**Deadly Powers: Animal Predators and the Mythic Imagination** by Paul A. Trout. Amherst, NY: Prometheus Books, 2011. 325 pp. \$26.00. ISBN 9781616145019.

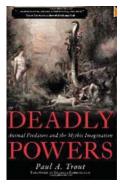
The question of how myth, folklore, and religion originated has exercised the scholarly imagination at least as far back as the Greek philosopher Euhemerus. The answers often have depended more on imagination than evidence. In the Victorian era, the German philologist Max Muller promoted "solar mythology" as the solution for all such origins, arguing that the movements of celestial bodies, seasonal events, and weather phenomena preoccupied the minds of primitive peoples, and their natural poetic abilities distorted these observations into fanciful anthropomorphic tales of gods and heroes. Freud applied psycho-analytic theory to the problem and found that myths began in dreams as the psyche struggled to resolve Oedipal and other developmental conflicts throughout the course of life. Structural anthropologists regarded myths as templates arising to reconcile logical contradictions in the concrete thinking of the primitive mind.

A sweeping explanation for origins may gain widespread acceptance for a time, but this dominance seldom endures for long. Anthropological fieldwork typically uncovers exceptions and alternative possibilities that overthrow the theory. In retrospect, it appears obviously wrong, and worse still the evidence and arguments that once seemed so convincing come to look as embarrassing as "Ancient Astronaut" speculations. Once burned, scholars shy away from the subject and frown on any efforts in its direction. Yet the problem of origins never stays down for long. Because it remains one of the "big" questions of human science, the origins problem continues to tease scholarly curiosity and sooner or later another ingenious proposal comes forward.

In the last few decades the issue of origins has returned from two directions, despite considerable disciplinary resistance. One approach has tried to solve limited problems rather than provide a comprehensive theory. A readiness to look for an experiential basis behind even extranormal traditions, a position argued long and well by folklorist David Hufford, has backed these efforts with persuasive evidence. Strong cases have emerged that the catastrophic eruption of the Santorini volcano about 1600 BC gave rise to the Atlantis legend, that misunderstood observations of the phenomena of bodily decay provided the basis for vampire beliefs, and that discoveries of dinosaur fossils by pre-modern peoples led to stories about giants and monsters. An even bolder appeal to experiential origins

has attempted to explain religious ideas of heaven and hell as the result of near-death experiences.

The second approach pays close attention to the circumstances and cognitive capabilities of humans over their evolutionary career. Significant changes in thinking abilities accompanied the transition from nonhuman primates to hominids and from the earliest hominids to *Homo sapiens*, with development of language, tool-making technology, and abstract thinking serving as momentous milestones along the way. The environment of our ancestors



challenged them to meet never-ending needs like food and shelter, while the social environment obliged adaptations to internal group dynamics and relationships with external groups. Various scholars have sought the origin of myth and religion in humans becoming hunters and their transition to a diet dominated by meat. The successful hunter became a figure of power, a master of prey animals, and, as dispenser of food, the arbiter of life and death. The leap from human to divine seems not very great since these same characteristics are also prime attributes of primitive gods.

With foundations in archaeological research, primate behavior, cognitive evolution, and language development, current theories on origins surpass all predecessors in sound evidence and defensible argument. Paul Trout joins this debate, accepting much of the human past as recent scholarship reconstructs it, but finds the key to myths and religion in an experiential reality recognized but not fully confronted in ongoing discussions. His argument in *Deadly Powers* identifies the crucial fact of life for our prehistoric ancestors as a stark prospect of death by predators of overwhelming strength and ferocity. This day-to-day fear left its mark on our ancestors, a mark so consequential that it shaped our stories, habits, and religious beliefs and lingers with us today.

The idea of man as prey has not appealed to many scholars. "Man is not cat food!" proclaimed archaeologist Louis Leaky; but Trout counters that this statement is true only in the sense that man was not food for cats alone. He was on every large predator's menu throughout the Pleistocene, when our distant ancestors were not burly Neanderthals or muscular Cro-Magnons but small, weak creatures with no means of defense. They faced a menagerie of man-eaters that consisted not just of lions, tigers, crocodiles, and sharks, but also larger and more terrifying killers like saber-toothed cats, dire wolves, cave bears, and gigantic forms of snakes, lizards, and eagles. The most dramatic (and traumatic) fact of life was sudden death that threatened from land, water, and air; and that death was an appalling one of

roaring, screaming, tearing, dismembering, and nothing left but blood and scraps, terrible for witnesses as well as for victims.

