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PYTHAGORAS AND THE DOCTRINE OF TRANSMIGRATION

By A. BERRIEDALE KEITH, B.C.L.

TO Sir William Jones[1] appears to belong the honour of first since the beginning of Sanskrit studies suggesting that Pythagoras derived from India the groundwork of his philosophy. His treatment of the matter, however, is unimportant compared with that of Colebrooke,[2] who discussed the question of the relation of Sāṃkhya and Pythagoreanism in some detail and with his usual mastery of material. As often, his treatment remained for many years definitive; his arguments were repeated and extended, but nothing solid was added to the foundation which he had laid until in 1884 Dr. Leopold von Schroeder[3] published his admirable study on *Pythagoras und die Inder.* His presentation of the case for the theory that the philosophy of Pythagoras is derived from India is, I think, complete, and the ability and learning of the treatise have won for the theory itself the deliberate and reasoned acceptance of Professor Garbe,[4] of Professor Hopkins,[5] and of Professor

[1] *Works*, iii, 236. [2] *Misc. Ess.*, i², 436 seq.

[3] See also his *Indiens Lit. und Kultur* (1887), pp. 717 seq.

[4] *Phil. of Ancient India*, pp. 39 seq. Cf. also his *Sāṃkhya Philosophie* (1890), p. 79.

[5] *Rel. of India*, pp. 559, 560.

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Macdonell,[1] all sane and able critics, so that, though acceptance has been by no means universal,[2] the theory may be deemed to be the ruling one at the present day.

On the other hand, with the exception of Gomperz, who seems to have been influenced by the late Professor Bühler, Hellenic scholars seem indifferent to the evidence adduced. The most favourable opinion to the theory expressed by any of the recognized authorities whom I have been able to consult appears to be that of Busolt,[3] who actually mentions in his history of Greece von Schroeder's work, and summarizes in a line its contents, but who evidently mentions it merely from a conscientious desire to give the literature of the subject completely. Professor Bury, who is decidedly advanced in his general views, does not mention in his *History of Greece* even the possibility of Indian influence. So able a historian of philosophy as Windelband[4] ignores the work entirely, while the most distinguished of English writers on Early Greek Philosophy, Professor Burnet,[5] sums up the position as follows: "No one now will suggest that Greek philosophy came from India, and indeed everything points to the conclusion that Indian philosophy came from Greece. The chronology of Sanskrit literature is an extremely difficult subject, but, so far as we can see, the great Indian systems are later in date than the Greek philosophies which they most nearly resemble. Of course, the mysticism of the Upanishads and of Buddhism were of native growth and profoundly influenced philosophy, but they were not themselves

[1] *Sanskrit Literature*, p. 422. Cf. also Windisch, *Buddha's Geburt*, p. 58.

[2] Cf. Oldenberg, *Ancient India*, p. 104, who compares in great detail the Indian and Greek systems, but who definitely declines to see any historical connection. With his views I generally concur. Purser, in Smith's *Dict. of Antiq.*, ii, 298, seems to suggest comparison with Buddhism.

[3] *Griech. Gesch.*, ii^2, 762.

[4] *Hist. of Phil.*, p. 23, n. 30.

[5] *Early Greek Philosophy* (1908), p. 21.

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philosophy in any true sense of the word"; and he makes no reference to von Schroeder's book, of which he must have known from Busolt and also from Weber's paper on the Greeks in India,[1] which he cites as an authority on the derivation of Indian philosophy from Greece.

It is, of course, quite unjustifiable on any theory of scientific method to dispose of the question in this way. It is perfectly true that the Upaniṣads contain much that is not philosophical: it is equally true that to disregard them on this ground comes strangely from a historian of the beginnings of Greek philosophy. It is not until the epistemological problem is definitely raised by the Sophists, especially Protagoras, that in the full sense of the word we have a Greek philosophy, and if we are to deny the influence of Indian thought on Pythagoras it can only be done as the result of a serious examination of the case brought in favour of it.

The first point which presents itself is the question whether such influence is chronologically possible. Pythagoras we know was a somewhat older contemporary[2] of the Buddha, whose death falls, according to Dr. Fleet,[3] in B.C. 483: the exact date of Pythagoras' death is not known: on the whole, I am disposed to think that he must have died shortly after he retired from Kroton, and probably not later than B.C. 500. At any rate, it seems clear that he settled finally in Italy, at a mature age, about B.C. 529, and it may be assumed that any doctrines he learned from India he learned before that date. Now,

[1] *Berl. Sitz.*, 1890, pp. 901 seq. It may be added that Gomperz (*Greek Thinkers*, i, 127, 146) also ignores von Schroeder's book. On the other hand, Holm, *Hist. of Greece*, i, 368, 375, admits Oriental influence, but impartially refers to Gladisch's theory, uncritical and absurd, of Chinese influences and to von Schroeder's book!

[2] For his date see Zeller, *Presocratic Philosophy*, i, 324 seq.; Burnet, op. cit., p. 94; Busolt, op. cit., p. 770; Gomperz, op. cit., i, 99; Holm, op. cit., i, 374.

[3] JRAS., 1909, pp. 22, 323; cf. Wickremasinghe, *Epigraphia Zeylanica*, i, 156, 157.

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considerations of common-sense show that Pythagoras can only have learned the Indian philosophy from which, on von Schroeder's hypothesis, his views are derived, by communication with persons familiar with it, and von Schroeder seizes eagerly upon certain references[1] in late writers to Pythagorean travels, which included, according to Alexander Polyhistor, one to the Brahmins. He admits that in themselves these references do not prove a visit, but he lays stress on the fact that there must be some fire to account for all the smoke, and the fire he suggests to lie either in a tradition of journeys in search of knowledge or in the foreign aspect of his doctrines to the Greek mind. Finally, as the result of his treatise, he concludes that Pythagoras really did visit India. That view is not accepted by Professors Garbe, Gomperz,[2] or Macdonell, who suggest that he met Indians in Persia, but believe in his travels.

Against these conjectures it must be pointed out that the evidence for the travels is all post-Aristotelian, that is, at least 200 years after Pythagoras' death, save as regards a visit to Egypt. For that visit the evidence is that of a statement in the *Busiris* of Isokrates, a work which frankly explains itself to be a rhetorical exercise and not to be based on any tradition. That it can be true is, I think, conclusively disproved by the silence of Herodotos,[3] who was an admirer of Pythagoras,[4] and who could not

[1] Zeller, pp. 327–9.

[2] Op. cit., i, 127.

[3] ii, 123. Of course, Samos under Polykrates and Egypt under Amasis were in close touch, and Egyptian ideas could easily reach Pythagoras at Samos (so Egyptian influence, even if certain, would not mean necessarily travels). Gomperz, i, 100, Holm, i, 367, and many others accept the view of a visit, and Holm is prepared, with Cantor, to believe in a visit to Babylon. But alas ! that visit also is known only centuries after Pythagoras' death.

[4] Stein held otherwise, but see Macan, *Herodotus, Books IV–VI*, i, 68. Stein, however, on ii, 123, considers, no doubt rightly (cf. Burnet, p. 95, n. 2), that the reference there is to Empedokles, not to Pythagoras, who was dead ere Herodotos was born.

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have refrained from all mention of him in his *Aigyptioi Logoi.* The simple explanation of the later reports of travels is one suggested by the procedure of Herodotos. When he sees customs similar to those he knew in Greece, he at once assumes that the Greek customs were derived from the Egyptians, as he had been told by the priests, what we know to be true, that the civilization of Egypt was much older than that of Greece. The similarity between Indian and Pythagorean ideas was similarly accounted for in Alexandrine times, when the learning of India began to be known in Alexandria [1]: the habit of mind on which it is based is very common at the present day.

There is thus no real ground to make us suspect a foreign origin for Pythagoreanism, but Indian influence, if for reasons of lack of satisfactory proof of intellectual intercourse between Asia Minor and India [2] somewhat improbable, remains possible. The dates given above, however, show that the Indian ideas with which Pythagoreanism is to be compared are those of the period before the Buddha, which are found in the older Upaniṣads, such as the *Bṛhadāraṇyaka* and the *Chāndogya,* the *Kauṣītaki,* and *Aitareya.* This point is of some importance, for von Schroeder occasionally argues from points which are proved, if at all, only for Buddhism and not for the Upaniṣads. Moreover, in examining Pythagoras' views, we must be careful not to ascribe to him [3] all the theories of the later Pythagoreans, not to mention the Neo-Pythagoreans: our enquiry is not into

[1] Zeller, op. cit., p. 329; Gomperz, op. cit., p. 96. Cf. also the case of Heketaios and the Egyptian priests, ibid., p. 257.

[2] Cf. also Kennedy, JRAS., 1898, pp. 241 seq.

[3] I follow generally Burnet's discussion of Pythagoras' views. Gomperz is rather imaginative, while Zeller is hardly in sympathy with his ideas. Any reconstruction must to some extent be hypothetical, but in the following the views assigned to Pythagoras are in all cases based on good evidence.

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possible connections between the pseudo-members of the school and Indian thought, for that enquiry would require too minute an investigation of the history of Greek philosophy, and would be of no value for the consideration of von Schroeder's results.

The origin of the doctrine of transmigration among the Brahmins is not now open to serious dispute.[1] It has been derived with great clearness by Oldenberg from the ever-growing dread in the Brāhmaṇas of falling into the power of death: the fear opens up a vista of repeated deaths even in the other world; the idea merely required that the conception of repeated death should be transferred to this world to give the doctrine of metempsychosis in the full form. This step was not a difficult one, especially when we remember the common idea among savage tribes that the human soul can pass into other animals or plants, an idea which no doubt helped the Brahmins to win for their doctrine of transmigration the assent of the people as a whole. But this doctrine, which is soon in India inseparably connected with, and no doubt owed its development to, the ethical theory that each act meets its due reward, is not an early one in Indian philosophy. Most authorities are agreed that it can be found only in the Upaniṣads,[2] that is to say, very little before B.C. 600, if indeed at all before. Nor can we safely say that the doctrine as an articulate theory existed long before it appears in the literature. We must not exaggerate the fact that the Buddha accepted

[1] See Oldenberg, *Buddha*, pp. 48 seq.; Deussen, *Phil. of the Upanishads*, pp. 313 seq. (The belief in transmigration must be distinguished from the doctrine which alone concerns us.)

