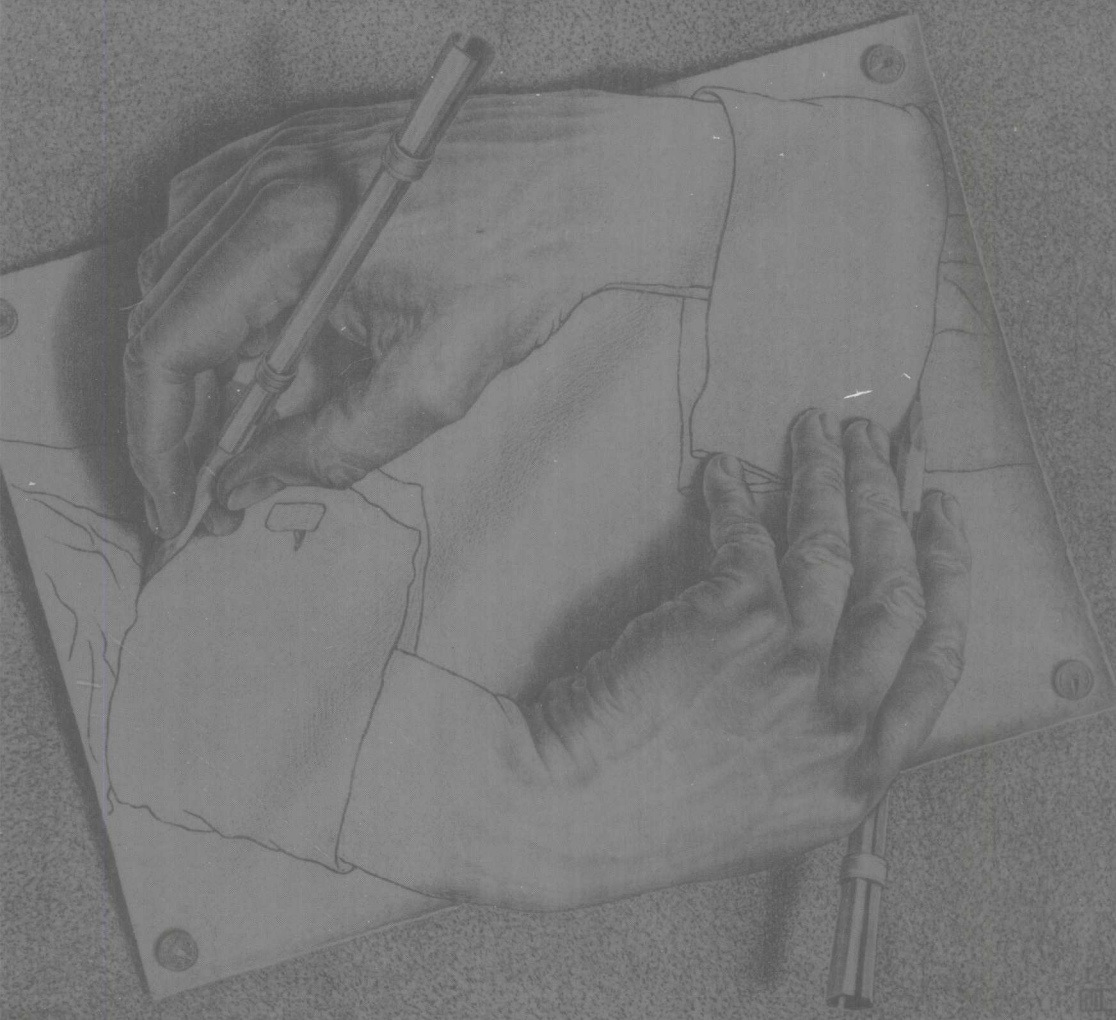


# THE HAND

A PHILOSOPHICAL INQUIRY INTO HUMAN BEING



RAYMOND TALLIS

# The Hand

*A Philosophical Inquiry into Human Being*

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Raymond Tallis

Edinburgh University Press

For Terry, whose hands have borne me up

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Edinburgh University Press Ltd  
22 George Square, Edinburgh

Typeset in Sabon  
by Koinonia, Manchester, and  
printed and bound in Great Britain  
by Antony Rowe Ltd, Chippenham, Wilts

