CHINESE NATURAL PHILOSOPHY* by H. G. CREEL

THIS chapter completes the first section of our study, which consists of a sketch of the background against which any intelligible picture of the development of the Chinese world-view must be thrown. We have reviewed, in the briefest way, what seem to have been the very early religious and philosophical ideas of the Chinese. We must now consider the broad conceptual outlines of Chinese thought, as it existed down to the end of our period, *i.e.*, to the first century A, D.

In presenting the varied materials with which we are dealing it is quite impossible to maintain a thoroughly logical order. It has seemed wisest to relinquish chronological sequence in favor of an arrangement which, it is hoped, causes that which precedes to help in the understanding of that which follows.

In undertaking to deal with Chinese natural philosophy we must bear well in mind the cautions of Chapter I. We must look at these Chinese ideas, not through Western eyes, but, in so far as it is at all possible, through Chinese eyes. We must try, then, first of all, to understand what this natural philosophy was to its Chinese authors.

We will not be dismayed by the fact that many Occidental philosophers, particularly certain of the German thinkers, would immediately rule this thinking out of court as no philosophy at all. For they refuse to recognize as philosophers any who do not use a great deal of their intellectual energy in grappling with the epistemological problem. But, as Prof. T. V. Smith has pointed out, the rise of idea-isms and of idealisms is usually associated with the desire to negate the world as it apparently is, in order to escape to a world

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more flexible to human wishes—that it is, in other words, closely • associated with a despair of attaining the good life here and now. But the ancient Chinese were peculiarly fortunately situated, and held steadfastly to the belief that it was possible to make this life, in this world, worth-while. Only the philosophic Taoists abandoned this position even to a degree, and it is precisely their philosophy which most reminds us of Western Idealism. It is surely no accident that in China, most favorable of lands for human life in ancient times, and in the United States, most prosperous of modern nations, similar types of pragmatic philosophy have been developed,⁴¹ and that the latter have effected similarities even in such an element of culture as art.

The Chinese mind is primarily social. The true Chinese cosmos is, monotheistic propaganda of Christian missionaries to the contrary notwithstanding, anthropocentric, never theocentric. The corollary of this is that practical orientation of the Chinese mind which observers have so universally remarked. When the Chinese speculates, he is usually speculating for a purpose, and if he is not, his speculation will be disapproved by Chinese society.

To those of us who deplore the great apparent waste involved in the vast amount of often seemingly foolish speculation in which Western philosophers engage, this may seem a very desirable situation, yet it had its unfortunate results. Without this *narrow* practicality, this short-sighted and imperfect pragmatism, nothing could have prevented the rise of the scientific method in China by the beginning of the Christian era at the latest. Chinese thinkers were penetrating analysts, and they reasoned, in many cases, scientifically: Even experimentation was begun, among certain of the Taoist alchemists, with minerals, vegetables, and even animals, but this was forbidden by their brethren and even by the government, because they were wasting their time !¹²

This should not be mistaken to mean that the Chinese were wholly ignorant of all but immediately practical matters. Curiosity is, seemingly, a universal characteristic of humanity, and Chinese literature shocks us periodically with bits of surprisingly accurate physical information which the Chinese possessed. For instance, Wang tells us that "Some people have measured the light of the

⁴² Leon Wieger, Taoisme, Vol. I, p. 14.

⁴¹ The fact that Chinese thought is so congenial to our own leads to the reasonable hope that American sinologists may surpass the European in this department of research.

sun and calculated his size. They found the diameter to be 1000 li (the li is about one-third of a mile) long." Far as this figure is from the one which we accept, it is still further removed from the appearance of the sun's size to the naked eye. These ancient Chinese were not inept at getting information they wanted, but on the whole they did lack scientific curiosity. On a point so easy to verify as the manner of the birth of the young of the hare. Wang Ch'ung tells us that they issue from the mouth of the mother! (1, 319).

The crux of the matter is that the ancient Chinese were on the whole neither systematic nor orderly thinkers. When a piece of information suggested itself as true, the only tests which seem to have been applied to it were (1) whether it *appeared* to have practical value, and (2) whether it obviously and flagrantly denied some particularly sacrosanct tenet already accepted as true. If the candidate for inclusion in truth could answer the first question affirmatively and the second question negatively, it became part of the body of things accepted as true. That great lacunae, and numerous mutual contradictions, must have grown up by the use of such methods, appears at once. They did, but because the Chinese did not try very thoroughly to systematize their information, they were unnoticed. The fact that we find Chinese philosophical information done up in neat bundles of five and seven and six factors, etc.. does not modify the statement that the ancient Chinese were unsystematic. They were indefatigable cataloguers; they were not systematisers.

