

Current Comments®

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The Turtle: A Most Ancient Mystery. Part 1. Its Role in Art, Literature, and Mythology

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Turtles have played an important role in the mythologies of diverse cultures. Several North American Indian tribes, including the Iroquois, Seri, and Mandans, believed that the earth rested on the back of a giant turtle.¹ And, thousands of miles across the sea, the Chinese regarded the turtle as sacred and as an emblem of longevity.² The Burmese believed that turtles were divine and kept them in tanks in pagodas, where they were fed special foods, according to James J. Parsons, Department of Geography, University of California, Berkeley. Even today, many groups consider the turtle sacred and refuse to eat its flesh.³ (p. 8) Peter C.H. Pritchard, Florida Audubon Society, Maitland, notes that temples devoted to turtles can still be found in India, Bangladesh, Malaysia, and Thailand. These temples are frequently located on rivers inhabited by turtles and include enclosures where turtles live and are fed by hand. One species, a black soft-shelled turtle, is found exclusively at a temple in Chittagong, Bangladesh.⁴

Although numerous stories involving turtles concern the creation of earth, many also attribute to these reptiles a wily nature or focus on their seeming steadfastness. Even today, hundreds of poems, children's stories, and works of art are inspired by turtles' unique appearance and behavior.

My own interest in collecting turtle sculpture was inspired by my daughter Thea. I don't really know why she collected turtles. After she died in 1980, I

slowly added to her collection. It has become a quiet, yet dynamic, memorial to her. This issue of *Current Contents*® contains color photographs of some of the turtles in this collection. Some hold special memories because they had belonged to Thea. Others are reminders of places I have visited or people I have known. One of my most recent acquisitions is a Lalique crystal turtle from France whose shell is a warm shade of amber orange. This turtle was presented to me by the staff at ISI®, who know that orange is my favorite color. The occasion was a surprise party held in my honor to celebrate ISI's 26th anniversary.

In Part 1 of this two-part essay, we will discuss the fascination that turtles have held for nonscientists, in both ancient and modern times. We use the term "turtle" when discussing both aquatic and terrestrial species and use "tortoise" to refer to some of the slow-moving, land-dwelling species. In art, literature, and mythology, the terms are often used interchangeably. In Part 2 we will discuss the problems of classification and terminology and explore some of the research questions currently being investigated by turtle biologists, noting such enigmas as the navigational skill of some sea turtles and their instinctive return to their birthplaces at breeding time.

Turtles in the Ancient World

Henry G. Fischer, Metropolitan Museum of Art, New York, reports that one of the earliest references to turtles in

Egyptian literature was a Middle Kingdom funerary spell concerning the god Re's abhorrence of turtles.⁵ The spell "If you tell me to eat this, then Re will eat turtle!" was designed to protect the deceased from having to eat excrement in the next world. Despite this ban on turtle flesh, turtles figure prominently in early Egyptian art and were used for medicinal purposes during the Middle Kingdom, although never taken internally. According to Herbert Friedmann, Department of Biology, University of Southern California, Los Angeles, the Egyptians believed that turtles possess special knowledge of medicinal herbs and other remedies.⁶ (p. 301) This theme was, apparently, picked up by Aristotle,⁷ and later by the English Renaissance writer Lyly⁸ and the French essayist Montaigne,⁹ who noted that turtles eat origanum or wild marjoram to revive themselves after tasting a viper.

The Romans associated turtles with the god Mercury. Susan C. Shelmerdine, University of North Carolina, Greensboro, notes that, according to Roman mythology, one of Mercury's first acts as an infant was killing a turtle and turning its shell into a lyre.¹⁰ Some early Roman statuary features the god holding his lyre or standing with his foot on a turtle.

One of the adages ascribed to the Dutch theologian and scholar Erasmus is thought to have arisen from Mercury's fondness for turtles. The adage "You caught the turtles, now you must eat them" is directed at people who have thoughtlessly taken on a task and then ask for help from others. The expression originated in a story in which fishermen, having caught more turtles than they could eat, invited Mercury to join them in their feast. Mercury, aware that he wasn't invited out of kindness, refused and told them to eat their own turtles.¹¹

The Romans were also fond of the mottled, translucent shell of the hawk-bill turtle, referred to as tortoiseshell.¹² J.M.C. Toynbee, formerly with the Cambridge University classics faculty, notes that several Latin writers refer to

tortoiseshell objects as marks of ostentation and luxury.¹³

Although the Romans valued the turtle's shell for its beauty, they seemed to have joined the early Greeks and Christians in their ambivalence toward the animal itself. According to Toynbee, the Roman politician and playwright Seneca classified turtles among the most "loathsome" animals, and the late Greek word for tortoise means "dweller in Tartarus or Hell."¹³

