Mind, Morals and Evolution

Deacon, Ruse, Donald and others dig deep

Tangled up in Blue

The Rocky Road to Relationships

Silent Partner

Does God act in the world?
Special Feature

A Trick of the Light: Richard Dawkins on Science and Religion
by Chris Hood
In an exclusive interview with Science & Spirit, about the world's leading Darwinian spouts out on religion, science and his feeling for the "transcendental moments of life."

Spirituality and Health
Tangled Up in Blue: The Evolution of Appreciation
by Nathaniel New
What are the roots of our tense relationships with others? Can an understanding of the evolutionary roots of committed help us transform the root of those tensions?

Special Series
Of Articles and Organic Philosophy, Faith and Science
by James R. Miller
The beginning of a new series examining the historical and philosophical background of science and religion dialogue -- and the implications of this for the future of faith and society.
Part One: The Baptism of Science

News and Views
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Features

Editor's Muse: God's Purpose -- A Contradiction in Terms by Beno Jaffe and Rebecca Boyer
New discoveries in genetics and biochemistry are changing our understanding of human nature in profound ways, posing a challenge -- and opportunity -- for religion.

The Light of Reason: Evolutionary Psychology and Ethics by Antoni Marsano
Human psychology goes out of our biological nature, what are the implications for ethics and morality? Marsano explores the possibilities of an enlightened "moral realism."

Giving Up the Ghost: The Epic of Spiritual Emergence by Terence Dewey
Science is undermining the basis for belief in a "spiritual essence" separate from our evolved biology. Will this lead to a nightmare of dead mechanization, a world emptied of meaning and depth? Or open the way to a creative, liberated spirituality?

Eyes on the Prize: Evolution and Direction by Michael Shea
Are humans the crowning achievement of evolution, the product of intelligent design? Or is the real question the end of all evolutionary exercise? What are the real questions the end of all evolutionary exercise? What are the real questions the end of all evolutionary exercise?

The Widening Gyre: Religion, Culture and Evolution by Martin Donald
Can religion, with its deep roots in our genetic make-up, provide any answers to the modern world's cultural free-for-all? Will the fields hear the falcon? Donald offers an evolutionary view.

New Wineskins for Old Wine? A Critical Thesaurus of a Scientific World
by Arthur Pasteau
If the thesis is a steely, rational vehicle of thought, it must have the capacity to absorb scientific knowledge and accommodate itself accordingly, says a writer this call for a "minimalist" approach.

Conversation at the Crossroads: An Interview with Billy Graham by Rebecca Bryant
The editor of Man talks about his efforts to ensure intellectual discourse and computer technology on the Internet, part of a lifetime of interaction between hard science and spiritual searching.

Once More to the Breakers: Ethics Action and Modern Science by Nicholas Stern
Is there any real sense in which God is able to "act" in the world described by science? "Sustainer looks for answers in the spaces left unexplored by scientific understanding.

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The Widening Gyre:
Religion, Culture and Evolution

Can religion, with its deep roots in our genetic makeup, provide any answers to the modern world's cultural free fall?

Merlin Donald offers an evolutionary view.

"Tuning in and turning the widening gyre,..."

The virtual absence of organized religion from Western public life is a dramatic break with our past. This is evident in the deep alienation of the Western intelligentsia from its own roots. Intellectuals should be, and traditionally have been, the natural conservators of culture, as well as leaders of culture. So long as our societies had a common cultural life, the work of the intelligentsia affected the lives of most people, from rich to poor, because it had a direct impact on their livelihoods. The social fabric was reworked, whether by reinterpreting myths, changing language, or introducing new ideas. But in our modern pluralistic society, the public role of the secular intellectual is at best marginal, and without it, we are in danger of becoming a society of atomized individuals, each of whom is at risk of losing all sense of community. This alienation is most obvious in academia, where professional thinkers in various fields seem to feel that it is their duty to destroy the high culture of the past, with no obligation to restore what has been destroyed. Ironically, they cannot accept mass culture either, because they claim it is not culture. As a result, the secular intelligentsia has become more and more alienated from the rest of society, and its mission is to propagate a new religious faith, with no ground in sight.

The question is, what are the consequences of this? Evolutionary patterns may provide some answers.

Acts of Observance
Religion is a very complex aspect of culture, but it must have started somewhere, perhaps in an unimpeachable manner, in the evolution of the human mind, in order to conceive of the possibility of something as sophisticated as religion. I think we need to postulate at least two very major changes along the way to becoming human.

The first involves vision - learning by observing a behavior and remembering it, acting it out, in our own lives. Religion always has a collective side, displayed in various public manifestations. I believe this collective dimension is one of the most important features, far older than any individual, or personal, aspects. This suggests that the external aspects of religion arose before they were internalized as the personal morality of individuals. This provides us with a powerful theoretical tool, the outside-inside principle. Lev Vygotsky observed that children learn to think from the outside in, that it is the external actions of speaking and signing first, and only later learn to think silently. In private, this "outside-inside" principle applies to a number of other intellectual skills, including reading. The problem seems to be that public, collective forms of thought and interaction follow, suggesting that some part of our personal thought begins as public acts.

That same principle applies to the course of human evolution. Humans must have evolved the external aspects of culture before we could internalize them, that is, before we could have committed them to the minds of individual human beings. This is true of religious thought as well, and to understand its emergence in prehistory, we need to consider its deeper roots.

