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Raymond Tallis Takes Out the 'Neurotrash'



Raymond Tallis by Felix Clay, Eyevine

By Marc Parry | OCTOBER 09, 2011

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Raymond Tallis likes a fight. On a recent afternoon, visiting this historic city to lecture at the University of Kent, the physician-philosopher intends to pick one.

His target: a rash of pseudo brain science that purports to explain behavior as varied as believing in God and falling in love. Tallis, a former clinical neuroscientist who devoted years to studying stroke and epilepsy, considers such claims trash. Neurotrash.

Taking out academic "trash" is a familiar role for Tallis. He first gained notice in the 1980s for brawling with literary theorists. The bearded doctor in the red fedora has since written more than 30 books that span philosophy, fiction, poetry, medicine, and cultural criticism. Much of this output he produced between 5 and 7 a.m., before starting his day job as a professor of geriatric medicine at the University of Manchester, a feat that earned him fame as one of Britain's top 100 public intellectuals (*Prospect Magazine*) and one of the world's leading polymaths (*The Economist*).

In 2006, Tallis gave up hospital-ward rounds for a full-time writing life that unfolds in morning and afternoon rounds of two local pubs. In these "offices," the atheist-humanist nurses his animosity toward thinkers who reduce human beings to animals "acting out a biological script inscribed in our brains by evolutionary forces." He takes aim at their exaggerated claims in a new book, *Aping Mankind: Neuromania, Darwinitis, and the Misrepresentation of Humanity* (McGill-Queen's University Press).

"We live in deeply pessimistic times," says Kenan Malik, a London-based historian of ideas. "There's a tendency to look at humans as being prisoners either of culture or of nature. Much of his argument runs against the grain of the received wisdom in contemporary culture."

Flamboyantly so. In a cheerful voice, turned out in a magenta tie and a blue boating blazer with broad white stripes, Tallis informs 60 people gathered in a Kent lecture hall that his talk will demolish two "pillars of unwisdom." The first, "neuromania," is the notion that to understand people you must peer into the "intracranial darkness" of their skulls with brain-scanning technology. The second, "Darwinitis," is the idea that Charles Darwin's evolutionary theory can explain not just the origin of the human species—a claim Tallis enthusiastically accepts—but also the nature of human behavior and institutions.

Those trends, as Tallis sees them, are like "intellectual illnesses" metastasizing from academic labs into popular culture. He sees the symptoms in neuro-economic thinkers who explain our susceptibility to subprime mortgages by describing how our brains evolved to favor short-term rewards. He sees them in philosophers who claim that our primate minds admire paintings of landscapes that would have supported hunting and gathering. He sees it in neurotheologians who preach that "God is a tingle in the 'God spot' in the brain."

So what's wrong with all that?

Many, many things, says Tallis, but the most basic problem with neuromania he illustrates by cuing up a slide of a fuzzy gray brain with some yellow bits lit up. This image represents love. At least that's the claim of two researchers, Andreas Bartels and Semir Zeki, who investigated the neural activity associated with romantic love by using fMRI scans to observe how subjects' brains reacted when they were shown pictures of loved ones. To Tallis, headline-grabbing studies like that—*Aping Mankind* skewers countless examples—are "crude enough to make a Martian laugh."

"Love is not like a response to a single stimulus, such as a picture," says Tallis, 65, who relishes his "robust" 38-year marriage to Terry Tallis, 64, a mostly retired social worker. "It's not even a single enduring state, like being cold. It is a many-splendored and many-miseried thing," which includes hope, jealousy, kindness, lust, guilt, delight, and moments of not feeling in love at all.

The backlash against neuroscience isn't new—one controversial paper in 2009 accused social neuroscientists of making "voodoo correlations" between brain regions and emotions—but the crowd delights in Tallis's hyperbolic version of it. The response from some philosophers and scientists has been less kind. That's because Tallis's beef is not just with crude methodologies. In detail so pitiless it threatens to be unreadable in parts, *Aping Mankind* argues that neuroscientific approaches to things like love, wisdom, and beauty are flawed because you can't reduce the mind to brain activity alone. And, like a school bully, Tallis taunts philosophers whose views he opposes, like Patricia S. Churchland (he calls her the "Queen of Neuromania"), John Gray (author of "misanthropic ravings"), and Daniel C. Dennett ("neuroscience groupie").