The early Christians vacillated in their attitude toward turtles. Saint Jerome, one of the fathers of the Latin church, condemned them as "heretical" animals who chose to live in filth and scum.⁶ (p. 300) Friedmann notes that turtles were a symbol of evil in most early Christian art, often appearing in battle with the cock, a symbol for moral combat. On the other hand, turtles were used to illustrate the adage "*festina lente*," or make haste slowly. Early Christian "emblems," which were designed to instruct and entertain, often used turtles as a symbol of the chaste woman's duty not to stray far from home. Several of these emblems feature a picture of Venus with her foot on a turtle.⁶ (p. 300-1) The turtle as a symbol of chastity also figured in the writings of Lyly.⁸

Turtles were a sacred symbol of the world's creation for many religious groups in both the Americas and Asia, as we mentioned earlier. In fact, the headquarters of the Native American Center for the Living Arts was designed to look like a turtle by Arapaho Indian architect Dennis Sun Rhodes.¹⁴

Indian author Gopal S. Hattiangdi notes that one of the chief deities of the Hindu religion, Vishnu, descended to earth in the form of a tortoise to help the other gods churn the ocean in their search for the nectar of immortality. Several Indian paintings depict the tortoise as a pivot for the staff that churned the oceans. A tortoise also figures in Hindu writings as a famous sage, Kas-yapa, also known as Pajapati, who assumed the form of a tortoise and who is

thought to be the father of all human beings.¹⁵

Aesop and Uncle Remus

Perhaps the most colorful and best-known examples of turtles in literature are *Aesop's Fables*. One of the most famous of these is the story of the tortoise and the hare, passed down through generations in a variety of forms.¹⁶ In one version, the tortoise won a race with the hare because the overconfident hare took a nap and did not wake up until the tortoise had passed the finish line. In the version that appears in Joel Chandler Harris's *Uncle Remus* stories, Brer Tarrypin defeats Brer Rabbit by posting various identical members of his family along the route and at the finish line.¹⁷ A similar version of this particular story, by modern Soviet author Sergei Baruzdin, features an ostrich instead of a rabbit.¹⁸

Similar tortoise tales occur in the stories of many African nations, as well as in North American Indian and Brazilian folklore. Deirdre La Pin, Department of English, University of Arkansas, Fayetteville, notes that tortoises were among the most prevalent characters in the oral literature of the Yoruba tribe of Nigeria. The tortoise generally figures as a cunning hero, a scandalmonger, and a greedy, intemperate creature.¹⁹ Ronald M. Rassner, Department of African Languages, Yale University, reports that the tortoise of Brazilian folklore is also a wily trickster, possibly because Brazil's tortoise tales were imported from Africa.²⁰

One such tale, found in Brazilian and North American literature, involves a tortoise promising a reward to an eagle if the eagle will take him for a flight above the earth. When the tortoise reneges on the reward, the eagle picks him up and drops him to his death.²¹ Pritchard and Pedro Trebbau, director, Parque Caricua Zoo, Caracas, Venezuela, note that the relationship between turtles and eagles may be responsible for the presence of certain turtle colonies. In *The*

Turtles of Venezuela they speculate that a colony of turtles living on a high mesa in Pará, Brazil, may have originated with turtles who escaped from eagle nests, where they had been brought as food for the eagle chicks.²²

Turtles as Food

Giant marine turtles, especially the green turtle, played a major role in the settlement of the New World. Because they could be kept on board ship for months without needing to be fed, they became a major staple for sailors. Parsons notes that because of their importance, turtles frequently appear in the writings of such adventurers as the seventeenth-century British seaman William Dampier and the fifteenth-century Italian explorer Alvise Cadamosto.³ (p. 11, 13-4) Large sea turtles were kept on their backs aboard ship and slaughtered as the need arose. In addition to being a welcome break from the monotony of dried beef and fish, turtle meat was considered a cure for scurvy and a host of other ailments.³ (p. 11)

The Galápagos tortoise became a major food staple for the New England whaling ships, which traveled for several years at a time in the Indian and Pacific oceans. These giant animals could be kept on board for up to a year without requiring food, according to Pritchard.⁴

By the seventeenth and eighteenth centuries, the tonic effects of turtle had become so highly valued that the Portuguese sent syphilitic patients to the Cape Verde Islands, where the turtle meat was said to restore health. Throughout history, turtle eggs and flesh have been considered an aphrodisiac and are still sold as such in some areas of the world.³ (p. 11)