Religion is incomparable outside of the West, and culture is universal, and it is always embedded within larger, unspoken customs, which often appear to be the same from one civilization to another, but which are not easily understood by those of us who are novel to them. Religion is like any other cultural system that has evolved, and it is not without enormous controversy to fix ritual and custom into standard forms that are widely shared, from one civilization to another. This is the way to universalize and to unify, and the way to achieve social organization. I have speculated, drawing from various fields, that our communal tendency to establish public customs and conventions is the most ancient component of human culture, stretching back at least 20 million years.

This suggests that certain aspects of human religion are more complex than language. Before our human ancestors could evolve a capacity to complexize as a language, they must have developed prior skills that allowed them to create and construe conventions, such as ritualized, socially coordinated public behaviors. In this sense, acquiring the skill of art would have been a formidable advance from the maintenance of individualist predilections, the Mode I arts.

Two of the most distinctive human abilities are re-presenting what we observe, and engaging in role-playing games. Art is a whole-body skill, unique to human beings, whereby we can use our entire bodies as expressive devices. It is the basis of the most essential communication, as well as science, craft, dance, and athletics. But more importantly, it is the primal source of social, community cultural achievement. All human groups invented customs and shared rituals that enabled them to become, as a group, more effective at tool-making, food preparation, big-game hunting, and warfare. The ability to come together in groups, to build a sense of community, and to construct things, is something that is uniquely human.
hunting, migrations, and fire-tending, among other things.

These ritualized patterns were preserved and transmitted by mimetic skill, resulting in very complex patterns of daily life that were determined by convention. Our deepest cultural roots thus lie in collective action, and mimetic thought, from the play-acting of children to the most elaborate rituals of formal religion, is still very much in evidence in the public arena.

Speak, Memory

An even greater evolutionary event came to our primate ancestry at the emergence of our capacity for speech. This second transition greatly increased the distance between ourselves and our primate cousins. Although the chronology of language evolution is highly debated, there is some evidence to suggest that it probably emerged in its prototypic form in archaic Homo sapiens, and reached its finessed form with the arrival of our own species, about 160,000 years ago.

Oral traditions were the inevitable outgrowth of this faculty for language. These traditions may be viewed as gigantic representational conventions that summarize the accumulated wisdom of a people. Such narratives were a great leap from the older framework of simpler ritualized behaviors that had been put in place by mimetic memory, and served as a kind of collective governor of values, beliefs, and behavior for every member of the society.

However, oral traditions did not displace or conflict with mimesis. They incorporated mimetic ritual under a more powerful system of narrative thinking, which produced "mythic" cultures. Myth, in the sense of an authorized set of allegories and narratives, became the ruling construct in such societies. Modern society still preserves much of this structure, and still depends upon mimesis as a sort of elemental social glue. The universal form of traditional religion consists precisely of this: a narrative, a sacred story overlaying a deeper core of mimetic traditions - rituals and beliefs whose origins lie in the depths of time. These forms a "governing hierarchy" that regulates both individual consciousness and public behavior on much of the planet.

The Scattering

However, modern technological society is now challenging all of this. We are living through a revolution that started with mass literacy, a time of enormous cognitive change. It isn't just that the locus of control has become more diffuse than it once was, or that the public media are fragmenting the memory systems of individuals, shortening our attention spans, and preventing us from gaining any significant perspective. These things are certainly a valid cause for concern. However, a deeper event is taking place, a cognitive metamorphosis that has a far-reaching effect on the external distribution of thought and memory.

Humankind has broken out of something that we had always lived by: our biological memory system. Oral traditions, including traditional religion, depended heavily on recitation, repetition, and visual imagination, all of which demanded a very personal involvement in the incantation of tradition. Cultures were preserved entirely in the minds of individuals, that is, within the limits of our inherited biological memory systems. Modern high-tech culture is something altogether different. It is externalized to a far greater degree, controlled by a billboard of symbols, computers and electronic media. Our highly plastic nervous systems are able to make fine adjustments to each new cognitive reality as it arises; but now the actual operational tools by which we think are changing, and new demands are being made on our brains, which will reshape their basic functional organization (just as we see the "architecture" of a child's mind uniquely shaped in early development). All of this has, and will have, tremendous consequences.

Religion - both as an institution and as a process of life - has the same evolutionary history as any of our other cultural domains. It inheres a multilayered web of practice, gesture, word, and symbol, by which it influences the way we experience meaning, and how we evaluate the significance of our lives. Just as the public expression of religion reflects our membership in a collective process, we have no choice but to externalize that process in our individual minds. Our spirituality still rests firmly on a mimetic core, and this remains emotionally the most satisfying aspect of religion. The stabilizing virtues of religion still lead to come from the traditional sources of communal practice and belief.

But the place of religion in our new society is not easy to define. Our traditional sources of cultural governance are exploding into a million disembodied, globalized fragments. We seem to be in danger of a parallel fragmentation of personal consciousness, and if so, could have consequences that may ultimately bear on our integrity as individuals. Perhaps individualism as we have known it in the West will prove to be an ephemeral historical accident, and we will slip back into a comfortable group-think, which would be consistent with much of our history as a species. Perhaps we will move in the opposite direction, towards extreme individualism, to the point of moral anarchy, or even a denial of the external world.

Or we may yet find a solution to this bewildering new cultural universe, as we have so many times in the past, and achieve some degree of balance between individualism and collectivity. Perhaps a new religious genius will discover a fantastically clever way to protect the sacred core that has sustained human being through our turbulent history as a species. We can only hope that this will happen.

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