

## THE GERM OF THE EVOLUTION THEORY IN OLD IRANIAN LITERATURE.\*

### I

There are few scientific discoveries or theories of the last century that have created so much stir among the learned world as that of Evolution, which is spoken of as having revolutionized our thoughts of God and His creation. But the stir seems to have settled to a great extent. The stir was due to the first, rather hasty, thought, that it unseats the great Architect of the Universe from his throne of Creation. But a calm unprejudiced consideration of the whole question, in its grand broad aspect, has led many a Divine to say, that a belief in the theory of Evolution does no way unseat the great God from his Divine throne. It assures and insures his seat on His throne, not only outside us but in our heart or hearts. Laying aside the above view of God, it was represented, that it hurt the pride of Man as man, as having been the last and the greatest creation of God. The idea of his low origin, of his having risen from the lowest species of animals was believed to be humiliating to his pride as God's last but not the least creation. But, as Sir Edwin Arnold has said in his East and West, if Evolution points on the one hand, to our low origin in the dim past, it also, on the other hand, points to the high pedestal, to which we have risen, and to a still higher to which we may rise in the equally dim distant future. If you have begun from the lowest step of the ladder, know that you have to rise to the highest.

Mr. E. Clodd, in his "Pioneers of Evolution,"<sup>1</sup> "attempts to tell the story of the origin of the Evolution idea in Ionia, and,

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\* This paper was read before the Anthropological Section of the tenth Indian Science Congress held at Lucknow in January 1923. (*Journal Anthropological Society of Bombay*, Vol. XII. No. 8. pp. 1003-1014.

<sup>1</sup> *Pioneers of Evolution from Thales to Huxley, with an intermittent Chapter on the causes of the arrest of the movement*, by Edward Clodd (1897).

after long arrest, of the revival of that idea in modern times, when its profound and permanent influence on thought in all directions and, therefore, on human relations and conduct, is apparent.”<sup>1</sup> In the matter of the “Origin of the Evolution idea, in Ionia,” he, in his first chapter, begins his story with Thales and ends with Lucretius. Speaking about Thales, he says:—“The Pioneers of Evolution—the first on record to doubt the truth of the theory of special creation, whether as the work of departmental gods or of one Supreme Deity, matters not—lived in Greece six centuries before Christ, not, in the early stages of the Evolution idea, in the Greece, limited, as now, to a rugged peninsula in the south-eastern corner of Europe and to the surrounding islands; but in the Greece which then included Ionia, on the opposite seaboard of Asia Minor.

“From times beyond memory or record, the islands of the Ægean had been the nurseries of culture and adventure. Thence the maritime inhabitants had spread themselves both east and west, feeding the spirit of enquiry, and imbibing influences from older civilisations, notably of Egypt and Chaldæa. But, mix as they might with other peoples, the Greeks never lost their own strongly-marked individuality and, in imparting what they had acquired or discovered to younger peoples, that is, younger in culture, they stamped it with an impress all their own.

“At the later period with which we are dealing, refugees from the Peloponnesus, who would not submit to the Dorian yoke, had been long settled in Ionia. To what extent they had been influenced by contact with their neighbours is a question which, even were it easy to answer, need not occupy us here. Certain it is that trade and travel had widened their intellectual horizon, and although India lay too remote to touch them closely (if that incurious, dreamy East had touched them, it would have taught them nothing), there was Babylonia with her star-watchers, and Egypt with her land-surveyors.”<sup>2</sup>

<sup>1</sup> *Ibid.* Preface p. IX.

<sup>2</sup> *Ibid.* pp. 3-4.

Here, Mr. Clodd, referring to the islands of the Ægean, which were then "Nurseries of culture and adventure" and to Ionia on the coast of the Ægean Sea, speaks of them as "feeding the spirit of enquiry, and imbibing influences from older civilizations, notably of Egypt and Chaldæa. He also refers to the people of the Ægean islands and of Ionia as gaining knowledge from Babylonia. He, however, does not refer to ancient Iran, which, though it had an old culture of its own, had sprung into prominence after Chaldæa and Babylonia. However, Irân had come into contact with Babylonia and Chaldæa.