Turtle soup, made from the cartilaginous, greenish substance that lines the shell of the green turtle, had become an esteemed delicacy by the eighteenth century.³ (p. 12) The English poet and dramatist Oliver Goldsmith refers in his writings to the special qualities of turtle soup.²³ The dish was served as the *pièce*

de résistance at diplomatic dinners and ceremonial banquets in England. According to Parsons, about 15,000 turtles a year were imported to London from the Cayman Islands,³ (p. 16) which, incidentally, are now the site of the world's only green turtle farm.⁴

While green turtle soup was a symbol of Victorian opulence, recipes for mock turtle soup for the less affluent appeared as early as 1808. Made from a calf's head, mock turtle soup simulated the gelatinous consistency of real turtle soup.³ (p. 16)

Today, turtle soup is still considered a gourmet dish, particularly in Philadelphia, where restaurants such as Bookbinders make it from snapping turtle and call it snapper soup. The snapper soup of many restaurants, however, is actually a fish-based dish made from red snapper.⁴

Most readers, of course, are familiar with the Mock Turtle of Lewis Carroll's *Alice's Adventures in Wonderland*.²⁴ This creature, drawn to look like a calf with a turtle shell around it, was based on the recipe for mock turtle soup, a dish consisting of calf's head prepared to resemble turtle. The Mock Turtle's song about turtle soup, in a metrical form normally used for heroic poetry, creates comic tension by discussing a banal subject within a lofty framework.

Contemporary Turtles

More recently, turtles have figured in the writing of John Steinbeck, who in *The Grapes of Wrath* used the tortoise as a symbol of the tenacity of the "Okies" traveling west for a better life.²⁵ For D.H. Lawrence the turtle was a symbol of aloneness and indifference, among other things.²⁶ Herman Melville, in his two short sketches entitled "The Encantadas or Enchanted Isles," describes the islands' tortoises as antediluvian creatures of great hopelessness and endurance. Melville saw these islands as melancholy places hospitable only to reptiles and wild vegetation.²⁷

The Encantadas are more commonly known as the Galápagos Islands, a name

taken from the old Spanish word *galápagos*, meaning land tortoise.²⁸ Charles Darwin, after visiting the islands in 1835, drew upon his observations of the animal life there to develop his ideas on natural selection. According to Joseph Wood Krutch, a former professor of dramatic literature at Columbia University, New York, the differences that Darwin noticed between giant land tortoises and birds from those living only short distances apart inspired Darwin's interest in evolution.²⁹

Some of the literature currently being published on turtles consists of poems and essays celebrating their unique appearance and behavior, using these attributes in an allegorical fashion. One such poem, by Thomas Lux, describes the turtle as "Solitary, speechless, utterly buoyant, as unethereal as cabbage...."³⁰ Gary Snyder, in his book of poems *Turtle Island*,³¹ refers to the American Indian concept of earth resting on the back of a giant turtle. His poems address the conversion of North America from the wilderness of the Indians to a polluted, overcrowded land.

Recently, Glenda Jackson and Ben Kingsley starred in a Samuel Goldwyn Company film entitled *Turtle Diary*,³² based on the novel by Russell Hoban³³ and with a screenplay by Harold Pinter. In the film, Jackson and Kingsley release sea turtles from their captivity in a London aquarium and return them to the ocean. By restoring the turtles' freedom, the protagonists symbolically free a part of themselves.

Some of the most compelling writing about turtles, however, is by marine turtle specialist Archie Carr, graduate research professor of biology, University of Florida, Gainesville. Carr, whose scientific work will be discussed in the second part of the essay, recently won *Audubon* magazine's Hal Borland Award for writing, photography, or art that has contributed to the appreciation of nature.³⁴ In addition to his pioneering research, Carr has written numerous books describing the adventures he

has had while engaged in turtle research.^{35,36}

In Part 2 we will discuss some of the mysteries yet to be solved by the scientists who study turtles. That essay will also review some of the journals, organi-

zations, and research fronts concerned with turtle research.