[2] Gomperz, op. cit., i, 546, quotes a different view from Bühler, but the statement is too vague for discussion; Hopkins, op. cit., p. 530, n. 3, ascribes the doctrine first to the *Śatapatha Brāhmaṇa*, with a possibility in RV., i, 164, 30. 38. For v. Schroeder's views cf. also his *Ind. Lit.*, pp. 89, 93, 245 seq. He lays great stress on the moral side, for which see *Bṛhadāraṇyaka Upaniṣad*, iii, 2, 13; iv, 4, 2–6. Cf. Macdonell, *Sanskrit Literature*, p. 223; Boyer, *Journ. As.*, 9, xviii, 451 seq.

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the doctrine into a view that it was then a universal philosophical belief. For the *Bṛhadāraṇyaka Upaniṣad* is later than the main body of the *Śatapatha Brāhmaṇa*, and Āpastamba in the *Dharma Sūtra*, a work which cannot reasonably be placed much earlier than B.C. 300 at soonest, refers to Śvetaketu, a contemporary of Yājñavalkya, who is by tradition the authority for the first books of the Brāhmaṇa, as an *avara* or modern writer in his time, so that the date of the Brāhmaṇa itself cannot go much further back than B.C. 600,[1] if so far. It is true that no less authorities than Roth,[2] Böhtlingk,[3] and Geldner[4] have found traces of the doctrine of transmigration in the *Ṛgveda*; but it is perhaps sufficient here to say that the traces consist practically of the interpretation of two verses in the riddle hymn, i, 164, 30 and 38, and it will probably be agreed that such evidence is of no cogency. It is accepted neither by Hillebrandt,[5] nor by Oldenberg, nor by Macdonell, nor by Garbe.

We know definitely that Pythagoras[6] was a believer in the doctrine of transmigration: one of the few certain anecdotes of him is the sarcastic reference of Xenophanes[7] (*c.* 540 B.C.) that he forbade the beating of a dog because he recognized in its howls the voice of a friend. Another anecdote, famous through Ennius and Horace, which we

[1] Cf. Bühler, *S.B.E.*, ii, pp. xlii seq. I put Āpastamba rather later than does Bühler, who is inclined to overestimate his earliness; cf. Macdonell, op. cit., p. 259; my *Aitareya Āraṇyaka*, pp. 20 seq. Von Schroeder's date for the *Śatapatha* is eighth or ninth century (p. 37, n.). It is, however, not an early work of its class.

[2] ZDMG., xlvi, 759. Cf. also Windisch, *Buddha's Geburt*, pp. 58 seq.

[3] *Sächs. Ber.*, 1893, pp. 87 seq.

[4] *Ved. Stud.*, ii, 288; iii, 3 (where he uses RV., iv, 42, 1, as an example, but quite unconvincingly), 116 (*ātman* = *saṃsārin*).

[5] *Ved. Myth.*, ii, 8. Cf. Lévi, *La doctrine du sacrifice*, pp. 96, n. 1, 97, n. 1; Garbe, *Sāṃkhya und Yoga*, p. 15; Oldenberg, *Buddha*, p. 49, n. 1; Bloomfield, *Religion of the Veda*, p. 257; who all agree with Hillebrandt on this point.

[6] Zeller, op. cit., pp. 481 seq.; Burnet, op. cit., p. 101; Rohde, *Psyche*, pp. 450 seq.

[7] Diog. Lært., viii, 36.

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can safely trust tells us that he was gifted with the power of remembrance of his former births, and claimed to have been Euphorbos among others. Moreover, he clearly believed in purification of the soul, and regarded the cycle of births as a means towards the growth of man's higher nature. Further, to him is due, it seems, the doctrine of the theoretic as the highest form of life: the man who devotes himself to the contemplative understanding of existence is the one who most effectually releases himself from the burdens of existence, and we may say frees himself from continued rebirth, though the latter idea cannot be proved for Pythagoras.

Now, it is not necessary to insist on the similarities between this view and the Indian Saṃsāra. It is real and important, but that is not to say that the Greek version of the doctrine is borrowed from India. And it is just worth while, in view of the argument that the coincidences between the two systems are too close to be the result of chance, to indicate certain points in which the systems differ. In the first place, the Pythagorean system is undoubtedly deeply religious in spirit: Plato in the *Phædo*[1] gives not only as Pythagorean, but as older than Philolaos, the Pythagorean of the latter part of the fifth century B.C. to whom we owe most of our scientific knowledge of the school, the doctrine that men are strangers to the world and the body is the tomb of the soul, and that yet we must not seek to escape by self-murder, for we are the chattels of God, who is our herdsman, and without His command we have no right to make our escape. On the other hand, the Upaniṣadic doctrine is quite untinged with any such emotion; I have no hesitation in saying that the idea of Pythagoras would hardly be intelligible to it. Nor have we any record of a view analogous to that of Pythagoras in the other

[1] 62 B; cf. Espinas, *Archiv für Gesch. der Phil.*, viii, 449 seq.

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literature of the period before the Buddha. Secondly, it is worth noting that the doctrine of the possibility of remembrance in the new body of the existence in a previous body is not mentioned in the Upaniṣads, and is apparently first recorded at an uncertain date of the Buddha,[1] so that it is illegitimate to use this parallelism in favour of the theory of Greek borrowing. Thirdly, despite the part which undoubtedly was played by the moral sense in developing the transmigration doctrine, the Upaniṣads hold that enlightenment frees the soul, and all their stress is laid on right knowledge. If that knowledge is possessed, sin is as nothing: the *Kauṣītaki Upaniṣad*[2] assures us that the knowledge of the truth saves a man from harm, even if he steal, or slay his father or his mother; even if he does any evil the bloom leaves not his face. The *Aitareya Āraṇyaka*[3] permits falsehood in the man who has true knowledge. What is still more important is the fact that the position adopted was the inevitable and only logical result of the premises of the system. No amount of mere action or good deeds would ever produce freedom from the weary round of transmigration, for action merely

[1] How early the evidence for this is is doubtful; it is certainly later than Pythagoras, or Empedokles, who refers to this power of Pythagoras (see Rohde, *Psyche*, p. 454, n. 2). Cf. Oldenberg, *Ancient India*, p. 98. I may add here that the evidence for the earliness of Buddhist scriptures, though apparently now accepted widely as a matter of certainty, is even more deplorably weak than the evidence for the antiquity of Brāhmaṇical works. In either case we deal with mere hypotheses, the exact degree of plausibility of which must vary with different minds. Moreover, the lack of real individuality in Indian works and the preservation of these works by schools renders reliance on our present texts perilous. A belief in the early character of the Upaniṣads and Suttas is not illegitimate, but it rests on general considerations, not on any strictly cogent proof. I mention this because admittedly the evidence for the dates of Orphic views is sometimes comparatively weak as measured by classical standards; it is quite strong when measured by standards considered adequate by Indologists. Cf. Franke, VOJ., xx, 337, n. 1.

[2] iii, 1 (my *Śāṅkhāyana Āraṇyaka*, p. 30).

[3] ii, 1, 5, with my note (p. 207).

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produced further life[1]; and the end was the extinction of rebirth. Later on, in the history of Vedāntism, efforts were made to regard works as a necessary propædeutic for the insight which gave release, but not only is this never an essential part of the system, but it is not a part at all of the system as it stands in the Upaniṣads of the time before the Buddha. On the other hand, the Pythagorean doctrine is penetrated by the desire for purity of life, perhaps conceived at first as physical but developing into a moral ideal, and the aim of the whole system is to produce holiness, and thereby freedom from transmigration. But unlike the insight of the Upaniṣads, the holiness desired was something akin in kind to, and only different in degree from, the holiness which man sought in life. The Pythagorean view, in fact, knows no *brahman* utterly and wholly cut off from the ordinary world, and though transmigration exists in both Indian and Pythagorean belief it has its roots in a completely different set of ideals.

Now, if we reject as the source of Pythagoreanism the Brahminic doctrine of transmigration, we must be prepared to meet the argument on which so much stress is laid by the supporters of the theory of Indian influence, viz. that a Greek origin for the belief cannot be found, nor is any other foreign origin possible. It is true that an obvious foreign origin does suggest itself for the belief. It was the opinion of Herodotos[2] that the doctrine of metempsychosis was borrowed from Egypt. The Egyptians were the first, he says, to adopt the doctrine that on death the soul, which is immortal, passes into another animal body,

[1] *Bṛhadāraṇyaka Upaniṣad*, iii, 2, 13, is the most pronounced assertion of the works' doctrine in the Upaniṣads of the early period (cf. Deussen, *Phil. of the Upanishads*, pp. 329 seq.), and it does not attribute freedom to works. For the non-morality of the Brāhmaṇas see Lévi, *La doctrine du sacrifice*, p. 9; Sadānanda, *Vedāntasāra*, 36, with comm. (ed. Jacob); Garbe, *Phil. of Ancient India*, pp. 60 seq.; Max Müller, *Works*, xix, 166 seq.

[2] ii, 123. Cf. p. 572, n. 4.

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which simultaneously comes into existence, and after passing through all forms, those of animals of the dry land, of the sea, and of the air, again returns into a human body, the peregrination taking three thousand years. Some Greeks, he adds, had used this doctrine both before his own time and contemporaneously, as if it were their own, but he forbears to give their names. It is clear that Herodotos believed that the Egyptians were holders of the belief in transmigration, but it is not improbable that he was wrong in this view. Von Schroeder[1] deals very convincingly with the evidence available in his own time, and an authority of decisive weight, Mr. Francis Ll. Griffith, the Reader in Egyptology in Oxford, who kindly answered my enquiry on the point, tells me that "no reference to metempsychosis has yet been found in Egyptian texts: if it existed at all in Egypt it was probably a popular notion or the opinion of a sect, not received in orthodoxy". It is, of course, possible that Herodotos may have been told the opinion of such a sect, but the idea is needless, for in his note on the passage of Herodotos, Wiedemann[2] gives an adequate explanation of the source of Herodotos' error. One very early view of the lot of the dead in Egyptian religion was that the dead man occupied the same place in the next world as he had done in life. Gradually, however, the wish developed itself to prepare for the dead a happier lot than he had enjoyed on earth. The end was to be gained by spells, which would enable him to spend a happy life in the fields of Aalū: should this celestial life pall he could return to wander on earth, visiting the places he had

[1] *Pythagoras und die Inder*, pp. 12 seq.

