

COLONIAL AND POST-COLONIAL ELABORATIONS OF AVATARIC EVOLUTIONISM

by *C. Mackenzie Brown*

Abstract. Avataric evolutionism is the idea that ancient Hindu myths of Vishnu's ten incarnations foreshadowed Darwinian evolution. In a previous essay I examined the late nineteenth-century origins of the theory in the works of Keshub Chunder Sen and Madame Blavatsky. Here I consider two major figures in the history of avataric evolutionism in the early twentieth century, N. B. Pavgee, a Marathi Brahmin deeply involved in the question of Aryan origins, and Aurobindo Ghose, political activist turned mystic. Pavgee, unlike Keshub, used avataric evolutionism in expounding his nationalistic goals for an independent India. His rationale was bolstered by the idea that India was the fountainhead of all science and civilization. Aurobindo saw in avataric evolutionism a possible key to understanding the involution and evolution of the supreme spirit in the realm of matter as taught in traditional Vedanta. This material-spiritual evolution represented for Aurobindo the necessary knowledge for the true liberation of India, transcending purely political independence. Such knowledge he also saw as the means for the spiritual liberation of the whole of humankind. The processes of involution and evolution he claimed were not in conflict with modern science, and Western evolutionary thinking seems to have inspired many of his own evolutionary reflections, even though in the end he rejected the Darwinian transmutation of species. I conclude with an overview and assessment of recent, post-colonial Hindu assimilations of avataric evolutionism.

Keywords: Aurobindo Ghose; avatars and Darwinism; avataric evolutionism; Annie Besant; British colonialism; Hinduism and Darwinism; Hinduism and evolution; Narayana Bhavanrao Pavgee; Orientalism; theosophy; Vedic geology

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[*Zygon*, vol. 42, no. 3 (September 2007)]

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Avataric evolutionism is the notion that the ten traditional incarnations, or avatars, of the Hindu god Vishnu foreshadowed Charles Darwin's theory of evolution. In a previous essay on avataric evolutionism (Brown 2007) I dealt primarily with the origin and development of the theory in the latter part of the nineteenth century, examining its syncretic and progressivist elaboration by Keshub Chunder Sen in 1882 and its likely Western roots in Madame Blavatsky's *Isis Unveiled* in 1877. In the present essay I look at various renderings of avataric evolutionism in the twentieth and twenty-first centuries, focusing especially on the nationalistic-geophysical interpretation of Narayana Bhavanrao Pavgee (1854–1935) and the mystical, though ambivalent, version of Aurobindo Ghose (1872–1950). I also briefly examine various post-colonial elaborations of the theory, including that of the Indian Marxist known simply as Kashinath.

To provide the cultural and theological-philosophical context for Pavgee's avataric evolutionism, I first summarize the views of a key evolutionary Hindu thinker, Swami Vivekananda (1863–1902).¹ In addition, I revisit briefly the contributions of Dayananda Saraswati and note the cosmic evolutionary views of one of Dayananda's later followers, the pandit Chamupati.

AVATARIC EVOLUTIONISM TAKES A NATIONALISTIC TURN

In my earlier essay I mentioned that Keshub, after his return from England, had met with Ramakrishna, with whom he was favorably impressed. Ramakrishna's most famous disciple, Swami Vivekananda, had been a member of the Brahmo Samaj, sharing its ideals of social reform but not its religious ideas, according to his own later report, and he did not regard Keshub as sincere (Williams 1974, 10–11). Vivekananda became India's spiritual ambassador to the West at the end of the nineteenth century, introducing a modernized, scientized version of traditional monistic Vedanta to America and Europe, as well as being an early instigator and promoter of India's rising nationalist consciousness. He and Dayananda were major pioneers of Vedic scientific precedence, finding in the ancient scriptures of the Hindu tradition all of the discoveries of modern science. Such ancient Vedic prescience warranted for both men the superior intellectual ability of the Indians, thereby justifying the growing Indian call for self-rule.

For both thinkers, then, the Vedic or Aryan culture was the fountainhead of all science, but, unlike Dayananda, Vivekananda had no trouble discerning the ancient Vedic roots of evolutionary theory, noting that "The idea of evolution was to be found in the Vedas long before the Christian era; but until Darwin said it was true, it was regarded as a mere Hindu superstition" ([1907] 2003, 8:25). However, for Vivekananda as for Keshub, the Darwinian theory was insufficient because it ignored the necessity for involution (descent of the Divine into matter) and dealt with physical transformation only, while neglecting spiritual evolution. In Vivekananda's view,

the ancient Vedic sage Patanjali was the “father” of *complete* evolutionary theory, “spiritual and physical” ([1907] 2003, 6:113). And, while Keshub simply left the notion of natural selection for scientists such as Darwin and T. H. Huxley to interpret, Vivekananda specifically criticized Darwinian evolutionary theory for its foundational idea of struggle and competition rather than basing itself on love. He thus concluded that India has much to teach the West regarding the material realm as well as the spiritual. Even though Vivekananda did not explicitly develop the notion of avataric evolutionism, we shall have various occasions to cite him, as his attempt to integrate Indian nationalist consciousness, Vedantic spirituality, and modern science—including evolutionary theory in particular—was quite influential among educated Hindus at the time and continues to be so.

Returning for a moment to the notion of Vedic scientific precedence, and in particular to Dayananda’s contentions regarding archaic Aryan technological achievements such as electricity and steam engines, we may note that most Western scholars, including Max Müller in the nineteenth century, have completely rejected such claims. To be sure, some romantic Orientalists including Louis Jacolliot, followed by Madame Blavatsky, believed that ancient India was the fountainhead of all civilization, including science. In any case, a small stream of European writers continued to entertain the idea that the ancient Hindus had anticipated in an intuitive way some of the theoretical discoveries of modern science, especially as they related to cosmogony. Accordingly, Hindu pride in India’s ancient scientific accomplishments received a special boost when endorsed by Western scholars.

One example relevant to our present purposes is found in a booklet titled *The Ten Commandments of Dayananda*, written by a follower of Dayananda’s Arya Samaj. The author, identified simply as the pandit Chamupati, took note of a comment by the Nobel-winning poet and playwright Maurice Maeterlinck praising the precocious insights of ancient Hindu discoveries “which are gradually being confirmed by science” (Maeterlinck [1922] 1969, 43). Chamupati quotes in particular the following words of the Nobel recipient regarding various immemorial cosmogonies from around the world, with specific reference to the ancient Hindu treatise on law by Manu:

Was it . . . mere chance that decreed that the earth should proceed [from chaos], take shape[,] and be covered with life precisely in the order which they describe[d]? According to the “Laws of Manu” the ether engenders the atmosphere; the atmosphere[,] transforming itself[,] engenders light; the atmosphere and light[,] giving rise to heat[,] produce water; and water is the mother of all [living] creatures. (ca. 1930, 50, quoting from Maeterlinck [1922] 1969, 43)²

Especially interesting, however, is what Chamupati chose *not* to quote. Maeterlinck immediately goes on to state:

“When this world had emerged from the darkness,” says the “Bhagavata Purana,” which according to the Hindus is contemporary with the “Veda,” “the subtle elementary principle produced the vegetable seed which first of all gave life to the plants. From the plants life passed into the fantastic creatures which were born of the slime in the waters; then, through a series of different shapes and animals, it came to man.” . . . Have we not here the whole of Darwinian evolution confirmed by geology and foreseen at least six thousand years ago? ([1922] 1969, 43–44)³

Chamupati’s failure to cite this passage is hardly surprising, given his teacher’s (Dayananda’s) dismissal of evolution.⁴ It is worthy of note, as suggested by the part of Maeterlinck’s passage that is quoted by Chamupati, that cosmic evolution (the emergence of the material universe and the physical elements out of some primordial subtle substance), in contrast to organic evolution, is generally not problematic for Hindu thinkers. Thus Swami Prakashanand Saraswati, founder of the International Society of Divine Love, while thoroughly denouncing Darwinian evolution, at the same time proclaims that the ancient Hindu Upanishadic scriptures accurately portray the evolutionary process of cosmogenesis, incorporating many concepts of modern physics but also answering all remaining problems in cosmology (Prakashanand Saraswati 1999–2001).

While Chamupati largely ignored Darwin, whose views of Hindu scriptures were hardly flattering (see Darwin [1893] 1995, 58), Chamupati was attracted to the ideas of Alfred Russel Wallace, codiscoverer of evolution. Chamupati noted Wallace’s praise of the mind of the Vedic hymn makers who, despite the “very limited knowledge [of Nature] at this early period, . . . could not have been in any way inferior to those of the best of our religious teachers and poets—to our Miltons and our Tennysons” (ca. 1930, 50, quoting from Wallace [1913] 1914, 21). For Chamupati and other followers of Dayananda, Wallace was far more congenial than Darwin, for, despite Wallace’s espousal of some of the most theologically challenging aspects of evolutionary theory, namely, random variation and natural selection, Wallace made considerable exceptions. He insisted on some sort of “spiritual influx” to account for the origin of life as well as of mind and morality (cf. Deva ca. 1930, 9). Accordingly, he was a much safer corroborator of Vedic insights, at least in Chamupati’s views.

Chamupati, following traditional Hindu notions of time and history and in particular the views of his master Dayananda, wished to assert the great antiquity of the Vedas, measured not in thousands but millions or billions of years. According to Dayananda, the Veda contains complete Truth, including scientific truth, and was revealed to humans by God who is all Truth; thus, in one sense, the Veda is eternal. The date of God’s revelation of the Veda, Dayananda asserted, was just after humankind was first created, some two billion years ago.⁵ Chamupati shies away from giving a specific time for this creative act and instead summarizes various late-nineteenth- and early-twentieth-century Western and Hindu speculations

on the matter. He cites in particular the notion of one Indian scholar that the Vedas contain references to features of the earliest geological strata in India dating back some seventy million to possibly six billion years ago (ca. 1930, 46). The scholar in question is identified as N. B. Pavagi (or Pavgee as his name appears in his published works), a Marathi Brahmin deeply involved in the question of Aryan origins and author of *The Vedic Fathers of Geology* ([1912] 2001). With Pavgee, we encounter the epitome of the scientific and evolutionistic exegesis of the Veda.