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REFERENCES

1. **Jobes G.** *Dictionary of mythology, folklore and symbols.* New York: Scarecrow Press, 1961. p. 1610.
2. **Dyson V.** *Forgotten tales of ancient China.* Shanghai, China: Commercial Press, 1927. p. 26.
3. **Parsons J J.** *The green turtle and man.* Gainesville, FL: University of Florida Press, 1962. 126 p.
4. **Pritchard P C H.** Personal communication. 3 August 1986.
5. **Fischer H G.** *Ancient Egyptian representations of turtles.* New York: Metropolitan Museum of Art, 1968. p. 6.
6. **Friedmann H.** *A bestiary for Saint Jerome.* Washington, DC: Smithsonian Institution Press, 1980. 378 p.
7. **Aristotle.** *The works of Aristotle. Vol. IV. Historia animalium.* (Smith J A & Ross W D, eds.) Oxford: Clarendon Press, 1910. Sect. 612a.
8. **Lily J.** *Euphues: the anatomy of wit. Euphues & his England.* (Croll M W & Clemons H, eds.) London: Routledge, 1916. p. 44.
9. **Montaigne M.** *The essays of Michael Lord of Montaigne. Vol. 2.* (Florio J, trans.) London: Dent, 1928. p. 155.
10. **Shelmerdine S C.** Hermes and the tortoise: a prelude to cult. *Greek Roman Byzantine Stud.* 25:201-8, 1984.
11. **Erasmus D.** *Collected works of Erasmus.* (Phillips M M, trans.) Toronto: University of Toronto Press, 1982. p. 128.
12. **Parsons J J.** The hawksbill turtle and the tortoise shell trade. (Gourou P, ed.) *Études de Géographie Tropicale Offertes à Pierre Gourou.* Paris: Mouton, 1972. p. 45-60.
13. **Toynbee J M C.** *Animals in Roman life and art.* Ithaca, NY: Cornell University Press, 1973. p. 221-3.
14. **Trimm W.** The turtle for the living arts. *Conservationist* 36(3):22-6, 1981.
15. **Hattiangdi G S.** *Pashu-Puraan.* Bombay, India: Pandurang Classics, 1967. p. 144-9.
16. **Aesop.** *Aesop's fables.* (James T & Townsend G T, trans.) Philadelphia: Lippincott, 1949. p. 124.
17. **Harris J C.** Mr. Rabbit finds his match at last. *The complete tales of Uncle Remus.* Boston: Houghton Mifflin, 1955. p. 57-60.
18. **Baruzdin S.** The ostrich and the tortoise. *Soviet Lit.* 9(438):98-9, 1984.
19. **La Plin D.** Tale and trickster in Yoruba verbal art. *Res. Afr. Lit.* 11:327-41, 1980.
20. **Rassner R M.** The transmission of the oral narrative from Africa to Brazil. *Res. Afr. Lit.* 13:327-58, 1982.
21. **Gayangos P.** *El libro de los gatos* (The book of cats). Madrid, Spain: Rivadeneyra, 1912. p. 543-60.
22. **Pritchard P C H & Trebbau P.** *The turtles of Venezuela.* Athens, OH: Society for the Study of Amphibians and Reptiles, 1984. 403 p.
23. **Goldsmith O.** *A history of the earth and animated nature. Vol. 2.* London: Blackie, 1860. p. 343-4.
24. **Carroll L.** *Alice's adventures in wonderland.* Berkeley, CA: University of California Press, 1982. p. 107.
25. **Steinbeck J.** *The grapes of wrath.* New York: Viking Press, 1939. 619 p.
26. **Innlus K.** *D.H. Lawrence's bestiary. A study of his use of animal trope and symbol.* Paris: Mouton, 1971. p. 74.
27. **Melville H.** The Encantadas or Enchanted Isles. (Oliver E S, ed.) *Piazza tales.* New York: Hendricks, Farrar Straus, 1948. p. 149-57.
28. Galápagos Islands. *Encyclopaedia Britannica.* Chicago: Encyclopaedia Britannica, 1983. Vol. 7. p. 826.
29. **Krutch J W.** *The world of animals.* New York: Simon and Schuster, 1961. p. 403-4.
30. **Lux T.** Three poems. *Paris Rev.* 87:202-4, 1983.
31. **Snyder G.** *Turtle Island.* New York: New Directions, 1974. p. 114.
32. **Johnson R.** prod. *Turtle diary.* Hollywood, CA: Samuel Goldwyn, 1986.
33. **Hoban R.** *Turtle diary.* New York: Random House, 1975. 211 p.
34. **Llne L.** Turtles and literature. *Audubon* 86(4):6-7, 1984.
35. **Carr A.** *The windward road. Adventures of a naturalist on remote Caribbean shores.* New York: Knopf, 1956. 258 p.
36. -----, *So excellent a fishe. A natural history of sea turtles.* Garden City, NY: Natural History Press, 1967. 248 p.