

“Stapledon and Cosmic Evolution”

Draft of Chapter Seven for the Forthcoming Book

Science Fiction: The Evolutionary Mythology of the Future Volume II: The Time Machine to Star Maker

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“Beside his [Stapledon’s] stupendous panorama, his vision of worlds and galaxies, of cosmos piled upon cosmos, the glimpses of the future that Mr. Wells and others have provided for us are no more than penny peepshows.”
Christian Science Monitor

Olaf Stapledon (1886-1950) earned a Ph.D. in philosophy in 1925 from the University of Liverpool, and his first published book was in philosophy, titled *A Modern Theory of Ethics* (1929). From very early in his life, he showed an intense passion for writing and the thoughtful exploration of the deepest questions of life, which generated both a set of “modern psalms,” as well as a study of Joan of Arc, in which he argued that her inspirational visions were neither hallucinations nor a product of psychological hysteria, but due to “natural causes.”

Indeed, also from his early years, Stapledon was fascinated with mystical and psychic topics, searching for some new doorway into the “way of the spirit,” having come to the conclusion that contemporary religion, which is based on a hope in personal immortality, was neither credible nor inspiring. Of relevance to his later science fiction writings, during these early formative years Stapledon appears to have explored the unorthodox idea of an “evolving God.” See Robert Crossley’s *Olaf Stapledon: Speaking for the Future* (1994) for an in-depth biography of Stapledon’s early life and education.

Clearly this is a much different type of educational background and set of interests than most popular science fiction writers. Clute and Nicholls argue, in the *Encyclopedia of Science Fiction* (online), that many of the central ideas contained in Stapledon’s fantastical fictional novels first emerged in his philosophical writings, notably in his *A Modern Theory of Ethics*. Although achieving his greatest historical status as a writer of fiction, Clute and Nicholls argue that Stapledon had an “unwavering concern with the pursuit of truth,” more the interest and focus of a philosopher or scientist, than a writer of fantastical fiction. As explained below, Stapledon’s masterpiece *Star Maker* is actually a philosophical theory of existence and ethics masquerading as a fictional narrative.

If all of this sounds somewhat mystical and beyond the boundaries of science and observable nature, it should be noted right from the start that Stapledon’s central idea throughout his writings was the scientific theory of evolution, albeit conceived in the

most mind-expanding and ontologically encompassing terms. More so even than H. G. Wells, evolution deeply informed and structured Stapledon's philosophy and his narratives. As argued earlier, evolution is the most fundamental of all contemporary scientific theories, and if a science fiction novel is to achieve scientific credibility it needs to be framed in terms of (or at least not contradict) the cosmic theory of evolution. This framing of narrative within the grand theory of cosmic evolution is what Stapledon excels at much more so than anyone before him. Life, humanity, civilization, intelligence, the universe, the multiverse, eternity, and God are all seen through the "eyes of evolution."

Stapledon's major published speculative fictional works include:

- *Last and First Men: A Story of the Near and Far Future* (1930)
- *Last Men in London* (1932)
- *Odd John: A Story Between Jest and Earnest* (1935)
- *Star Maker* (1937)
- *Darkness and the Light* (1942)
- *Sirius: A Fantasy of Love and Discord* (1944)
- *Death Into Life* (1946)
- *The Flames: A Fantasy* (1947)

I focus below on Stapledon's three most significant and well-known science fiction books: *Last and First Men*, *Odd John*, and *Star Maker*. I connect these three novels, especially *Star Maker*, with the evolution of science fiction leading up to the time of Stapledon. (The final version of this chapter will also contain reviews of *Last Men in London* and *Sirius*, as well as a discussion of Robert Crossley's biography *Olaf Stapledon: Speaking for the Future* (1994) and a more in-depth comparison of H. G. Wells and Stapledon.)

Last and First Men

*"No book before or since has had such an impact on my imagination."
Arthur C. Clarke*

To set the context for *Last and First Men*, the novel begins with an explanation that there are actually two authors of the book: One author is a contemporary human, who is physically writing out the story, and a second author—the true source of the ideas in the narrative—who is a human from the far distant future that is dictating, through a form of mental-conscious communion, the story to the first author. The contemporary author can be viewed as Stapledon himself, presumably in some type of mental resonance with a mind from the future. (Did Stapledon really believe this, or was this opening explanation of authorship a literary device for the telling of the story?) The conscious connection across time between the authors is explained within the novel as due to the highly advanced ability of the mind from the future (a member of a species of future humans) to mentally reach out and both observe and communicate with minds from the past.

This future human mind (and real author of the novel) exists two billion years in the future and is a member of the eighteenth species of humans, who live on the planet Neptune. This super-evolved human wishes to communicate with us (through the contemporary author) to help present day humans gain a better understanding and appreciation of the realities, truths, and beauties to come in our future. The future mind is a teacher and a guide, who due to his highly evolved emotional, social, and aesthetic capacities, feels great love for us and wishes to share his insights and enlighten us.