The object of this paper is not to draw any definite inference from the fact of the above contacts, but, to present the old Iranian view of Creation, and to show, that there existed also, in the old literature of Iran, as in that of Greece, some germs of the Evolution theory. But, before doing so, I will specially refer to the view of one of the philosophers between Thales and Lucretius *viz.*, Empedocles, because, what he says, in connection with Love and Strife in relation to the theory of Evolution, reminds us much of the Iranian view of Spenta Mainyu, the bountiful, beneficent, constructive spirit and Angra-Mainu, the maleficent destructive spirit. Mr. Clodd speaks of Empedocles as proceeding from "the theories of the beginning of life" to "the theories of the origin of its various forms."<sup>1</sup> Empedocles was born in 490 B.C. at Agrigenteum in Sicily, where many Greeks had migrated owing to Persia's westward advance towards Greece. "He conceived 'the four roots of all things' to be Fire, Air, Earth and Water,"<sup>2</sup> and said, that it was foolish to believe that "what before was not, comes into being, or that aught can perish and be utterly destroyed."<sup>3</sup> Therefore, the abovenamed four roots or elements are "eternal and indestructible." They are acted upon by two forces, which are also material, Love and Strife; the one an uniting agent, the other a disrupting agent. From the four roots, thus operated upon, arise, 'the colours and forms' of living things; trees, fruit,

<sup>1</sup> *Ibid.* p. 12.

<sup>2</sup> *Ibid.* p. 12.

<sup>3</sup> *Ibid.* p. 12-13.

both male and female, then fragmentary parts of animals, heads without necks, and 'eyes that strayed up and down in want of a forehead,' which, combined together, produced monstrous forms. There, lacking power to propagate, perished, and were replaced by whole natured but sexless forms which arise from the earth, and which as strife gained the upper hand, became male and female. Herein amidst much fantastic speculation, would appear to be the germ of the modern theory that the unadapted become extinct and that only the adapted survive. Nature kills off her failures to make room for her successes."<sup>1</sup>

At the root of all that is said about Evolution, what we find is, that Creation has advanced step by step from a lower form to a higher form, ending in Man. We trace partly the same view in Old Iranian writings of the Parsees. The Iranian view of Creation begins with Ahura Mazda, the omnipresent, omnipotent, the omniscient God. He is all Light, Boundless Light (anaghra raochâo). There are four natural sources of Light, viz., the Moon, the Sun, the Stars and the Boundless light. Ahura Mazda's mansion is in the Boundless Light, the Eternal Light, the Infinite Light, which has no beginning (aghra, Sans. अग्र) and no end. We read in the Bundelesh; "The Great Ahura Mazda, out of his all-wisdom and goodness, was matchless in Light in the Light which is called Boundless (or Endless). Light is the place and mansion of Ahura Mazda. What is called Religion is the all-wisdom of God and his matchless goodness."<sup>2</sup> Opposed to the region of Boundless light is the region of Boundless darkness. Between the two, the space of Boundless light and the space of Boundless darkness, there is Emptiness (tahighih)."

The Order of Creation, according to the ancient Parsee books, is the following: 1. Heavens which is the source of all Light, the Light of the Sun, Moon, Stars and of the Ethereal Universe

The Order of Creation.

<sup>1</sup> *Ibid.* p. 13.

<sup>2</sup> *Vide* my Translation of the Bundelesh, p. 3

through or by means of which Light passes. 2. Water (Liquid). 3. Earth (Solid). 4. Trees. 5. Animals. 6. Man. We read in the Farvardin Yasht (Yt. XIII, 85-86): Ashaonâm vanghuhish sûrâo spentâo fravashayô yazamaidê...yâmchâ ashnô, yâmchâ âpo, yâmchâ zemo, yâmchâ urvarayâo, yâmchâ gêush, yâmchâ gayêhé.

*Translation.*—We invoke the Fravashis which are of the good valiant, bounteous, holy...which belong to the Heavens, Water, Earth, Trees, Animals and Man.

We read well-nigh the same order in the Yaçna (Yaçna XIX.)<sup>1</sup> We find the same order in the Bundelesh, the Iranian Genesis, which says : Oharmazd min dâm-i geti fardûm asmân, va dedigar maya, va sedigar zamik, chehârum urvar, panjûm kirâ, shashun, anshutâ.

*Translation.*—In the Creation of the world, Ahura Mazda (God, created) first the Heavens, second Water, third Land, fourth Trees, fifth Animals, sixth Man (Bundelesh, Chap. I.)