[2] *Herodot's zweites Buch*, p. 457; cf. Erman, *Die Aegyptische Religion*, p. 192; *Life in Ancient Egypt*, p. 306. The following account is from Wiedemann, *Realms of the Egyptian Dead*, p. 56. See also Deussen, op. cit., p. 316; Gomperz, i, 546. Bloomfield, *Religion of the Veda*, p. 255, following Bertholet, *Seelenwanderung* (Halle a. S., 1902), finds it in Egypt. Flinders Petrie seems to me in error when he says (*Trans. Third Inter. Congress of Relig.*, i, 196) that metempsychosis of the good and noble is specially Indian.

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loved in life or abiding in the tomb and receiving the offerings made by his relatives. Or, again, he could change himself into a heron, a swallow, a snake, a crocodile, a god, could indeed take any form that he pleased. This is indeed transmigration, but a different transmigration from either that of Greece or of India: it is a boon granted only to those who were provided with the necessary spells, and who were pronounced just at the judgment of the dead. None the less, I do not think we need deny that it is sufficiently like Pythagoreanism to allow us to believe that Herodotos could mistake it for that.

This Egyptian view is much older than Pythagoreanism, and if we were obliged to seek outside Greece for the germ of the doctrine of Pythagoras I would have no hesitation in accepting Egypt as the source of the Greek doctrine. Of course, in that case it would be necessary to admit that the doctrine had been largely remodelled in the process of adaptation to Greek ideas, but a similar admission would clearly be required in the case of a borrowing from India, as von Schroeder himself recognizes. But we are in a much better position than von Schroeder could be to estimate the possibilities of the growth of the doctrine in Greece itself. Von Schroeder's view of Pythagoras depends essentially on that of Zeller, and Zeller was a rationalist of a pronounced type. In thus treating Pythagoras he had distinguished predecessors [1] in Dikaiarchos and Aristoxenos, who from different points of view, the political and the scientific, endeavoured to remove from the master of the school the strange collection of legends which had grown round his name. But in doing so they were obliterating history and rendering the position of Pythagoras unintelligible. To von Schroeder [2] he is a man of taste for research and

[1] Cf. Burnet, *Early Greek Philosophy*, p. 103; Grote, *Hist.*, iv, 90.

[2] Op. cit., p. 92. The ἱστορίη praised by Herakleitos, *Frag.*, 17, was mathematical; see Iamblichos, *Vit. Pyth.*, 89: ἐκαλεῖτο δὲ ἡ γεωμετρία πρὸς

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learning who brought to Greece the lore of India, and founded a society of students on the basis of the Doric institutions of his adopted home. Later ages attached to him the wonderful tales which grew up about him, much as tales grew up around the Buddha.

It was not until 1894 that Rohde [1] published his study of the doctrine of the soul in Greece, a study which renders all earlier work antiquated and which treats of the topic from the point of view of ethnology and psychology. Even since that date, however, much evidence has accumulated which helps to overthrow the foundation on which von Schroeder worked, the theory that the ideas of Pythagoras were so un-Greek as only to be accounted for on the theory of the deliberate borrowing of them by Pythagoras from abroad. It is now recognized that the Homeric poems, the greatest creation of the poetical genius known to the world, are not representative of the normal development of the popular life, and that we must not judge all Hellas by Homeric views. Hesiod, in his account of the ages in the *Works and Days*, interpolates between the bronze and iron ages the age of the heroes, and in this has justly been seen [2] a recognition of the fact that the Greek middle ages were a break in the continuity of Greek development. To some extent the cause was no doubt racial,[3] but it is not necessary to lay undue stress on this fact. But we must recognize that the poems give us but little idea of the importance of the chthonian cults and the spirits of the dead in

Πυθαγόρου ἱστορία. Much has wrongly been made of this word, as of his polymathy. It is quite a mistake to read into this the modern conception of historical research and comparative study of religion.

[1] *Psyche, Seelenkult und Unsterblichkeitsglaube der Griechen.* (I quote from the first edition; the second does not modify the results with which we are concerned here.)

[2] Burnet, op. cit., p. 7, n. 1.

[3] Cf. Burrows, *Discoveries in Crete*, pp. 193 seq.; Ridgeway, *Early Age of Greece*; Hogarth, *Ionia and the East*, pp. 101 seq.

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Greek thought. These ideas lived [1] among the lower classes of the people, and revived after the fall of that brilliant aristocracy whose interest in art is revealed to us by Mykenai and Knossos, and whose chivalry is idealized in the great epics. The people cared, it is clear, very deeply for the future of their souls, and the Homeric religion of the day had little to offer in the way of consolation. The dead were not, indeed, extinguished, but continued to lead a shadowy existence after death; but the faintness of the life thus continued is summed up once for all in the words of Achilles when he prefers the life of a bondservant to kingship over all the dead that are departed—[2]

> *μὴ δή μοι θάνατόν γε παραύδαε, φαίδιμ' Ὀδυσσεῦ.*
> *βουλοίμην κ' ἐπάρουρος ἐὼν θητευέμεν ἄλλῳ,*
> *ἀνδρὶ παρ' ἀκλήρῳ ᾧ μὴ βίοτος πολὺς εἴη*
> *ἢ πᾶσιν νεκύεσσιν καταφθιμένοισι Ϝανάσσειν.*

We cannot wonder, therefore, at the eagerness with which the Greek world hailed the appearance or regeneration of a new religious belief, the worship of Dionysos, or Orpheus, for both are but different forms of one divinity. It is needless for our purpose to examine into the precise character of the god: it is sufficient to say that in one aspect at least he was a god of vegetation, a god, moreover, who died and lived again even as the world of vegetation dies and lives again. From Thrace with the god came also the belief in the divine madness, the possession by the god, which lifts man for the moment to godhood, a belief widespread throughout the world in different forms and shapes.[3]

[1] It is probable that the revival was a good deal more than a revival. The Mycenæan religion shows much care of the dead, but not necessarily a cult; worship and respect are not identical. *Contra*, Rohde and Gomperz, i, 23 seq., and cf. von Schroeder, VOJ., xv, 206.

[2] Homer, *Od.*, xi, 488 seq.

[3] For Egypt, cf. Bissing, *Trans. Third Inter. Congress of Relig.*, i, 228. Cf. Rohde, op. cit., pp. 296 seq. Very possibly Dionysos was an ancient

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With this belief was bound up that of the immortality of the soul, which thus first enters Greek thought in contradistinction to the belief in the pale existence of the soul, which is the Homeric view. That which in the fit of mania can become for the time divine cannot be different in ultimate nature from the divine. Yet it is not divine in itself as fettered by the body, and the religion sets as its end the devising of means whereby to release from the non-divine the divine element in man. Again, if the soul is divine in essence and immortal, and yet is not freed at once from bondage by death, it is natural to suppose that until it attains freedom it remains either in a purgatory or in other human or animal form, for, as we know Pythagoras held,[1] all souls are similar in class, and the apparent distinctions between human and other kinds of beings are not ultimate.[2]

Such in brief outline were the ideas which were bound up in the Orphic and Dionysiac worship. Their exposition and development into a system were the work of many minds. The Dionysiac religion united itself in part with the Apollonine cult,[3] and we hear of an elaborate practice of divination in ecstasy, a characteristic of the Pythia; of ritual purifications like that of Athens by Epimenides, and of occasional asceticism as in the case of Abaris and Epimenides. But the most important body in the matter were the Orphic bands[4] who joined in mutual relations for the practice of their religious beliefs. They held in its fullest extent the doctrine of transmigration, the

god in Greece, but the orgiastic worship of Thrace was a new movement in Greek religion.

[1] Cf. Burnet, *Early Greek Philosophy*, p. 101.

[2] For transmigration in Thracian belief see Rohde, pp. 320 seq.; in Orphism, ibid., pp. 442–8. Gomperz seems needlessly critical (op. cit., i, 546); see Burnet, op. cit., pp. 86 seq.

[3] Cf. Farnell, *Cults of the Greek States*, iv, 208.

[4] Rohde, op. cit., pp. 395 seq.; Busolt, op. cit., pp. 362 seq.; Gomperz, op. cit., i, 123 seq.; Murray, *Greek Literature*, pp. 64 seq.; Oldenberg, *Ancient India*, pp. 80 seq.; Meyer, *Gesch. des Alt.*, ii, 727 seq.

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immortality and god-like character of the soul, the imprisonment of the soul in the body, and the possibility of release by purification. This release never meant to any Greek of this age the merger of existence—the soul was divine but also eternal and distinct from the divinity—and its freedom was release from the troubles of the flesh. The pious believer became Bakchos himself: hence the proverb πολλοὶ μὲν ναρθηκοφόροι παῦροι δέ τε Βάκχοι,[1] and in Hades he enjoyed communion with the gods, the northern derivation of the doctrine showing itself in an amusing fashion in the eternal drunkenness which Plato[2] assures us was promised to the votaries.

The transmigration of Pythagoras stands, in view of these facts, in a new light, that of a genius' version of a popular belief. What Pythagoras really believed we may guess from what we know of Empedokles' views.[3] That sage in his own works claims that he had been a boy and a girl, a bush and a bird, and a dumb fish in the sea. He claims to be a present deity, and he tells us, and it seems to have been true, that he went through the streets of Akragas an immortal god, no mortal now, honoured by all, crowned with fillets and flowery garlands. Men, he says, and women flocked to him for oracles and for magic healing. He asserts the kindred character of all living creatures and the sin of slaughter of animals, the sorrow in which all created things live, and the joys of release from transmigration. Or, again, we have the Orphic view in Pindar's *Threnoi*[4] and in the second Olympian, whence we

[1] Rohde, *Psyche*, p. 323.