But also, as the mind from the future explains, it has become known to his evolved species of time traveling future humans that their intervention in the past is somehow necessary for the realization of their own existence in the future. The book, as such, contains a time-loop scenario, where an effect (or message) coming “out of the future” into the present is necessary for the actualization of the future reality from which the message originated. The future effects the past, thus causing that very future. *Last and First Men*, as a published book of “fiction,” will facilitate the emergence of the “Last Men” as a future reality who are described in the book.

The mind from the far future explains to the author of the present (and to us the readers) that the story to follow (the novel of *Last and First Men*) will be a narrative of the future history of humankind from present day to two billion years in the future.

In overview, this novel describes in succession eighteen distinctive species of humans, beginning with our species in the present day. Stapledon (or the hypothetical human from the future) provides in this expansive narrative a holistic vision of the entire future evolution of humanity, including repeated changes in physical-biological anatomy and capabilities, genetic make-up, technological achievements, social organizations, ecological settings, psychological capacities and dispositions, values and ethics, and philosophical and spiritual perspectives and achievements. We follow the ascension and decline of species and civilizations, including devolution and re-evolution; repeated close calls with the total extinction of the species; the emergence of purposefully evolved and intelligently designed humans; the migration and colonization of humanity first to Venus and then to Neptune; the appearance of “giant brains” (the fourth men) and redesigned flying humans (the seventh men); the continued diversification and multiplication of genders and sex; and the emergence and re-emergence of group minds and forms of collective consciousness. Through the book, Stapledon provides a series of “Time Scales” and graphic representations of the history of humankind, identifying chronologically the various periods when each new human species came into existence and then disappeared.

As a first general point regarding this future history of humanity, to the best of my knowledge, *Last and First Men* is the most philosophically and scientifically expansive and complex vision of the future possibilities of human evolution ever written. It easily transcends any narrative of the future of humanity written prior to it, and although science and technology have significantly advanced since Stapledon’s time providing a variety of new ideas to incorporate into a future narrative of human evolution, the rich

diversity described in eighteen distinctive species, along with their mindsets and ways of life, I don't believe has ever been exceeded. Bodies shrink and expand and brains do likewise; for some species, we no longer even appear humanoid in basic anatomical structure; we adapt and readapt to changing environmental conditions; we take to the air and worship flight as a spiritual experience; for some species, we create immense towering buildings and cities; other times we revert to the jungle; and we realize a host of different philosophies and ways of life. We flower and wilt in multitudinous ways.

Of special note, Stapledon's futurist narrative of human evolution is philosophically informed. Not only does Stapledon describe the succession of human species, he reflects and ponders on the strengths and weaknesses of many of the species, and repeatedly discusses the issue of preferable futures regarding human nature. What should we aspire toward in our future evolution, if indeed, as happens in *Last and First Man*, we eventually gain volitional control over our descendants? If a species failed to sustain itself or continue to flourish, what were its limitations or weaknesses? When humans gained scientific and technological control over evolution, which occurred for the first time with the third men, what increased powers or higher traits were intentionally incorporated into the redesigned humans and why? Where these goals and ideals pursued worthwhile or self-defeating?

Although Stapledon discusses the physical dimensions of human existence, including biological body types, technologies, urban structures, and ecology and environment, *Last and First Men* is the first in a series of novels, which will notably include *Odd John* and *Star Maker*, in which Stapledon deeply explores the evolution of mind, holistically conceived, at both an individual and a collective level. Within *Last and First Men*, as well as the other above two novels, Stapledon delves into the nature and evolution of intelligence; the expanding reach of consciousness, inclusive of both space and time; the achievement of cosmic consciousness; the evolution and varied expressions of creativity; the development of ethics and values; increasing self-awareness and self-control; progressive levels of knowledge and understanding; the emergence of "psychic capacities" (telepathy, in particular); collective or communal consciousness; the types of bodies needed to house different forms of mentality (including giant brains hooked into technological systems); love, rapture and ecstasy and emotional-spiritual crises; and, as one of Stapledon's most central issues, the inherent difficulties in conceptualizing or imagining what would be the asymptote of mental evolution and self-actualization.

Another general feature that *Last and First Men* shares with *Star Maker* (although not with *Odd John*) is that the primary focus of the narrative is not individual characters but social groups, nations, species, worlds, and civilizations. (There are a couple of notable exceptions to this narrative emphasis explained in the section below on *Star Maker*.) *Last and First Men* reads like a history of the rise and fall of civilizations, with the focus on collective mindsets and values, group efforts and global initiatives, wars and great battles, environmental and man-made catastrophes, and the underlying general forces of history and evolution that move nations and global realities. The book is a narrative—a story with events, drama, tragedies, and triumphs—but it is not told at the level of the individual lives of humans, but rather at the collective level of the mass of humanity in

passing through great periods of history. Consequently, the novel is epochal in scope and feel.