According to the Pahlavi Bundelesh,<sup>2</sup> Ahura Mazda existed from the first, unequalled or matchless. The Conflict between Construction and Destruction, Good and Evil, (a-hamaki), from infinite, or endless (a-kenârê) times. His space, time and knowledge were eternal. They existed, exist and will exist. He is therefore Omnipotent, Omnipresent Omniscient and Eternal. His place was in Boundless Infinite Light (a-sar roshni). Through omniscience, he brought creation (dâm) into existence. For a long period, the creation existed in a quiescent or motionless (a-muitâr) static (a-ravâ) and intangible (a-giraftâr) condition. This early state of existence of creation can only be conceived by the mind (minoihâ). After that long period, the Creation took a tangible or visible form. With the assumption of that form, there came in Destruction, the idea of Evil. With this, came the second long

<sup>1</sup> *Ibid.* p. 8.

<sup>2</sup> *Vide* my Translation of the Bundelesh, pp. 1-4.

period, wherein there was a conflict between construction and destruction, good and evil. The conflict existed in connection with all the six classes of creation (1) The Sky, (2) Water, (3) Earth, (4) Plants, (5) Animals, represented by the primieval ox (Gavyô-dad) 6 and Man, represented by the very first primieval man represented by Gayomard. This active dynamic period is very much longer than that of the first quiescent or static period. This long active dynamic period is divided into three periods, spoken of as hazârâs (milleniums). In the first, there was all construction, very little destruction, all good, very little evil. In the second, there was a mixture of Construction and Destruction, of Good and Evil. Ahura Mazda himself typifies the Construction, the Good; Ahriman typifies the Destruction, the Evil. This Good and Evil have their parallels in the Love and Strife, the two forces of Empedocles. The one is "the uniting agent, the other a destructive agent."<sup>1</sup> There will come a time—we do not know when—when every thing will be for the good. Good will overpower and suppress all evil. This will occur in the last of the three periods. All this account of the conflict, looking somewhat mysterious and mythical on the surface, gives us a glimpse of "the survival of the fittest."

Now, though Man is spoken of as the last creation of God

the Creator, the Bundelesh speaks of the

Man's Origin  
from a lower form.

Origin of Man as proceeding from a lower  
form of life—the vegetable. The very first-

primitive being is spoken of as Gayomard, who, in the phraseology of the modern scientists, can be called "the progenitor or ancestor of the common stock of human life (gaya). He is not "a spontaneous creation," a something out of nothing. We read: "On the subject of the Nature of Man, it is said in religion, that Gayomard gave forth his seed at the time of death. That seed was purified by the work (lit. motion) of the light of

<sup>1</sup> Pioneers of Evolution by Edward Clodd, p. 13.

the Sun (robashnih-i roshnih-i khurshed). Neryosang<sup>1</sup> guarded its two parts. One part was accepted by Spendârmad.<sup>2</sup> In the form of *rivâs* (a kind of tree), which grows like a column during 15 years with 15 leaves, there grew up Mashi and Mashyâni<sup>3</sup> from Earth, after 40 years, in such a way, that their hands were backward on their shoulders; they were united with each other and were of the same height and of similar appearance. The waists of both were united and they were of a similar stature in such a way, that it was difficult to recognize, which was male and which was female..... The soul (robân) was first created and then the body (tan). Both came into the form of man from the form of a tree (urvar). The breadth (nismo) which spiritually entered into them (mankind) is soul. Now, in that way, there grew up a tree, the fruit or result of which is 10 species or varieties of mans.<sup>4</sup>

Now all this, which we read in the Bundelesh, seems to have a parallel in what we read in Clodd's *Pioneers of Evolution* as the view of Empedocles. We read there : They *i.e.*, the roots or elements are acted upon by two forces, which are also material, Love and Strife ; the one a uniting agent, the other a disrupting agent. " From the four roots (Fire, Air, Earth, and Water), thus operated upon, arise, ' the colours and forms ' of living things ; trees first, both male and female, then fragmentary parts of animals, heads without necks and ' eyes that strayed up and down in want of a forehead,' which, continued together, produce monstrous forms. This lacking power to propagate, perished and were replaced by ' whole-natured ' but sexless ' forms,' which arose from the earth and which, as Strife gained the upper hand became male and female." In this statement of the view of Empedocles, Clodd sees the germ of Evolution. He says : " Herein, amidst mad fantastic speculation, would appear to be

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1 A messenger of God.

