Evolutionary Psychology:
The Landscape

Few scientific enterprises evoke more interest, debate and hostility than evolutionary psychology, the effort to use the principles of evolutionary biology in studying the human mind.

Cognitive Science
In the last few decades, scientists in a variety of fields, including psychology, have harnessed concepts from computer science to understand how people take in information, process it and use it to solve problems.

Evolution
All life evolved through a process of natural selection. Organisms with traits that promoted survival or reproduction passed on those traits to future generations; others died off. Natural selection remains the central feature of evolutionary biology.

Evolutionary Psychology
It holds that the human mind is not a "blank slate," but instead, comprises specialized mental mechanisms for solving problems faced long ago. The question is, are these mechanisms limited to functions like vision, or do they extend to complex behaviors?

Sociobiology
The systematic study of the biological basis of social behavior; it attempts to explain animal behavior in light of natural selection and other biological processes.

Edward O. Wilson
Caltech's 1975 book "Sociobiology," laid a foundation for the field. Though most of it dealt with animals, its final chapter brought into the realm of human affairs, where critics said he was on shaky ground.

George C. Williams
In 1966, he refuted the idea that adaptations arise for the good of the species or group. Rather, he said, adaptations are the result of successful genes spreading themselves through the population.

William D. Hamilton
His work brought mathematical rigor to the study of evolution and offered a genetic basis for altruism, behavior that had baffled naturalists from Darwin onward. Wilson called Hamilton's work "pivotal."

A Shadow Over the Field

Social Darwinism
The 19th-century theory distorted Darwin's scientific message to justify social inequalities. Though scientists generally agree that social Darwinism has nothing to do with reputable evolutionary science, some theorists find themselves tarred with the term.