NARAYANA BHAVANRAO PAVGEE: AVATARIC EVOLUTIONISM AND
THE INDIAN ORIGIN OF HUMANKIND—AND OF LIFE ITSELF

It is not entirely clear that Chamupati, in claiming Vedic references to geological strata dating back seventy million to six billion years ago, meant to infer that the Vedic revelation to humankind occurred that long ago, although this seemed to be his implication. However, a careful reading of *The Vedic Fathers of Geology* shows that Pavgee placed the Vedas, or parts of them, “only” back between some 80,000 and 240,000 years ago, when India’s Vedic forefathers, according to Pavgee, were living in the Arctic regions during the interglacial episodes of the Tertiary period. For Pavgee, the Vedas do contain references to ancient (Cambrian, or post-Vindhyan) geologic ages, but he sees this as evidence of the geological researches and discoveries of the ancient Vedic forefathers, not of their being contemporaneous with events of those times ([1912] 2001, 83–85). As Pavgee concludes, “it seems, beyond any manner of doubt, that our Vedic Fore-fathers had taken a very deep interest in the studies of Geology . . . they were Evolutionists *par excellence*, and I may say this without fear of contradiction” (p. 91).

Pavgee is the first Sanskrit scholar and patriot who attempted to establish the Indian avataric evolutionary theory through a close reading of Vedic and later Hindu texts. In his youth, while seeking an appropriate education for a government job with the British administration, Pavgee early encountered the biases of British colonialist scholarship. As Madhav M. Deshpande notes, summarizing from Pavgee’s Marathi autobiography: “For his BA entrance exam in 1872, he had to read history of India, Greece, Rome, and England, written by British authors, but he felt that the authors did not know the glory of India” (2005b). Pavgee’s lifework was dedicated to making the ancient glory of India known, in order to establish a historical rationale for Indian nationalism. When he left his government job, he felt like he was “gaining freedom from the foreign rule” (2005b).

To bolster the notion that the ancient Hindus/Aryans were fully modern, Pavgee, like Vivekananda, not only stressed the Vedic roots of modern scientific theories, including evolutionary theory, but also appealed to the

opinions of Western scholars. Pavgee was especially attracted to the ideas of the French scholar Jacolliot, who proclaimed: "Astonishing fact! The Hindoo revelation, which proclaims the slow and gradual formation of worlds, is of all revelations the only one whose ideas are in complete harmony with modern science" (1870, 186). I return to Pavgee's use of Jacolliot below. With specific reference to Darwinian evolution, Pavgee, like Vivekananda, noted the following statement of the great English Sanskritist, Sir M. Monier-Williams: "Indeed, if you will pardon the anachronism, the Hindus were . . . Darwinians many centuries before Darwin, and Evolutionists many centuries before the doctrines of Evolution had been accepted by the Huxleys of our time" ([1912] 2001, 91n).⁶ Unlike Vivekananda, however, Pavgee fully embraced Darwinism, without any qualification with regard to its avowed lack of attention to involution or to the notion of love rather than competition. For Pavgee, the ancient Aryans were a highly competitive people, and a revival of this competitive spirit was what was called for at the beginning of the twentieth century as India suffered under British imperialism.

Pavgee shares with Vivekananda, Dayananda Saraswati, and later thinkers such as Prakashanand Saraswati and A. C. Bhaktivedanta Prabhupada the deep conviction that Vedic literature (sometimes broadly defined to include the Puranas as a "fifth Veda"), is a repository of all scientific knowledge, knowledge that modern scientists are just now (re-)discovering and affirming. For Pavgee alone, however, the ancient Vedic scriptures demonstrate an understanding of geologic and evolutionary history *based on the empirical observations* of the ancient Aryan sages, rather than on divine scientific knowledge revealed by God to those sages, or on their yogic, intuitive perceptions into the truths of the material world. And while Dayananda rejected Darwinism as not scientific, and thus not in the Vedas since they contain no false knowledge but only true science, Pavgee was busy exercising his ingenuity in proving that the Vedas do contain Darwinian evolutionary principles founded on empirical research. In the process Pavgee developed an elaborate geophysical notion of avataric evolutionism.

Like other Hindu apologists and revivalists of the late nineteenth and early twentieth century, Pavgee was keenly aware of the damning critiques of Hindu religion and culture by the more conservative Western missionaries and the utilitarians as well as the idealization of a Vedic Golden Age advanced by various Orientalist scholars. It was the praise of the Vedic sages by Müller, in his *India: What Can It Teach Us?* ([1883] 1999), that most immediately inspired Pavgee's inquiry into the geological researches of the ancient Vedic seers. Although Müller's praise referred to the sages' construction of Sanskrit, of natural religion, and of subtle philosophies, laws, and poetry, Pavgee concluded from Müller's acclaim that the Vedic sages

were the *acknowledged benefactors* of Mankind, and were therefore naturally supposed by the East and the West to be the *Repositories of varied knowledge and diverse arts and sciences*. . . . In the circumstances, I could not believe, that our fore-fathers of yore had practically left untouched the very important subject of Geology, or that they were totally in the dark, even as regards the elementary knowledge of the science. ([1912] 2001, Intro., pp. I–II)⁷

Müller practically invites Pavgee to extend the Vedic compass to include the geological by likening Vedic literature to “palaeontological records of an evolution” (by which Müller meant only the cultural evolution of the human mind and philosophy) “that begins to elicit wider and deeper sympathies than the nebular formation of the planet on which we dwell . . . , or the organic development of that chrysalis which we call man” ([1883] 1999, 274; the passage is quoted by Pavgee [1912] 2001, VI).

Initial inquiries into the ancient Sanskrit literature led Pavgee to consider it highly probable that the Vedic sages were “acquainted with the main features, and perhaps with even the minute details of Geology” ([1912] 2001, III). Further investigations confirmed for him that the probability was certainty. Specifically, he claimed to have found in the ancient Vedic and subsequent literature references to the major geological eras and periods as propounded by Western geologists, namely the Azoic, Paleozoic, Mesozoic, and the Cenozoic with its subdivisions into the Tertiary and Quaternary, as well as to the life forms dominant in each ([1912] 2001, IV).

Pavgee’s reconstruction of Vedic geological knowledge includes descriptions of Earth’s genesis and structure, the origin and evolution of life forms, and the transformative processes involved. Among the various scriptural passages relating to the formation of Earth and early terrestrial history that Pavgee highlights are the following illustrative examples, beginning with a verse from the *Taittiriya Upanishad* (2.1): “From the Self (Atman) arose space (*akasha*); from space, air (*vayu*); from air, fire (*agni*); from fire, water (*apas*); from water, earth (*prithivi*); from earth, plants (*oshadhi*); from plants food (*anna*); from food man (*purusha*).”⁸

Pavgee notes that for the ancient Indo-Aryans, religion and science were not separate and thus the geological evolution of the planet was regarded as the work of a creator god like Prajapati, or, as in this passage, the Self. He expands on the above passage, providing details of processes that are only implicit in what Pavgee calls the Upanishad’s “synoptical view”:

Now, this description may, in brief, be said to be the geological evolution of Cosmos from the infinite space, which having given rise to atmosphere, the violent currents of wind produced fire. This remained in a state of igneous fusion, until part of the heat having been diffused into the surrounding space, refrigeration proceeded in course of time, which having caused the aqueous vapour in the atmosphere to condense, occasioned the fall of rain, thus giving rise to what is called the first *Thermal Ocean*. . . . [Once the thermal ocean cooled, and land and mountains arose, then] life naturally became visible therein, first in herbs or

seaweeds, and then in others, the vital gradation having progressed from simpler conceptions to more complex types and highly organized orders, ending in the last and marvelous creation of Man. ([1912] 2001, 15–16)⁹

As for the specific forms of organic evolution according to the ancient texts—as interpreted by Pavgee—after “weeds and lotuses” had appeared, then “trilobites and fishes, reptiles and quadrupeds, began to swarm and breed, on earth” (p. 18). Pavgee bases the sequence from trilobites to quadrupeds on a passage from the *Vishnu Purana* (1.4.7), which reads literally “He [the Lord] created another body, just as in earlier ages he had taken the form of a fish and a tortoise; so in this he assumed the form of a boar.”¹⁰ The passage clearly refers to the avataras of Vishnu; reference to trilobites, reptiles, and quadrupeds is a rather creative reading on Pavgee’s part, while the avataric import he ignores for the moment.

The crowning scriptural passages for Pavgee are from the *Rig Veda* itself, in which the sequence of organic forms is supposedly correlated with three major geologic eras of modern science. *Rig Veda* 10.97 states: “Herbs sprang up long ago, three ages before the gods” (*ya oshadhiih purva jata devebhyas triyugam pura*).¹¹ Pavgee interprets the passage as follows: “vegetable life (*oshadhiih*) had commenced (*purva jata*), some three epochs (*triyugam*), before the Mammalian life-types of the Tertiary Era, or rather before the advent of Man and the superhuman Gods (*devebhyas-triyugam*)” ([1912] 2001, 21).¹² In a similar manner, he interprets *Rig Veda* 10.72.2 to mean that life or vitality first came into being in the primary or Paleozoic age (*purve yuge* [literally, first or previous age]), following the Azoic epoch (*asatah sad-ajayata* [literally, when being arose from nonbeing]). By such ingenious moves as interpreting *asat*, nonbeing, as referring to the era devoid of living beings (Azoic), and expanding the term *deva* to include both gods and humans,¹³ and then placing these in the Tertiary period, three ages after the birth of plants, Pavgee convinces himself that the ancient Sanskrit texts affirm the discoveries of modern paleontology ([1912] 2001, 22).

Further details of the eras and periods, according to the Marathi scholar, are provided especially in the Puranas. Pavgee suggests that the Vedic and Puranic geologists “probably classified the Indian Geological Epochs in their own way,” in particular, according to the various incarnations of God, beginning with the First Incarnation of the Fish (*matsyavatara*), corresponding to the Paleozoic, in which herbs, microscopic fish, and trilobites flourished (p. 111). This was followed by the Tortoise Incarnation (*kurmavatara*), or the Mesozoic Age of Reptiles. The next age, the Tertiary period (of the Cenozoic) included a number of incarnations, corresponding to the series of life forms evolved during this period. These included the Boar Incarnation (*varahavatara*), for mammals in general, then the Man-Lion Incarnation (*nrisimhavatara*), regarded by Pavgee as “the link between *Man* and *Beast*,” and then the Dwarf-Man Incarnation (*vamanavatara*) and other human incarnations such as Rama (p. 112).