Coupled with this practical emphasis, as a leading principle of Chinese natural philosophy, is the fact that the Chinese physical world is a world of action as opposed both to a static world and to a world of substance. On the one hand, the Chinese world appears to be always in flux, to do little resting on any "eternal verities." On the other hand, we find, in the Chinese world, only one sort of substance, if indeed that be a substance at all. (This is a broad generalization, and such statements may usually be shown to have exceptions. There may well be individual variations from this position, although the writer knows of none.) Things are differentiated, not by the stuff of which they are composed, but by the way in which they act. Stuffs pass from a state of having one sort of properties to a state of having another; in the latter state they have a different name, but the only difference is one of activity. One wonders, indeed, whether (although an ancient Chinese would never have thought of, let alone expressed this) the phenomenon is not, in ancient Chinese thought, identical with the noumenon. To say the same thing otherwise, the Chinese seem to have lacked a conception of substance, matter, as such,⁴³ since this can only exist as over against that which is not material. To the ancient Chinese thinker, the differences between things consist in degree of density (itself a kind of activity) and nature of activity.

So much for the approach of the Chinese thinker to his task. He is practical, unsystematic, looking in the main for ways to better human social life. He is not wedded to a dualistic view of reality ⁴⁴ but is, on the whole, a naive realist. But a philosophy, as everyone knows, grows out of another ingredient in addition to methodology, *i.e.*, assumption, the back-ground of axiomatic "truth" which the thinker brings, consciously or unconsciously, to every problem. This background seems very evidently to come from precisely that ancient agricultural-village-life complex which was described in Chapter I.

It will be recalled that the chief characteristics of this life were found to be regularity and order, both in social life and in the natural processes of agriculture and the weather. The hypothesis was further ventured that these two sorts of regularity were ama'gamated into a cosmology in which the idea of harmony became the ideal. Granet⁴⁵ calls the Chinese "des gens dont la pensée profonde était que rien de ce qui est humain ne peut être sans retentissment dans la nature entirère." In theory, at least this formula works also in the reverse direction. Further, "Le sentiment que le monde naturel et la société humaine sont étroitement solidaires a été l'élément de fond de toutes les crovances chinoises."46 The statement is an extreme one, but in the large, true. Surely no one can read the Chinese Classics, not to mention other literature, without being impressed with the emphasis which is laid on the dogma that there is a right and proper way to do everything, and that no act is of so little importance that the manner of its doing is a matter of indiffer-

⁴³ Is not modern physical science moving in much the same direction?

⁴⁴ Many, perhaps most, of the writers on Chinese philosophy have called the *yang-yin* idea a dualism. But if it is so, it is a very different sort of dualism from that of the West, since the *yang* and the *yin* are constantly passing over into each other, and both derive from what Wang Ch'ung calls "one primal fluid" $\rightarrow \vec{\pi}$.

⁴⁵ Religion, p. 31.⁴⁶ Granet, Religion, p. 17.

ence. This would obviously be true in a universe so constituted that every portion of it were in the most intimate and immediate relations of cause and effect with every other portion of it.

To be sure, the actions of a king or a feudal lord or a sorcerer are of more importance than the same actions on the part of a husbandman, because the former are placed nearer the center of things. The principle is the same as that by which the deflection of the barrel of a rifle, for a fraction of an inch, is much more important near the breach than at the muzzle. The king is at the center (geographically as well as governmentally) of the world, and it is through him that the social world receives its most beneficial integration with the rest of the cosmos. Therefore, if anything goes wrong at the center of things, if the king is not virtuous, the world of men and of animals is disturbed, and various disorders occur in the natural world and in the heavens. This idea is central to Chinese thought, and is perhaps older than any of our literature. It appears in the Great Plan,⁴⁷ which is supposed to go back to high antiquity, and to have been written down at the beginning of the Chow dynasty (1024? B. C.).

Fifth, of the royal perfection.—The sovereign having established his highest point of excellence, he concentrates in himself the five happinesses, and then diffuses them so as to give them to his people:— then on their part the multitudes of the people, resting on your perfection, will give you the preservation of it. That the multitudes of the people have no lawless confederacies, and that men *in office* have no selfish combinations, will be an effect of the sovereign's establishing his highest point of excellence.

As will be shown in Chapter 111, one inevitable result of this idea was the very rigorous regulation exercised (always in theory and often in practise) over even the most seemingly unimportant acts, performed by persons of significance.