[2] *Rep.*, 363 C, D, where see Adams' note.

[3] *Frag.*, 117 and 112 (ed. Diels); Burnet, op. cit., pp. 256 seq. That he borrowed the doctrine from Pythagoras is quite improbable.

[4] *Frag.*, 129, 133; *Ol.*, ii, 69 seq. The exact sense is disputed. I follow Christ, *Pind. Carm.*, pp. 21, 22. Cf. Rohde, op. cit., pp. 496 seq. Gildersleeve, *Olympian and Nemean Odes*, p. 149, adopts without adequate consideration an impossible view of Mezger's. Murray, *Greek Literature*, pp. 109–16, ignores altogether this most important element in Pindar's

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gather that all mortals after death spend a time in Hades or with the gods and then begin again mortal lives, though those that three times, both above and below, endure and live uprightly go for ever to the tower of Kronos[1] and live in everlasting bliss. It may be that some hint of Egyptian conceptions of the life of the dead is seen here, for in a *Threnos*[2] the joys of the blessed dead include the playing with draughts, and the Egyptian texts[3] tell us that in the fields of Aalū the dead played draughts either with their companions or with their own souls; but the main outline of the picture is clearly Greek.

It would be possible indefinitely to increase the mass of evidence for a real Greek belief in transmigration, one of indigenous growth from an impulse derived from Thrace, itself half-Greek. We need not overestimate the debt of Greece to Thrace: the country was ripe for a more spiritual conception of the divinity and its relation to the human soul, and the Greek genius, with its peculiar creative power, could mould into deeper issues the suggestions derived from the vivid nature-worship of Thrace. There are in Greek story many legends similar to those told in India, such as that of the man whose body was burnt by an enemy in the absence of his soul,[4] or the curious double system of punishment, both in hell and by reincarnation, which exists even in the early, though not the earliest,[5] Indian versions of transmigration; but we could only prove that Greece borrowed all this from India by proving that transmigration existed as

thought, which redeems him from the charge of materialism. The "contamination" of ordinary retribution or reward with metempsychosis is natural.

[1] Cf. Hesiod, *Op.*, 167 seq.

[2] *Frag.*, 129, v. 4: τοὶ δὲ πεσσοῖς. The game is believed to have been borrowed from Egypt (Smith, *Dict. of Antiq.*, ii, 11).

[3] Wiedemann, *Realms of the Egyptian Dead*, p. 55.

[4] Rohde, op. cit., p. 386, n. 1.

[5] Deussen, op. cit., pp. 328 seq. Cf. Hopkins, JRAS., 1906, pp. 586 seq.; 1907, pp. 665 seq.

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a scientific doctrine in India long before the records show any trace of it, and by indicating some means by which the people of Greece as a whole could be converted to accept a doctrine brought from India. Orphism is dominant in Greek thought during the seventh and sixth centuries B.C.,[1] and probably goes back far into the eighth century. Chronologically India might perhaps have derived transmigration as a scientific doctrine from Greece; it is, of course, certain that it did not, yet the opposite view cannot even chronologically be upheld with any plausibility.

We see now in the proper perspective the ritual practices on which von Schroeder[2] laid great stress in support of his view. These are the partial abstention of Pythagoras from the use of animal food and his non-use of beans. It is interesting to note that Aristoxenos[3] felt the absurdity of the master's attitude in these matters so much that he tried to repudiate them. The master, he said, ate meat except in the case of the flesh of the plough ox and the ram, was partial to the flesh of sucking-pigs and tender kids, and preferred beans to every other vegetable, a statement which probably gives us a correct view of Aristoxenos' own tastes in food. The polemic of Aristoxenos proves the truth of the reports, and we find ourselves in the face of two of a long list[4] of tabus which can be constructed as Pythagorean, such as the rules not to stir the fire with iron, not to pick up what has fallen, not to break bread, to roll together the bedclothes after you have arisen and smooth out the impress of the body, no doubt to remove your

[1] Busolt, l.c., and Bury, *Greek Hist.*, p. 312, underestimate the age of the impulse. The theory of an Orphic interpretation in Homer under Peisistratos (Bury, p. 317; Wilamowitz-Möllendorff, *Hom. Unter.*, p. 199) is, I think, quite untenable. Cf. Lang, *Homer and his Age*, pp. 43 seq.

[2] Op. cit., pp. 31–8. For his later view, see VOJ., xv, 187 seq.

[3] *Ap.* Diog. Lært., viii, 20.

[4] Burnet, op. cit., p. 106. For tabu, cf. Marett, *Trans. Third Inter. Congress of Relig.*, i, 52; *Anthropological Essays*, pp. 225 seq.

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shadow from hostile possession. Once we realize the number and character of these rules the attempt to derive any of them from India breaks hopelessly down. Beans are tabu in various parts of the world, like onions, pomegranates, and many other vegetables;[1] the reason in each case must be mainly guesswork, but I think in the case of beans the nearest approach to the truth is that of Dr. Farnell that they are of the colour of blood, and blood, even on the modern mind, often produces a physical shrinking which may adequately explain the tabu. Rohde,[2] indeed, following Lobeck, explains the non-use of beans among the Orphics by the fact that they were used for offerings to the dead, but it is probable that they were used as offerings for the dead precisely because they were tabu for the living. Moreover, it is fatal, as against von Schroeder's theory, that they were also tabu in Egypt. Herodotos[3] says so expressly, and Mr. Griffith tells me that there is some ground for accepting the view as correct, besides the fact that this was the sort of matter on which Herodotos should have been able to give accurate information. Beans are very rarely mentioned, for example, in the great series of farm accounts dealt with by Grenfell and Hunt in vol. i of the Tebtunis papyri of Ptolemaic date, and they are very scarce on the Greek ostraka (Ptolemaic and Roman). It is true that they occur in most of the published collections of papyri and were certainly grown in Egypt, but it is probable that the priests regarded them as tabu. They were also tabu to the Roman priest of Jupiter, as we know from Aulus Gellius.

[1] See Farnell, *Evol. of Rel.*, pp. 89 seq.; von Negelein, *Archiv für Relig.*, vi, 246. Cf. Westermarck, *Origin and Development of Moral Ideas*, ch. xxxviii.

[2] Op. cit., p. 419, n. 1; Lobeck, *Aglaoph.*, p. 254; so Purser, *Dict. of Antiq.*, ii, 298. The view is old: Festus says *putantur ad mortuos pertinere*; Pliny, *H.N.*, xviii, 118, *quoniam mortuorum animæ sint in ea* (*faba*). See also Warde Fowler, *Roman Festivals*, p. 110; a totemistic view is suggested by Astley, *Trans. Third Inter. Congress of Relig.*, i, 267.

[3] ii, 37; see Wiedemann, *Herodot's zweites Buch*, p. 177. Cf. VOJ., xv, 212.

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As regards the eating of flesh, it is hard to say whether this is in the case of Pythagoras in any degree due to the transmigration doctrine. That the abstention, so far as it was real, was due to Indian influence, is disproved by the fact that it would be quite impossible to establish any *ahiṃsā* doctrine as existing in India at the time of Pythagoras: even later the virtuous Buddha dies after a meal of pork, possibly tender,[1] and his followers, as Hopkins[2] has shown, were by no means vegetarians, but, like the Burman Buddhists to-day, ate meat as long as they had not to kill it. A different theory is suggested by the report of Porphyry,[3] which is probably based on the view of Heracleides of Pontos, that the Pythagoreans ate the flesh of animals slain for the sacrifice. That carries us back into the sacramental meal on the flesh of the sacred animal, and fits well into the general doctrine of the Bakchic ritual. Moreover, it may be harmonized with the exception admitted by Aristoxenos, viz. the refraining from the use of the flesh of the plough ox, for Dionysos might be conceived as in ox form and the ox be slain and eaten only rarely and then sacramentally.[4]

[1] Cf. Fleet, JRAS., 1906, pp. 881, 882.

[2] JAOS., xiii, 119 seq.; xxvii, 455 seq.; *Great Epic of India*, pp. 378 seq.; *Rel. of India*, pp. 199 seq. For earlier times see Weber, *Ind. Stud.*, xvii, 280, 314; Bloomfield, *S.B.E.*, xlii, 493.

[3] *De Abst.*, p. 58, 25 (ed. Nauck).

[4] Cf. Farnell, *Cults of the Greek States*, i, 89 seq. (the Bouphonia ceremony). Burnet, op. cit., p. 106; Rohde, op. cit., p. 454; Purser, *Dict. of Antiq.*, ii, 298; and Gomperz, op. cit., i, 127, consider that abstinence from flesh is due to transmigration, and this is Empedokles' view (see *Frag.*, 128, 136, 137 (ed. Diels); Ritter & Preller, *Hist. Phil. Græc.*[8], § 184). But it is probably in origin older and connected with the abhorrence of blood. Hopkins, p. 464, considers that transmigration had very little to do with non-meat-eating in the case either of the Brahmins or of the Buddhists, and it is certainly curious that the reputed founder of the transmigration theory should have been addicted to meat-eating (see Yājñavalkya's saying in *Śatapatha Brāhmaṇa*, iii, 1, 2, 21, and Hopkins, op. cit., p. 189). The sacramental eating of the ox on the Bouphonia and elsewhere need hardly be explained by totemism, as Farnell was inclined to do: the sorrow and the kinship characteristic

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So far I have endeavoured to show that there is to be found in Greece itself all the materials for the development of the system which is believed to be Pythagorean. But von Schroeder has alleged certain other considerations based on other sides of Pythagorean activity which must not be overlooked. It is clear that if, as a philosopher pure and simple, Pythagoras was indebted to Indian teachers, his religious views can be attributed more easily to India. Von Schroeder contends,[1] and is followed by Garbe, Hopkins, and Macdonell, that the Pythagorean problem and the discovery of irrational numbers are due to India, and in particular to the Śulba Sūtras.