Here, then, we have a fairly complete summary of the avataric evolutionary theory, reminiscent of Blavatsky's geologically interpreted avataric ages.¹⁴ With Pavgee, however, we find no reference to Blavatsky's man-monkey (Rama's devoted servant Hanuman) as an evolutionary throw-back from human to ape; instead we see an easy acceptance of a missing link between human and nonhuman primates in the figure of the Man-Lion.¹⁵

It is not clear what Pavgee thought of these avataric speculations. On one hand, he warns us early in his book that direct empirical researches of the Vedic sages had come to an end by the time of the Puranas, so that "the original scientific geological theory seems apparently to have been all lost in the mist of religion" (p. 10). As a result, the Puranic descriptions of the geologic ages are "given in the grotesque ideas of incarnations and Mythological legends" (p. 10). On the other hand, near the end of the book Pavgee concludes:

I cannot resist the temptation to state, that our Indian theory of Incarnations, *viz.* first that of the Fish, the second of the Tortoise, the third of the Boar, the fourth of the Man-Lion, the fifth of the Dwarf-Wamana or Man, and so on, is nothing more than a metaphorical expression of the successive phases of geological evolution and development in the ascending order, from the Fish to the perfect type of Man, the crowning piece of creation. (pp. 130–31)

Even with regard to the Vedic evidence for evolution in general Pavgee is ambivalent. He thus characterizes the geologic notions of the Vedic forefathers as "incipient and yet scientific ideas" and as "crude but correct beginnings" (p. 4). He also argues, more forcefully, that there are "very cogent grounds and strong evidences to affirm, that the Rig-Vedic Rishis and subsequent sages had, in truth, very wide acquaintance with, and intimate knowledge of Geology" (p. IV), and yet, after reviewing all the literary evidence, he concludes that

the idea of our Vedic Fathers, in respect of the geological evolution, progressive creation, and successive grades of vitality, looks rather hazy, and does not appear to have been duly expressed in so many distinct words, still reading between the lines, and connecting the disjointed links of stray thoughts found in the Vedic literature, it is by no means difficult to give a connected whole. . . . (pp. 116–17)

Pavgee's avataric evolutionary theory, however tenuous, was a key part of a larger program not just to burnish Indian pride in its ancient scientific achievements but also to establish an idea that would become increasingly important in Hindu nationalist politics: India as the sacred homeland of Aryan culture. The primordial Aryanism of Dayananda Saraswati receives with Pavgee its geological imprimatur.

Pavgee established this theme in three basic ways. First, he argued that the area of northwest India, between the Saraswati and Drishadvati rivers, and the Saraswati River itself, are primordially sacred, being "the scene of creation, as it was the tract fashioned by God" ([1912] 2001, 38; cf. Pavgee

1915, 20–28, 78–80, 163–71). The waters of the Saraswati were the place of origin of life itself, as evidenced, according to Pavgee, by the Vedic verses that sing the praises of the Saraswati as “the best of Mothers, the best of Rivers, and the best of Goddesses” ([1912] 2001, 99). Pavgee concludes:

And all these praises [of the *Rig Veda*] seem to have been lavished on her [the Saraswati River], evidently for the reason that she was supposed to be the site not only of *the Aryan Home* and *the Human Cradle*, but was moreover, considered to be *the very region of the Origin* of life, or of vitality itself. Because, the river appears to have been thus addressed:—

[*Ive vishva sarasvati shrityumshi devyam*] (Rig-Veda. II.41.17).

“O Sarasvati, all life is in thee, who art divine.”

Now, this poetic effusion of the Bard does not seem to be an out-pouring of some hackneyed theme, or a common-place thought, or any meaningless expression, but appears to be an original idea in the researches of geology, as the poet had apparently hit upon some geological discovery, that *vitality had first come into play in the region of the river Sarasvati*. (pp. 99–100)

Pavgee attempts to clinch his argument by citing modern discoveries of fossils in pre-Cambrian rocks in the area of the Saraswati River, adding that the Vedic seers “had probably come across some fossils in the beds and regions of the river; and as these were considered to be the earliest life-types, it was naturally thought that *vitality had its origin in that region*” (p. 101). Not only life arose here, but humanity as well, that is, the ancient Aryans, who “*were born, and are born, and re-born, over and over again,*” in this God-given land (p. 37). It is “*a model region of discipline and order,*” and, according to the Mahabharata, the region from where “all men on earth should receive *their lessons* in their respective *duties* and responsibilities” (p. 38).

This brings us to Pavgee’s second argument for India as the sacred home of the Aryans. Responding to Western Orientalist assertions that the Aryans had invaded (or migrated) into the Indian subcontinent around 2000–1200 B.C.E., Pavgee does not directly disagree but rather reinterprets the migration into India as a *return* of Aryan colonists from the Arctic regions, which they had reached as part of a global imperial undertaking, driven by “their thirst for fame” and a “spirit of adventure and conquests abroad” ([1912] 2001, 61–62; cf. Pavgee 1915, 379–82). His inspiration for the idea of the Aryan return to Aryavarta was reinforced, if not suggested, by his favorite French savant, Jacolliot, who argued not only for India as “the world’s cradle” but also for an emigration of ancient Indians out of the subcontinent. In a passage much quoted by Pavgee, Jacolliot argued:

Traversing Persia, Arabia, Egypt, and even forcing their way to the cold and cloudy North, [the ancient Aryan emigrants traveled] far from the sunny soil of their birth; in vain they may forget their point of departure, their skin may remain brown, or become white from contact with snows of the West. . . . (Jacolliot 1870, x; quoted in Pavgee [1912] 2001, 152; 1915, 89; [1918] 1980, 102)

Taking a cue from his fellow Marathi activist-scholar, Bal Gangadhar Tilak (1856–1920), and the latter’s *Arctic Home in the Vedas* (1903), Pavgee supported the idea that the Arctic formerly had a mild climate during the interglacial periods of the Tertiary period, and adduces Vedic evidence that the Aryan ancestors had witnessed days and nights of six months’ duration and thus must have lived above the Arctic Circle. But finally, the last Ice Age drove the Aryans south some 8,000 or more years ago. What Pavgee refers to as the “junior branch” of colonists, namely the European Aryans, settled in parts of Europe and Russia, the “senior branch” of Iranian Aryans inhabiting Iran, while the “oldest of the stock,” the Indian Aryans, were led back to India, or Aryavarta, by the lawgiver Manu. Thus Manu saved his people from the Great Deluge—an event referred to in many ancient mythologies—but it was a deluge of sheets of spreading ice, rather than water, in Pavgee’s interpretation. With the return of the Indian Aryans to Aryavarta, the Kali Yuga commenced, known to Western geologists as the Quaternary period. As with his account of the prior geologic ages, Pavgee utilizes various Vedic and Brahmanic verses, as well as lines from the law book of Manu, to reconstruct his Tertiary and Quaternary history of the Aryan peoples.

Before turning to Pavgee’s third argument, it is worth noting the role that Pavgee’s interpretation of ancient Aryan migrations played in Indian nationalism. Tilak, although one of the pioneering founders of Indian nationalism, had proposed a theory of Aryan origins—an Arctic homeland—that would not sit easily with later nationalists as it entailed the undesirable conclusion that the Aryans, like the later Muslim and British imperialists, were invaders from outside India. Yet the Western scholarship of the time, especially regarding the linguistic and philological evidence relevant to the history of the Indo-European family of languages, including the sacred Sanskrit, strongly suggested that the ancient Aryans had migrated into northern India from western or central Asia. Pavgee’s solution, based more on astronomy, geology, and other natural sciences than on philology, reinterpreted the migration as a return. Clearly indebted to Tilak for the idea that the Aryans had once dwelt in the Arctic, Pavgee differed from his Marathi colleague in arguing for a prior emigration of Aryans out of India to the Arctic. The two often debated their respective theories, without coming to any reconciliation of views. Pavgee also went beyond Tilak in arguing “that the languages and cultures of the Greeks and the Romans were derived from the Vedas of the Arctic home” (Deshpande 2005a, 429). In any case, Pavgee is one of the first Indian nationalists to argue for the “Out of India” theory of Aryan migration, emphasizing India as the indigenous homeland of the Aryans, a position that later became the dominant model of such Indian nationalists as Madhav Sadashiv Golwalkar (Deshpande forthcoming).

Pavgee's third point follows easily from his second: Much of the ancient scientific knowledge of the Vedic forefathers was, he claims, destroyed after the Indian Aryans returned to India by later invading foreigners. This helps to explain, on one hand, "the paucity, if not the total absence, of any Indian Geological Literature worth the name" (Pavgee [1912] 2001, 6), thus accounting for the stray, fragmentary, and vague references Pavgee had to rely upon to reconstruct Vedic geology. On the other hand, it explains the current state of Aryan cultural impoverishment as primarily the result of external causes, a favorite theme of contemporary Hindu nationalists.¹⁶ As Pavgee colorfully states the case:

. . . the unsympathetic invaders had consigned to the flames, and reduced to ashes, immense libraries in various parts of India, and the scenes of devastations, massacres, and plunders, which lasted through ages, have only served to revive memory of the past. In short, after almost every city and capital was stormed and repeatedly sacked by barbarous foes, ruthless enemies, and exasperated plunderers, nearly all that was sacred in religion, every thing that was devoted to science, and whatever was but wonderfully remarkable in art, was destroyed without compunction and without remorse. ([1912] 2001, 6–7)

While Pavgee is embittered against the foreign invaders, he refrains from naming them. Clearly he has in mind the Muslim as well as the British conquerors, yet, with regard to the latter, he exhibits considerable deference to the British Orientalist scholars, at least toward linguistic and literary scholars such as Müller and Monier-Williams who praise the Vedic sages. He is equally deferential toward Western scientists, especially the geologists Charles Lyell and James Hutton, and of course Darwin. He is sufficiently impressed, apparently, by the discoveries and methods of modern science that he offers no critique of the scientific theories and substantive facts put forth by Western scientists. Rather, his strategy throughout is to stress the harmony between Vedic knowledge and "western" science. In the process, Pavgee offers an implicit critique of traditional Christianity with its rather circumscribed sense of time and space.¹⁷ Thus, in support of his basic claim of harmony between Vedic and modern science, Pavgee argues:

And may I here . . . be allowed to offer an humble suggestion that, *in time* as also *in space*, the confines of the Universe, or His works of creation, absolutely lie beyond the reach of mortal ken. Naturally, therefore, many Vedic scientists and subsequent Hindu philosophers, as also Western *Savants* and geologists, touch at times a most sonorous chord and strike a soft melodious note, by declaring their deep conviction, that so far as the primaevial state of our Globe was concerned, *there never was a beginning* to the present order of things. ([1912] 2001, 122–23)

Pavgee goes on to quote various Hindu sages and saints to make his point, including the following passage from the thirteenth-century Maharashtra saint Jnaneshwara: "This creation has been in existence from Eternity (*anadi*). That is to say, *it is without beginning and without end*" (quoted

by Pavgee, p. 123). He finds scientific corroboration of this basic Hindu notion in the famous statement of Scottish geologist Hutton: “We find no vestige of a beginning, no prospect of an end” (quoted by Pavgee, p. 124). The aligning of Vedic science with “western” science against Christianity is a theme persisting among Hindu nationalists to the present day.

