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Book Review

Bodies in Motion: Evolution and Experience in Motorcycling

by Steven L. Thompson

with a foreword by Andy Goldfine

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Steven L. Thompson's *Bodies In Motion*, using the framework of evolutionary biological theory, presents the intriguing argument that the pleasures we seek and experience in motorcycling are embedded in our very genes. While at times he seems to be using too much throttle on the argument—perhaps in need of a touch of front brake—he brings a level of intellectual sophistication and erudition seldom found in books about motorcycling.

Thompson claims that he is

persuaded ... that the artifacts of our evolution – specifically, our ancestors arboreal adaptations, many of which seem to have been preserved throughout our species' history – are the fundamental reasons why some of us are effectively addicted to motorcycling while others are not.

To put it another way, the evolutionary fitness of swinging through trees by our ancestors has been replaced by the sensorium we know as motorcycling. The vibrations, the turning, the leaning—all are modern-day equivalents of the motion we experienced as tree-dwelling creatures. Using the tools of “evolutionary science, psychology, human-factors research and engineering research,” Thompson proceeds chapter by chapter to expand his argument.

As anyone who has ever mounted a motorcycle knows, there exists some neurological basis for the pleasure we take in motorcycling. Thompson wisely notes that neurological research in the last part of the twentieth century that sought to locate, for example, pleasure centers in certain areas of our brain has not been supported by factual evidence. The brain, as Antonio Damasio has noted, is a “system of systems,” and as such should not be understood on the analogy of our other organs, which carry out a specific task for the benefit of the organism.

As Thompson notes,

But until the neurochemical bases for motion stimuli as emotion generators are themselves understood, tracking the data path away from the organ that detects motion and dispatches information about it to and throughout the “bodymind” is the closest we can come to mapping the way in which leaning into a turn generates a grin.

Still, motorcycles are special among transportation devices. “Motorcycles produce a wider range of motions that mimic the ones central to our collective evolution in the trees than any other ground-

bound personal transportation devices.”

In addition to exploring the motion involved in turning and leaning Thompson address the issue of both noise—the sweet music of the exhaust pipes—as well as vibration, a physical sensation sought by some and avoided by others. Thompson contends that individuals are drawn to specific motorcycles owing to the vibration pattern the bikes exhibit. To this end, Thompson sought to determine if specific motorcycles vibrated in a particular way that appealed to some precognitive element of our neurological system. In his words,

To determine, and then to illustrate the differences between the exemplars of various engine configurations for this book, I commissioned a study of motorcycle vibration by Stanford University’s Smart Product Design Lab. I envisaged a real-world test of motorcycles, using accelerometers to record the vibration ‘signatures’ of ten bikes at the primary human-machine interface points: seat, the handlebars, and the foot pegs.... I wanted to have comparative data to determine exactly how much the bikes differed or were similar in the vibration they delivered to their riders.

Given the complex statistical nature of his results, I will leave it to the reader to explore the data Thompson has collected. However, I can say what he has established is that there are statistically significant differences in vibration patterns of various types of motorcycles.

Thompson has sought to establish an evolutionary biological basis to our attraction to motorcycles. However, the next stage of his argument extends this idea from the biological to the social realm:

... we ride primarily for physical—or more precisely, psychobiological—reasons, and ... the bike’s social aspects are artifacts of its physicality. In other words, I think that it is the actual and perceived nature of the motorcycle in motion, and the bodies thus in motion on it, which drive the social dimensions of the motorcycle developed over the last century.

Thompson is making the case that our choice of what motorcycle to buy is guided by evolutionary impulses that, in a social context, develop what he calls “mototypes”:

...the development of motorcycle types, archetypal mototypes, and finally, stereotypes over the century has not been an incidental or accidental process, but necessary to integrate the machines, their riders and what the riders signify for themselves and to others in society.

Noting the popularity of these mototypes among consumers, manufacturers then refine the mototypes further, producing styles of motorcycles that originated from customization and customer demand. Underneath all the notions of individual choice and capitalist profit motives lies, according to Thompson, our biology: “Thus it is also clear why stereotypes in moto-imagery are useful socially, since shadings in the sensation-seeking traits one pursues are important, like the differences in plumage among birds, or any sexually-linked traits among animal populations.”

