Chris McManus applauds dexterous insight from the Sina

read Raymond Tallis' wonderful book on a train from Carlisle to London. The electrically powered, precision-engineered metal boxes sped at 100 miles an hour on endless steel tracks while I relaxed in an upholstered seat, sipped coffee brought as beans from the tropics and turned the bound pages, each with its thousands of little black symbols. Even reviewers tire, and so I turned on my Walkman and, as a laser scanned the tiny pits on the rapidly turning plastic disc. I heard Dmitry Shostakovich's eighth string quartet. The Brodsky Quartet had played it in Berlin in 1989, scraping long pieces of hair over tensioned gut and steel strings stretched across varnished

The Hand: A **Philosophical Inquiry** into **Human Being**

By Raymond Tallis

Edinburah University Press, 364pp £60.00 and £19.99 ISBN 074861737X and 1738 8

wooden boxes made. if they were lucky, a couple of hundred vears ago in northern Italy. The rapid. closely coordinated finger movements reproduced the intentions of a man in Russia in 1960 who had written music for a film about the city called Dresden that

ing hundreds of miles to drop explosives from the skies.

In the postmodern world, we take such technology for granted. Tallis wants to restore the sense of wonder, the sheer incredulity, that such things exist and have been made to exist. CDs and hot coffee and violins and trains are not part of the natural world. They have, however, been crafted and engineered by something that is part of the natural organic world: us.

How was this ever possible, asks Tallis, in a book he describes as taking biology to the frontiers of metaphysics, and why did none of the other species on this planet, not even our fellow apes, ever get anywhere near? His answer, simply, is that ours was the only species that developed a hand with a fully opposable thumb, nails rather than claws and an array of sensitive touch receptors that could manipulate objects with power and precision. A big brain to control that hand was also useful, but would have been pointless without the hand, that infinitely versatile sensorimotor effector, Aristotle's "tool of tools".

The Hand is a complex, sometimes rambling book, and is only the first volume of a trilogy whose unpublished parts will reflect further on human evolution and its relation to action, self-consciousness and knowledge. The book tries to do many things, most of them successfully.

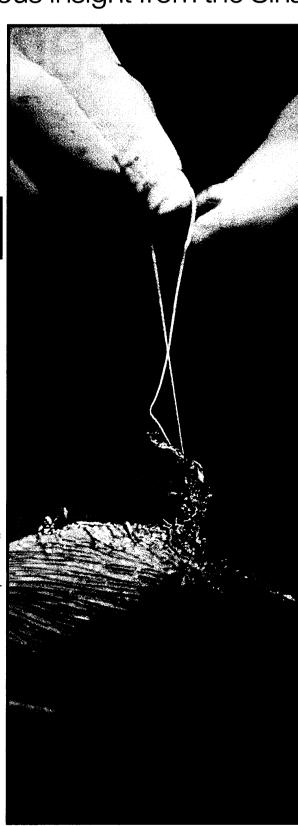
Purely as literature, it succeeds as few books on anthropology or philosophy or

Grasp on life allowed man to called Dresden that had been devastated by large machines flyto drop explosives

biology or evolution ever do. This paean to manipulation and dexterity is a prose-poem of playfulness, lightened and enlightened by insightful punning, autobiographical introspection and scatological endnotes. It converts the banal and the mundane into things of wonder and deeper questioning and is reminiscent of Montaigne, The Anatomy of Melancholy and Sir Thomas Browne's Vulgar Errors. And yet Tallis also has big philosophical and biological targets in sight and takes careful aim at them.

The central thesis is that the evolution of the human hand, that extremity that at first glance seems so minimally different from the five fingers of other primates, pushed humans over the threshold, which made possible self-conscious reflection through an endless cycle of us acting on the world and the world acting on us. Tallis is a selfdeclared "exceptionalist", believing there to be a vast gap between us and the other animals on this planet. However, he is also a practising doctor and daily observes how our unexceptional vertebrate anatomy, physiology and biochemistry cause the eventual earthly demise of bodies containing a brain that dreams of the stars and flies to the

Tallis argues that human consciousness



Manual skills: the driving force of human developm

dexterous insight from the Sinatra school of thought

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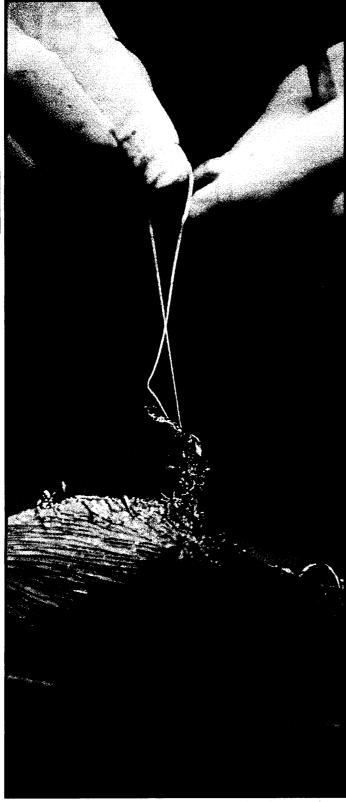
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Manual skills: the driving force of human development?

arises in the use of tools to manipulate and make things, thereby acting on the world, changing it and hence understanding it, and thence building ever-more sophisticated tools, including, ultimately, tools for thinking itself. Tallis acknowledges that the idea of man as an animal helped jettison much unwanted philosophical baggage during the Enlightenment and put humans in their rightful biological place in the animal kingdom. However, to continue to invoke a serious sense of cognitive continuity with the apes, merely because chimpanzees occasionally use a hammerstone to remove a nut's kernel, or because 90-something per cent of a chimp's genes are identical to our own, is to miss the big story. No Martian biologist would be impressed by these similarities, and neither should we be, except perhaps to ask about the spasms of anthropomorphic sentimentality that drive people to think them important. It is the differences that matter.

Tallis acknowledges his own "reckless speculations", but they are inevitable with provocative and new ideas. There are areas of omission, and there are details to be completed. The human hand may be different from that of other apes, but that does not say how and why that evolution occurred. Is a partly opposable thumb of any practical use, and what were the selective pressures that changed the hands of those apes that came down from the trees?

Tallis also skips over that other huge difference in our hands and those of apes — handedness. The right hand that most of us prefer to use is controlled by the left half of the brain that also processes language, the other quintessentially human characteristic, while the right hemisphere does other things. How did having two functionally different cerebral hemispheres in continual dialogue alter human consciousness and action? I suspect that cerebral lateralisation is a major part of human exceptionalism.

There is a well-known graffito that has many philosophically implausible variants and, according to the internet, two much-repeated attributions (Kurt Vonnegut, Jr, and "Men's restroom, Greasewood Flats, Scottsdale, Arizona"). In its most alliterative version it reads:

"To be is to do" — Socrates
"To do is to be" — Sartre

"Do be do be do" — Sinatra Raymond Tallis is undoubtedly of the Frank Sinatra school of philosophy. He believes that doing drives being and being drives doing in a never-ending spiral. He also believes in philosophy that is entertainment.

Chris McManus is professor of psychology and medical education at University College London, and the author of *Right Hand*, *Left Hand*.