Stephen Cave, a Berlin-based philosopher and writer who has called *Aping Mankind* "an important work," points out that most philosophers and scientists do in fact believe "that mind is just the product of certain brain activity, even if we do not currently know quite how." Tallis "does both the reader and these thinkers

an injustice" by declaring that view "obviously" wrong, Cave wrote in a *Financial Times* review. Geraint Rees, director of University College London's Institute of Cognitive Neuroscience, complains that reading Tallis is "a bit like trying to nail jelly to the wall." He "rubbishes every current theory of the relationship between mind and brain, whether philosophical or neuroscientific," while offering "little or no alternative," Rees says in an e-mail.

Perhaps the harshest reaction comes from Dennett, an influential U.S. philosopher whose books square human life with science. He sympathizes with Tallis's concerns. But what every philosopher should know is that any philosopher—Plato, Hume, Kant, take your pick—"can be made to look like a flaming idiot if you oversimplify and caricature them," Dennett tells me.

"Tallis indulges in refutation by caricature," says Dennett, a professor of philosophy and co-director of the Center for Cognitive Studies at Tufts University. "He's not taking his opponents seriously. He's sneering instead of arguing. He's ignoring the complexities of the arguments. So he's not really doing philosophy. He's doing propaganda."

At least Dennett takes the bait. Two other Tallis targets, John Gray and the evolutionary biologist Richard Dawkins, declined to be interviewed for this story. Some find Tallis's arguments so "tiresome" they won't debate him in public, says one friend, Simon Shorvon, a professor of clinical neurology at University College London.

In contrast to his sometimes cranky prose, in person Tallis exudes charm. He carries himself with old-fashioned, my-dear-chap courtesy, a healthy dose of self-deprecation, and the down-to-earth warmth of a man whose professional experience includes calming patients during rectal exams. He questions strangers about their lives. Even when he's chatting with three people, he seems like he's on stage. "He's a *bon viveur*," says Shorvon. "He likes parties, pretty girls."

After the Kent lecture, as Tallis takes a cab with some colleagues to grab a drink downtown, it tickles him to learn that a graduate student in the group finds him "cute." Most women might judge that an odd verdict. Tallis has a long face, big ears, sunken yellowed eyes, and a "time-weeded cranial dome" ringed by "a low hedge of grey hair," to borrow the self-description in his book about the human head, *The Kingdom of Infinite Space*. He responds to the compliment by mentioning the advice he gave his wife when I called her up to find out more about him for this profile: "If he asks you what he's like in the sack, don't tell him." (She didn't.)

Two drinks later, reclining on a train to London, Tallis mellows as he sips from a cup of Stella Artois and tells me the story of his first steps into philosophy. It sounds like the plot of a bad existential novel: Young lad comes of age in Liverpool during heady days of Beatles and miniskirts, but his head fills with terror about whether humans have free will and life is an illusion. Then he reads philosophy and—moment of revelation!—finds others have pondered these things, too.

But that's what happened. Not that he planned to make a career of it. His father, a self-made building contractor, was skeptical of the trade. "Never knew a philosopher who could withstand a toothache," he liked to say. Anyway, Tallis had other ambitions. His path would be medical school, then a career in biochemistry. Watson and Crick had just won the 1962 Nobel Prize for describing DNA. Tallis thought that was going to be the secret of life.

There was just one hitch: It turned out he was a lousy biochemist.

But he took to medicine. Tallis trained at the University of Oxford and then ventured off to practice in Nigeria, a radical "desperate to do good." It was a shattering experience that haunts him still. The low point came when a woman

arrived at his hospital with cardiac failure. An injection could have saved her. But the nurse had gone off duty. The cupboard was locked. Tallis watched the patient die.

Returning to England, shorn of his revolutionary ideas and racked with guilt over his mistakes, he took three months off to think and write. But it would be years before his work appeared in print. Over a period of two decades, Tallis sent off manuscripts of philosophy, novels, and poems. He received 135 rejections. "The children used to say, 'Dad, there's another manuscript for you.' "

Then it happened: a moment of anger that propelled him to write the first prose book somebody actually wanted to publish. The trigger was *Of Grammatology*, by the French philosopher and literary theorist Jacques Derrida. "I thought, this is the kind of bullshit that's dominating so many aspects of the humanities," says Tallis, a sentiment that inspired his 1988 critique of literary theory, *Not Saussure*. Tallis took theorists to task for "bad linguistics," in particular misuses of Ferdinand de Saussure, a linguist whose ideas influenced structuralist and poststructuralist writers. At the time, the idea was to deconstruct texts to uncover underlying ideologies. Tallis felt that theory drove students to hate literature. He failed to incite a reaction from his foes in the "Theorrhoea-poisoned Groves of Hackademe," but others enjoyed his assault.

