From *IDOLS OF THE MIND*, by Bhakti Madhava Puri, PhD, ISBN 978-1-7349089-5-4. Princeton: Bhakti Vedanta Institute, pp iii-v, June 2020.

Foreword

In the era of IT and robotics it is all too easy to confuse digital artifacts with living systems but, as Madhava Puri clearly shows in this wide-ranging essay, the two are irreconcilable. A living organism is not a machine. A machine is a construct of human ingenuity and relies on external mediation to function. Yet practitioners in the field prefer to imbue their constructs with metaphysical attributes, ascribing intelligence to problem-solving software, and life to robotics. The public are more easily seduced by this delusion that many might think. On the Jimmy Fallon television show a mechanical mannequin was produced. The host (and the guest who had invented it) agreed it was basically alive. It was, of course, no more than an elaborate doll; but the *zeitgeist* has robots as near-rivals to humankind. A popular television show reflects what is current in the minds of many, and this serves as a warning to us all.

When so many authorities are promulgating their products as almost supernatural, the Bhakti Vedanta Institute of Princeton seeks to investigate the realities of this intricate interaction to provide a soundly-argued case that restores reality. With its roots in Aristotelian philosophy, the distinction between life and non-life has an ancient lineage. Yet in our post-Cartesian mechanistic environment it is all too easy to subsume the one into the other. Seventy years ago, at Bristol in England, Grey Walter invented robots the size of a helmet that were equipped with photo-electric sensors which caused them to avoid dark obstacles placed in their path. They moved like small cybernetic entities, and he went so far as to insist that he had created the first 'artificial life', with the equivalence of two living cells. Indeed, he gave them a Linnean binomial designation – he said they were *Machina speculatrix*, a new organism. Throughout the following decades, this hubris has marked out our progress through to a digital age.

To those of us who are devoted to the elucidation of the single cell, and the adaptability, ingenuity, and sheer intelligence it manifests, the pretense of making mechanical models is absurd. There is a majesty about the vitalism of a microbe, with which technological models cannot compare. A machine is just a machine, no matter how refined we make it appear, and the relationship between organism and artifact becomes clearer as the reader digests the arguments within these pages.

In this book, Madhava Puri seeks to transcend the physical and seek enlightenment from the spiritual dialectic of G. W. F. Hegel as well as the Bhagavat Vedanta of Hindu philosophy. How well he succeeds is up to the reader to determine. The fundamental thrust of the discussion is to enlighten us all as to the down-to-earth, pragmatic realities of being. We explore. We sense. We think. We conclude. We live. A machine merely exists, and comes to being only through the artifice of its manufacturer. Complex devices, like autonomous robots, can behave in extraordinary ways and perform unimaginable tasks, that's true. But our sense of wonder and amazement is wrongly directed if we find we are admiring the machine. This sophistication reveals the mental might of the man who made it, and is testimony to the complexity of life. The

machine would be nothing without its human creator, and we would do well to remind ourselves where our loyalties lie.

The title of this book, *Idols of the Mind*, stems from the writing of Francis Bacon in the sixteenth century. It was at this time that Juanelo Turriano, a clockmaker to the Holy Roman Emperor Charles V, constructed a mechanically operated model monk which walked and prayed silently as it brandished its crucifix in one hand, and a rosary in the other. Charles's son, King Philip II, commissioned the construction of this curious automaton and, when it was set on motion, courtiers fled in fear, believing it to be alive. We now smile patronizingly at their naïveté, knowing better in the twenty-first century. Or do we? Madhava Puri demonstrates that we, in our own era, are just as confused, and are equally easily taken in.

Even the most sophisticated digital device is no match for the wonderful workings of a microbial cell. Life has a degree of refinement that cannot thus be replicated. As we explore the interrelationships between humanity, the mind, consciousness and the constructed habitat in which we exist, we would do well to appreciate the uniqueness of living, and the arbitrariness of existence. No mind can apply itself to comprehend anything as great as it is, and the chance to explore the ramifications of this enduring paradox within the pages of this book is one in which we can relish – as we celebrate our uniqueness in an unfathomable world.

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