A taste of the intricate symbolism, by which the conceived linkage of the various elements of the universe was represented, is given by the following:

Le Ciel exerce son action bienfaisant à l'aide des douze mois et des cinq Éléments: la musique excite la joie, l'allégrésse et produit la concorde au moyen des douze tubes sonores et des cinq notes fondamentales. Chaque tube ex-

⁴⁷ Legge, Chinese Classics, Vol. III, p. 328.

prime la Nature d'un mois, chaque note a la Vertu d'un saison.⁴⁸

The connection of the idea of harmony with music⁴⁹ was not overlooked by the Chinese, and we find many references to music as being peculiarly potent, sometimes for evil as well as for good.⁵⁰

We have said that the ideal is harmony. But what is harmony? Here is one of the crucial questions for ancient Chinese philosophy, and one on which various schools differ, as we shall see. But, in general, harmony is the ordinary, the usual, the "golden mean," the temperate, even the common-place.

Generous wine (a good thing in moderation) is a poison; one can not drink much of it. The secretion of bees becomes honey; one can not eat much of it. A hero conquers an entire State, but it is better to keep aloof from him. Pretty women delight the eyes, but it is dangerous to keep them. Sophists are interesting, but they can by no means be trusted. Nice tastes spoil the stomach, and pretty looks beguile the heart. Heroes cause disasters, and controversialists do great harm. These four classes are the poison of society. (I, 303.)

Is this not a beautiful example of the philosophy of the typical western rustic? These things look very nicely, but, better let them alone! Yet Wang Ch'ung, who wrote this, was one of the most sophisticated philosophers China has ever produced. When China became an empire, the Chinese village concept was distended to cover hundreds of thousands of square miles.

The concept of harmony is hypostasized as h'u ch'i \Re \Re , "the harmonious fluid," to which Wang refers often. Unusual phenomena which are considered especially good, as, for instance, the birth of sages (I, 316) are referred to the action of this harmonious fluid.⁵¹

It should be noted that this h'u ch'i is not a different kind of fluid, but simply a portion of the universally present fluid which has taken on, for the time being, an unusual mode of action. This ephemeral nature of the superusual quality is graphically shown by the fact that if, for instance, the seed from an unusual sort of

⁴⁸ Granet, Religion, p. 120.

⁴⁹ This does not mean that there was "harmony" in the technical musical sense in ancient Chinese music. But even music which consists of single notes must have a certain harmony between those which succeed each other.

⁵⁰ Cf. Lun Hêng, II, 180; Granet, Religion p. 119-121.

⁵¹ Cf. also I, 471.

grain (the spontaneous growth of which is a good omen) be sown, the crop will be only ordinary grain, the harmonious fluid which produced the original grain having dissipated (1, 356-7). Wang denies even that there is a species of the fabled unicorn, holding that it is probably born in the deer species under unusual conditions. (I. 357). Specifically: "All ominous \mathbf{H} things originate from a harmonious fluid, "Born in an ordinary species, they have their peculiar character, and therefore become omens." (I, 356.)

It is difficult, however, to distinguish this harmonious fluid⁵² from the *chao* (or *yao*) \mathbf{K} fluid. The latter adjective has the force of "weird" or "supernatural."

The *chao* fluid engenders beauty, but the beautiful are often vicious and depraved. The mother of Shu Hu was a beauty. Shu Hsiang's mother knew her, and would not allow her to go to the chamber of her husband. Shu Hsiang remonstrated. "In the depths of the mountains and in vast marshes dragons and snakes really grow." said his mother. "She is beautiful, but I am afraid, lest she give birth to a dragon or a snake, which would bring mishap upon you." (I, 302.)

That is, unusual beings, since they are formed of the same stuff (*i.e.*, the original universal stuff *plus* superusual action-patterns) may and often do change from one into another form of such beings with the greatest ease.

But what is the difference between these two classes of unusual stuff, the harmonious and the weird? Two distinctions may be inferred from Wang's treatment. With respect to origin, the harmonious fluid seems to be generated by an especially harmonious condition, social or cosmic, such as prevails in time of peace or at the equinoxes; the origin of the *chao* fluid is more special and accidental. With respect to result, the harmonious fluid is in general beneficent, while the weird fluid may produce either good or bad effects. These distinctions are not rigorous, however, as we shou'd not expect them to be. In general, the ideal is that of symmetry, a specialization of the harmonious principle which holds that like must be grouped with like. It is therefore the case that the same stuff may be beneficial to one man, who has the constitution to consort with it, and deadly to another.

 5^{2} As here used the word *fluid* is not easy to distinguish in meaning from mere *substance*.