Perhaps what is most striking about Pavgee’s reconstruction of Vedic science and the development of his avataric evolutionism is the total lack of reference to spiritual evolution, and hardly any to such notions as karma and reincarnation other than to suggest that Aryans have been reborn in Aryavarta since the beginning of humanity. Pavgee’s lack of attention to the spiritual may partially account for his relative obscurity, especially when compared to such Vedantic evolutionists as Vivekananda and Aurobindo Ghose. Pavgee saw the Vedic seers as world conquerors and especially as scientists, for whom “the geological theories then in progress . . . were at the time upper-most in the minds of the hoary Bards of the Vedic period” (pp. 12–13). Clearly Pavgee’s concerns were primarily political, and while he often respectfully deferred to the scientific views of Western scholars, whom he quotes frequently, his geologic theories and avataric evolutionism were developed to serve a fledgling Hindu nationalistic program. With Aurobindo we find the political elements not forgotten but merely submerged and the spiritual/mystical coming to the fore.

AUROBINDO GHOSE: INTEGRAL YOGA AND AVATARIC EVOLUTIONISM

Like many other Hindu intellectual elites of the time, including Keshub Chunder Sen, Vivekananda, and Pavgee, Aurobindo Ghose was impressed by Western science and technology, even while bitterly chafing at colonial rule and the general disparagement of Hindu culture by missionaries. He also recoiled even from the praise of such Indophiles as Müller who, despite their eulogies of Vedic literature, saw in the Vedas only a primordial, if pristine, nature religion or primitive form of Christianity. Thus Aurobindo admired the *Satyarthprakash* of Dayananda for its taking the Vedas seriously, and Aurobindo seems to have been prepared to endorse Dayananda’s finding of ancient Vedic science in spirit if not in every particular. He argued that Dayananda’s affirmation that the

truths of modern physical science are discoverable in the [Vedic] hymns . . . is increasingly supported by the recent trend of knowledge about the ancient world. The ancient [Vedic] civilization did possess secrets of science some of which modern knowledge has recovered . . . but others are even now not recovered. There is then nothing fantastic in Dayananda’s idea that Veda contains truth of science as well as truth of religion. (quoted in Garg 1984, 149–50; cf. Aurobindo [1914–1919] 1982, 13–14)

Unlike Dayananda, however, Aurobindo was more sympathetic to aspects of Darwinian notions of evolution. Much of Aurobindo’s integral yoga

was an attempt to integrate elements of Western evolutionary science, combined with certain Hegelian and Christian ideals, with Vedantic spirituality.

Aurobindo was thoroughly familiar with the culture of the British imperialists, having spent his formative years, from age seven to twenty, in England, to prepare for a career in the Indian Civil Service. He was taken there by his atheistically inclined father, a medical doctor who had trained in England and who rejected Hindu religious beliefs as superstitious. The father believed that the only hope for colonial India was to adopt the culture and values of the English. Aurobindo received a first-class education in Western classical thought in England and won high marks in Greek, Latin, English composition, and other subjects at the high school level and at Cambridge University.¹⁸

Although initially and intentionally cut off from his Indian cultural roots while in England, Aurobindo became familiar as a teenager with Indian nationalist ideas and soon harbored the desire to work for the independence of his fellow countrymen. At Cambridge University, while preparing for the Indian Civil Service examinations, he studied among other subjects Sanskrit, Bengali, Indian history, and Indian philosophy. This latter introduced him to the Upanishads in English translation and to the idea of Atman, the true Self that permeates all, in the perspective of Vedanta philosophy. With this exposure, he began to leave behind the skepticism and agnosticism that he had absorbed from his father. While performing well on the ICS examination, he eventually failed to qualify for the Service by refusing to show up for the horse-riding test, his way of ensuring that he would not end up working for the British government back in India.

Upon his return to India in 1893 soon after the death of his father, Aurobindo became an administrative assistant to the Maharaja of Baroda, where he lived and taught for the next thirteen years. He became a professor of English and French at the Baroda College and eventually its vice president. During these years, he began the regular practice of yoga, for its discipline and to strengthen himself in what he assumed would be his coming struggle against British dominion. He also came to know his maternal grandfather, Rajnarain Bose, a former leader and president of the Adi Brahma Samaj in the 1870s and champion of Hinduism as the highest form of religion. It was Rajnarain, according to Peter Heehs, who in the 1870s “helped launch the Hindu revival movement which heralded the end of educated Bengal’s century-long infatuation with Western ways” (1989, 6). Rajnarain was delighted to see that his grandson had rejected the ways of his father and was “eager . . . to become a thoroughgoing Indian” (1989, 26).

During his years in Baroda, Aurobindo delved fervently into his own cultural roots, immersing himself in the study of his native traditions, including further study of Bengali and later of Sanskrit. Around 1902, he

turned in earnest to the sacred writings of Vedanta, the *Bhagavad Gita*, and the Upanishads. As Robert Minor summarizes, Aurobindo came to three major realizations as a result of his study of the ancient Hindu scriptures: (1) the fundamental means of real knowledge is yogic perception or intuition, testified to in such revelations as the Upanishads; (2) there is an underlying, all-pervasive reality to the Universe, called Brahman in the language of Vedanta, and (3) the ultimate goal of human life is to harmonize or unite with this ultimate reality (Minor 1999, 19). Such views were to form the basis of his integral yoga developed during his years of meditation and writing in Pondicherry. These three realizations also provided the framework within which he elaborated upon his own ambivalent version of avataric evolutionism, modifying some elements of Darwinian evolution and firmly rejecting others, while still maintaining that his views were in harmony with modern science.

While in Baroda, Aurobindo's nationalistic zeal was also nourished. In 1898 he met three young Marathi nationalists—one of whom was an acquaintance from Cambridge—with connections with Tilak. Aurobindo since the time of his return to India had been critical of the majority faction of the Indian National Congress who saw British rule as a providential phase in the eventual development of India as a modern nation. In 1902, at a meeting of the Indian National Congress, Aurobindo met Tilak, a leader of the minority party who advocated immediate independence, possibly by violent means. His grandfather Rajnarain, known also as the Grandfather of Indian Nationalism, would have been pleased. In Calcutta in the 1870s, Rajnarain had headed one of the amateur secret societies springing up in Calcutta to work for Indian independence by whatever means. Rajnarain “was thus a trailblazer in both the political and revolutionary movements that a quarter-century later would be led by his grandson Aurobindo” (Heehs 1989, 6).

Aurobindo's newfound passion for his Hindu heritage, combined with his fervor for political independence, led to his famous dictum that nationalism is religion. He saw India's mission as bringing Vedanta to the world, but a mission India could not fulfill until free from British dominion. Quite naturally, he became a political activist in the Indian nationalist movement, leaving Baroda for Calcutta, where he continued advocating subversive activities against the British and plunged into the fray of revolutionary politics. Eventually implicated in a terrorist bombing that killed two British women, Aurobindo spent a year in the Alipore jail outside Calcutta before being released for lack of evidence.

While in jail, Aurobindo spent much of his time reading the Upanishads and the *Bhagavad Gita* and meditating. He underwent a radical spiritual transformation, experiencing the all-pervading Brahman/Atman even in the most hardened criminals in prison. His yogic experiences in jail, according to one devoted biographer, “more and more related him to the

evolutionary drive of humanity as a whole . . . and finally to the divine will operative in cosmic evolution” (Chaudhuri [1951] 1960, 7). Upon his release from prison, Aurobindo soon withdrew from political activism, leaving the work of achieving Indian independence in the hands of others. Eventually settling in the politically safer and less turbulent French district of Pondicherry, he devoted the rest of his life to yoga, meditation, and developing his philosophy and spiritual discipline of integral yoga.

The philosophical manifestation of Aurobindo’s spiritual transformation can readily be seen in his new interpretations of the Hindu scriptural tradition. For instance, prior to his internment in the Alipore jail, his understanding of the *Bhagavad Gita* was heavily oriented toward the political. He read the message of the *Gita* as calling for action, not passivity, in reaching the goal of liberation—the latter interpreted especially in terms of national independence rather than freedom from the realm of rebirth, as in traditional Vedanta. Aurobindo saw in the *Gita* indications that a new avatara was soon destined to come into the world, for God/Krishna descends whenever there is the need to relieve oppression. But for Aurobindo, some preliminary work was needed to prepare for the next incarnation; the divine avatara would come again to save humankind only when India was free from the British. Then India would be able to teach the world the solution to its problems: the unity of all beings as revealed in the ancient wisdom of the Vedanta that would save civilization from scientific atheism. After his transformative spiritual experiences, while settled in Pondicherry, Aurobindo offered a far more mystical interpretation of the avatara doctrine of the *Gita*—an interpretation that included the assimilation of certain Darwinian evolutionary ideas.