This general narrative form and how it is executed within both *Last and First Men* and *Star Maker* generates works of imaginative fiction in which science fiction and futures studies realize a unity and are almost totally indistinguishable. Stapledon creates narrative scenarios of the future, sketching out possibilities of what may evolve in the future. As narrative (or story) the novels read like fiction, especially in so far as the books depict sequentially connected chronologies of events, have a clear dramatic dimension—with challenges, goals, and actions—and deal with the realm of imagination rather than actual facts. Yet, in reading about these hypothetical events, Stapledon regularly provides explanations regarding why the future events occur, a causal and rational analysis of the sequence of events. In particular, in the opening chapters of *Last and First Men*, Stapledon begins with present day global-political realities (of 1930), and as we watch his mind work, he describes and assesses these contemporary conditions and he begins to make hypothetical predictions regarding where the state of the world is heading, first in the next decade or two, then the next few centuries, progressively expanding his scope of projections into thousands of years into the future. Through the text he is thinking the future out. This intensive analysis, projection, and ongoing scenario building, embedded in a probabilistic narrative of the future, is identical to the practices of many contemporary futurists.

At this point it would be illuminating to compare Stapledon with Wells regarding how they each integrated futures studies with science fiction. Wells repeatedly engaged in synthetic writing projects involving both science fiction and futures studies. In Wells' near-future narratives, that were clearly informed by his assessment of present conditions, we find both great drama and frequently great worldwide catastrophe, but then, after the dust has settled, we find Wells envisioning more distant futures where enlightenment finally takes hold, and humanity builds a global civilization (a utopia), based on principles that Wells developed in his futurist writings on preferable futures. Wells predicts (based on his rather pessimistic assessments), framing his predictions in the form of science fiction stories, such as *War in the Air* and *The World Set Free*, and then he offers hope through an argued utopian vision or preferable future of what *should* come next after the predicted collapse or destruction of human civilization.

Stapledon, especially in *Last and First Men*, begins similarly, making short-term predictions that are a mixture of disasters and momentary triumphs. The longer term future though goes downhill, for the “first men” (who are us) suffer from tribalism (nationalism), short-sightedness, greed, grandiosity, and excessive materialism and industrialism, leading to an exhaustion of earthly resources. A few thousand years out into the future we build great cities and achieve great technological heights but due to the failings listed above, the whole thing eventually collapses into a new Dark Age. The icing on the cake of catastrophe for the first men though doesn't occur for a hundred thousand years into the future, when the first men accidentally destroy most of the surface life on the earth by letting loose a chain reactive atomic explosion.

Although Wells does provide in *The Time Machine* a decidedly bleak vision of the earth millions of years in the future, his narrative on this distant future is rather sketchy. The focus of his science fiction and futurist writings is primarily on the relatively near future. Stapledon, on the other hand, keeps going in his hypothetical predictive narrative way beyond Wells. He does not end his future history of humanity—both his predicted disasters and preferable futures—after a hundred thousand years, but keeps journeys forward millions and then billions of years with predictive and preferable futures.

Delving more deeply into the future history of humanity outlined in *Last and First Men*, the author from our distant future does note that some humans of our present species, as distinctive anomalies, do realize higher levels of consciousness. Both Socrates in his search for truth and Jesus in his heartfelt dedication to worship and love for humanity do rise above the masses, but their messages are not sufficiently internalized by the collective consciousness of first men humanity, and due to our failings, as identified above, we pass away.

Before moving forward into the distant future of humanity it is worth noting that Stapledon's short term predictions (written in 1930) for the remainder of the twentieth century were in many respects way off the mark. For one thing, Stapledon did not foresee a major second world war in the coming decade, or how the alliances would form during this major conflict. He did though foresee, if we move ahead into the next couple of centuries, a major political-economic tension developing between the two super-powers, United States and China. But it was the eventual global triumph of an Americanized culture—individualistic, materialistic, and short-sighted—that precipitated the collapse of the civilization of the first men. Also, Stapledon, due to his emphasis on general trends and forces within the world, does not recognize or incorporate into this predictions the immensely significant role that unique individuals play in the unfolding of history. He does not include charismatic and powerful characters like Hitler, Stalin, Roosevelt, Mao, or Churchill in his near future history.

As a fundamental theme in futurist science fiction (see Asimov's *Foundation* series), futures studies, and historical theory, there is the ongoing issue of whether "great men" or general social and natural forces (or some combination of the two) move history along. Although there are notable points in Stapledon's futurist narratives where key individuals play a highly influential role in the unfolding of events, by and large, Stapledon emphasizes general forces and themes in his futurist narrative.