"There was a crisis of confidence," says Philip Davis, a Tallis friend and literary scholar at the University of Liverpool. "Old-fashioned people lost their nerve in the face of young people coming through with new theories. Ray's resistance to some of that helped some of those older people build up a case that could enable them to get on with their work." (Tallis has not, however, helped Davis get on with his recent work in the hot new field of "neuro-lit-crit." *Aping Mankind* shreds Davis's efforts to explain the impact of Shakespeare by examining how the Bard's

plays play with our brains. More broadly, Tallis huffs, it is "sickening that the humanities, traditionally a bulwark against the encroaching tides of scientism, have proved so willing to collaborate with the invaders.")

In 2003, Tallis's crack-of-dawn philosophizing began to yield a major work, a 1,000-page trilogy that accounts for what makes humans different from other animals while avoiding both religion and reductive biology. In these books of "philosophical anthropology"—*The Hand, I Am*, and *The Knowing Animal*—Tallis argued that humans escaped biology through a chain of events that began several million years ago with the evolution of the human hand. The dexterity of our uniquely free thumbs "utterly transforms the hominid's relationship not only to the external objects it is manipulating, but also to its own body," Tallis wrote, "and this in turn feeds back on to the relationship with those material objects"—carrying humans beyond unreflective animal instinct. With the fully developed hand also came the tool use that led to complicated symbolic systems like language.

Writing in the medical journal *The Lancet*, the philosopher A.C. Grayling praised the trilogy as "a remarkable achievement." Even so, his review pointed out a hard fact of Tallis's life: Most philosophers, suspicious of amateurs, had yet to pay any attention to him.

They're paying attention now.

The morning after our train ride, I get an unscheduled 8 a.m. wake-up call. It's Tallis, whose polymathic mind has been humming since 5:30, ringing to brief me on something pertaining to his latest neurophilosophical arm-wrestling opponent, Patricia Churchland. Their tiff began a week ago, when I called Churchland to get her take on *Aping Mankind*. She disliked how the book botched one of her ideas and crowned her "Queen of Neuromania" to boot. ("If I'm the

Queen of Neuromania," she jabbed, "he's the Archduke of Misrepresentation.") Now she'd e-mailed Tallis directly, scolding him that "it does science no good to set up straw men and argue against them."

Others lob much the same criticism. Dennett complains that *Aping Mankind* caricatures a controversial idea he develops: cultural memes. The Darwinesque concept originates in Dawkins's 1976 book, *The Selfish Gene*. Memes are analogous to genes, Dennett has said, "replicating units of culture" that spread from mind to mind like a virus. Religion, chess, songs, clothing, tolerance for free speech—all have been described as memes. Tallis considers it absurd to talk of a noun-phrase like "tolerance for free speech" as a discrete entity. But Dennett argues that Tallis's objections are based on "a simplistic idea of what one might mean by a unit." Memes aren't units? Well, in that spirit, says Dennett, organisms aren't units of biology, nor are species—they're too complex, with too much variation. "He's got to allow theory to talk about entities which are not simple building blocks," Dennett says.

A couple of hours after Tallis's phone call, I sit down with him over coffee and biscuits at his London club, the Athenaeum, to talk more about his disputes with philosophers like Dennett and Churchland. In Victorian times, the Athenaeum was an important place of national debate. Dickens and Thackeray reconciled their quarrel at its front staircase. People of faith met doubters there. Today another former member, Darwin, gazes from a portrait above the bar—"watching the animals at play," quips Tallis. And one of the contemporary debates of most interest to Tallis is the one among secular thinkers arguing over the implications of Darwin's ideas. In that drama, Tallis has won acclaim in the British press: *The Guardian* recently cast him in the role of trying to "rescue atheism from the currently fashionable atheists."