Trout emphasizes that our ancestors lived in constant fear. This fear sharpened our intellect to become aware of predators or the possibility of predators, to recognize their characteristics and read the signs of their presence, also to imagine how these enemies thought and to anticipate their actions. Though fear helped our ancestors survive, it also burdened them with insupportable stress that they had to manage and alleviate. Trout argues that one outlet was to "act out" the predator, through mimesis during pre-verbal times and later through storytelling. These performances communicated knowledge of survival value to the audience, but they also helped to control fear by demonstrating that sometimes the prey escaped to tell the tale. In this way the prey gained a small measure of control over their adversaries.

Once humans acquired the capacity for language, they also developed a cognitive fluidity that allowed the integration of previously isolated domains of knowledge. Words had a flexibility that memories of concrete objects did not, opening unprecedented possibilities for imaginative creation. The basic components of mythic thinking—attributing human properties to a non-human agent (anthropomorphism), seeing all objects as living things (animism), and believing that one being or object can transform into another (metamorphosis)—had antecedents in pre-verbal thought processes, but began to flourish only once language provided a conceptual medium for imagination.

Mythic thinking supplanted the strictly experiential world with an imaginative substitute, necessarily in close attunement with reality yet amenable to altered relationships with the sources of fear. Imagination created monsters, not the specific predators of experience but hybrid sums of multiple fearful creatures that added to the total of reasons to be afraid. These imaginary monsters could be huge, powerful, even supernatural; but they included human properties that allowed imaginative solutions like appeasement and negotiation. Humans began to identify themselves as animals, as the shaman able to communicate with animal powers, as descendants of a totemic ancestor, and as killers themselves by internalizing the ways of predators. The fear of real predators diminished as the mythic substitutes developed, while stories of heroes slaying monsters or tricksters able to outwit stronger adversaries helped control fears born from reality and imagination alike.

A plausible origin for much of myth and religion becomes understandable by taking fear of the predator as a template. The hero's quest in myths and folktales typically includes conquest of fearsome monsters such as dragons

or cannibal ogres. The gods of primitive religion often take the form of predatory animals or monsters, while rituals of sacrifice and supplication echo tactics to fend off predator attack. Initiation rites may depict the candidate being swallowed and dismembered, then emerging from the belly of the imaginary beast remade as a full adult. If deities humanized over the ages, such primitive traits as the angry god that had to be appeased persists even today, while such imagery as the maw-like mouth of hell, death as a stalker, and disease as a devourer preserve the awe and fear that the predator inspired. The danger of predation continues to grip modern audiences of movies like *Jaws*, *Jurassic Park*, and *Alien*, where the threat may be a shark, an alien, a zombie, or a crazy killer, but the emotional charge derives from the age-old fear of being eaten and the hormonally induced "survival ecstasy" that comes from living through the attack.

A proliferation of research into the physical, cognitive, and social evolution of the human line has opened new approaches for understanding cultural beginnings. Trout takes advantage of these opportunities as he synthesizes theory and evidence to build a wide-ranging account of the origin of myth and religion. While he depends on prior research, his book is valuable to lay readers as an introduction to the explanatory potential of current theories. At the same time, *Deadly Powers* is not merely derivative but a strong argument for the importance of predation in the history of human evolution. Trout's most original contribution insists that the predator and fear of its death-dealing powers have served as the primary agents of natural selection, shaping both mental and cultural evolution. He takes a long view of formative influences because to start with man as hunter or storyteller begins too late. By then our ancestors had been prey for millions of years and the damage was already done. This emphasis on the experiential challenge our lineage faced not only sounds persuasive at face value, but accounts for a great many attributed consequences like myths being about fear, primitive gods taking the form of monstrous animals, rites mimicking survival techniques before predators, and the continuing fear and pleasure connected with stories of being eaten alive.

The subject of cultural origins has traditionally been rather jealously guarded by scholars with their favored theories and preferences, so Trout's advocacy of predation as the key has the hurdle of prejudice to overcome. In more concrete terms, his book offers no balanced review of competing theories and becomes liable to accusations of selective presentation of evidence. A critic might argue that other forces besides predation might have taken a hand, like natural disasters, or that social and psychological factors deserve more credit than he gives them. Trout points toward many consequences attributed to the predator experience but he rarely follows up

with detailed evidence, and as a result fails to balance breadth with depth in arguing his case.

If not every assumption and deduction is right, the fact remains that *Deadly Powers* takes on one of the big questions and responds with a big answer that is at once lucid, plausible, and well-supported. The reader comes away with thought-provoking insights into the development of human thought and the nature of cultural institutions. Anomalists can benefit from a theory of origins for some monsters of legend and the experiential factor in creating some stories about terrible creatures. Trout is convincing enough that future research into the origin of myths and religion will have to reckon with his assertion that long ages of being low on the food chain made us what we are.

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