In this claim two things are involved, the similarity of the Pythagorean views with those of the Śulba Sūtras and the derivation of the former from the latter. Neither of these views is correct. As regards Pythagoras' opinions we have merely the information that he discovered the proof of the Pythagorean proposition: how he did so is uncertain, and von Schroeder's view was to some extent supported by the fact that the mode in which the Śulba Sūtras treat the proposition (by dividing it into the cases when the two sides are of equal length and when of unequal length) was conjectured by Cantor[2] to have been the mode in which the proposition was proved by Pythagoras. It seems, however, as a result of recent research quite clear[3] that the discovery of the proof

of the rite are adequately explained if we remember that the deity may be present in part in the sacred animal: cf. also Warde Fowler, *Roman Festivals*, p. 329. The tale of Zagreus is clearly a reflex of the ritual of the slaying of a theanthropic bull (Gomperz, i, 136), and may be compared with the legends of Orpheus and Pentheus, for which cf. Frazer, *Adonis, Attis, Osiris*, pp. 270 seq.; Bather, JHS., xiv, 244–63. For the sacramental meal, cf. Robertson Smith, *Religion of the Semites*; Farnell, *Hibbert Journal*, 1904; and my note, JRAS., 1907, pp. 929 seq. Farnell's view is summarized in *Trans. Third Inter. Congress of Relig.*, ii, 139, 140, and will appear in full in *Cults of the Greek States*, v.

[1] *Pythagoras und die Inder*, pp. 39–59.

[2] *Gesch. der Math.*, i, 144.

[3] See Burnet, op. cit., pp. 110 seq., where he gives diagrams.

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was really due to the peculiar form of arithmetic notation by square numbers and oblong numbers which he used, added probably to a practical knowledge of the triangle, used long before his time by the Egyptians, whose sides were 3, 4, and 5 units in length respectively. This triangle was apparently early known to the Babylonians and the Chinese, and possibly India got it from Babylon; possibly invented it independently. But the practical use, which was known to Thales[1] and probably much earlier in Greece, never led to any mathematical theory in Egypt, and Pythagoras' merit is to have turned the matter into science. It is characteristic of the arithmetical basis of his scheme that the discovery of an irrational number,[2] which followed at once on the Pythagorean problem—for that yields at once the equation that the length of the hypotenuse of a triangle whose sides are each one unit is the root of 2—led him no further in the discussion of geometry, as it really upset for good the old view of quantity as a sum of units.

In contradistinction to the theoretic interest of Pythagoras, the Śulba Sūtras are practical manuals for the construction of the great altars which were required for the use of the sacrificers. I do not see that they arrive at any really scientific as opposed to practical conception of the Pythagorean theorem, but that point need not here be discussed, as the claim that they are sufficiently old to have affected Pythagoras is impossible to maintain. Von Schroeder's argument[3] here is in effect that the

[1] Ibid., pp. 44 seq. The latest supporter of the theory of Babylonian influence on India is Gomperz, *Greek Thinkers*, i, 95. There is nothing *a priori* impossible in it, and it explains conveniently the Nakṣatra series and the flood legend. For the *Ṛgveda* it is, however, not proven (despite *manā́*, viii, 78, 2, which is too isolated and too doubtful to afford any secure basis for argument). More important are Oldenberg's theories of the Ādityas as the planets, which have not yet, however, convinced me.

[2] Ibid., pp. 116, 117.

[3] Accepted and endorsed by Hopkins, *Rel. of India*, p. 560, n. 1, and Garbe, *Rel. of Ancient India*, p. 43, n. 1.

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Sulba Sūtras are not Pariśiṣṭas but integral parts of the Śrauta Sūtras, and in particular the *Mānava Śrauta Sūtra* contains, as its tenth part, the Śulba Sūtra. That Śrauta Sūtra is antique in character and goes back to the eighth century, the period of the Brāhmaṇas. Moreover, the material of the Śulba Sūtras is common in the different recensions of Baudhāyana, Āpastamba, Kātyāyana, and Mānava, and goes back to the centuries from the tenth to the eighth, when the sacrificial system was at its height. Garbe adds that each Śrauta Sūtra is by one hand, and contains doctrines much older than its own date.

The fact that a work is not called a Pariśiṣṭa is of no consequence, and the text of the Mānava and Baudhāyana Sūtras is in a hopeless condition. Both these Sūtras contain many passages of undoubted antiquity in the Brāhmaṇa style, just as the *Śāṅkhāyana Śrauta Sūtra* contains a parallel version of the Śunaḥśepa episode, which appears as part of the *Aitareya Brāhmaṇa*.[1] But from these facts to argue to the whole is simply impossible. Caland[2] significantly omits the *Baudhāyana Śulba Sūtra* from consideration in sketching the language of the Śrauta Sūtra. In fact, the Śulba Sūtras all belong to the latest period of Sūtra production: they are pure Sūtra works, unlike Brāhmaṇas in every way, and have no claim to rank as ancient. The actual Sūtras, excluding Brāhmaṇa passages included in Sūtra works, even the Śrauta Sūtras whose dates we can approximately guess, do not go back

[1] JRAS., 1907, p. 411.

[2] *Ueber das rituelle Sūtra des Baudhāyana*, p. 41. In general the Sūtras cannot be regarded as very old: the Āśvalāyana cannot be more than about B.C. 400; the Śāṅkhāyana is, I think, younger. Bühler, *S.B.E.*, ii, pp. xlv, lxi, tends to ascribe too great antiquity to the Sūtras. It is indeed probable that Āpastamba's irregularities of language are a proof that he is not later than the Pāṇinean period or, say, B.C. 350–300, but the mention of the *Atharvaśiras* in Gautama is significant, even if *Yavana* in iv, 18, is not original. I doubt if Gautama is older than B.C. 400. Cf. also Macdonell, *Sanskrit Literature*, p. 36. For the confusion of the *Baudhāyana Sūtra*, cf. Caland's edition (*Bibl. Ind.*), i, pp. vii seq.; ii, pp. i seq.; for the *Mānava*, cf. Knauer's ed.

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beyond the fifth century, and I should very much doubt whether the Śulba Sūtras are even as old as the third century B.C., the lower date suggested by Thibaut.[1] It is quite fatal to their claim to antiquity that the subject-matter of these Sūtras should form no matter of reference in the Brāhmaṇas proper. If the geometrical constructions and spatial relations there dealt with had been known to the writers of the Brāhmaṇas, they would have referred to them in order to explain their hidden meaning, just as they do in the case of the various topics dealt with in the Śrauta Sūtras. The ritual no doubt went on for generations by rule of thumb: the only quasi-geometrical discussions in the Brāhmaṇas touch only minor and quite simple[2] points, such as e.g. the distance of any special part from the ground, and only when everything began to be reduced to formal rule arose the science of geometry as applied to the altar construction. The Brahmins, it must be remembered, went on sacrificing in the Vedic fashion for centuries after Pythagoras passed away, and the *Mahābhāṣya* (c. B.C. 150) reveals the ritual in full swing.[3] The activity of the priests in these later days consisted not in the development of the philosophical doctrines of the Brāhmaṇas, but in the perfection of the technique of the sacrifice, and it is to this period of activity that the Śulba Sūtras are due. This conclusion is confirmed and placed beyond doubt by their style and language, both of which are in close accord with those of the last representatives of the Sūtra period, and display none of the Vedic irregularities of the earliest Sūtras, while on the other hand they contain technical terms like *karaṇa*, which are never found in

[1] *Astronomie*, pp. 76–80. For Kātyāyana we have only a Pariśiṣṭa, no more modern, however, in contents than the Sūtras. Cf. Weber, *Lit. Centralblatt*, 1884, p. 1564; *Die Griechen in Indien*, pp. 923–6.

[2] e.g. *Aitareya Āraṇyaka*, i, 2, 4. This passage is instructive of the petty and non-geometrical sort of point dealt with.

[3] Weber, *Ind. Stud.*, xiii, 335, 456, 457.

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the Brāhmaṇas and similar writings. Cantor, indeed, has urged that the Sūtras are derived in their materials from Greek geometry, and the possibility of this being true cannot be denied, as there are striking coincidences between them and the works of Heron, while Heron's own principles are undoubtedly much older in Greece than his own date.[1] It is not necessary here to express any definite opinion on this point, which Thibaut leaves undecided, but it is well to remember that whatever the value of Indian work on arithmetic and algebra, their geometrical powers were of a low order, as may be seen from the grave errors committed by a man like Āryabhaṭa, and it is paradoxical to find in India the source of the really high mathematical knowledge of Greece.

It is true that von Schroeder[2] would wish to believe that in matters arithmetical the Indians were teachers of Greece, but he admits that for this there is at this date no evidence, unless we are to pay any attention to the fables of the *Lalita Vistara* about the youth of the Buddha,[3] which he admits to be impossible.

It is, however, the view of von Schroeder[4] that between the Pythagorean philosophy proper and Indian thought there is a close connection which can only be explained by borrowing. This he finds in the doctrine of the five elements. This position involves the view that the five elements were accepted in Indian philosophy before Pythagoras' date; that they were recognized by Pythagoras; and that the two sets of five really agree so closely

[1] Thibaut, *Astronomie*, p. 78. On the Śulba Sūtras, see Thibaut, JAB., xliv, 227 seq. The *Apastamba Sūtra* is edited by Bürk, ZDMG., lv and lvi.

[2] Op. cit., pp. 57–9.

[3] Cf. Oldenberg's remark in his interesting review (*Gött. gel. Anz.*, 1909, p. 83) on a less guarded use of the evidence of the *Lalita Vistara* by von Schroeder, *Mysterium und Mimus*, p. 76, as an authority for the early existence of drama.

[4] Op. cit., pp. 59–66. The view is not original; cf. Max Müller, ZDMG., vi, 18 seq.; Weber, *Ind. Lit.*, p. 234.

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as to render borrowing the only explanation. In fact, all three propositions can be denied or gravely doubted.