Returning to the narrative thread of *Last and First Men*, and moving ahead roughly ten million years into the future, out of the few remaining seeds of the first men, natural evolutionary forces eventually produce the "second men." The second men are physically giant in stature, calm in disposition, and transcend the excessive egotism of the first men. All told, the second men show great evolutionary promise, but are invaded by the communal "cloudlet" intelligences of the Martians, and after repeated struggles between the two worlds, both Martian and earth civilizations are destroyed, leading to extended Dark Age for humankind. But the coming of the Martians provides an opportunity for Stapledon to begin his speculations on the nature of communal or

collective intelligence, a theme he will repeatedly engage within later portions of the book.

Eventually, after over thirty million years into the future had transpired, a “third men” arise, much smaller and delicate than the second men. These third men revel in music, which became their ultimate medium for realizing spiritual heights, but also the third men studied and worship the great diversity of life, and out of this intense fascination with life, they ushered in a new era for humanity. They achieved the capacity to purposefully modify and control life, and they applied this deep knowledge to re-creating themselves.

Believing that the key quality of humanity was its intelligence, the third men create the “fourth men,” giant brains, supported and kept alive by intricate technological systems. The third men became servants of the fourth men. The latter, in pursuit of the deepest knowledge and understanding of themselves and the cosmos, eventually, being frustrated in their pursuits, came to the conclusion that the deepest cosmic insights required embodied minds, and hence, the fourth men design the fifth men, who possess humanoid bodies, along with great intellects.

The fifth men possess bodies even larger in size than the second men and that self-repair and live for thousands of years. Deriving knowledge from the communal minds of the Martians, the fifth men have the capacity for telepathy (a communication of minds), yet this emergence of a collective consciousness out of this telepathic capacity does not obliterate the individuality of each mind. Notably, Stapledon, beginning from the physical dynamics of the collective Martian minds, attempts to explain telepathy in naturalistic and scientific terms, as fundamentally a resonance capacity to electro-magnetic radiation among brains.

In many regards the fifth men exceed all previous human species. Their scientific knowledge extends to the vast reaches of the cosmos and the most minute structures of the physical world. They realize a fundamental insight into the underlying unity of consciousness and mind and the physical world. They come to see all of reality as a intricate work of art, and are able to perceive the beauty in everything. Indeed, in spite (indeed because of) the evanescence of everything, including their own mortal existence, over which they obsess, the fifth men see great aesthetic beauty in the cosmos. Life for the fifth men is a journey of discovery, rapture, awe and wonder. Eventually, with the telepathic and highly developed minds, they become able to mentally journey into the past, specifically into conscious minds of the past, and over time acquire a first hand experiential knowledge of all of history. They become obsessed with the past. Technologically they exceed all previous human accomplishments, creating the most amazing cities ever seen on the earth. Eventually they take to the exploration of space, and realizing that the moon is getting closer and closer to the earth and would eventually collide with the earth, they decide to migrate to Venus, which involves both transforming the surface of Venus to suit human life (including exterminating life forms on Venus), as well as designing a new type of human, the sixth

men, who are better suited to life on this new planet. At this point in time we are now hundreds of millions of years into the future.

Things do not initially go well for humans on Venus. The alien environment almost spells the end for humanity, and as had occurred before, humanity takes a downward turn, losing or forgetting almost all the great accomplishments of the previous species. Out of the darkness though once again emerges the light, and a new Venusian human, the seventh men arises, who are very small in size, but possess the capacity for flight, having wings that can be folded up when they walk about on the surface. The seventh men are psychologically bi-polar, experiencing ecstatic emotional heights when in flight and yet sinking into great despair when moving about the surface. A whole spirituality and philosophy emerges out of the experience of flight.

From the seventh men eventually emerge the eighth men who both recreate an extremely advanced technological civilization, but now on Venus, as well as rediscover the scientific knowledge necessary to modify their own species. Purposeful evolution is once again an option, and as new events emerge, the eighth men are propelled into having to design a new human, the ninth men. Astronomical observations indicate that the sun is going to significantly expand in brilliance and energetic radiation, and Venus will be burned to a cinder. Hence, the ninth men are designed to live on the planet Neptune, far enough out in the solar system to be habitable with a greatly intensified sun.

After roughly a half a billion years on the planet Venus, and now one billion years in the future, humanity, as the ninth men, migrate to Neptune. But things go seriously wrong, for the eighth men did not adequately take into account the primordial and extremely challenging environmental conditions when they design the ninth men. Again, we have a collapse in human civilization and even the threat of total extinction. In the struggle for survival on Neptune, humanity significantly devolves into a plethora of animal-like species and for over 500 million years exists in a very primitive state on Neptune, which covers the ninth through the fourteenth men. As we move toward the end of this period, there are repeated rises and falls in a new oscillatory wave of civilization and “savagery” in the fourteenth men.

