

third is the “idea of a true, original natural religion, which has been obscured by accretions and corruptions, and which must now be laid clear again.” This last notion became so widespread that Unitarianism effectively reached beyond those who belonged to that denomination.

A book of such large proportions finally defies encapsulation, but one of its greater accomplishments is to challenge the modern (or is it post-modern?) orthodoxy that the hunger for religion is no more than the expression of some innate human need for meaning. Introduced by thinkers such as Friedrich Nietzsche and Max Weber, the idea has more recently been elaborated (and “scientized”) by sociobiologists and evolutionary psychologists. Taylor rejects it on the grounds that it usually ends up denying transcendent reality in the name of a generalized human longing for it.

For all his wariness of the factors leading to a secular age, Taylor appreciates the good that has come with a largely secular public sphere, not least because the alternative, in our time, would be endless violent conflict among contending faiths. But he is equally dismissive of postmodern sentimentalities, including the view that the sacred is merely one human construct among many. No, Taylor tirelessly and sometimes even eloquently insists, it is more than that. Much more. Including the ground on which our secularism stands.

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SCIENCE & TECHNOLOGY

Time Beings

By Sharman Apt Russell

IMAGINE A COUPLE SLOW-dancing. One partner leads. The other seamlessly follows. Now imagine that time—the natural progression of day and night, morning followed by afternoon and evening—is

the lead partner. Imagine your body dancing with time.

In fact, this is happening right now. Your internal clock (a big clock in the brain and smaller clocks scattered in cells throughout the body) keeps track of the passing minutes and signals for certain physical responses. As you move through the day, your body temperature steadily rises, along with your heart rate and blood pressure. Your muscle flexibility increases and your reflexes quicken. The level of the stress hormone cortisol declines. Hormones and neurotransmitters ebb and flow according to the hour, as does your white blood cell count. During the night, the hormone melatonin surges; your temperature, heart rate, and blood pressure fall; and the cortisol level begins to climb so as to peak when you must wake again.

The new research on chronobiology, or the effect of time on our bodies, is so compelling that some scientists suggest we should timestamp each visit to the doctor. A morning test might not reveal the hypertension of afternoon. Asthma is often worse at night, when adrenaline levels are low and bronchial passages shrink slightly. When we take certain drugs may determine how well they work. Late in the day, higher body temperatures cause medication to break down more quickly. In a recent study of colorectal cancer, the tumors in patients who were given drugs in a conventional steady dose were reduced in size by 30 percent. In patients treated in a chronotherapy regimen—in which drugs are administered at the time of day calculated to maximize their benefit and minimize their toxicity—tumors shrunk by 51 percent, and side effects were less severe.

Science writer Jennifer Ackerman takes us through the most recent discoveries about the body's natural rhythms, explaining that organisms on earth evolved these rhythms to deal with a rotating planet and its patterns of light and dark, warm and cold. Her larger point is that understanding this dance with

SEX SLEEP EAT DRINK DREAM:

*A Day in the Life of
Your Body.*

By Jennifer Ackerman.
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time can help us make better choices. Morning is best for activities that require balance and fine motor skills. After reading this book, you might schedule your next medical operation before lunch, when you could expect your surgeon to be at peak efficiency. Late afternoon is when most swimmers and runners set speed records. This is also when your pain tolerance is highest—a good time to be in the dentist's chair. Sperm concentration is higher in the late afternoon. By early evening, your body is often physically strongest. Later in the evening, you should avoid exercise if you want a good night's sleep. While these patterns are typical, they can vary. Sleep patterns are particularly individualistic, occurring along a

It is not surprising that mistakes that led to nuclear accidents at Three Mile Island and Chernobyl were made by night-shift workers.

continuum of "larks," people with peak alert times in the morning, to "owls," who are most alert in the late afternoon and evening.

Knowledge of the body's natural rhythms could also influence labor policy. About 15 percent of the American work force now labors through the night—when the body's clock is signaling sleep. Workers on the graveyard shift may be at higher risk for heart attack and cancer, as well as high cholesterol, high blood pressure, mood disorders, and infertility. They may also be a danger to others. Ackerman connects the major nuclear plant accidents at Three Mile Island and Chernobyl to mistakes made by night-shift workers.

In her account of a day in the life of your body, Ackerman explores a number of intriguing byways—orgasms, napping, the common cold, and nightmares. She provides a cascade of odd facts: Kissing your partner can involve an exchange of five million bacteria, for example, and fetuses yawn in utero. Her astonishment appears to grow with each chapter, and so does ours. Our bodies know just what to do

and when to do it. With a languorous dip and a graceful slide, we follow our partner's lead—a miracle in motion.

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Calculated Decisions

By Alexandra Vacroux

WORRIED THAT YOUR personal information is being collected and manipulated? Wonder why your favorite websites know your taste in books and movies better than your own mother does? In *Super*

Crunchers, Ian Ayres answers these questions and more as he tells a numerical tale both exciting and cautionary.

In the past several years, advances in computer storage capacity have made possible massive databases that are changing the ways government agencies, market research firms, and universities run their operations—and our lives. Ayres, an economist and law professor at Yale, sets out to explain how these databases, some of which contain thousands of times the information stored in the Library of Congress, can be quickly analyzed to shape real-world decisions.

Super Crunchers is not the dry econometrics textbook you couldn't get through in college. Ayres relies on baseball scouts, wine critics, entrepreneurs, and doctors to illustrate his argument, and goes into the gory mathematical details only in the last chapter. He illustrates regression—a statistical procedure that exploits databases to estimate how various factors influence a single outcome—by describing how electronic matchmaking sites such as eHarmony and True.com put people together. These companies propose matches by collecting clues to personality traits and social skills with detailed questionnaires. The

SUPER CRUNCHERS:
Why Thinking-by-Numbers Is the New Way to Be Smart.

By Ian Ayres. Bantam.
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