In his 1922 *Essays on the Gita*, Aurobindo provides an extensive commentary on the famous passage in the *Bhagavad Gita* (4.6–8) that sets forth the classic avatara doctrine according to which God/Krishna incarnates into the world in age after age whenever unrighteousness threatens the world. Aurobindo attempts to clarify in semi-naturalistic terms how the process of incarnation might occur. The process is not sudden but rather involves “some kind of evolution, physical or spiritual or both” ([1922] 1966, 150). The matter would be simple enough, Aurobindo tells us, if we first suppose that material nature, combined with a vital principle or life-spirit and using ordinary reproductive means—referred to by Aurobindo as “hereditary evolution”—, creates a body and mind appropriate for the avataric descent: “A physical and mental body is prepared fit for the divine incarnation by a pure . . . heredity and the descending Godhead takes possession of it” ([1922] 1966, 150). But then, according to Aurobindo, the *Gita* applies the notion of reincarnation or rebirth to the avatara himself. That is, just as an ordinary soul by its own past spiritual evolution determines the body into which it will be reborn, so apparently the supreme soul prepares its own body into which it will descend—a

spiritual rather than physical or “hereditary” process. Aurobindo then asks: “Are we then to suppose an eternal or continual Avatar himself evolving . . . his own fit mental and physical body according to the needs and pace of the human evolution and so appearing from age to age, *yuge yuge?*” ([1922] 1966, 150)

Aurobindo immediately proceeds to the answer: “In some such spirit some would interpret the ten incarnations of Vishnu, first in animal forms, then in the animal man, then in the dwarf man-soul, Vamana, the violent Asuric man, Rama of the axe, the divinely-natured man, a greater Rama, the awakened spiritual man, Buddha, and preceding him in time, but in final place, the complete divine manhood, Krishna” ([1922] 1966, 150–51). While such a view is difficult for modern minds to accept, Aurobindo concludes, “the language of the Gita seems to demand it” (p. 151).¹⁹ In sum, Aurobindo’s interpretation of the *Gita’s* avatara doctrine posits that the Godhead evolves for itself, and incarnates in, progressive animal forms to minister to the changing spiritual needs of souls as they are reborn in these same hereditarily evolved animal forms.²⁰

In expounding his avatara speculations as outlined above, Aurobindo uses the term *evolution* in at least three distinct meanings but with overlapping physical and spiritual components: (1) incarnational evolution, wherein the Godhead evolves various mental-physical bodies into which it descends; (2) spiritual evolution of the soul, sometimes referred to simply as human evolution; and (3) physical evolution, directed by the process of “pure heredity.”²¹ To understand more fully the interrelated meanings of evolution for Aurobindo, we need to look at the larger framework of his philosophy as a whole. The hallmark of his integral yoga is its assumption of a twofold spiritual process of involution and evolution. This process is loosely based on traditional Samkhyan dualistic notions of two eternal aspects of reality, Spirit or Consciousness (Purusha), and Matter or Nature (Prakriti), which includes various mental elements but not spiritual consciousness. According to Samkhya, the material evolution of Nature is responsible for the unfolding of this phenomenal world: Nature evolves out of itself very subtle forms of matter, which further evolve out of themselves increasingly grosser material forms, the entire process beginning with the mental elements of mind and intellect, continuing through the sense faculties, and concluding with the gross material objects of the senses. The subsequent entanglement of Spirit in Nature, by which the material mind and intellect become illumined and appear conscious, constitutes a confinement of the Spirit that is permeated by pain and suffering. Liberation from this entanglement involves distinguishing between what is truly Spirit and what is Matter and disengaging the two, in effect reversing the process of Nature’s evolution.

From his more monistic Advaita Vedantic perspective, Aurobindo sees both Nature and Spirit as ultimately a manifestation of the one absolute

Godhead (Brahman). During the process of cosmic manifestation, the underlying supreme Consciousness (what Aurobindo at times refers to as Supermind) comes to indwell in, rather than becoming entangled with, matter. This general process, whereby Consciousness manifests and indwells in Nature, Aurobindo calls involution, or descent of the spirit into matter.²² Descent into specific organic forms for the purposes of incarnational manifestation, summarized above, thus appears to be just a special case of the general involutory process. And in light of Aurobindo's involution-evolution ideas, the physical evolution of different animal forms represents only the reemergence of consciousness in these forms rather than a genuinely novel emergence. Physical evolution thus complements soul evolution, which completes the former. As Aurobindo states it, physical evolution

by itself would mean only a cosmic evolution; for the individual would be a quickly perishing instrument, and the race, a more abiding collective formulation, would be the real step in the progressive manifestation of the cosmic Inhabitant, the universal Spirit: rebirth [soul evolution] is an indispensable condition for any long duration and evolution of the individual being in the earth-existence. ([1914–1919] 1982, 826)

The final goal of soul evolution is not release of the Spirit from Matter, as in traditional Samkhya, but the spiritualization of Matter, the integral realization of the full potential of Matter and Spirit united in the Supermind.

It is the concept of soul evolution via rebirth, incidentally, that Hindus traditionally have used to resolve the problem of suffering in this world. That the world cycle is a realm of suffering and strife accords well with the Samkhyan and other ancient Hindu worldviews as well as with the Darwinian. For Aurobindo, it was thus an easy step to interpret Darwin's struggle for survival in terms of the soul's striving for liberation: "The struggle for life is not only a struggle to survive, it is also a struggle for possession and perfection, . . . a continuous permanence, a lasting survival. It is this truth that Darwinism sought to express in the formula of the survival of the fittest" ([1914–1919] 1982, 199).

It is time to return to Aurobindo's interpretation of the *Gita's* avatara doctrine. A close reading of his avataric reflections in the passages summarized above fails to reveal Aurobindo's attitude toward the evolutionary ideas of Darwin.²³ Aurobindo's purpose in elaborating his avataric ideas in *Essays on the Gita* was primarily to clarify how the Divine comes into the world, not to address issues of Darwinian evolution, despite the frequent use of evolutionary terminology. In any case, the "avataric evolutionism" found in the *Essays* is hardly the robust version of a Pavgee, Keshub, or Blavatsky.

A more definite exposition, however, is found in a collection of Aurobindo's letters titled "The Purpose of Avatarhood." In these letters Aurobindo points out the parallel between the avatars and the standard evolutionary sequence: "Avatarhood would have little meaning if it were

not connected with the evolution. The Hindu procession of the ten Avatars is itself, as it were, a parable of evolution" (1971, 401–2). In context, the meaning of the term *evolution* in the last phrase, "a parable of evolution," seems reasonably only to refer to Darwinian, organic evolution, although cultural and mental-spiritual evolutionary stages are included at the end of the physical or animal series. Aurobindo continues:

First the Fish Avatar, then the amphibious animal between land and water, then the land animal, then the Man-Lion Avatar, bridging man and animal, then man as dwarf, small and undeveloped and physical but containing in himself the godhead and taking possession of existence. . . . Krishna, Buddha and Kalki depict the last three stages, the stages of the spiritual development. (1971, 402)

Aurobindo uses these final stages to emphasize his ideal that the final goal of soul evolution is not release from the material world but the spiritualization of all Nature: "Krishna opens the possibility of overmind, Buddha tries to shoot beyond to the supreme liberation but that liberation is still negative, not returning upon earth to complete positively the evolution; Kalki is to correct this by bringing the Kingdom of the Divine upon earth" (p. 402). Buddha, as well as the famous Advaitin scholar Shankara, according to Aurobindo, both made the mistake of trying to achieve a static liberation via "a nameless and featureless Absolute," and thus Kalki is needed to rectify the emphasis on passivity and world renunciation in order to realize the dynamic aspect of liberation in the Supermind (pp. 402–3). Aurobindo concludes his "parable of evolution" with the statement: "The progression is striking and unmistakable" (p. 402).

It would seem that here we have a wholehearted endorsement of a full-bodied avataric evolutionism. But we find that Aurobindo soon demurs. In another letter referring to these comments, Aurobindo partially recants: "I was of course dealing with the ten Avatars as a 'parable of the evolution', and only explaining the interpretation we can put on it from that point of view. It was not my own view of the thing that I was giving" (p. 403). Later he rather ambiguously states, "I only took the Puranic list of Avatars and interpreted it as a parable of evolution, so as to show that the idea of evolution is implicit behind the theory of Avatarhood" (p. 403). It is far from clear that the "idea of evolution" here refers to a robust Darwinian evolutionary theory, but it seems to leave open the possibility, at least, that Aurobindo found some sort of scientific, evolutionary anticipation in the Puranic sources, however allegorical, parabolic, or implicit it may have been.

Two related questions arise at this point. First, why was Aurobindo so reticent to endorse a full-bodied avataric evolutionism? And second, whose view was he apparently reporting, since he explicitly disavows it as his own? Let me take the second question first.

A somewhat earlier commentator on the *Gita* who may have been the immediate inspiration for Aurobindo's interpretation also insisted upon a

highly allegorical reading of the doctrine of the avatars. This earlier commentator, in a four-part lecture on avatars delivered in 1899 in Madras, affirmed that Krishna or the Supreme incarnates not only to deal with human needs, as in the *Gita* itself, but also to ensure the development of the organic universe at large: “there are certain kosmic necessities which in the earlier ages of the world’s story called forth special manifestations. When in the great wheel of evolution another turn round has to be given, when some new form, new type of life is coming forth, then also the Supreme reveals Himself, embodying the type which thus He initiates in His kosmos” (Besant 1899a, sec. 6). The same commentator later asserts that the ten major avatars “mark stages in the evolution of the world. They mark new departures in the growth of the developing life” (1899b, sec. 51).

This notion that the divine manifests or self-reveals in special organic forms corresponding to the needs of the evolving cosmos has considerable resonance with Aurobindo’s idea that avatars prepare for themselves the organic forms or types needed for the various stages of physical-spiritual evolution. In his discussion of the purpose of Avatarhood, Aurobindo notes, “The Avatar is necessary when a special work is to be done and in crises of the evolution” (1971, 401). He adds: “If we admit that the object of Avatarhood is to lead the evolution, this [notion] is quite reasonable, the Divine appearing as Avatar in the great transitional stages” (p. 402). Aurobindo also refers to the vast Yugas or ages in which the different avatars appear as “successive periods in the cyclic wheel of evolution” (p. 403).

The earlier commentator, Annie Besant, was the intellectual heir of our earliest avataric evolutionist, Madame Blavatsky of the Theosophical Society (see Brown 2007). Besant became president of the Society in 1907 and continued in this role until her death in 1933. She also became involved in the Indian Nationalist Movement, founding the Indian Home Rule League and becoming its president in 1916, and then serving as president of the Indian National Congress in 1917.

Besant, like Blavatsky before her, was ambivalent toward Darwinism. Her ambivalence is made clear in her occultist interpretation of the avatars, an interpretation unknown to modern minds bound by the limits of material science. This interpretation, effectively, is a radical rejection of Darwinian evolution, although the latter is not explicitly denied but simply confined to the lower realm, or material plane, which in the final analysis of Besant is only a plane of illusion. From the standpoint of the higher plane, the deeper truths of this illusory world can best be put forth as allegories. Through such an allegorical interpretation, she argues that true evolution is basically the divine imagining of the different types, or archetypes, that eventually manifest themselves as copies in the physical world. Thus, the archetypes of the various species were created more or less simultaneously, even if they may manifest in the physical sphere in the order suggested by geological science. Human beings existed, accordingly, in

subtle forms, before manifesting in the physical evolutionary sequence. Incidentally, this explains why the Puranas may talk about human beings already existing during the evolutionary stage of fishes; subtle humans existed when physical fishes were evolving.