It is only with the fifteenth men that a sustained level of scientific and social sophistication is maintained and steady human progress is realized on Neptune. The fifteenth men achieve a stable and peaceful world community. In many ways, the fifteenth men are similar in disposition and abilities to the second men. Of particular note, the fifteenth men, with concerted and collective effort, and through struggle and repeated failures along the way, are able “abolish” the “five great evils...disease, suffocating toil, senility, misunderstanding [and] ill will.” Moreover, the fifteenth men rediscover the scientific-technological capacities to redesign themselves, biologically and psychologically, and purposefully evolve, creating the sixteenth men.

The sixteenth men possess omni-directional vision (having two additional eyes on the back of their head) and rediscover telepathy, realizing a mental resonance and rapport

within the whole species community. “The ancient evil of selfishness” is henceforth eliminated. With their new mental powers they also rediscover the ability to see into the past through the conscious minds of earlier humans, and after hundreds of millions of years in the conscious darkness uncover their ancient origins and history on Venus and the Earth. The sixteenth men also acquire the capacity to move their planet Neptune, both closer or farther away from the sun.

Yet, the sixteenth men can not solve three great mysteries: The mystery of time, the mystery of the connection of mind and the physical world, and the perplexity of how to reconcile their passionate drive for life in opposition to death with their ever-growing disposition to stand above it all and view all existence dispassionately. Driven to realize a new level of consciousness that is not localized in individual brains, the sixteenth men design a new type, the seventeenth men that hopefully will be able to transcend the mode of consciousness of the sixteenth species and realize deep enlightenment.

The seventeenth men though are born with a variety of subtle imperfections in design, and after a relatively short period of a few hundred thousand years, they create an improved version of themselves, the eighteenth men, and as it would eventually come to pass, the “last men” in the grand saga of human history and evolution.

The eighteenth men, who are the sentient beings from the future communicating to us in our present century, do not come into existence until well over one and a half billion years into the future. It is in his description of these “Last Men” that Stapledon extends his cosmic imagination and futurist speculation to the most elevated and outermost expanses within this novel. Yet, it is also within this last section of the book that he most strongly expresses the tragic dimension of the entire story, epitomized in the eighteenth men’s philosophy of “ecstatic fatalism,” as they face their mortality and death.

Physically, the “Last Men” are giant in stature, with very large brains and heads, but also possessing very big hands and long fingers. On their middle fingers they have three tiny additional branching “finger like” extensions. They possess also an “astronomical eye” that gazes upwards into the heavens. They are described as both more humanlike and more animal-like than present day humans. Although there are males and females, there are numerous sub-sexes that have a significant role to play within their advanced modes of consciousness. Mothers carry the fetus of their children for twenty years before birth, and infancy lasts for a century. Adolescence doesn’t arrive for a thousand years, and then the adolescents spend their second thousand years living in the “Land of the Young” where they must survive under relatively primitive conditions where some of them die. It is a rite of passage into adulthood. Generally the average life span of an individual is a quarter of a million years. Across the surface of Neptune there are approximately a “million million” (a trillion) members of the species.

At a technological level of development, the Last Men are able to travel among the planets of the solar system, and have created huge factory and agricultural facilities across the solar system. The Last Men have created “ether ships” which are piloted by a special class referred to as the “ethereal navigators.” The Last Men also have flying

suits which they can use for individual aerial locomotion. Although many of their dwellings are small, the Last Men have also over the eons of their existence, created an array of distinctive giant structures, in an extensive number of distinctive shapes, that are larger than the biggest of mountains in the solar system. The immense buildings have symbolic and artistic meanings, and invariably house in their highest areas above the ground, large groups of astronomers studying the vast reaches of the physical universe.

In fact, the Last Men describe themselves as having both a philosophical culture and an astronomical culture, and these two orientations synthesize and reach their fullest expression within their collective state of cosmic consciousness. On the astronomical side of things, the Last Men have explored the vast reaches of the universe with their telescopic technologies and their minds. They believe that they have found indications of other advanced species throughout the universe, and also indications that there exist other dimensions of reality beyond the observable physical universe. As the Last Men extended their awareness into the vast expanse of physical space, they also extended their awareness into time, and specifically the past. In studying the cosmos they have arrived at a general theory of time and the universe, believing that the whole of physical existence is cyclic, yet not repetitious. As the End after countless eons follows the Beginning, the Beginning—a new Beginning—after an interlude, follows the End.