When the Hsia emperor K'ung Chia was hunting on Mount Shou it began to rain, the sky turned dark, and he entered the house of a citizen, where the mistress was just nursing a baby. Some said the child to which an emperor came must needs rise to high honors, but others were of the opinion that a child unfit for such an honor would become ill-fated. (II, 314.)

The child turned out unlucky.53

Again, if two individuals of different constitution, one fated, perhaps, for the nobility, the other for common life, are so unlucky as to marry, the match is very unfortunate, for one of them must die.

It becomes apparent that this matter of harmony and disharmony was not an academic philosophical question, but one of the greatest practical importance. In such a world, if one is to live satisfactorily, he must know, in the first place, what constitutes harmony. How may it be preserved, or, if lost, how may it be regained? These questions of technique and of the fundamental standard of harmony are at the base of the more important philosophical and religious systems developed in China. They must be dealt with in the chapters which remain. Before that, however, there is still something to be sketched of the fundamental background of the whole intellectual drift.

It is evident that in any case "harmony" denotes a relationship between two or more objects. A "harmonious" universe must be a universe in which parts are distinguishable, in order that those parts may stand against each other in that *relation* which alone can give meaning to the term "harmonious." Furthermore, any attempt to produce or to conserve a condition of harmony must have as its end the control of these parts. It is, then, one would suppose, perfectly evident that the investigation of the divisions of Existence (*i.e.*, the universe), of the characteristics of these parts, and of their mutual relationships and tendencies to act, is not only of philosophical and speculative interest, but is (on the premises) a *prerequisite* to practical action, and therefore to be considered as the most practical sort of activity.⁵⁴

 53 This idea differs from the Polynesian idea of the hurt done a commoner by the chief's *mana*, because the conception of kingship is different, as will be shown in the next chapter.

⁵⁴ I do not mean to intimate that the physical theories which will be described were all reached as the result of such a process of reasoning as is here given. I do mean, however, to protest against the custom of some writers in the field, to consider Chinese physical theory as utterly impractical and puerile speculation. It has already been shown that Chinese thought was, on the whole, too practical to be so fruitful as it might otherwise well have been. The Chinese thinkers did not, of course, elaborate the constitution of the universe *de novo*, but rather reworked the old conceptual furniture into useable forms. The first, and perhaps in all Chinese thought the most important divisions which were made, seem to have been the old categories of *yang* and *yin*. The early history of these ideas has been traced. They quickly expanded, in importance, far beyond their vague beginnings.

As well as an historical beginning (which, of course, the Chinese philosopher did not recognize), it was thought in the philosophical era that the *yang* and the *yin* must have had a material origin, and this was almost universally referred to some single original stuff out of which the two were differentiated.

Wang says specifically that "One Heaven (which is *yang*) and one Earth (which is *yin*) conjointly produce all things. When they are created they all receive the same fluid." (1, 471.) But why is there evil in some, why are there such creatures as vipers, etc.?

Fire is a phenomenon of the sun. All created beings of the world are filled with the solar fluid (or, the fluid of too much yang).⁵⁵ and after their creation contain some poison [*i.e.*, poison is excessive yang, cf. 1, 298]. Reptiles and insects possessing this poison in abundance become vipers and adders, bees and scorpions, plants become croton seeds and wild dolichos, fishes become porpoises and *to-shu* fish. Consequently men eating a porpoise liver die, and the bite of a *to-shu* is venomous.

Among mankind bad characters take the place of these creatures. Their mouths do mischief.⁵⁶ The bad men of the world are imbued with poison fluid. The poison of the wicked living in the land of $yang^{57}$ is still more virulent, hence the curses and the swearing of the people of southern Yüeh have such wonderful results.

Here we see that the *yang* and the *yin* have become, not mere principles of classification, but also principles of origination of all things, and principles, also, of their difference.

55 T'ai yang $\mathbf{\chi}$ **(B)** may mean either "the Great Yang" (*i.e.*, the sun) or it may mean "too much (*i.e.*, excessive) yang." Forke translates it always in the former sense, which, while technically correct, does not always present the best sense of the passage to the reader. As a matter of fact, the ideas are *identical* in Wang's thinking, for he says specifically "The sun *is* fire" (I, 301) and fire is the very essence of yang.