2 The Yazata or angel presiding over earth.

3 The Iranian Adam and Eve.

4 Bundelesh Chap. XV 1-5 (S. B. E. Vol. V. pp. 52-53). *Vide my Translation of the Bundelesh pp. 59-61.*

the germ of the modern theory that the unadapted become extinct and that only the adapted survive. Nature kills off her failures to make room for her successor."<sup>1</sup> We see a similar germ of Evolution in the above Iranian parallel, and it is with some diffidence that I draw here special attention to what is stated of Empedocles that he was the son of one of those Greeks whom "the advance of Persians westward had led to migrations . . . to the south of Italy and Sicily." It is possible that the parallel between the Iranian view as given above and the Greek view as given by Empedocles may be due to the contact of the two nations.

I will quote here, what I have said in my paper on "The Antiquity of Man": "At the bottom of all that appears to be mythological on the surface, the old Iranian belief seems to be this, : Gayomard (lit. mortal life) was the first primitive being or what may be called human 'life principle.' The primitive man or the first man or humanity grew or came into existence at the hand of the Creator from a lower form of creation—the vegetable creation. From this Gayomard, the primitive being or form of existence, there descended various species of, what Dr. West calls, 'human monsters', and the progenitors of modern man. The description shows that all-life creation, whether vegetable; animal or human, had in remote antiquity one life principle or life-stock."<sup>2</sup>

The view of Dr. Arthur Keith, one of the greatest anthropologists of to-day, is, that Man descended from more than one type. We are reminded of this by what we learn from the Pahlavi Bundeshesh, which says, that Man came down from two progenitors who were however vegetable in substance. Fifteen races of men descended from one progenitor or plant, named *rivds*. The first separate pair which descended

Dr. Arthur  
Keith's Theory  
and the Pahlavi  
Bundeshesh.

<sup>1</sup> Clodd's *Pioneers of Evolution* p. 13.

<sup>2</sup> *Journal of the Anthropological Society of Bombay*, Vol. X, p. 591; *Vide* my *Anthropological Papers*, Part II, p. 232.



from this is represented as animal in its nature and it devoured its children. Ten races of Man descended from the other plant and these races were at first monstrous races. I give below what I have said in my Note on the Antiquity of Man.<sup>1</sup>

“Gayomard, the very first primitive being or form of (human) existence was sexless. The first progeny (Mashi Mashyâni) had sexes combined in one body. It was after some long time that a desire for sexual intercourse arose in them. Nine months after cohabitation and conception, a pair—male and female—was born. The parents of the first human stock devoured their children, the male devouring one of the twins and the female the other. Then, at first, there came into existence seven pairs. Their average age was 100 years. From these pairs and their progeny, there descended 15 races (sardeh) which spread into different parts of the earth. In all, from Gayomard, the first primitive being or form of existence, there descended 25 species among which there were many, which were of a kind of human monsters. For example, there were some beings that had ears on their breast (vargush, bargush); some that had eyes on their breasts (varchashm); some that were one-legged (ayok regalman); some were bat-winged (parr chegun shabâ); some were with tails (dumbimand); and some were with hair on the body (mui pavan tan).”<sup>2</sup>

Some of these statements, collected from the Pahlavi Bunde-hesh, present parallels to what we saw above as the views or speculations of Empedocles. According to these views, from the four roots or elements (Air, Water, Earth and Fire) arise “heads without necks, and eyes that strayed up and down in want of a forehead, which, continued together, produced monstrous forms. These, lacking power to propagate, perished and were replaced by ‘whole-natured but sexless forms’ which arose from the earth, and which as Strife gained the upper hand,

1 *Ibid.*, p. 590. *Vide* my Anthropological Papers, Part II, p. 231.

2 Bunde-hesh Chapter XV 20.

became male and female.”<sup>1</sup> Thus we find from the Bunde-hesh, that at the root of all that appears mythological on the surface, the old Iranian belief pointed to a kind of change and advancement from a lower form of life to a higher.

Dr. Arthur Keith, gives, in his “Antiquity of Man,” a table or geneological tree and refers therein to the

Dr. Keith's gene-  
ological tree and the  
Bunde-hesh geneo-  
logical tree.