Much of their deepest insights into reality follow from their distinctive mode of consciousness. As a consequence of the limitations and epistemic frustrations experienced by both the sixteenth and seventeenth men, the eighteenth men were designed with the capacity to achieve, above and beyond their telepathic connectivity, truly group minds with super-individuals emerging out of resonant collectives of individual minds. Possessing a specially designed organ in their individual brains, that can generate an “electro-magnetic system” between brains, groups of ninety-six sexually and personally intimate and diversely talented sub-sexes are able to come together as a single group mind with a synthetic sense of one collective body—composed of the distributed individual bodies—and observing reality from their multiplicity of perspectives, they integrate into a higher level of individuated consciousness. And in turn, these group minds as collective individuals can communicate with each other, and at times realize an even higher level of conscious integration as a “racial mind” composed of all the existing members of the Last Men. This racial mind experiences a “now” that is extended to include the entire lifespans of all those individual members in the collective, and this racial mind’s experienced memory consists of all the conscious streams of all previously existing humans, which have been accessed by the Last Men’s capacity to travel in their minds back in time and connect with conscious minds of the past. All told, this expansive and distinctive mode of consciousness is the source of their most profound experiences of enlightenment, and their deepest, most tragic feelings of mortality and lack of omniscience in the face of the limitless reaches and mysteries of existence.

It is the hope of the Last Men that an “Awaken Soul of All” will emerge in the cosmos, who having an eternal dimension, will be able to hold in its mind the individual lives and

conscious streams of all sentient beings in the universe, realizing an eternal beauty and recognition of all intelligent beings who have suffered and come before. In essence, the Last Men hope for an “eternal remembrance,” in the face of a universe that they perceive as both beautiful and terrible. But they are unsure whether such an “Awaken Soul of All” will evolve somewhere and at sometime in the depths of the universe. Further they also struggle, in their tragic and “ecstatic fatalism,” with the existential tension between life-affirmation in the face of death and the dispassionate and transcendent contemplation of the whole in all its suffering, ignorance, and finitude.

The Last Men, at approximately the two billion year mark in the future, realize that the solar system is doomed. Through their astronomical observations, they have determined that deathly cosmic radiation approaching from outside the solar system is going to destroy all life within the solar system, and the Last Men do not possess the technical know-how to either move Neptune sufficiently far enough away, or transport themselves to a new world outside the solar system. They accept their fate, although they do communicate back in time to us, telling the story of humankind.

But also, aside from coming to the conclusion that their conscious communications back to our present species may be necessary for their own evolution in the future, they also suspect that some more advanced type of mind within their own distant future (post two billion years) may have been influencing them. Indeed, they suspect that all great creative surges in history may be due to influences from the future. Time is a circle; evolution is guided from up ahead.

The Last Men also design space spores that will hopefully carry the seeds of humanity to distant star systems where such spores might—just might—take root and start a new chapter in the saga of humanity.

But still, when all is said and done, the curtain must be drawn, and in the *Epilogue*, in which the Last Men are beginning to degenerate into insanity as the effects of increasing radiation impact their minds and brains, the last born of the Last Men, in a closing statement brings to conclusion the novel. Recognizing that “The music of the spheres ...is a music not merely of sounds but of souls,” he offers these final words,

“...one thing is certain. Man himself...is music, a brave theme...Man himself in his degree is eternally a beauty in the eternal form of things. It is very good to have been man. And so we may go forward together with laughter in our hearts, and peace, thankful for the past, and for our own courage. For we shall make after all a fair conclusion to this brief music that is man.”

This ending to the novel is a fitting expression of Stapledon’s introductory statement in *Last and First Men* that “A true myth is one which, within the universe of a certain culture... expresses richly, and often perhaps tragically, the highest aspirations possible within a culture.” The ending is tragic, but as expressed by the last born of the Last Men, the closing of the story also expresses the philosophy of transcendent appreciation of our finitude and mortality and the necessary coupling of life and death.

There is something deeply beautiful and emotionally moving—of the highest mythic and philosophical order—in the mortal saga and song of humankind.

This dramatic ending should to be placed within an even broader cosmic context. As noted earlier, *Last and First Men* provides a holistic depiction of the evolutionary possibilities of consciousness, intelligence, and mind within humanity. Indeed, by the time we come to the eighteenth men, the overall thrust of human evolution, expressed within the central concerns, modes of being, and aspirations of the Last Men, is the expansion and ascension of consciousness and mind. The Last Men, with their capacities to merge individual conscious minds into group and racial minds, as well as their ability to extend their minds across space and time, are psychologically highly evolved. But Stapledon on a number of occasions places the evolution of consciousness and mind in the future history of humans within a more expansive cosmic context of what might be the potentialities for mental evolution within the universe as a whole, and more distant futures beyond the timespan of humanity. Humanity aspired and reached and caught glimmers of what might be possible at a cosmic level; humanity was one localized expression of a general universal thrust toward the potential realization of an “Awaken Soul of All.”