Further, Thompson understands motorcycle clubs as having an evolutionary function. “One reason why a motorcycle clubs are so useful is that they contain and channel male competitiveness in ways other cultural constructs do not.” A motorcycle club “simultaneously symbolizes a set of cultural associations and the sensations that lie deep under the associations.”

Thompson allies himself with E. O. Wilson, Jared Diamond, Stephen Jay Gould, Steven Pinker, to note

only the most prominent evolutionary biologists. Evolutionary biology provides an explanatory system so comprehensive that there is seemingly no human behavior that cannot be understood as a consequence of our Darwinian drive to assure the transfer of our genetic material into subsequent generations. This comprehensiveness is no doubt part of its general attractiveness as an explanatory theory. However, we should be rightly suspicious of any global explanatory system. Every culture is periodically dominated by such systems. Our own, for example, has seen systems such as Christianity, Hegelianism, Marxism, and Freudianism, as well as the currently popular evolutionary biology.

Thompson sees as a necessary assumption to the legitimacy of his argument that we have an enduring human nature. He singles out Marxism as a particularly dangerous brand of what he calls “cultural constructivism,” the idea that what we call human nature is not an essential property of our being, but rather the result of social forces. Thompson strongly disagrees:

... it's difficult not to conclude that the attempt to use the belief that human nature is essentially a cultural construct has been history's most catastrophic exercise. Human nature, as the sciences continue to reveal, is indeed somewhat flexible, but not nearly as elastic as Marx's diehard followers believe.

The argument over whether we do possess an enduring human nature or whether it is a social construct is as complicated as the Darwinian questions Thompson raises in this book and hence lies outside our current consideration. However, what can be said is that the arguments of evolutionary biology need to be carefully observed. Such arguments eerily resemble the development in the nineteenth century of the now-debunked theory of Social Darwinism, and perpetuate two problems for which Social Darwinism has been criticized.

First, observing the evolutionary impulses behind risk-taking behavior isn't the same thing as arguing for them. It's one thing to say that we can find biological bases to our social practices, but it's quite another to move from the realm of explanation to that of justification. For example, Thompson may well be able to claim that our desire for speed on a motorcycle is the result of our genetic impulses, namely, that risk-taking behavior is often rewarded by available females. It's quite another thing, however, to say that we ought to engage in risk taking behavior because we will improve our evolutionary fitness. Those who, for example, enjoy the thrill of motorcycling could reject it for a variety of reasons without, one has to assume, endangering their ability to actively transmit their genetic materials (some girls, I'm sad to say, just don't like motorcyclists).

Second, an unconscious sexist bias informs the argument. Women, as well as gay men, enjoy the risks inherent in motorcycling, yet neither group would be, so the argument goes, subject to the evolutionary impulses that are supposedly behind risk-taking behavior in heterosexual men. Moreover, most evolutionary biologists would argue that women seek protection (for their ovum/embryo/fetus), not testing the limits of one's skills at speed, so it's not clear how this explanation addresses the thrills sought by women. Darwin's and, by association, Thompson's argument does not account for the broader spectrum we all understand to constitute the motorcycling community.

So long as these important distinctions are understood we can profit from and enjoy these currently popular explanations of human individual and social behavior.

Thompson's final discussion has to do with the relationship between motorcycling and spirituality, a connection other writers have discussed, from Pirsig onwards. Thompson is winningly articulate in expressing the sense of that freedom we all find in our machines, tearing down the road: “Yet as wise

men and women remind us, to be human is more than to be a biological machine, and a human body is always in motion, if not externally, then internally, the mind and spirit free even when the body is not.”

He leaves us with this thought: “We who were born into the wide world need to find it sometimes to find ourselves, and we do it best when our spirits lead the way. And for millions of motorcyclists, putting our bodies in motion on two wheels is the way to liberate our spirits.”

Steven L. Thompson’s Bodies in Motion is available from Aerostich for \$19.95: www.aerostich.com.