In the first place, the doctrine of the five elements—ether, wind, fire, water, and earth—is not found in the early Upaniṣads.[1] The *Aitareya Upaniṣad*,[2] the only text in which the five occur, and which is, in my opinion correctly, though on grounds of no cogency, reasonably regarded as old enough to have conceivably influenced Pythagoras, has not the fixed order which is laid down in the *Taittirīya Upaniṣad* as the result of the combination of the older triad, fire, water, earth, with ether and wind, which were originally regarded as symbolic representations of Brahman and not as elements like the others. The order in the *Aitareya* is earth, wind, ether, water, light. So that so far from the view of the five elements being the regular philosophical view in the time of Pythagoras, it was merely one of a large number of conflicting views, and its general acceptance lies at a date long after Pythagoras had ceased to exist.

In the second place, there is conclusive evidence that Pythagoras never held the view of five elements. The pseudo-Plutarch,[3] indeed, tells us that he ascribed to the earth the cube, to the fire the tetrahedron, to the air the octahedron, to the water the icosahedron, and the dodecahedron to the fifth element, the nature of which we will later examine. Further, a fragment attributed to Philolaos[4] refers to the five regular solids. Moreover, as the pseudo-Plutarch's evidence is of no weight, von Schroeder argues that it is admitted[5] that not only Philolaos but the other later Pythagoreans believed

[1] Cf. Deussen, *Phil. of the Upanishads*, pp. 189 seq., who on different grounds, viz. the different order of the two sets, disputes the theory of von Schroeder, whom he does not name.

[2] iii, 3. For the dates of the Upaniṣads, cf. Deussen, *Trans. Third Inter. Congress of Relig.*, ii, 19 seq.; my *Aitareya Āraṇyaka*, pp. 25 seq.

[3] Aet., ii, 6, 5.

[4] *Frag.*, 20, *ap.* Stob. *Ecl.*, i, 10.

[5] Zeller, op. cit., pp. 317, 437.

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in five elements; and against the theory of Zeller, that they borrowed four from Empedokles, he suggests that Empedokles borrowed them from Pythagoras, from whom he borrowed his views of transmigration, his objection to the eating of flesh, and his antipathy to beans.[1] But the ascription to Pythagoras, or even to Philolaos, of a knowledge of the five regular solids is contradicted by the best possible evidence: Plato in the *Republic*[2] especially refers to the neglect of stereometry by previous authorities, and the Scholia to Euclid[3] expressly tells us that the Pythagoreans knew only the cube, tetrahedron, and dodecahedron, and that the octahedron and icosahedron were discovered by Theaitetos of the Academy. With this falls to the ground the ascription to Pythagoras of the doctrine of the five elements.

It remains true, however, that the later Pythagoreans believed in a sense in five elements, and it is worth while comparing these elements with the Indian five and tracing their history. The five elements of India, as Böhtlingk,[4] in reply to a criticism of Whitney's on his rendering of the word Ākāśa, pointed out in a very acute note, consist of fire, water, earth, and Vāyu (wind) and Ākāśa (empty space). Now, the five elements of Philolaos, if we may properly so call them, are identical as regards fire, water, and earth, though the element fire attains a position and importance physical and astronomical, continued in the Stoic doctrine, for which there is no parallel in the Indian conception, in which it plays no considerable part.[5] But the element air is a different thing

[1] This supposition is of course gratuitous and incorrect; Gomperz even (i, 427) recognizes that Empedokles is an Orphic.

[2] 528 B.

[3] (Ed. Heiberg), v, 264; Burnet, op. cit., p. 329, n. 1.

[4] *Sächs. Ber.*, 1900, pp. 149–51; cf. Deussen, op. cit., p. 194.

[5] Cf. Burnet, op. cit., pp. 348 seq. It is significant also that Pythagoras' astronomical views have no parallel in India. He was, in fact, a man of original genius, not a borrower. Von Schroeder ignores entirely this most important side of his activity.

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from wind, which is merely a popular, not a scientific conception.

One of the best attested facts about Empedokles is that he actually proved, by the use of a klepsydra, the fact that air is a different thing from empty space: a fragment of his own works attests it,[1] and Aristotle[2] evidently alluded to him in this connection. The fifth element was not called by Philolaos[3] ether: its real nature is seen by reference to what Aristotle in the *Physics*[4] tells us of the Pythagoreans, and what, as it was denied by Xenophanes,[5] who ever disputed the views of Pythagoras, we have no reason to doubt was held by the master himself. They believed, we learn, that outside the world there was boundless breath (πνεῦμα), and that it was inhaled by the world. The boundless breath was also, it appears from Aristotle,[6] conceived as being empty space and as keeping apart the units of which the world is composed, a primitive mode of indicating the nature of discrete quantity. We can now understand the strange metaphors in which the fifth element was described by Philolaos, either as the sphere of the universe or as the hull of the sphere[7] (ὁ τᾶς σφαίρας ὁλκάς). They consort with the expression applied to the central fire as the keel (τρόπις) of the sphere, and with the metaphor which produced the Aristotelian use of ὕλη (wood) as the material substratum of existence. Whether this fifth element was ever called ether by the Pythagoreans does not appear: there is no evidence for it, though the name occurs in the later philosophy of the old Academy,[8] but it is sufficient to

[1] *Frag.*, 100 (ed. Diels).
[2] *Phys.*, iv, 6, 213*a*, 22.
[3] Cf. Burnet, op. cit., p. 339.
[4] *Phys.*, iv, 6, 213*b*, 22.
[5] Diog. Lært., ix, 19.
[6] *Phys.*, l.c.
[7] Aet., ii, 6, 5; *fr.*, 12. The latter passage, like the former, probably does not contain precise information, but the phrase itself is no doubt genuine (Burnet, p. 341, n. 2).
[8] Windelband, op. cit., p. 57, ascribes it to the Pythagoreans.

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point out that between this element and Ākāśa the resemblance is very faint. And we must, of course, reject entirely the attempts of von Schroeder[1] and of Garbe[2] to emend the passage ὁ τᾶς σφαίρας ὁλκάς to include the word ἀκας, a supposed borrowing from India. Such guesses are contrary to every principle of scientific method, and are on a par with Halévy's attempt to find χλωρός borrowed from Greece in the *hrūdu* of the *Atharvaveda.*[3]

With the disappearance of the supposed borrowing of the five elements, there remains little on which to base a theory of Pythagorean philosophical borrowing. Von Schroeder, however, finds in the importance laid on number in the Pythagorean school an inheritance from the Sāṃkhya. As that school, however, does not in its present form lay any real stress on number, he is bound to believe that the tradition has obscured the important part played by number in the history of the Sāṃkhya. This conjectural history of the Sāṃkhya philosophy, however, need hardly be taken seriously, and Garbe[4] deserts him on this point, and can only suggest as a conceivable connection the idea that Pythagoras created his numerical theory because he misunderstood what he had been told in Persia, viz. that the Sāṃkhya system was named after its enumeration of the principles of the school, to mean that number was the dominating principle of the philosophy, a suggestion which, very wisely, he does not press as probable. In fact, the stress laid on numbers by Pythagoras is clearly a result of his arithmetical studies, which led in due course to the

[1] *Pythagoras und die Inder*, p. 65, n. 2.

[2] VOJ., xiii, 303 seq. As to the meaning I follow Burnet. Böhtlingk, VOJ., xiv, 85, and *Sächs. Ber.*, 1900, p. 150, and Gundermann, *Rhein. Mus.*, 1904, pp. 145 seq., suggest that the point of comparison is the movement (not the structure) of a vessel. The word ὁλκάς of the text may stand unaltered.

[3] i, 25, 2; see *Journ. As.*, 9, xi, 320 seq., and cf. Macdonell, JRAS., 1907, p. 1106.

[4] *Phil. of Ancient India*, pp. 45, 46.

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theory of harmony in music, and is in full agreement with all we know of him and his times, in which music played a part of the greatest importance in connection with religious feeling.[1]

Nor can much stress be laid on the fact[2] that the Sāṃkhya believes in a number of independent eternal souls, and that it is atheistic. It is quite true that Pythagoras believed in a number of eternal souls, and that he does not in his construction of the world postulate divine action. But the doctrine of the existence of divine souls forms no part whatever of his philosophy as opposed to his religious beliefs, and we cannot say that he himself felt the inconsistency of his religious and his philosophical views. As a religious doctrine it is immediately derived by him and his school from their partaking in the divine nature, and we have the evidence of Aristotle[3] himself for the identification by the people of Kroton of Pythagoras with Apollo Hyperboreios, an authority supported by his connection with Abaris and Aristeas, and the story reported by Herodotos[4] that Salmoxis was his slave. Nor is there the slightest trace in Pythagoras of the fundamental view of the Sāṃkhya, the eternal difference between souls and matter, and the delusion by which soul believes itself to be fettered by matter. The fetters in the Pythagorean view are no delusion—the idea of delusion was clearly borrowed by the Sāṃkhya from the Vedānta[5]—but a sad

[1] Rohde, *Psyche*, pp. 336–8.

[2] Von Schroeder, op. cit., p. 71.

[3] *Frag.*, 186, 1510*b*, 20. See also Herodotos, iv, 13; Burnet, op. cit., p. 97, n. 3.

[4] iv, 95; cf. Burnet, op. cit., p. 93.

[5] See Deussen, op. cit., pp. 239 seq. It is of course true that Māyā is primarily a Vedānta, not a Sāṃkhya, tenet, and that the Sāṃkhya expressly repudiates the Vedānta doctrine of delusion as creation of the material world. But the idea appears in the Sāṃkhya conception of the relation between soul and Prakṛti, which stand in no real connection but which appear through error to be united: cf. Cowell's trans. of *Sarvadarśanasaṃgraha*, p. 229; Garbe, *Sāṃkhya und Yoga*, p. 16; Max Müller, *Six Systems of Indian Philosophy*, pp. 268, 285.