Last and First Men is informed and inspired by the general theory of cosmic evolution: The future history of humankind is an evolutionary saga, specifically toward higher and more all-embracing modes of mind and consciousness; humankind repeatedly engages in purposeful, scientifically informed self-evolution that facilitates this mental ascension; and the entire process of mental evolution within humans is but one expression of a possible and preferable general trend within the universe toward an all-encompassing cosmic intelligence.

Another important feature of the novel, pulling together the tragic and the cosmic, is that no matter how evolved are the characters in any of Stapledon’s novels, including *Last and First Men*, they never realize, in perfection and achievement, the ultimate pinnacle of existence. Whatever is most elevated and evolved lies beyond them. In fact, it lies beyond what can even be meaningfully conceived. This is the ultimate cosmic context of his novels: The characters, finite in power and intelligence, are set within an imaginative universe of inescapable mystery and unscalable infinity. This absolute “beyond-ness” within Stapledon’s novels is a key feature of in both myth and science fiction; the sense of wonder in the face to an infinite transcendence is forever there. Even when Stapledon confronts the ultimate heights of existence in *Star Maker*, he repeatedly and emphatically states that the nature of the Star Maker lies beyond our capacities of conceptualization and understanding.

Finally, as one additional point on the mythic quality of *Last and First Men*, a point that equally applies to *Star Maker*, it is not at all obvious or clear, how Stapledon’s narrative vision expresses “...the highest aspirations possible within a culture.” It is not evident how his vision expresses the deepest or most profound beliefs within his own culture. Rather, I would suggest that his narratives transcend the highest aspirations, values, and beliefs of his culture. He pushes the envelop of the possible and the highest, rather

than staying within it. We can argue that no one within a particular time and place can think beyond the concepts and values of the era and culture, but this presumed limitation to human consciousness, to me, doesn't seem to hold always and everywhere. Creative individuals do transcend the mindsets of their time; history is evolution and evolution involves transcendence beyond what came before (Lombardo, 2011c). Minds can leap forward, and it seems to me that this is what Stapledon realizes, repeatedly so. Stapledon's narratives are myths, but they are evolutionary myths that purposefully extend beyond the mindsets of his time. As such, his narratives stretched and further evolved the holistic future consciousness of humanity of his time. He was a pioneer on the possibilities of mind and existence.

Odd John

"The first superman story and still by all odds the best." Damon Knight

Odd John, published in 1935, was not the first superman story as the science fiction writer Damon Knight contends. This general narrative theme can be traced at least as far back as *The Food of the Gods* (1904) by H. G. Wells and *The Hampdenshire Wonder* (1911) by J. D. Beresford. Stapledon was almost certainly familiar with Beresford's novel and probably Wells' novel as well. We could though agree with Knight that *Odd John* is one of the best, or perhaps even the best, superman story ever written.

Of the three works of fiction of Stapledon discussed in this section, *Odd John* best exemplifies a traditional work of fiction with a set of distinctive characters, concrete and specific events, and an overall dramatic sequence of challenges and triumphs, leading to a dramatic conclusion. The two main characters are Odd John and the story's narrator, a somewhat older friend of Odd John, who becomes his business associate and confidant, as Odd John matures from young adolescence into adulthood.

The novel is a biography of Odd John from his birth to his tragic end, presumably written by his friend after the death of Odd John, who dies at a very young age in his twenties. Yet, in spite of his short-lived life, Odd John realizes a level of mental development and personal achievement only equalled by a few people in history. In essence, the novel *Odd John* is a first hand personal remembrance of the development and varied experiences of an individual who undoubtedly belongs to an advanced human-like species that clearly transcends the capacities and level of consciousness of *homo sapiens*. In this context of describing the life of Odd John, told from the point of view of his friend, Stapledon once again explores the possibilities of future mental evolution, now though focused on a unique individual character.

The narrator, who is a friend of the family, is fascinated with Odd John right from Odd John's birth. As a newborn infant, Odd John seems extremely frail and physically undeveloped, although he possesses an exceedingly large head and large hands, and once he opens his eyes, reveals disproportionately large eyes as well. He definitely looks "odd," which is why he is referred to as "Odd John." Physically he doesn't mature at a normal pace; his physical growth and motor capacities seem stunted. For all of his

short life, he looks much younger than he actually is. Moreover, he doesn't begin to walk or talk when he normally should, but he seems nonetheless to be highly observant and attentive to events around him. When normal developmental steps are finally realized, their emergence is decidedly unusual in form and dynamics. When Odd John seems to recognize the importance of some capacity, such as walking, talking, or reading, he simply focuses his energy upon the skill and quickly learns it. Within a day or two he goes from being illiterate to talking in complete well formed sentences. He seems to possess the capacity for self-directed and focused intense study on any skill or area of knowledge acquisition he desires to master. After teaching himself to read, he devours books. He also, at a very young age, starts making things with his hands. A little later in life, he assimilates geometry and mathematics. On the physical end, although he possesses a small and thin body, he teaches himself to be a ruthless and highly effective street fighter. A bit later in life, he perfects the art of thievery and breaking and entering into homes, followed by learning such skills and knowledge areas as finances, hunting and surviving in the wilderness, and building airplanes and boats. At one point in his life, realizing he needs a huge amount of money to support his plans for the future, he amasses a fortune through a variety of inventions in a very short period of time. All in all, Odd John volitionally and thoughtfully directs his own maturation and development with great efficiency and focus.