Aping Mankind sprang more than anything from Tallis's outrage at one of the most fashionable of British thinkers, John Gray, a former professor at the London School of Economics and Political Science who has been called "the philosopher of pessimism." In 2002, Gray produced *Straw Dogs: Thoughts on Humans and Other Animals*, a book that relieved Tallis of any need to set up a straw man. It posited that a human being is "an exceptionally rapacious primate." What's more, Gray wrote, "If Darwin's theory of natural selection is true ... the human mind serves evolutionary success, not truth. To think otherwise is to resurrect the pre-Darwinian error that humans are different from all other animals." In reality, "our lives are more like fragmentary dreams than the enactments of conscious selves." Our natural condition is illusion. Our faith in progress is a fantasy. Will Self, a novelist and admirer of Gray's, wrote that a better title for *Straw Dogs* might have been "How to Contemplate the Inevitable Destruction of the Majority of Humanity With Total Equanimity."

Tallis contemplated *Straw Dogs* with disgruntlement. Especially so because it won a rapturous reception among British highbrows. What appalled him was the conclusion he took away from Gray's writing: that because Darwin showed we are animals, we are doomed never to improve our lot.

"That's fine to be pessimistic about the future of humanity if you're a nice, comfortable professor in a tenured chair at the London School of Economics," Tallis tells me. "If you're a bloody child grubbing in the dirt, and you knew those buggers over there were saying, 'There's nothing we can do about the world,' while they're drinking their claret, it wouldn't give you much hope in the dirt, would it?"

That disgust at Darwin-inspired pessimism is straightforward, but what about the mind-brain distinction? Here his arguments get more elusive. But the basic dilemma is clear enough. It is what some philosophers call the "hard problem" of consciousness.

Tallis explains it using the example of himself, sitting on a plum couch in the Athenaeum's smoking room. How is it that he perceives the glass of water on the table? How is it that he feels a sense of self over time? How is it that he can remember a patient he saw in 1973, and then cast his mind forward to his impending visit to the zoo? There are serious problems with trying to reduce such things to impulses in the brain, he argues. We can explain "how the light gets in," he says, but not "how the gaze looks out."

And isn't it astonishing, he adds, that much neural activity seems to have no link to consciousness? Instead, it's associated with things like controlling automatic movements and regulating blood pressure. Sure, we need the brain for consciousness: "Chop my head off, and my IQ descends." But it's not the whole story. There is more to perceptions, memories, and beliefs than neural impulses can explain. The human sphere encompasses a "community of minds," Tallis has written, "woven out of a trillion cognitive handshakes of shared attention, within which our freedom operates and our narrated lives are led."

Those views on perception and memory anchor his attack on "neurobollocks." Because if you can't get the basics right, he says, then it's premature to look to neuroscience for clues to complex things like love.

Churchland draws a different conclusion from Tallis's misgivings: So what?

Yes, many unanswered questions persist. But these are early days, and neuroscience remains immature, says Churchland, a professor emerita of philosophy at University of California at San Diego and author of the subfield-spawning 1986 book *Neurophilosophy*. In the 19th century, she points out, people thought we'd never understand light. "Well, by gosh," she says, "by the time the 20th century rolls around, it turns out that light is electromagnetic radiation. ... So

the fact that at a certain point in time something seems like a smooth-walled mystery that we can't get a grip on, doesn't tell us anything about whether some real smart graduate student is going to sort it out in the next 10 years or not."

Dennett claims he's got much of it sorted out already. He wrote a landmark book on the topic in 1991, *Consciousness Explained*. (The title "should have landed him in court, charged with breach of the Trade Descriptions Act," writes Tallis.)

Dennett uses the vocabulary of computer science to explain how consciousness emerges from the huge volume of things happening in the brain all at once. We're not aware of everything, he tells me, only a "limited window." He describes that stream of consciousness as "the activities of a virtual machine which is running on the parallel hardware of the brain."

"You—the fruits of all your experience, not just your genetic background, but everything you've learned and done and all your memories—what ties those all together? What makes a self?" Dennett asks. "The answer is, and has to be, the self is like a software program that organizes the activities of the brain."

As for Darwin, Dennett cheers him on whereas Tallis charges him with trespassing—in economics, aesthetics, culture, and morality.

"Consciousness, meaning, purpose, culture, and morality are all natural products of evolutionary biological processes," Dennett says.

He adds, "I see Tallis as a sort of outraged defender of an obsolete worldview that's losing ground fast."

That statement will only further outrage Tallis. But he does concede that one of his critics is right. That would be Rees, the neuroscientist who slapped him for junking everybody else's mind-brain theories without proposing his own.

"Absolutely," says Tallis. "I have the Socratic wisdom of knowing that I don't know. Which is a start."

Marc Parry is a staff reporter at The Chronicle.



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