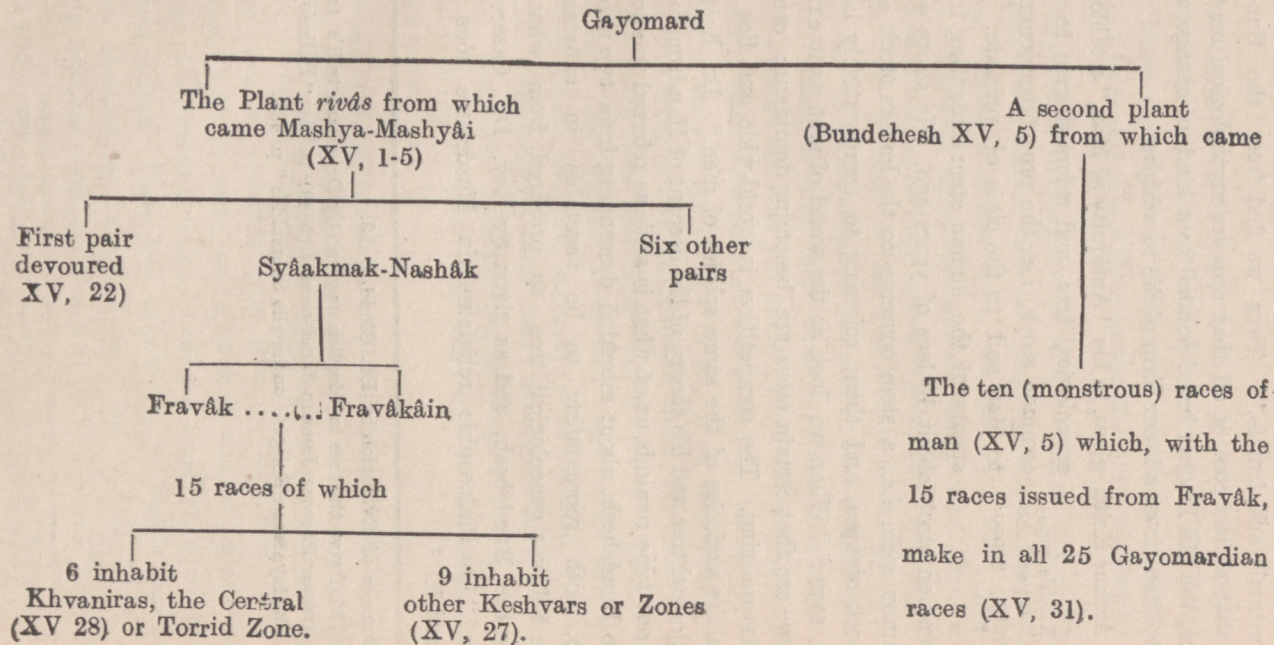
common stock, *i.e.*, the progenitor common to Man and to the class of primate. He speaks of the human stem separating from

the common stock about 10 lacs of years ago. He starts with a common stem *i.e.*, a stem common to the human stock and the stock of apes, and then, referring to comparatively later times, says: “When we look at the world of men as it exists now, we see that certain races are becoming dominant; others are disappearing. The competition is world-wide and lies between the varieties of the same species of men.” Dr. Keith's geneological tree and his theory of the descent of Man from more than one type reminds us of what is said, as referred to above, in the Bunde-hesh, about mankind descending from two progenitors, both representing to be vegetable in substance. I give below a geneological tree, as prepared, from what is said in the Bunde-hesh, and as given by Rev. Dr. Casartelli in his “La Philosophie religieuse du Mazdeisme soue les Sassanides.”<sup>2</sup>

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<sup>1</sup> Pioneers of Evolution by Ed. Clodd, p. 13.

<sup>2</sup> p. 125. I give the tree in English as given by Dr. Casartelli's translator, Dastur Pheroze Jamasp Jamaspasana (1889) in his “Philosophy of the Mazdayasnian Religion under the Sassanides” p. 133.



We said in the beginning, that, at one time, the Evolution theory, when first launched, raised a conflict between Religion and Science. The Iranian view, from the very beginning, admitted the hand of God, the first Cause, the Cause of Causes, behind every thing. Faraday very properly says: "I can see no such conflict, as has been suggested, but I do see that when I have made all my investigations, there is a wonderous field beyond which no human faculty is capable of fathoming."

The Iranian philosophy about the Fravashis which are compared with Plato's Ideas, further suggests the idea of gradual Evolution in Nature. All beings, men, animals, trees have a Fravashi and it is the Fravashi of a man that is the strongest. The unborn, born, the dead all have their Fravashis with them. The birth of a child is no spontaneous creation or generation. It is no new event. Its Fravashi existed from the very beginning of Creation. With the birth of the child it comes into this world. With its death, it will continue somewhere. There is a permanent continuity in Nature.