This kind of occult interpretation is especially clear in Besant's comments on the second avatara, the Tortoise, who as he swam in the mythic Milk Ocean used his broad back as a resting place for the churning stick, the mountain Mandara. With the churning, a variety of forms emerged. Besant's analysis of the Tortoise as "the base of the revolving axis of evolution" is as follows:

So the churning begins in matter, evolving types of life. The type is ever evolved before the lower manifestation, the type appears before the copies of it are born in the lower world . . . these are the archetypes, as we call them, of classes and creatures, always produced in preparation for the forward stretch of evolution. There came forth one by one the archetypes, the elephant, the horse, the woman, and so on, one after another, showing the track along which evolution was to go. (1899b, sec. 60)

Here we see in full force a Platonic-style emphasis on archetypes, combined with a directed and progressive unfolding of physical forms.

Aurobindo accepted the notion of progressive unfolding of organic life, perhaps inspired by Besant. But to what extent did he share her views on species archetypes and the idea of physical beings as mere copies?

To answer this question, we need to look carefully at what Aurobindo means by physical evolution, to which he so often alludes. In his *The Life Divine*, he explains that physical evolution, complementary to the "invisible process of soul evolution," has as its mechanism physical birth and heredity, which helps to preserve the race or species. As Aurobindo puts it, "there is an outward visible process of physical evolution with birth as its machinery,—for each evolved form of body housing its own evolved power of consciousness is maintained and kept in continuity by heredity" ([1914–1919] 1982, 825).

Aurobindo is aware of the critical distinction between the concept of the evolution of species through mutation and natural selection and the related idea of maintenance or stabilization of species through the more clearly observable everyday processes of heredity and birth. But in a move similar to that of recent creationist arguments in America that evolution is "just a theory," Aurobindo regards only the stability of species through heredity as scientific fact, dismissing the notion of species transmutation as belonging to those generalizations or theories based upon facts but which are not demonstrated and thus usually short-lived. He thus argues:

Heredity, upon which Science builds its concept of life-evolution, is certainly a power, a machinery for keeping a type of species in unchanged being; the demonstration that it is also an instrument for persistent and progressive variation is very questionable; its tendency is conservative rather than evolutionary. . . . All the

facts show that a type can vary within its own specification of nature, but there is nothing to show that it can go beyond it. (pp. 828–29)

He goes on to apply this critique specifically to humankind: “It has not yet been really established that ape-kind developed into man; for it would rather seem that a type resembling the ape, but always characteristic of itself and not of apehood, developed within its own tendencies of nature and became what we know as man, the present human being” (p. 829). In today’s terminology, Aurobindo radically separates microevolution and macroevolution and accepts only the former.

Aurobindo concludes by reasserting the venerable notion of a continuous but nondynamic chain of being, or scale of nature: “Here as elsewhere each grade of being exists in itself and by itself, is manifested according to its own character by its own proper energy, and the gradations above or below it are not origins and resultant sequences but only degrees in the continuous scale of earth-nature” (p. 829). He later elaborates that each type of being, including humankind, “has its own native law, limits, special kind of existence, *svabhava*, *svadharma* . . .” (p. 831). We thus see that Aurobindo, like Besant, accepts the notion of ideal types, but he rejects her idea of organic forms as mere copies, at least in the sense that this might reduce them to illusory status, preferring the traditional Hindu notion that each being or species has its own essence and law (*svabhava*, *svadharma*) wherein the Divine may come to indwell in its cosmic existence.

To bolster his rejection of the gradual processes of the Darwinian mechanisms of mutation and natural selection, Aurobindo notes certain objections to the theory that were being raised early in the twentieth century: “the first idea of a slow and gradual evolution is being challenged by a new theory of evolution through sudden and rapid outbursts” ([1921] 1944, 4). This may sound like a prescient anticipation of Niles Eldredge and Stephen Jay Gould’s punctuated equilibrium, but Aurobindo goes on to draw various supernaturalistic conclusions, including reconsideration of “theories of vitalism, idealistic tendencies of thought, which were supposed to have been slain by the march of physical Science” (p. 4). Even more explicitly, Aurobindo argues: “it is now suggested that new steps in evolution are rather effected by rapid and sudden outbursts, outbreaks, as it were, of manifestation from the unmanifest” (p. 9). In short, he ends up as what I call a punctuated creationist.²⁴ It seems quite likely that Aurobindo’s hesitancy to accept a full-blown avataric evolutionism along the lines of a Pavgee or Keshub was the result of his fundamental rejection of Darwinian transmutation of species.

Perhaps, were he alive today, Aurobindo would recognize the problematic nature of his acceptance of the common creationist distinction between microevolution and macroevolution. Would he recognize in his hesitancy to accept the full implications of Darwinian evolution a superimposition upon nature of his own preconceived notions? Aurobindo was

certainly aware of the need to be self-critical about one's presuppositions and the danger of those presuppositions coloring one's view of nature. He interpreted such coloring, in fact, in terms of the Vedantic notion of superimposition, *adhyaropa*, used in the monistic Advaita school to explain the illusion of thinking of oneself as an active, individual agent through superimposing such a notion on one's true identity as the nondual and nonacting Self (Atman). Thus, he saw as one of the major contributions of modern science to civilization "the scientific method of knowledge,—which is to induce Nature and Being to reveal their own way of being and proceeding, not hastening to put upon them our own impositions of idea and imagination, *adhyaropa*" (p. 44).

Despite his distrust of Darwinism, Aurobindo espoused certain insights of secularism and modern science regarding the reality of the physical universe, rejecting the world-illusionism that affected much of traditional Vedanta. He regarded secularism and science as revealing "the truth and importance of the earth life and the human endeavour, its evolutionary meaning" (p. 44). Yet ultimately he denied both the progressive and innovative nature of modern science, reverting to the sacrosanct Hindu notion that knowledge is something recovered rather than discovered: "In reality, we are continually rediscovering the knowledge and repeating the achievement of the ages that have gone before us" (p. 23). Aurobindo thus proved himself a worthy heir of the romanticized and revivalist Aryan/Vedic tradition of Dayananda, Vivekananda, and Pavgee and the intuitionist ideals of the first two.

POST-COLONIAL DEVELOPMENTS

Since the time of Keshub, Pavgee, Aurobindo, and the early Theosophists, the avataric evolutionary theory has retained a degree of popularity among various sorts of Hindus into the twenty-first century, despite the rejection of a robust Darwinism by many well-known neo-Vedantic thinkers including Aurobindo and Sarvepalli Radhakrishnan. Those who support avataric evolutionism today rarely cite, and most probably do not know, the historical sources of the theory.²⁵ Most of the post-colonial (post-1947) commentators do little more than note the parallels between the sequence of avatars and the stages of organic evolution, with varying degrees of earnestness. Bhagavan Das, for instance, simply notes that the ten incarnations may be thought of "as Puranic allegories of the stages of psychophysical evolution," as well as "typifying the fact of the appearance of leaders amongst animals also" (1962, 8–9). In this statement Das implicitly highlights three common themes of avataric evolutionism: (1) the ancient myths are to be read symbolically or allegorically; (2) psychological (spiritual) evolution is part of the developmental sequence; and (3) there is physical/spiritual continuity between humans and other animals.

There are for the most part no further theological elaborations or political implications drawn beyond what our pioneering theorists have already laid out, although scientific details from recent discoveries in cosmology, paleontology, geology, and even molecular science may be added. We see this in a more detailed and updated rendering of avataric evolutionism, reminiscent of Pavgee's and Blavatsky's geological version, in Ayodhya Chandra Dass's article "Vaisnava Incarnations and Biological Evolution" (1981). Dass first makes the familiar argument that myths are factual knowledge "presented in a symbolical way" and then affirms that "the ten principal incarnations represent ten different parts of the entire human history" (p. 49). By human history Dass means the history of terrestrial life "since the Paleozoic Era to the Recent Age, or it even embraces the future" (p. 49), thereby emphasizing that human or soul evolution encompasses progression through the whole of the animal kingdom. While noting the absence among the avataras of any representation of plant evolution (despite tree worship in the Rig Veda), Dass simply consigns this fact to a mystery needing further investigation. Among the ten avataras, Dass sees in the Tortoise not only the emergence of the amphibious class but also reference to a great geological disturbance of the ocean—recall the churning of the Ocean of Milk story associated with this avatara—resulting in the uplift of mountains such as the Himalayas. The Boar avatara, who lifted the earth out of the ocean, in similar manner "may indicate some unusual phenomenon of geological upheaval of a sea bed" (p. 52).²⁶ The Man-Lion, because of his large size, "suggests a species of *anthro-pithecus*" emerging in the Miocene period, while the Dwarf "bears a close similarity with the Neanderthal-man" (pp. 52–53).²⁷ The next four incarnations (sixth through ninth) "clearly represent four different phases of human history of Indian civilization," with Kalki, the tenth, yet to appear (pp. 54–55). It is worth noting that Dass's article was published by the Bharatiya Vidya Bhavan, an institution founded in 1938 and among whose goals is the correlation of ancient (Hindu) insights and modern discoveries.²⁸

One radical new twist on avataric evolutionism is given by the Indian Marxist writer known simply as Kashinath. In his view the avataric sequence reveals "that our elders had some kind of scientific idea of the evolution of life and man, similar to Darwinian and, also, the evolution of human society similar to Marxian" (1997, 2). Kashinath's materialism is a tolerant one, as he argues that there has been a synthesis of the religious idea of a life-infusing soul inserted into matter by God and the scientific idea of life and consciousness evolving or emerging from matter itself. He argues that the difference between the two ideas is immaterial, since evolution is a fact, and God could have used evolution as the method of creation. Kashinath rejects Bhagavan Das's portrayal of the avataras as supernatural beings, which educated persons can see only as myths and imaginary beings. Kashinath gives the avataras an euhemeristic interpreta-

tion, the fish (*matsya*), for instance, referring to the Matsya chief or tribe who helped the ancient Aryans, and the Varahas probably being a people with a boar totem (pp. 6, 14). In any case, Kashinath reasserts that the theory of evolution of life and culture is “the result of a long scientific and historical research of universal nature” and that the “theory of avatars suggests that our elders also had, in those remote days, an idea of the evolution of life, man and human society” (p. 4).