⁵⁶ The mouth and tongue, as well as speech, are *yang*. (I, 246, 301). ⁵⁷ The south (I, 298). It is pertinent to ask, at this point, when these all-pervasive concepts first appear in Chinese literature. Wieger places the earliest possible occurrence of the terms in recorded literature at the time of Confucius.⁵⁸ The Yi King has been supposed to contain them in other language and in veiled references. Forke says, rightly, that to find them there requires very liberal interpretation. On the other hand, it seems likely that the ideas did exist in some form at a time much earlier than that of Confucius. Let us consult a thoroughly unbiased source for the meaning of the terms. The following definitions are from Mr. O. Z. Tsang's *Complete Chinese-English Dictionary*.

Yang. (n.) The male or positive principle in nature.
The sun. The south of a hill. The north of a river.
Penis. (adj.) Male; masculine. Sunny; light; brilliant.
Yin. (n.) A shadow; shade. The south side of a river.
The female or negative principle in nature. The privates;
privities; the genitals. (adj.) Shady; dark; cloudy; gloomy.
Cold. Mysterious; secret. Female; feminine.

Why do we find in these definitions this irrelevant "south of a hill," "south of a river," etc.? These do not appear to be the deliberate constructions of philosophic terminologists. Granet holds that these refer to the relative positions taken by the young men and the girls in the spring festivals previously referred to, which, he thinks, did much to give content to the *yin* and *yang* idea.⁵⁹ The hypothesis seems probable.

There is a difficulty, however, in the apparent non-occurrence of the words, if not of the ideas, in the early literature. The characters occur frequently in the *Shu* and the *Shi*, but are used in senses other than the philosophical. In the *Shu* there seems to be only one certain reference to the *yin* and the *yang* as philosophical concepts.⁶⁰

The particular document in which the passage occurs is said to date from about 1000 B.C. It is possible, also, that the very beginning of *The Great Plan* employs the *yin-yang* idea, in this case substituting *T'ien* for *yang*. No published translation which I have examined gives this meaning to the passage, however.

As a final statement, it may be said that the origin of the *yang* and *yin* ideas is not possible at present to determine positively. They

⁵⁸ Histoire des Croyances, p. 136.
⁵⁹ Religion, p. 21.
⁶⁰ Shu, p. 527.

do not appear, however, to be mere constructions of sophisticated philosophers, and there is reason to believe that they go back to early roots in Chinese folk religion.

It is obviously a simple and inevitable step to identify that regularity and harmony, cosmic and social, of which we have spoken, with the harmony of the *yin* and the *yang*.

The people being at ease, the *yin* and the *yang* are in harmony, and when they harmonize, all things grow and develop; such being the case, strange omens come forth. (II, 192.)

When the *yin* and the *yang* are at variance, calamitous changes supervene. (II, 16.)

The connection between yin and winter, yang and summer, was mentioned in Chapter I. This later received a philosophical interpretation. "The yang having reached its climax turns into yin, and the yin having gone to extremes becomes yang." (II, 344.) Again there should be noted the tendency of all things to preserve harmony, or at least to tend to and return to it. Animals are classified, in general, as yang and yin, showing themselves in summer or in winter (II, 357). The bear is, of course, a yang animal.⁶¹

Here we have the beginning of that elaborate classification of objects and phenomena as belonging to the *yin* or to the *yang* which pervades so much of ancient Chinese literature. The brightness and obscurity of the two fluids explains the difference in the length of days in summer and in winter (I, 258). An eclipse is the temporary vanquishment of the *yang* by the *yin* (I, 269), or of the sun by the moon (which is *yin*) (I, 270). The sun is proved to be fire by the fact that a burning-glass held toward the sun will cause flame (II, 350-51, 412); similarly, mirrors left out at night accumulate dew, which is water drawn from the moon (water is the *yin* "element," and the moon is *yin*) (II, 351). Ghosts are made of concentrated *yang*, and therefore are, of course, the *yang* color, red.⁶² They are able to hurt people because *yang* is poison (I, 299).⁶³

⁶¹ Granet, Danses, p. 567.

 62 Wang does not believe that ghosts are dead men, but those who do, in China, sometimes hold that since man is made up of *yang* and of *yin*, and decomposes when he dies, the lighter stuff, *i.e.*, the *yang*, is naturally what will go about hurting people. Ghosts made of *yin* are not unknown, however.

⁶³ The idea of *yang* as poison would appear not only to be connected with the fact that it is essential activity, and is unharmonious without the mixture of *yin*, but also with the prevalence of disease and fever in summer and in hot regions.

In Kiang-pei the land is dry; consequently bees and scorpions abound there.⁶⁴ . . . Those creatures growing in high and dry places are like the *yang* (the male principle). The *yang* (penis) hangs down, therefore bees and scorpions sting with their tails (I, 302).