A CIP record for this book is available  
from the British Library

ISBN 0 7486 1737 X (hardback)  
ISBN 0 7486 1738 8 (paperback)

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## The Hand

The titles in this three-part work by Raymond Tallis, and published by Edinburgh University Press, are:

*The Hand: A Philosophical Inquiry into Human Being*

*I Am: A Philosophical Inquiry into First-Person Being*

*The Knowing Animal: A Philosophical Inquiry into Knowledge and Truth*

2007

# Acknowledgements

This 'five-fingered salute to the hand' would be incomplete if I did not also salute the work of the many scholars upon whose work I have been unashamedly dependent. The observations of John Napier – a pre-eminent chirophile whose writings I have drawn upon at many places – in the Acknowledgement to one of his own books is particularly pertinent:

Anyone who writes books about science or indeed about any subject that is rich in facts, figures and ideas is from the beginning up to his neck in debt. He must beg, borrow, steal, left, right and centre. His pilfering is usually made respectable by the inclusion of a bibliography, but formal citations do not tell more than a fraction of the story of an author's obligations to colleagues living and dead. (*Hands*, London: George Allen and Unwin, 1980, p. 7)

If this is true of an authentic scholar of the hand such as Professor Napier, it is even more true of an interloper such as the present author!

In the Introduction, where I describe the genesis of *The Hand: A Philosophical Inquiry into Human Being*, I particularly acknowledge the inspiration of conversations with Professor David Marsh, Dr Paulette van Vliet's thesis, which I had the pleasure to examine, and the work of scientists such as Professor Alan Wing. In all three cases, their benefactions were largely unconscious; from which it follows that they cannot be held responsible for any errors of fact and interpretation in this volume.

In the final three chapters I explore the role of the hand, and its tools, in human evolution. Here, I have strayed furthest from my own area of expertise and consequently my 'begging, borrowing, stealing' have been

especially shameless. I have been heavily dependent upon a relatively small number of major texts, which are fully acknowledged, though the extent to which they have shaped, as well as informed, my thinking is perhaps not fully apparent. What will be apparent is that *The Hand: A Philosophical Inquiry into Human Being* is by no stretch of the imagination a primary work of factual scholarship. Any originality it has lies in the synthesis of material from widely disparate quarters – neurophysiology, palaeontology, etc. – and, above all, ordinary observations of daily life, in the service of a handful of philosophical (and, in the companion volumes, specifically ontological and epistemological) ideas about the fundamental nature of human beings and the origin of their profound differences from all other living creatures. Such scholarship as the book manifests has been requisitioned on behalf of philosophical arguments, whose implications will not be fully apparent until the trilogy, of which this is the first volume, is complete.

It is a special pleasure to acknowledge the work done on the typescript by Ruth Willats, who, in addition to her usual meticulous copy-editing, saved me from quite a few factual blunders. She also made several fascinating observations, which I have been unable to resist stealing, thus making me further indebted to her.

This book would not have been published had it not been for the interest shown in my writing by Jackie Jones, Editorial Director of Edinburgh University Press, and her enthusiasm for and support of the overall philosophical project. The organisation of the proposed trilogy owes much to her. She has even suggested the definitive titles of the volumes. For all of this, I am enormously grateful.

My greatest debt is, as always, to my family: to Ben and Lawrence who have goodnaturedly tolerated my latest obsession expressed in, for example, a tendency to talk about pebble choppers at the breakfast table; and, above all, to my wife Terry, without whose love and support I could not have been a writer as well as a doctor.

The hand is the window on to the mind.

*Immanuel Kant*

Man's place in nature is largely writ upon the hand.

*F. Wood Jones*

I could worship my hand even, with its fan of bones laced by blue mysterious veins and its astonishing look of aptness, suppleness and ability to curl softly or suddenly crush – its infinite sensibility.

*Virginia Woolf*

Proud man alone in wailing weakness born,  
No horns protect him and no plumes adorn;  
No finer powers of nostril, ear or eye,  
Teach the young Reasoner to pursue or fly. –  
Nerved with fine touch above the bestial throngs,  
The hand, first gift of Heaven! to man belongs;  
Untipt with claws the circling fingers close,  
With rival points the bending thumbs oppose,  
Trace the nice lines of form with sense refined  
And clear ideas charm the thinking mind.  
Whence the first organs of touch impart  
Ideal figures, source of every art;  
Time, motion, number, sunshine, or the storm  
But mark varieties in Nature's *form*.

