regarded *nous* as something divine. It was infinite and autonomous, existed for itself, was omniscient and omnipotent. He also considered the ultimate components of nature. They were not, as for Democritus, only quantitatively different from each other, they differed qualitatively, so that what a thing was as a whole it already was in each one of its parts (*homoiomerien*). Among Anaxagoras' followers, the idea of order and direction (teleology) became a philosophy with an enormous influence, especially in so-called "natural theology", which deduced from the meaningfulness and purposefulness of the cosmos an all-wise and divine Mind who created it all, and in the qualitative-eidetic rather than quantitative consideration of Nature, which as late as Leibniz was considered quasi-infinite.

## 1.2 The Pre-Socratic Method

The great ideas of Pre-Socratic philosophy depended on the simple natural speculations of common sense. The Pythagoreans were led to the concept of harmony by observing the relationship of pitch to the length of the vibrating string. When Democritus, watching corn being sieved and waves splashing up on the seashore, noticed how like produced like, he concluded that the process by which our world and its myriad forms emerged from the primitive vortex was something similar. Anaxagoras thought about human nutrition and wondered how hair came from non-hair and flesh from non-flesh: surely it was because the matter from which a thing arose was already, in some hidden way, what it was to become? This led him to his concept of *homoiomerien*.

The way in which the Pre-Socratics conducted their thinking gives us a valuable insight into the nature of philosophical thought in general: philosophy is a basic human activity, and far from being the preserve of specialist sciences is something universally human and fundamentally accessible to common sense. Kant once said that the insights necessary to true humanity do not depend on the subtlety of learned syllogisms but properly belong to natural reason which, if not distorted by artifice, does not fail to lead us to the true and useful. The Pre-Socratics prove it.

### 1.3 Sophism; Words and Distorted Values

The Sophists in their turn proved how dangerous the mind could be as an instrument of inquiry. It was capable of a great deal that passed for brilliance but which was in reality empty words. To see through sophism, mere mind was not enough; maturity of mind was needed.

Sophism arose at a time when Greece was preparing to enter the arena of high politics. Experts were needed. The Sophists offered their services. They promised to teach *arete*. If we translate this word literally as virtue and take virtue in the conventional sense, we have more or less the opposite of what was meant. On the lips of the Sophists, *arete* meant no more than dexterity (verbal and practical), and a dexterity that was not too fastidious. They propounded an omniscient expertise (*panurgia*), as Plato pertinently observed. For the Sophists the important thing was *rhetoric*, the art of speaking and writing persuasively. Political leaders needed it. And they now had some dangerous maxims at their disposal: if you want to be somebody, you must learn how to be first, how to acquire and retain power, how to assert yourself, how to master life and enjoy it. Everything was justified in the service of this aim—hence the Sophist principle that the clever speaker must be able to make the weaker cause the stronger not by shedding the light of truth but simply by persuasion. Plato's constant reproach was that the Sophists were concerned not with reality or truth or justice, but only with power, and that at bottom they lacked all genuine insight into the truth and worth of man—they did not lead, they led astray.

The Sophists adopted the appropriate view of life, a universal relativism: there was no truth, and even if there were we could not know it, and even if we could know it, it would be incommunicable. This was a favourite theme of Gorgias (ca. 483–375 B.C.). Or as one of their best known members, Protagoras (ca. 481–411 B.C.), held, everything was relative, subjective, dependent entirely on the personal opinions of the individual: “What seems to me to be so, is so for me, and what seems to you to be so, is so for you.” It would follow that there was nothing external to man: no objective facts, no eternal laws, no gods. “Man is the measure of all things”, said Protagoras. The Sophists left no avenue unexplored in their attempts to show the relativity of the judgements of justice, morality and religion. There was no place for “nature” (universal validity), everything depended on human decision and agreement. For their ideology of power too they cast around for a philosophical camouflage. They chose the law of nature according



to which the strong prevail over the weak. For them this was “natural law”, a view which was to be resurrected, centuries later, by Hobbes and Nietzsche.

It did not occur to them that their much-vaunted relativity affected not moral values but only the human awareness of moral values, not objective validity but only its historical expression. They also overlooked the distinction between “natural law” (in their sense) and natural greed, as Thomas Hobbes was much later rightly to call it. One man saw through their blindness; Plato. All his early writings were directed against the Sophists. His most cutting argument was that of the liar and the thief. The principle that the only matter of consequence was ability must, he said, be subjected to rigorous scrutiny. If it were really true, the liar would be “better” than the person who speaks the truth, because he out-talks him; similarly the thief is “better” than the watchman, because he “does” more in that he outwits him. Concentrating on ability alone, then, is to miss the point.

The Sophists’ arguments were not always seen through, however. The art of fine speech and writing, the humanistic ideal of formal creation, will always find adherents. Plato wrote for these people in vain, as they then simply turned on him with their sophistries. To his way of thinking they were no more than lovers of the word (*philologoi*), not lovers of thought and its wisdom (*philosophoi*) ; they lacked maturity of mind, feeling for the truth and appreciation of moral reason. There is always a sophism which takes more pleasure in appearances than in reality. People are always dazzled by expertise. If, however, man’s ability, even in knowledge or will-power, is not subject to principles of moral value and derived from them, certain consequences inevitably follow. In a philosophy orientated uniquely to performance and power, egoism becomes a necessity. It can be masked, lies can be called propaganda and theft the common good, but under a regime of naked power falsehood will fester. The person who is out to make the most of his advantages will always rely on the smooth cunning of the experienced practitioner whose conscience jibs at nothing.