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reality, and holiness[1] of life is the way to be rid of them, not theoretical realization that the ties were unreal. Nor is there any essential similarity between the Sāṃkhya and the supposed Pythagorean[2] doctrine of the eternity of the world; as a matter of fact, the Sāṃkhya believes in the eternity of matter and the periodic renewal and destruction of the world, an idea seen as early as *Atharvaveda*, x, 8, 39. 40, while the latter idea is completely strange to Pythagoras, and the former idea is doubtfully his, and in any case in one shape or other is the common basis of all early Greek philosophy. Again, it is only fair to remember that there is no evidence of the existence of the Sāṃkhya in the sixth century B.C. other than what can be gathered from the dependence on that system of certain Buddhist tenets, themselves of doubtful and obscure date.[3]

Practically there remain but two substantial arguments of von Schroeder's[4]—that from the fantastic-mystic-symbolic character of the Pythagorean system, and that from the religio-philosophical character of the school.[5] On the latter point it may be fairly stated that there is much more certain evidence, collected by Foucart in his *Les Associations religieuses chez les Grecs*, for such fraternities in Greece than in India: there is no doubt that the Orphic societies go back into the seventh, probably the eighth century B.C. No doubt the Buddhist was not the first society of its sort in India, but it needed not to go to India to find precedent for such societies, and the practice of such societies is ethnic. What is really

[1] The holiness was at first probably not of heart (as Zeller, *Presocratic Philosophy*, i, 493–6; Murray, *Greek Literature*, p. 154; and Gomperz, i, 123, say) but of body (see Rohde, *Psyche*, pp. 457, 458), but it naturally passed into the sphere of ethics proper (cf. Farnell, *Evol. of Rel.*, ch. iii).

[2] Cf. von Schroeder, p. 76, n. That it was Pythagorean is most improbable (Zeller, pp. 439 seq.).

[3] Cf. Oldenberg, *Buddha*[3], App.; Jacobi, ZDMG., lii, 1 seq.

[4] Op. cit., pp. 79–88. It is repeated by Garbe, Hopkins, and Macdonell.

[5] Ibid., pp. 78, 79. Also accepted by the writers just cited.

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interesting about the Pythagorean society is that, unlike the Buddhist, it endeavoured to be, and for a time succeeded in setting itself up as, a state organization superseding the ordinary state machinery. The fate of the movement was adverse, as it deserved to be, but the idea was characteristically political and Greek, or at least un-Indian.[1]

Nor is it denied that some degree of fantasy crept into the Pythagorean number theory, when attempts were made to carry the principle of number beyond the sphere in which it has relative validity. But it is important not only to note that we have no warrant to attribute this to Pythagoras himself, for the reference to him in the *Magna Moralia*[2] merely proves the non-Aristotelian character of that compilation, but that it was based on a sound principle. The Pythagoreans had discovered one category, and, like all discoverers, thought that they could find in it an open sesame to all questions: they did not persevere in the idea when they found it unsubstantial, but developed a philosophy which is enshrined in the *Phædo* of Plato, and which is of great value and importance.[3] But in the case of the identifications of the Brāhmaṇas there is neither rhyme nor reason: they are based on no one principle such as number, and they are endless and meaningless: one is happy to believe that they meant nothing to their authors, for deliberate nonsense, as clearly seems often to have been intended, is better than unconscious folly.[4] There is, moreover, not a single striking parallelism between the two sets of identifications: von Schroeder's[5] comparison of the Brāhmaṇa

[1] Cf. Lyall, *Trans. Third Inter. Congress of Relig.*, i, 12 seq.; Burnet, op. cit., pp. 96 seq. Gomperz, op. cit., i, 137 (cf. Meyer, *Gesch. des Alt.*, ii, 502, note), sees in the movement a revolt against aristocracy; Holm, op. cit., i, 369; Murray, op. cit., p. 154; Bury, op. cit., p. 318, a movement for aristocracy. Neither view is adequate or correct.

[2] 1182*a*, 11; cf. Burnet, p. 100, n. 1.

[3] Burnet, pp. 353 seq.

[4] Cf. Hopkins, op. cit., p. 194, n. 2.

[5] Op. cit., p. 87.

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identification of the year and the world of heaven with the Pythagorean identification of time and the heavenly sphere can hardly be seriously meant.

I have, I think, noticed every substantial argument of Prof. von Schroeder's, and it seems to me that the following results are established by the evidence adduced: (1) there is no historic evidence or antecedent probability that Pythagoras ever visited India or Persia, or came into contact with persons cognisant of and competent to explain Indian philosophy to him; (2) that the doctrine of transmigration as held by him can be most easily explained from the religious history of Greece, and in particular from the tenets held by the Orphic societies; (3) that the mathematical doctrines of Pythagoras were a direct outcome of his arithmetic studies and of his practical knowledge of the Egyptian methods of measurement; (4) that the Pythagorean doctrine of the five elements was not due to Pythagoras himself, but was adopted by his school, partly from Empedokles, who had experimentally proved the existence of a substance air, and in part from Pythagoras' own theory of an extra-mundal breath; (5) that the Pythagorean philosophy generally shows no real trace of connection with the Sāṃkhya, even assuming that the Sāṃkhya can be deemed old enough to render any comparison chronologically possible; (6) that the tabus and other characteristics of the Pythagorean brotherhood were not borrowed from India, but occurrences in Greece of customs worldwide in character. It is perhaps disappointing to find that we cannot trace to India the beginnings of a philosophy which undoubtedly influenced Greece, and has found a place in both the systems of Plato and Aristotle, but it is impossible to maintain that opinion in the face of the evidence for the present available.[1]

[1] Some odd points may be dealt with in a note. (1) In the Upaniṣadic doctrine of immortality the moon is mentioned as the dwelling-place of spirits, as in the *Kauṣītaki Upaniṣad* and in the Pañcāgnividyā, for which see Deussen, *Phil. of the Upanishads*, pp. 328 seq.; Windisch,

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Buddha's Geburt, pp. 71 seq. Pythagoras is asserted by Iamblichus, *Vit. Pyth.*, 82, to have said that the islands of the blest were the sun and moon, but the idea is already Orphic (Zeller, op. cit., p. 457; Rohde, op. cit., p. 423, n. 4). (2) In *Śatapatha Brāhmaṇa*, i, 9, 3, 10, it is said that the rays of the sun are the good; in Aristotle, *de An.*, i, 2, that some thought the soul was the dust in the air (cf. Rohde, p. 453, n. 5; Gomperz, i, 138). Von Schroeder identifies (p. 25) these views by assuming, what is quite impossible, that the reference in Aristotle refers to the souls of the good, a view which turns the passage into nonsense, as it is a definition of the soul as such, and by converting the good into the souls of the good, which is legitimate. (3) The Pythagorean πρὸς ἥλιον τετραμμένον μὴ ὀμιχεῖν is quoted not only by von Schroeder (p. 39), but also by Garbe (op. cit., p. 43) and by Hopkins (op. cit., p. 559), as Indian because it occurs in the *Atharvaveda*, xiii, i, 6. But, as Weber and Lanman (*Sanskrit Reader*, p. 349) have pointed out, the expression is already found in Hesiod, *Op.*, 727, and no sane criticism will imagine that a piece of folklore like that and the numerous other examples in the preceding and following verses came to Hesiod (eighth century B.C.; cf. Mair, *Hesiod*, p. 134) from India. See also Berthelot, *Trans. Third Inter. Congress of Relig.*, i, 274. (4) It is suggested that the musical theories of Pythagoras may have been due to the Vedic Śikṣā. It is perhaps sufficient to say that the seven notes of the Vedic scale do not correspond to the Greek notes (cf. Burnell, *Saṃhitopaniṣad Brāhmaṇa*, pp. vi seq.; Caland & Henry, *L'Agniṣṭoma*, App. ii), that the Śikṣās have nothing to do with the theory of music such as Pythagoras developed it, and that the Śikṣās are all late works and of no use as evidence for the sixth century B.C.; cf. Lüders, *Vyāsaśikṣā*, pp. 2 seq. (5) It is also suggested that the medical art of Pythagoras, which seems to have been accompanied by the use of spells, music, and song, is Indian. The answer is, of course, that it is ethnic (cf. e.g. the famous spells of the *Atharvaveda*, Kuhn, *K.Z.*, xiii, 49 seq., 113 seq.) and is earlier proved to exist in Greece, though no doubt it equally early existed in India. (6) Colebrooke and von Schroeder lay stress on the fact that the Pythagoreans are said to have believed in a threefold division of the world into Olympos, Kosmos, and Ouranos, and with this division they compare the three worlds of the Vedic mythology—earth, air, and heaven (see Macdonell, *Vedic Mythology*, p. 7). It is sufficient to say that the names are not merely not attributed to Pythagoras himself, but expressly (Stob., *Ecl.*, i, 488) to Philolaos, and even if as applied to him they are genuine, the division has nothing to do with the Indian one, for the upper region contains τὴν εἰλικρινείαν τῶν στοχείων, the middle the seven planets and the sun and moon, the third the sublunar and terrestrial region. Nor is there any force in the argument that Pythagoras ascribed to spirits the middle region: there is no evidence for any such formal ascription. (7) The arguments of Colebrooke, derived from a distinction between φρήν and θυμός similar to that between *jīvātman* and *manas*, and from a distinction between the coverings of the soul analogous to those between the *sūkṣma* and *sthūla śarīra*, are not borne out by any Pythagorean writings, and probably refer to Neo-Pythagoreanism. For