...

The human species in some of their sensations are much inferior to animals, yet the accuracy of the sense of touch which they possess in so eminent a degree gives them a great superiority of understanding.

*Erasmus Darwin*



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# Introduction

## ORIGINS

The origins of the volume you are (probably) holding in your hand are somewhat scattered and complex, and largely lost in the mists of Tallis. I can, however, remember the precise moment when I decided that, yes, this was the book I wanted to write next, though its gestation – or what I can remember of it – had begun at least a couple of years before.

As happens once or twice a year, I had agreed to act as external examiner for a doctoral thesis.<sup>1</sup> To my surprise, I found reading the thesis (an academic chore I usually dislike) an enjoyable experience. It was beautifully written – which made its 250 pages a change from the bad or mediocre prose I was used to. More importantly, its theme, not at first sight very promising, proved fascinating.

The thesis described a group of painstakingly executed studies of reaching and grasping movements in patients who had sustained a stroke affecting the arm. In passing, the candidate introduced her examiner to an entire literature about the control of upper limb movement of which he had previously had only the most rudimentary knowledge; in particular the work of experimenters such as Alan Wing and Pierre Jeanerod. This literature was a forcible reminder of the extraordinary achievements that are built into the most ordinary of our activities.

For her research, Dr van Vliet required her patients to reach out for, and pick up, a glass that was either empty or half-filled with water. This was an apparently simple task. The descriptions of her experiments and the literature to which she referred were, however, anything but simple; indeed, they proved a revelation of the obvious non-obvious. We shall visit this literature in due course (see especially section 2.2, 'The Genius of Reaching'), but it will become evident, as we examine them in some

detail, that reaching, grasping and gripping cannot be something that we *do* because we could not manage to control all the relevant variables with the requisite precision. The action, in other words, cannot be entirely driven by conscious agency; it has to be predicated on (cerebral) mechanism(s) – more specifically on the availability of tailor-made motor programmes that can be requisitioned as required.

On the other hand, the action cannot be entirely downloaded to mechanisms because we would have no sense of doing it; nor could we relate it in a meaningful and flexible way to the flickering network of our evolving, highly specific and personal intentions and the unique world of meaning into which they are inserted; nor, finally, if the movement were created out of fixed and automatic mechanisms, could the action, or the strategy by which it is realised, be continuously modified in the light of rather complex unfolding aims, information and circumstances. This raises questions about the relationship between agency and mechanism in human actions.

It will be evident that the thoughts prompted by Ms (now, deservedly, Dr) van Vliet's rich thesis went far beyond those relevant to my role as external examiner. I had an inchoate sense of having come upon a different way of illuminating the kind of thing I am. At any rate, there was the feeling of something 'philosophical' in the background: something that might cast light on our own nature in the wider sense. This was not entirely appropriate because the kinds of actions that Dr van Vliet's work investigated are not unique to human beings: apes and other non-human animals reach out and grasp things. But human reaching opened up questions about other manual activities, some of which are unique to humans. I could not shake off the sense of something immensely interesting in the hinterland and worthy of exploration.

I tried to find an outlet for this feeling in a variety of ways. Most notably, I attributed Dr van Vliet's work to a fictional neurologist, a tragic, gifted character whose gathering unhappiness from a multiplicity of causes ends with his death – by his own hand. The complexity of Dr Langley's life has still to find its definitive formulation in *A Far Country*, which is at present, like so many of my fictions, a massive torso awaiting a full set of limbs. And then my preoccupation with the hand was displaced by an unexpected book on Martin Heidegger's *Being and Time* – *A Conversation with Martin Heidegger*<sup>2</sup> – which waylaid me in 1999. However, the hand still retained an important place, amongst reserve preoccupations, if only because of the number of times I typed out the word 'hand' in the course of writing the Heidegger book. For 'readiness-to-hand' (an English translation of the word *Zuhandenheit*) is a term Heidegger uses to denote one of the fundamental, indeed

primordial, categories of Being in his ontology. According to Heidegger, the world is composed primarily of 'handy beings'; and 'handiness' is central to his so-called 'existential analytic'. The world, for the Heidegger of *Being and Time*, far from being the traditional collection of 'objective presences' that constitutes the physical universe of science, facing the equally traditional isolated subject, is a nexus of 'the ready-to-hand' disclosed in, by and to *Da-sein* or 'being-there'. It is not a rubble-heap of matter, or of discrete physical objects, but a network of meanings embodied in the ready-to-hand.