The *yin* occupies a less prominent place in this process of classification, as is fitting. "The creatures living in low and wet places resemble the female principle. The female organ is soft and extensible, therefore snakes bite with their mouths" (I, 302). The dragon, an animal associated with clouds and rain, belongs to the *yin*.

A proverb says "Many mouths melt metal."65

The mouth is fire. Fire is the second of the five elements, and speech the second of the five actions. There is an exact correspondence between speech and fire, therefore in speaking of the melting of metal one says that the mouth and tongue melt it.

This brings us to the classification by fives, which is an important and complicated subject. The use of the number five may be traced, perhaps, to counting on the fingers. In any case, any reader of the *Chinese Classics* alone can not fail to note the predominance of the classification into fives.

In the *Great Plan*, of the *Shu King*, the antiquity of which has already been discussed, there are several sets of fives, conspicuously more than of any other number. The five we may accept as old. But which five is oldest, and started the system? Provisionally, in the present lack of evidence, there is good reason to believe that the five directions, north, south, east, west, and center, may well have come first. There is nothing inherently sophisticated in the idea, the Zuni Indians of North America having had as many as seven directions. It is an idea which might easily occur from the east-west passage of the sun, to which a perpendicular is easily erected. The idea of the center, tied to the idea of the village and of the mound $(sh\hat{e})$, seems a natural addition.⁶⁶

Chinese geography represented the world as very much like an apple pie, cut into quarters, with a slice for each cardinal direction. This means that the lines of division ran northeast-southwest and

64 Denoting yang, since water is yin.

⁶⁵ This may have arisen from the process of blowing the flame of the blast furnace.

⁶⁶ Does the fact that there was not an up direction, but that there was a *center* associated with the *shê* argue that the *shê* is older than *Tieu?*

northwest-southeast. Heaven was a similar pie, according to one idea, situated a great distance above the earth. The center of heaven was the pole star, while the center of the earth was the imperial $sh\hat{c}$. Whether there were other worlds was debated. (I, 89).⁶⁷

Le trait fondamental de la pensée chinoise est une classification des êtres par Régions, sous la domination d'un Vent ou d'un Orient.⁶⁸

That the five directions was the first system of the hierarchy of fives to be developed, seems altogether probable, if not provable. But what came next? Probably the five colors and the five *hsing*, but which of these preceded would be difficult to say.

The five colors are not difficult to account for. For north and south we have simply the colors of the *yin* and the *yang*, black and red. Red is the color of the sun and of flame. Black is the color of night, and of darkness and shade in general.

The color of east is green. The sun rises in the east, which governs Spring (I, 520) and the new life. The color most prominent in Spring is, of course, green. The color of the center, always associated with earth, is yellow, which is perfectly understandable if we remember the color of the loess which makes up the soil of much of China.

Only the color of the west, white, is difficult to account for. It may well have come, however, as an attempt to complete the list of colors. It is the only color conspicuously missing from the list previously given.⁶⁹

Concerning the antiquity of the five colors, it is worthy of note that they are mentioned in *The Tribute of Yu*, which Legge suggests may have been written during the Hsia time, and feels rather certain was in existence before 1077 B.C.⁷⁰

Given the five directions and the five colors, the evolution of the so-called Five Elements, the *wu hsing* already referred to, would seem to present no great difficulty. *A priori*, there does not seem to be any great necessity of postulating a foreign origin, as some scholars have done.

 67 It must not be supposed that sophisticated Chinese thought, even in *Wang's* time, held such a simple idea of the heavens. Complicated theories which accounted very ingeniously for the movements of the heavenly bodies had been developed. (Cf. I, 260-61).

68 Granet, Danses, p. 390.

⁶⁹ Green is a very usual substitute for blue in the making of color series. ⁷⁰ Shu King in S. B. E., p. 19 (cf. p. 67).

The five *hsing* are, in the order of their "production," wood, fire, earth, metal, water.⁷¹ This is the order in which, starting in the east with wood, they would occur, clockwise, as one passed around a map, omitting earth which is the center. It is also the order in which occur, beginning again with wood (corresponding to Spring), the seasons with which these elements are associated, again omitting the earth. They are said to "produce" each other in this order. Wood produces (is capable of supporting) fire; fi.e produces earth (ashes); earth produces metal; metal produces water (dew deposited on a metal mirror); water produces (makes possible the growth of) wood. Thus the circle is completed.⁷²

Another order in which the *hsing* figure prominently in Chinese thought is that in which they "overcome" each other. This order is water, fire, metal, wood, earth, and may be seen to be based on the north-south, west-east opposition. Water extinguishes fire, fire melts metal, metal cuts wood, wood penetrates earth (by the roots of trees, or, perhaps by the wooden plow), earth soaks up or dams the course of water.⁷³

As opposed to such attempts at explaining these sequences on a naïve and quasi-naturalistic basis, Granet⁷⁴ holds that they are:

Simplement une transposition dans l'ordre intellectuel de divers modes de la technique divinatoire.