Such an euhemeristic interpretation of the avatars is not new. The nineteenth-century Orientalist Jacolliot, ironically cited with approval by such early avataric evolutionists as Pavgee and Blavatsky in other contexts, subscribes in general to a euhemeristic interpretation of the ancient gods, Hindu and otherwise. With specific reference to the Vamana (Dwarf) incarnation, for instance, Jacolliot writes: “Faithful to their practice of referring everything to God, the Hindus have attributed [the discovery of iron] to Vamana, incarnation of Vischnou” (Jacolliot n.d., 14; my translation). Thus Jacolliot interprets the Dwarf as a culture hero to whom the Hindus ascribe the discovery of iron, just as the Bible attributed the discovery to Tubalcain.²⁹

A very recent spokesman in the Hinduism-and-science dialogue, physicist Varadaraja V. Raman, in an article proposing a bridging of traditional Hinduism and modern science, alludes to the “uncanny parallel” between the traditional avataric sequence and current views of evolutionary development (2003, 189). He further notes that avataric evolutionism “transcends the current scientific picture” and contains the insight that “not just humanity but all life [is] a manifestation of the divine (*imago dei*)” (2003, 189)—an apparent critique of scientific naturalism as well as an invitation to Christian theologians to engage with the Hindu. Raman cautions us, however, about the temptation to see in the sequence of avatars “a propaedeutic to Darwinian evolution” (p. 189). With this caution, it seems, we see a traditionalist Hindu apprehension arising with regard to a full-fledged Darwinism, an apprehension such as we found in Aurobindo. Raman’s concern is apparently not so much with the insightful anticipation of modern science by the ancients as with Darwinism itself. He characterizes the ancient insight as one that realized the “different *levels* of sophistication” of various organisms, but “to conclude that they are in different *stages* of an *evolutionary* process is a huge leap” (p. 189). He thus urges that “considerable observational studies” are needed before we can confirm Darwinian evolution (p. 189).

In personal conversation with Raman, I have found him to be much more supportive of Darwinism than the impression given in the article. The reasons for his ambivalence are suggested in that same article: “In some instances, Hindu reflections on reality, particularly the Hindu view of nature, ‘anticipated’ our modern scientific knowledge; in other instances, what modern science says contradicts what traditional religion-based views

affirm. I find myself living in both worlds” (p. 186). He explains that from the Hindu perspective, scientific method is one mode of discovering or comprehending “the substratum of physical reality,” but in addition, “it can also be apprehended through the mystical mode via meditation, prayer, or yogic exercises” (pp. 191–92). He acknowledges that “the efforts to find harmony between the findings of modern science and traditional Hindu visions of the cosmos “are interesting at the analytical and academic levels, but in the actual practice of faith, many people such as myself, find them quite unnecessary, and sometimes even awkward” (p. 192). He concludes: “If there is splendor in the perceived world and pattern in its functioning, and if it can all result in the grand experience of life and thought, then even prior to the advent of humans, there must have been a *purusha* [cosmic Mind or Spirit] of a vastly superior order, an Experiencer who spanned the cosmic range in space and time” (p. 193). Raman’s interpretation of avataric evolutionism, then, seems very similar, in a modern context, to Aurobindo’s notion that it is only a “parable of evolution,” which it would seem Raman must finally disown.

Avataric evolutionary theory and the controversies surrounding it have made their way onto the World Wide Web. In my earlier essay (Brown 2007) I quoted two Internet authors, Dr. Kurian Kachappilly and Swami Prakashanand Saraswati, who espouse and reject, respectively, the theory of avataric evolutionism. Yet, both writers share a considerable respect for science as well as a certain antipathy to various aspects of Western culture. Other Internet authors frequently plagiarize older sources, or each other, in their enthusiasm to propound avataric evolutionism on a worldwide basis.³⁰ One, an anonymous “rishi editor” and self-professed Shaiva (follower of Shiva rather than Vishnu), even asserts that Darwin did not “propound anything new, but we presume that he studied our scriptures deeply, and came out with his theory” (Anon. n.d.), although Darwin had a rather negative view of Hindu scriptures. Intriguingly, the Shaivite editor interprets the avatars after Rama as representing increasing stages of human degradation rather than progression, a process that the editor claims “continues through Sri Krishna” and will conclude with Kalki who will destroy the present Kali Yuga (corrupt age). Such a view, harmonizing with traditional Hindu views of the cyclic decline of the universe and its complete destruction before the beginning of a new cycle, presents an interpretation of Kalki that is very different from Aurobindo’s and suggests the possibility of significant sectarian differences in the interpretation of avataric evolutionism. Yet, like Aurobindo, the Shaivite editor in the end rejects Darwinism:

A human being is not the consequence of any kind of evolution procedure. He has his own personal characteristics and destiny that could be as great as becoming a God realized Saint. But an animal, no matter how gross or how intelligent he is (from a donkey to the most intelligent being of the animal world, an el-

ephant or a chimpanzee), he is bound to live and die and remain in the animal world until his soul is born in a human family. (Anon. n.d.)

The interpretation of Kalki, an avatara yet to come, is open to all sorts of futuristic interpretations and implications for science as well as for the fate of the world. One of the more imaginative scenarios is presented in this blog entry:

There seems to exist some amount of uncertainty regarding the form of Kalki. Some say he is part human and part horse with the head of a human and torso of a horse. This may be assumed as a prognosis. This clearly refers to genetic engineering. Cloning is gaining momentum and the human genome has captured the imagination of millions in recent times. This form of hybridization to create a superior being might have been the *point d'appui* of the story of the *Kalki avatara*. (Vinod 2002)

Very few sites take a critical approach to avataric evolutionism. One such critical site is that of Vinay Lal, Associate Professor of History at UCLA, who notes that “Though some might read in the narrative of the avatars a strict linear progression, the numerous texts belie such a mechanical interpretation” (Lal n.d.).

The continuing political sensitivity of avataric evolutionism is well illustrated in the Indian popular media, as it finds its way into the present controversy over who best speaks for Hinduism, outsider academics, or the faithful insider.³¹ In his 2005 article “Harvard Don Denigrates Hindus” that appeared in a New Delhi newspaper, Kanchan Gupta writes of Harvard’s Professor Michael Witzel, “Witzel sneers at the Hindu belief in evolution, enshrined in the Ten Incarnations, which include the Varaha, the wild boar. He writes that second generation [Hindu] people just understand [Hinduism] as ‘boaring rituals’ (puja, etc.), temple visits and Indian (mythological) comic books. . . .”

The Internet appearances and popular media thus reflect the long history of avataric evolutionism with all its cultural, political, theological, and philosophical ramifications.

CONCLUSION

With the gaining of independence in 1947, Indians no longer needed to use avataric evolutionism as part of any nationalistic agenda against British political imperialism, although it is still invoked against an alleged colonialist intellectual imperialism. The older nationalistic feelings fed into ethnic and cultural pride in India’s ancient achievements. Almost invariably proponents of avataric evolutionism today are motivated by pride in the presence of the ancient Vedic or Puranic sages in anticipating the discoveries of modern science. Avataric evolutionism is also used to confirm the modern and scientific nature of Hinduism and the Vedic tradition, often illustrated by noting the insight into the unity of humans and animals manifest

in the traditional avataric myths. Such insights are sometimes used to show the superiority of the Hindu to the Abrahamic religions that insist upon a radical uniqueness of humankind.

Avataric evolutionism is also used to critique Western science and materialism, because the avataric sequence goes beyond mere organic evolution to include a more “holistic” vision of human destiny that encompasses the spiritual as well as the physical (and cultural). Sometimes embedded in such critique is a negative evaluation of scientific epistemology, or at least a positing of the equality or even superiority of intuitive and yogic modes of perception that go beyond the rational and sensory.

Rarely do proponents critically analyze the basic assumptions of the theory, such as the historical plausibility of an ancient Vedic Darwinism and the extremely vague nature of the parallels—parallels that can be readily accounted for by the general human ability to discern a hierarchy among major classes of animals as reflected in the culturally widespread notion of a chain or scale of being. Further, the clear linear sequence assumed by avataric evolutionism is not reflected in the many texts that either overlook some of the famous ten, or include many others, or place them in a different order. Nor is the fact that many of the animal avatars are said to take place when human beings are already existent (although we may recall that Besant offers a mystical explanation). A closely related issue is the problem of the transitional link between animal and human, despite ingenious attempts to place this role on the fairly obvious half-human, half animal Man-Lion, or on the still-developing, small primate of the Dwarf, or even on Rama (whose arms are described in the *Ramayana* as reaching to his knees, a characteristic of gorillas).³²

More troubling from philosophical and theological perspectives, proponents seldom ask whether the ancient avataric stories really were intended as science rather than as devotional inspiration, a very reasonable critique made by the anti-Darwinian guru Prakashanand Saraswati. Nor is it asked whether yogic intuition is a reliable means of learning about the empirical workings of the universe. A vague awareness of these critical issues, I suspect, underlies the frequent reference to the avataric stories as only symbolic, allegorical, or parabolic representations of Darwinism, as well as the occasional tension between commending the idea of avataric evolutionism as evidence for ancient sagely prescience, on one hand, and rejecting species transmutation in favor of the unique and inherent nature especially of human beings, on the other.

As Wilhelm Halbfass notes, the most momentous aspect of the Hindu encounter with the West in the nineteenth and twentieth centuries was the challenge of modern science and technology (1988, 399). Halbfass points out three models developed by Hindus to meet the challenge. The first was “a model of mutual supplementation or even exchange,” in which India was regarded as superior in spiritual matters, the West in scientific

and mechanical, and the two civilizations could learn from each other. Halbfass includes as proponents of this model Rammohan Roy, Keshub Chunder Sen, and Vivekananda. The second model, a variant of the first, acknowledged Western superiority in physical or outward sciences but saw India as superior in the inward sciences, “the inner, mental sphere, the realm of consciousness and the self.” Vivekananda also promoted this model, as did Aurobindo and Radhakrishnan. The third model affirmed India as “the original homeland of all science and technology” and as the ultimate source or inspiration even for Western science. Halbfass refers to Dayananda Saraswati and his followers as the most conspicuous promoter of this model. Pavgee clearly was drawn to this model.