Without either of us knowing it, therefore, my long conversation with Heidegger in the spring, summer and autumn of 1999 was preparing me for a much shorter conversation I had on a late-night car journey in November 1999 from Londonderry to Belfast with Professor David Marsh, incumbent of the Chair in Orthopaedic Surgery at Queen's University, Belfast. Among other things, this conversation reminded me that my first encounter with the wonder of reaching and grasping with and the cleverness of the hand had not, after all, been Dr van Vliet's thesis. For it had been Dave Marsh who had first drawn my attention, several years earlier, to the extraordinary cunning built into the ordinary actions of the hand. He had become aware of this when he had been writing his thesis.

The circumstances of our conversation that November were propitious: we were being driven through the darkness by our genial host, Professor Bob Stout. I was mildly drunk and, moreover, much relieved at having discharged my duty as the first Desmond Whyte memorial lecturer. (My topic – The Future of Old Age – had bored my audience less than I feared it might have done.) We talked about this and we talked about that and we then fell to talking about the beautiful work Dave had carried out for many years before on the recovery of tactile sensation in the fingers following nerve injury. As we entered the outskirts of Belfast, travelling along a sodium-lit dock road that could have been anywhere, I realised that 'The Hand' was a theme that could bring together sufficient of my preoccupations to justify its being the subject of my next book. What I could not have then foreseen was the extent to which this theme would open and that it would lead the way into an entire trilogy, of which this is the first volume. It has become an instrument for helping me to get a handle on those things that, philosophically, seem to me to matter most: making sense of what it is to be a human being. This is a bold statement and most certainly requires explanation.

## PURPOSE

According to Kant, getting clear about what it is to be a human being is philosophy's most essential preoccupation<sup>3</sup> – so that 'philosophical anthropology', far from being a rather soft and woolly subdivision of the discipline, may be its ultimate purpose, the point at which its different, more narrowly focused, enterprises – the philosophies of mind, of art, of ethics, ontology, epistemology, metaphysics, etc. – converge. Kant's is a view that I wholeheartedly endorse. Of course, for reasons that hardly need spelling out, we will never get entirely straight about ourselves, in the way that we may get straight about some of the things that lie outside of ourselves. We must always live our lives opaquely, acting out bodies, desires and thoughts that we find ourselves possessing and being possessed by. But it is not unreasonable to hope that, through a more compendious vision, founded on a tough sense of reality infused with the widest and most tingling sense of possibility, we might come to understand a little better our own nature; not our own individual nature – the nature of Raymond Tallis as opposed to that of A. N. Other – but our nature as examples of a universal (though not Platonic) type, as instances of humankind. Out of this may come not only a more precise definition of the limits, of the fixed 'given', within which all humans must live, but also and more importantly – since *l'homme surpasse infiniment l'homme* – an intenser understanding of how loose that 'given' is and how one might transcend the seemingly obdurate limitations it imposes upon one's life.

Interpreted in this way, doing philosophy may be seen as a means of coming upon oneself as from afar and alighting upon what one is, in the most usefully general sense. Out of this encounter may arise an enriched, more critical, less habit-prisoned, less parochial attitude to our life; a stronger feeling for its possibilities, its duties, its station in the wider scheme of things. We might even arrive at a better understanding of what is good for us; of what our ends truly are; and how better to order our affairs in our individual and collective pursuit of them. More probably – and, to be honest, more excitingly – we might arrive at a sharper awareness of the miraculous, complex, mysterious creatures we are. This is what, ultimately, philosophical anthropology may be about.

At the beginning of the twenty-first century, it may be felt that the history of the preceding hundred years has taught us more about human nature or human possibility than we actually want to know. Correspondingly, readers may feel sceptical of what may sound like a somewhat romantic expectation of the outcome of philosophical inquiry, particularly of an inquiry that takes its rise from a consideration of

something as commonplace as the human hand. There is surely little room for human self-redefinition, and what little redefinition is possible is least likely to come from philosophical reflection.