This is possible, and in the existence of good evidence might even be probable, but he admits that

Nous ne savons pas de quelle façon les techniques divinatoires, astrologiques, et astronomiques ont commandé le developpement de ces théories.

An hypothesis so feebly supported remains an hypothesis. Naturalistic origin appears most probable.

When and where did the five elements originate? Chavannes has held that they were introduced to the Chinese, from a "barbarian" people, about 300 B.C.⁷⁵ If true, this would necessitate great revision in the writing of Chinese history. It has, however, been refuted thoroughly both by De Saussure and by Forke.⁷⁶ As De

⁷¹ It will be remembered that these are "forces," not inert "elements," and they must not be confused with those "materialistic" concepts which are opposed, in the West, to "spiritual things."

⁷² Cf. Forke, Lun Hêng, Vol. II, p. 469-70.

⁷³ Cf. ibid. Vol. II, p. 470-71.

- ⁷⁴ Religion, p. 117-118.
- 75 T'oung Pao, 1906, p. 96-97.
- ⁷⁶ T'oung Pao, 1910, p. 265 f. Lun Hêng, Vol. II, p. 240.

Saussure has said, all of the ancient literature of China "est partout (let us be cautious and qualify with "almost") imprégnée de la théorie des cinq éléments."

The five hsing are given in the Great Plan.

First, of the five elements.—The first is named water; the second, fire: the third, wood; the fourth, metal: the fifth, earth. *The nature of* water is to soak and descend; of wood, to be crooked and straight: of metal, to obey and to change; while the virtue of earth is seen in seed-sowing and ingathering. That which soaks and descends becomes salt; that which blazes and ascends becomes bitter; that which is crooked and straight becomes sour; that which obeys and changes becomes acrid; and from seed-sowing and ingathering comes sweetness.⁷⁷

Here we have an example of that building of fives, to correspond with the five *hsing*, directions, seasons, etc., which ancient Chinese writers were wont to indulge in. Even in the above quotation, it will be seen that the principle of, at least, easily available analogy, was abandoned. Beyond doubt, there was a reason for each of these lists, and its order, but many of these reasons must have been historical rather than analogical. That we shall ever be able to explain the origin of all of them seems both doubtful and of little import. A table of these fives is given on the next page. It must be remembered that this table is suggestive rather than exhaustive. There are, for instance, within the brief space of the *Great Plan*, tables of fives which it does not include. Further, there is more than one set of animals which is placed in relation to the five *hsing* (cf. I, 105).

It is true, as was said in the beginning of this chapter, that these various lists of phenomena were not systematised, in the sense of a rigid revision to remove discrepancies.

There was, however, a distinct but perhaps almost an unconscious process of reducing ancient, and perhaps intruded, elements of thought to the terms of the *yang-yin*, five *hsing* interpretation of the universe. We have seen, for instance, that the *shĉ*, the village mound, apparently gave three elements to this complex which were not a part of the old cult of the *shĉ* at all, that is, the idea of *yin* as localized particularly in earth, the idea of the center direction, and the idea of earth as one of the *hsing* and associated with the *yin* and the center. Again, Wang mentions the Four Sacred Mountains

77Shu, (in Chinese Classics) p. 326-27.

Table of the Five "Elements" 五 行 and Their Correlates.*

Five "Elements"	wood	fire	earth	metal	water
Five Directions	east	south	center	west	north
Five Colors	green	red	yellow	white	black
Four Seasons	spring	summer		autumn	winter -
Five Flavors	sour	bitter	sweet	acrid	salt
Five Odors	go <mark>a</mark> tish	burning	fragrant	rank	rotten
Five Grains	wheat	beans	panicled millet	hemp	millet
Five Sacrifices	inner door	hearth	inner court (atrium)	outer door	well
Five Animals	sheep	fowl	ox	dog	pig
Five Classes of Creatures	scaly	feathered	naked	hairy	shell-covered
Five Organs	spleen	lungs	heart	liver	kidneys
Five Numbers	8	7	5	9	6
Five Musical Notes	chio	chih	kung	shang	yü

(* This table, based chiefly on the Li Ki, is suggestive rather than exhaustive. Many variations from the above lists occur, and many sets of "fives" not mentioned here are to be found in Chinese literature.)