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the real position of θυμός in early Greek thought, see Gomperz, i, 248 seq. It may be added that the Upaniṣads have not yet learned to distinguish sharply *manas* and *jīvātman* (Deussen, op. cit., p. 271), or the *sūkṣma* and *sthūla śarīra* (ibid., pp. 280 seq.). (8) Hopkins (p. 559) mentions the vow of silence and compares it to the vow taken by the Indian *muni*. The evidence as to Pythagoreanism is late (Zeller, p. 342); Aristoxenos probably invented the "mystic silence" to explain the absence of philosophical doctrines proper before Philolaos; Burnet, op. cit., p. 96; in any case ritual silence is ethnic; cf. a curious example in Frazer, *Trans. Third Inter. Congress of Relig.*, i, 256 seq. (9) The difficulty felt by von Schroeder at the idea of an independent origin of metempsychosis is exaggerated (see Dieterich, *Nekyia*, p. 90; Zeller, p. 73; *Archiv für Relig.*, viii, 29 seq.). It existed among the Druids in Cæsar's time—his evidence is quite clear (*B.G.*, vi, 14, 5; cf. Diodorus, v, 28, 6; Ammian. Marcell., xv, 9, 8). Moreover, as Rohde (p. 427, n. 3) points out, the Greek mind was familiar with the transference of the soul from one body into another, as in Ovid's *Metamorphoses*; cf. Kirke and the comrades of Odysseus. Cf. also the case of the Druses and other peoples set forth in Tylor, *Prim. Cult.*, ii, 3 seq., and in Berthelot, *Seelenwanderung*. (10) It is impossible, as von Schroeder and Gomperz, i, 124 seq., try to do, to deduce all Hellenic knowledge of transmigration in early days from Pythagoras and his influence. Plato (*Phæd.*, 62 B; *Cratyl.*, 400 B) clearly refers the belief to the Orphics, and Pindar (who in Thebes could hardly be moved by a mere South Italian belief, Zeller, p. 71) must here follow the Orphics. Herakleitos (*c.* 504 B.C.) knew of it (cf. Burnet, p. 172, with Rohde, p. 442). Pherekydes, who was certainly older than Pythagoras (see Rohde, p. 461, n. 1; Zeller, pp. 71, 327; *contra* Gomperz, i, 542), is said to have held the doctrine by Cicero, *Tusc.*, i, 38. Empedokles held the doctrine in full form: he knew Pythagoras' view, but there is no reason to suppose he borrowed it; his treatment varies from that of Pythagoras (Rohde, pp. 473 seq.). For the Thracians transmigration appears in the tale of Zamolxis or Salmoxis (Hdt., iv, 94; 95). The dæmons of Hesiod, *Op.*, 250 seq., form a preliminary stage (cf. Rohde, pp. 89 seq.; E. Meyer, *Gesch. des Alterthums*, ii, §§ 453 seq.). Cf. also Murray, in App. to Harrison's *Prolegomena* and JHS., iii, 114 seq., on gold plates of Petelia with Orphic verses, dating from the fourth or third century B.C. These verses are of great importance inasmuch as they conclusively disprove what was the main difficulty in Zeller's time of dealing with Orphism, the theory that the Orphic fragments were all late (cf. Zeller, i, 98 seq.; Purser, *Dict. of Antiq.*, ii, 302). These verses establish the existence of the cosmological and psychological doctrines of the Orphic school as they are revealed in the Orphic rhapsodist theology, and Diels' investigations (*Archiv für Gesch. der Phil.*, ii, 91) lead him to the conclusion that the original form of the Orphic theogony belongs to the sixth century, and that the Orphic eschatological mysticism is a good deal older still (see Gomperz, op. cit., i, 539). The world-egg is alluded to in Aristophanes, *Aves*, 695; Phanes occurs on a plate from Thurioi; but to go further into the question of the evidence for Orphism would be out of place here. Philolaos quotes as his authority

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(Clem., *Strom.*, iii, 433) for the doctrine of the bondage of the soul, οἱ παλαιοὶ θαολόγοι τε καὶ μάντιες. (11) Gomperz' own argument rests (i) on Xenophanes: if the belief in metempsychosis had existed, he says (i, 126), Xenophanes would not have ridiculed Pythagoras especially on this account. This criticism is quite unsound. In the first place, the doctrine of transmigration was never a universal belief in Greece: a satirist like Xenophanes could always make effective fun of it. Secondly, the point criticized by Xenophanes is a very remarkable one: Pythagoras goes beyond all early Indian transmigration ideas by claiming to recognize in a dog's howls the voice of a friend. Again, (ii) Gomperz says that this episode is based on kindness to animals, and the Greeks were not especially friendly to animals; there were, with a few isolated exceptions (a statement which, cf. Harrison, *Trans. Third Inter. Congress of Relig.*, ii, 154, is somewhat exaggerated), no sacred animals as these were in Egypt and India. But this is very doubtful: (*a*) the doctrine is sufficiently accounted for by the Pythagorean πάντα τὰ γενόμενα ἔμψυχα ὁμογενῆ (Porph., *Vit. Pyth.*, 19; Rohde, p. 465); cf. also Westermarck, *Origin and Development of the Moral Ideas*, ii, 500 seq.; (*b*) the indifference of the Greeks to animals does not apply in any case, even assuming its general truth, to the dog, cf. Odysseus' dog and Geddes, *Problem of the Homeric Poems*, pp. 221 seq.; (*c*) there is no necessary connection between the existence of sacred animals and kindness to animals generally. In India the existence of sacred animals did not prevent the contemporary existence of a brutal and cruel ritual for the slaying of animals in sacrifice; see *Aitareya Brāhmaṇa*, ii, 6; Hopkins, p. 198, n. 5. Nor is India in any special degree remarkable for kindness in theory or fact to animals generally even now. (iii) Vegetarianism is common to India and Pythagoras: the statement is true of neither, as we have seen above. (iv) The formulæ which summarize the whole creed of the "circle and wheel" of birth are likewise the same in both. This statement (for which cf. Oldenberg, *Ancient India*, p. 96) is applicable to the Orphic conception and is a mere case of natural coincidence. (v) Pythagoras, he thinks, learned of the doctrine *viâ* Persia, and he points out that the Asiatic Greeks while Pythagoras dwelt in Ionia were united with a part of the Indian nation under the sway of Cyrus. This merely means that Cyrus conquered Asia Minor and a small part of the north-west of India. The Indians do not occur in Greek literature before Aischylos (cf. Maspero, *The Passing of the Empires*, p. 694; Busolt, *Griech. Gesch.*, ii, 515), nor the Greeks in Indian literature before Pāṇini's *Yavanānī* (see my *Aitareya Āraṇyaka*, pp. 22 seq.), which points to the fifth century B.C. at soonest). (12) It may be argued that if we admit foreign influences it is absurd to exclude Indian. But there is a great difference. India was remote from Greece, and, unlike Egypt, not in any close touch with Greek travellers. A good instance of this close touch is seen in the Orphic cosmology itself, where the world-egg, the twofold nature of Phanes, etc., correspond very closely with Egyptian ideas (see Gomperz, i, 92 seq.). I see no reason to question here Egyptian influence (if the idea is originally Babylonian, still it

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no doubt came *viâ* Egypt) on Orphism, as the world-egg idea is not found elsewhere in early Greek thought. Cf. also Jastrow, *Trans. Third Inter. Congress of Relig.*, i, 237; and see now Flinders Petrie, *Trans. Third Inter. Congress of Relig.*, i, 196 seq. Harrison (ibid., ii, 164) finds the origin of the egg in a primitive bird-worship, but I doubt this. This fact may also be cited as supporting the attribution to Egypt of the germs of the Greek doctrine of transmigration, and Maspero (*Bibl. égypt.*, i, 349) thought it existed there when the country came into contact with Greece, but probably the Greek was only secondarily influenced in this regard by Egypt. It may also be pointed out that any theory can hardly be satisfactory which attributes to any individual influence the growth of the belief in transmigration. The facts are that the belief appears widespread over a considerable part of Greece; it is not universal by any means, and therefore cannot be regarded as quite a normal development of Greek religious feeling. On the other hand, it is much too widespread to be the creation of a single mind, and the theory of Thracian influence, which Gomperz rejects, receives most important support from the fact that the doctrine is unquestionably closely connected with Orphism, which beyond doubt came in from Thrace, and by the fact that the Phrygian religion is marked by its orgiastic character. The Thracians were an uncultured people who held their religious beliefs in a much deeper way than natural in an enlightened Hellas; contrast with Euripides' general attitude the *Bakchai* written in the north. (13) The fact must of course be emphasized that we may at any time be confronted with new evidence proving Oriental influence, though I think such evidence will be more likely to point to Egypt as the source of the doctrine than to India (cf. e.g. Foucart, *Recherches*, on the Mysteries of Eleusis, which, however, differ essentially, as Rohde and Farnell, *Cults of the Greek States*, iii, 146 seq., have shown, from those of Orphic societies). What I have endeavoured to show is that the arguments of von Schroeder are not convincing, and that any new investigation must rest on fresh arguments. At the same time I gladly recognize that von Schroeder's arguments were for the time of the appearing of his book practically decisive. It may be added that I have not attempted to deal with the quite different question of whether Indian influences may not have been at work to produce the Thracian doctrines: I do not see any evidence for that, but following von Schroeder I am merely concerned with the theory of Indian influence on Pythagoras himself. (14) Garbe finds other early evidence of Greek borrowing from India, especially (*Phil. of Ancient India*, pp. 54, 55) in the derivation from the Vāc doctrine of the Logos idea by Herakleitos. That this is impossible I think certain; see for the real sense of Logos in Herakleitos, Burnet, op. cit., pp. 146, n. 3, 153, n. 1. In fact, Hopkins, *Rel. of India*, p. 558, rejects even Weber's view (*Ind. Stud.*, ix, 473) of Indian influence on neo-Platonism in this regard. See also the doctrine as it appears in Egypt (fifth century B.C. onwards), and is described by Flinders Petrie, *Trans. Third Inter. Congress of Relig.*, i, 196 seq. (15) Oldenberg, *Ancient India*, p. 96, points out the similarity between the Buddhist and Orphic conceptions of the wanderings of the

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soul in the next world, but the Egyptian Book of the Dead is a much more obvious source of the Greek version if foreign influence be demanded. (16) With reference to the question of remembrance of former births (p. 577), it should be noted that Windisch, *Buddha's Geburt*, p. 62, n. 2, accepts the interpretation of *Aitareya Āraṇyaka*, ii, 5, which finds in it an assertion of Vāmadeva having remembrance of his former births. But I have tried in my edition (p. 233) to show that this is at least very improbable. Nor does *Bṛhadāraṇyaka*, i, 4, 22, bear out the theory: that passage merely asserts in *Ṛgveda*, iv, 26, 1, a recognition of the unity of the universe, and does not illustrate recollection of previous births, which is in no sense the subject of the passage in the Upaniṣad.

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