After all, it will be argued, in the century that has just passed, humanity has utilised other ways of uncovering the essential characteristics – the greatness, the pettiness, the nobility and nastiness, the splendour and the nullity – of mankind. Some of the things that we have learned seem to suggest that there are severe limitations to human nature and that the given is not readily ripe for renegotiation. The nastiness of recent times, the argument will continue, differs from the immemorial nastiness of all times only in the vastness of its scale and the degree to which it has been organised.

To take an extreme example, the experience of the concentration camps – which demonstrated the ease with which an individual may be reduced to a crazed animal grubbing in the dirt and the readiness of others to take on the task of supervising that reduction, or to collude with it, or to ignore it – has, for some thinkers, provided an authoritative answer to the questions, ‘What is man? What possibilities lie within us?’<sup>4</sup> The twentieth century taught us a practice of philosophical anthropology in which part of humankind may be redefined by the rest of humankind as trash and vermin. And it cruelly demonstrated that even distinctively human suffering is a reminder not, as Novalis claimed, of ‘our high estate’,<sup>5</sup> but of the profound ambiguity of our condition – as beasts, and worse than beasts, more beastly than beasts.

Beyond or beneath the devastating moral lessons of death camps, totalitarian states and total war, there is the additional daily evidence of the inescapability of our bodily condition and the defining limitations this imposes upon us. When, in *As You Like It*, the Duke says of ‘the icy fang’ and ‘the churlish chiding of the winter’s wind’ that

These are counsellors  
That feelingly persuade me what I am.<sup>6</sup>

he is articulating an important truth about us: whatever we may discover about ourselves, whatever human possibilities may be uncovered or postulated through reflection and exploration, we deceive ourselves if we forget how we remain fastened to our physical body and, through embodiment, are vulnerable to pain and suffering from within and without that body: we shall always be under the sway of its imperious needs. The very nature that nurtures us may also torture us, having no more care for a dying child than for the micro-organisms that kill her. And it is through our bodies that our enemies may seize hold of and



possess us. Cold, starvation, illness, accident, bullies, persecutors, tyrants, bullets: these are reminders of our inextricated state. Through our bodies we are exposed to the anti-meanings of pain, nausea, shortness of breath. Sooner or later, we all die. And we usually die as animals die: panting like them; like them, vomiting, fighting for air, twitching, in pain. Such is the final common pathway imposed upon us all. These surely are counsellors that persuade us what we truly are. What price, therefore, human possibility? What new revelations about us are to be gained from philosophical anthropology? Surely there is nothing more to be learned.

I believe that there is much more to be learned, because we are distanced from our condition, and from our material, biological and ethical limitations, if only in virtue of our being aware of them, as Pascal proclaimed from the heart of his own suffering. The thinking reed is nobler than the universe because he, unlike the universe, knows that he is being crushed. And we may claim more than this Pascalian dignity: for our distance from nature is elaborated with extraordinary complexity. We have, for example, developed theories, myths, legends about our condition – as is demonstrated by the very lines just cited from *As You Like It* to express our limitations: we have the notion of our fallenness, of ‘the penalty of Adam’. In the Duke’s mouth, ‘the icy fang / And churlish chiding of the winter’s wind’ become ‘counsellors’ that ‘feelingly’ persuade him what he is. He contrasts their counsel with that of the flatterers in the life of ‘painted pomp’ from which he has been exiled. The cold wind has become the antithesis of an (abstract) court counsellor and so, itself, is transformed into an abstract symbol. And the elaboration of our distance from our embodied state does not stop there. After all, the Duke’s speech is itself an instrument of further, highly sophisticated, purpose: it is Shakespeare’s means of representing the character of the Duke and of discovering the plot to us; and the play of which the speech is a part is in turn enacted, rehearsed, criticised, interpreted and – as in this Introduction – cited in support of an argument about the character of humankind.

Thus have we distanced ourselves from a state deemed to be natural, or the initial condition of the human animal – though it remains something to which so many are reduced – and in this respect we are not captured by the naturalistic viewpoint that understands us as a piece of nature. Whereas it is something of an exaggeration to say that (some of) humankind has ‘spoken itself free of organic constraint’,<sup>7</sup> it is no exaggeration to assert that we have, through a multitude of faculties, become insulated from this putative natural state, a state that we may observe even in our nearest relations among the higher primates. Granted