(II, 244). There can be no doubt that the mountain was one of the important objects of early Chinese religion, and it may well have served as the gathering place for feudal lords which it is represented. We find, however, that the sacred mountains become five, each one corresponding to one of the directions.⁷⁸ In another place Wang himself speaks of the Five Mountains (I, 251).

It is not to be supposed that the categories which have been mentioned are the only ones which figure in Chinese thought. Various less important categories, such as that of the "Six Honored Ones" (I, 517),⁷⁹ are met with, but these seem not to have won any great use, perhaps because they did not fit well with the categories which had already developed into a flourishing complex.

It is altogether possible that the number eight, and the four, are older in Chinese thought than is the five. Certainly eight is an important number throughout the ancient period, but in the literature it is by no means so prominent as the five.

Les Vents sont huit comme les sons. Les danseurs s'affrontent par bandes de huit (on vient de voir qu'il (sic) se groupaient aussi par trois). Les inventeurs des chants et de la danse sont les Huit fils d'un Souverain . . . qui était le mari de Hi-Ho (le Soleil) et de Tch'ang-hi (la Lune). Le soleil parcourt dans sa journée *seize* stations (parmi les noms qui correspond à la première se retrouve les noms d'un luth et celui d'une danse). Pour presider a la nuit, il y a Deux bandes de Huit divinités.⁸⁰

That the four directions and their media gave origin to the number eight seems *a priori* probable. There is some evidence for this.

Les huit sons sont, d'après le *Po hou t'ong* chap. 1, *Houai-nan tseu* et le *Po ya*: le Tambour (peau)= N.; la flute de Pan (calebasse à 19 tuyauax)= N-E.; la flûte (bambou)= E.; la caisse de *bois*= S-E.; l'instrument à cordes de soies= S.; le sifflet d'*argile*= S. W.; la cloche (métal)= W.; la pierre sonore= N-W.⁸¹

Such was the general character of the various ways in which the parts of the world of existence were described in ancient China.

To summarize, we have found the most general conception of

⁷⁸ Henry Doré, *Researches into Chinese Superstitions* (tr. by M. Kennelly), Vol. VIII, p. xxiv.

⁷⁹ According to Forke, these have been said to be "water, fire, wind, thunder, hills, lakes" or, "sun, moon, stars, rivers, seas, and mountains."

⁸⁰ Granet, Danses, p. 264.

⁸¹ Ibid., p. 264, n. 1.

early Chinese philosophy to be that of harmony and order, in which social and cosmic regularity are combined in a single complex. But this simple whole had to be analyzed, both under the pressure of curiosity, and of necessity to control the environment of man. This analysis, probably never made consciously, followed old lines of thinking, and gave rise to the idea that all things originated from the interaction of the *yang* and the *yin*. These, combined with the simple ideas of direction, and working perhaps under the influence of the decimal numbering system, developed into the complex series of fives. Other methods of analyzing reality arose in profusion, but were never able to reach the surpremacy of those already mentioned.

Man occupies an interesting place in this universe. He is, as we have seen, a natural and an inseparable part of it, his acts affecting all the universe, and all the universe affecting him, in a manner much more intimate than the Western world is accustomed to suppose. Yet he is also felt to be unique. Wang says "Man alone is not metamorphosed, being the recipient of the real Heavenly fluid" (I, 327). As is not unusual, Wang contradicts himself on this later; however, he is giving expression to a very deep-seated conviction of the value of man, which is typically Chinese. The *Li Ki* says:

Man is the heart and mind of Heaven and Earth, and the visible embodiment of the five elements. He lives in the enjoyment of all flavors, the discriminating of all notes (of harmony)) and the enrobing of all colors.⁸²

Here is suggested the idea, voiced many times, that man is a microcosm, reflecting the universe. He is certainly in close relation to it.

A great man agrees with Heaven and Earth in virtue (II, 27).

Heaven, in giving birth to the multitudes of the people, to every faculty and relationship annexed its law. The people possess this normal nature. And they (consequently) love its normal virtue.⁸³

But man, an integral part of a supposedly harmonious universe, found that all things were not as they should be, and that famine, war, and injustice made life something far different from that ideal peaceful existence which is so beautifully described in the *Classics*. How was this possible? More important, how could humanity find the way back to order, peace, happiness?

To the various answers which were given to these questions, the remainder of this study will be largely devoted.

⁸² Li Ki (in Chinese Classics) p. 382.
 ⁸³ Shi King (in Chinese Classics) p. 541.