While the above models provide insight into the general religion-and-science encounter in colonial India, Darwinism posed its own special challenge. Proponents of avataric evolutionism, for instance, might subscribe to any of the three models in terms of science and technology in general. With regard to evolution, however, all develop some variant of the third model. What distinguishes avataric evolutionists is the degree to which, on one hand, they accept the ancient myths as more literal or more allegorical anticipations of Darwinism, and on the other, how qualified their acceptance of organic evolution actually is. Only Pavgee among the early proponents seems to have accepted organic evolution without ambivalence or qualification. He also is the only major figure discussed who based his avataric evolutionism on (claims of) ancient Hindu empirical studies rather than on ancient yogic intuitions or divine revelation. It would seem that clarification of the many cultural, political, philosophical, and theological issues awaits precisely a resolution of the epistemological issues underlying avataric evolutionism. Only then can the many meanings of *science* (such as higher and lower, or material and spiritual) begin to be disentangled and the insights of the ancient Hindus appropriately contextualized.

NOTES

1. I do not examine Vivekananda's evolutionism in depth, simply because he did not develop his views with reference to the avataric succession of life forms. For readers interested in Vivekananda's evolutionism in greater detail than this essay provides, see Killingley 1990; 1995.

2. I have indicated words and punctuation left out by Chamupati from Maeterlinck's original in square brackets, and an addition by Chamupati in braces.

3. This passage is very similar to, and likely derived from, Madame Blavatsky's *Isis Unveiled* (1877, Pt. One, 620; Pt. Two, 260, 274–75).

4. Another reason that may have led Chamupati to ignore this statement is Maeterlinck's reference to the *Bhagavata Purana*. Dayananda considered the Puranic literature as a whole to be a corrupt offshoot of the pure truths found only in the Vedas.

5. As J. E. Llewellyn notes (1993, 113), Dayananda placed the creation of the universe, complete with humans, back some two billion years ago, and from then until five thousand years ago there was one universal kingdom ruled by Aryans.

6. Pavgee cites for the quotation an article of Monier-Williams in *The Indian Magazine and Review*, no. 249, September 1891. Vivekananda's quotation is slightly different and is cited from a speech by Monier-Williams at Oxford University (Vivekananda [1907] 2003, 9:25).

7. For the statement underlying Pavgee's inspired conclusion, see Müller [1883] 1999, 33.
8. This is my translation of the Devanagari text provided by Pavgee ([1912] 2001, 15). All translations of Sanskrit passages utilized by Pavgee are mine, based on the Devanagari texts he provides.
9. Unless otherwise noted, I have deleted the Devanagari text for terms and phrases that Pavgee often parenthetically includes from the original Sanskrit.
10. Text provided by Pavgee ([1912] 2001, 18).
11. Text provided by Pavgee ([1912] 2001, 22).
12. I have transliterated Pavgee's Devanagari parenthetical terms. Incidentally, Pavgee comments on the first part of this text in *The Aryavartic Home* (1915, 8) to the effect that the discovery of plants as evolving before animals by "our hoary Vedic Geologists" has been confirmed by modern scientists.
13. Dayananda, interestingly, argues in similar manner that the term *dev* (*deva*) refers not to deities but to persons who are learned (Llewellyn 1993, 94).
14. In my prior essay in *Zygon* on avataric evolutionism (Brown 2007) I examined in some detail Blavatsky's initial rendering of the theory as given in *Isis Unveiled*. Blavatsky elaborated the idea in somewhat scattered metaphysical and esoteric detail in her later book, *The Secret Doctrine*. See for instance the section "Archaic Teachings in the Puranas and Genesis" (1888, 2:251–63).
15. For Blavatsky's views, see Brown 2007. As for Pavgee's missing link, he writes: "Now, with reference to the type of the *Man-Lion*, supposed by our Vedic as well as Puranic geologists to be the precursor of Man-kind, and probably as a *connecting link* between the *brute intelligence* and the *reasoning powers of man*, I may here observe in passing, that the Man-Lion was, in all likelihood, supposed to be one of the *lost types* of the anthropoid primates; or, it might be, that the geological knowledge of our ancestors was imperfect. But in all probability, the *fossils* of such an *anthropoid primate* were found by our older ancestors, as some details appear to have been given in respect of the powers and qualities of the *Man-Lion*" ([1912] 2001, 88–89). Pavgee concedes that Western geologists are unlikely to be persuaded that the Man-Lion is the missing link, so used are they to thinking in terms of an ape or chimpanzee, unless such a man-lion primate fossil is eventually discovered. Pavgee was clearly unaware of the evidentiary bases, such as comparative anatomy, that scientists of his day relied upon to establish the ape as far closer to humans than the lion in the evolutionary branching of life.
16. This contrasts markedly with Dayananda Saraswati's view of the causes for the degeneration of Aryan culture from its former pristine state in the Vedic Golden Age. For Dayananda, the cause was not external but internal to the Hindu tradition, namely the great Mahabharata war (Bhatt 2001, 18).
17. As Chetan Bhatt notes, the late-nineteenth- and early-twentieth-century Hindu nationalist movements were often motivated by opposition to Christianity, not just to Islam (2001, 22).
18. My biographical summary is based largely on Heehs 1989 and Minor 1978.
19. Aurobindo goes on to posit other possible interpretations, since he admits that the *Gita* does not explicitly "solve the problem" of the avataric process, but notes that the alternative possibilities go even further into the mystical field from which modern rationality shrinks ([1922] 1966, 151).
20. A somewhat similar view is expressed by Bhaktivinoda Thakura in his *Sri Kṛṣṇa-samhita* (written in 1888). According to him, a living entity or soul when conditioned by Maya (delusion) accepts the position of a fish, tortoise, boar, man-lion, and so forth, according to the soul's nature and mood. Then the Lord takes on a corresponding form out of sympathy and for the welfare of the soul. For Thakura, the progression of forms that a soul accepts reflects only the spiritual or moral status of the soul, and not, apparently, any sort of organic or Darwinian evolution ([ca. 1888] 1998, 88–89). Aurobindo, as we shall see, is likewise reticent to accept a robust, Darwinian notion of species transformation.
21. This physical evolution, for Aurobindo, is only immediately directed by the process of "pure heredity," for ultimately, in his view, it seems to be guided by divine intention.
22. As Dermot H. Killingley points out, Aurobindo's use of the term *involution* to indicate the evolutionary process of the unfolding of the physical universe, while generally reserving *evolution* for the reversal of this unfolding, goes against earlier usages of the latter term, at the same time providing a certain clarity (1995, 195–96).
23. David L. Gosling also quotes Aurobindo's interpretation of the *Gītā*'s avatara doctrine, noting that "the evolutionary sequence of avatars is similar to Keshub's and may have been

taken over from him" (1976, 57). After discussing other related views of Aurobindo, Gosling concludes: "It is difficult to say whether such statements are made with reference to scientific knowledge, or are merely the result of Aurobindo's own imaginative reflection" (1976, 57).

24. Similar views have been followed by other influential Neo-Vedantins, such as Sarvepalli Radhakrishnan. He notes, for instance: "When we pass from animal to man, we find not a gradual development but a sudden break, a leap into a new form of experience . . . man is not simply the animal gone up any more than an animal is a man gone down. Between the two there is a gulf. No amount of scientific observation can help us to explain the astonishing change" (1937, 262–63).

25. The Vaishnava devotee Raghavan Srikanth (1997) indirectly seems to acknowledge Aurobindo. After referring to the idea of avataric evolutionism, Srikanth warns that the lessons of ancient myths and of modern anthropological theories may suggest "self-interest" as the driving force behind evolution (with reference to the "selfish gene"). But he then cites Aurobindo as one thinker who suggests a "more global" (altruistic) interest behind the development of the world that is responsible for human evolution. See also "Avatar: What Is an Avatar?" by an anonymous devotee of the contemporary spiritual teacher Mother Meera (Anon. 2004). The devotee quotes Aurobindo's statement beginning with "Avatarhood would have little meaning if it were not connected with the evolution," which I have discussed above.

26. Cf. Blavatsky: "he who reads the Hindu Puranas—its allegorical exaggerations notwithstanding—will find them quite in accordance with physical Science. Even what appears to be the, on the face of it, perfectly nonsensical allegory of Brahma assuming the form of a Boar to rescue the Earth from under the waters, finds in the Secret Commentaries a perfectly scientific explanation, relating as it does to the many risings and sinkings, and the constant alternation of water and land from the earliest to the latest geological periods of our globe; for Science teaches us now that nine-tenths of the stratified formations of the earth's crust have been gradually constructed beneath water, at the bottom of the seas" (1888, 2:252).

27. Dass concedes that no evidence places Neanderthals in India at any time, and there is no fossil record of the Dwarf organism, and thus the Dwarf may only represent a primate or human of normal stature but "of unusual broadness" that made him appear like a dwarf (1981, 53–54). Compare Srikanth (1998), who writes regarding the Man-Lion and Dwarf: "Nrsimha, as man-lion, possibly represents the stage of evolution estimated to be 1.4–1.8 million years ago, when the genus *Homo* . . . started to evolve. Perhaps more detailed study is needed to ascertain whether it actually represents a pre-*Homo* stage (say, like *pithecanthropus*, *australopithecus Afarensis*, etc.); anyway, even anthropologists are not fully agreed about some details. Thus, Nrsimha avataara represents the state when what is claimed to be the potentially highest aspect of the *jiivaatma*, the allegedly best instrument to reflect Godliness on the physical plane, namely the human, was about to evolve. Vaamana, dwarf, presumably represents the hunched, not-fully-biped stage of the genus *Homo* before the species of *Homo Erectus* (the straight standing) arose."

28. According to the timeline of the institution provided on their Web site, the "Ancient Insights and Modern Discoveries" project was launched in 1976 (Bharatiya Vidya Bhavan n.d., "Landmarks"; Bharatiya Vidya Bhavan n.d., "Adventure").

29. Jacolliot's interpretation of Vamana is soon followed by an explicit discussion of euhemerism. See Jacolliot n.d., 28–30.

30. For example, Dr. Narasingh Ch. Panda in his online essay "*Avatara* in Indian Culture" (2003) writes: "The incarnations give us the keys which unlock the mysteries of nature. They represent the different stages of evolution in the different departments of nature. Even if we take into consideration the ten incarnations (of Lord Vishnu) as they stand, the different stages of evolutions are there." This is taken almost verbatim from K. Narayanswami Aiyar ([1916] 1996, 208–9).

31. The dichotomies of insider and outsider, of the devout and the academic, are highly problematic but are commonly propounded on traditionalist Hindu Web sites.

32. Regarding Rama, see M. K. Vinod (2002), who argues: "The Ramayana describes Rama as being *Ajaanubaahu*, one whose hands reach his knees. This trait is seen in gorillas. This quite lucidly delineates the transition phase from the primate to the human of today. Another indicator is the evidence of monkeys assisting Rama in his escapades."

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