As he matures during his childhood years, one area that Odd John finds particularly fascinating is human nature and all the diverse forms of human behavior. But Odd John studies humans like an anthropologist or ethologist, investigating the culture and ways of life of a primitive people or animal in their natural surroundings. From early on, Odd John begins to understand that he is different—indeed, very different—from other human beings. And in his interactions with humans, he, by and large, adopts a position of detachment or separation, and often, to gain whatever knowledge he seeks, manipulate humans as if they were experimental subjects in his ongoing scientific investigation of humanity and nature. Moreover while Odd John seems to possess a deep interest in understanding the world around him, his inquiries and experiments are usually motivated by a desire to learn how to control people and events in the world. Knowledge is a means toward power. Understanding people serves his desire to control them.

This sense of distinctiveness within Odd John applies to the values and morals of human society as well. Odd John is quite willing to break the rules of ethics and cultural customs if his goals require such transgressions. He steals without a guilty conscience. At one point, he murders a policeman, because the policeman is interfering with the execution of his plans. When sexual consciousness emerges in his mind, he experiments, without concern over social taboos; he engages in homosexual activities and going even further beyond the limits of traditional moral constraints, appears to have sex with his mother. From a psycho-diagnostic perspective, Odd John behaves and thinks like a psychopath.

Continuing on the psychological theme, Odd John seems to develop an extremely enhanced awareness of both the minds and motives of other human beings, as well as

the content of his own mind. He acquires both heightened other-awareness and enhanced self-awareness. Moreover, driven toward personal excellence, he develops an amazing capacity for self-control. Building upon his general capacity to manipulate humans and their behavior, in his adulthood he acquires the abilities to enter the conscious minds of others and to muddle or obliterate other people's memories.

At one point in his childhood development, having realized that he was the only true human being in a "herd of cattle," and perceiving the great failings of present day humanity and experiencing a sense of doom for our species, John decided to take off into the wilderness. He needed to get away from humanity to find himself and determine his purpose in life. As he explained to the narrator of the story, Odd John felt deeply lonely, the only member of his kind, and coming to the conclusion that there was some important purpose for this life and existence, but not knowing what it was, he stripped himself of all the trappings of human culture, and went on a spiritual quest into the woods to discover his destiny. Without bringing with him any clothing, food, or tools, John tested himself in the wilds and almost died in the process. But eventually he learns to make weapons and hunt animals for food. As a climatic episode he patiently and tenaciously hunts down and kills a deer and has an epiphany in the process. He comes out of the wilderness, having transcended his anguish over our species, and ready to enact a life plan.

Odd John, with his accrued wealth from his inventions, goes in search of others of his kind. His highly attuned mind has sensed that there are other advanced humans within the world. Again, he leaves home and the first "advanced" human he finds is insane, and then the second one is totally evil and hateful, and attempts to mentally infiltrate and destroy Odd John's own mind. But Odd John is eventually successful in locating a number of sane individuals who possess similar mental powers to him. Among them are a spiritualist living in a monastery in Asia who teaches Odd John even more advanced mental capacities. Thereafter Odd John and his Asian comrade establish a telepathic communication network that reaches around the globe. Several other advanced humans are located, who join together with John, who has plans for his growing group of fellow super-humans.

The most memorable of encounters between Odd John and other advanced humans involves traveling through time. John's telepathic capacity, as it matured, not only allowed him to bring his consciousness into the mind of another human, experiencing whatever they were experiencing, but Odd John also developed the ability to connect with conscious minds from the past through the mind of a presently existing person who had known the person from the past. It was through this telepathic time travel process that John meets the most powerful mind of anyone he encountered. This person from the past, who was now dead, was an Egyptian who ferried travelers across rivers in Egypt. When John contacts and begins communication with this powerful mind, John asks him why he has spent his life engaged in such a menial task. The Egyptian responds that there are two ways of serving Allah: To observe, worship, and praise the works of God or to carry out as an instrument of action the purposes of God. As the Egyptian states, he is of the first kind of servant of Allah, while Odd John is the second

kind of servant. And each will be judged on how well they carry out Allah's specific purpose for them.

With a specially designed boat, after recruiting a number of similar advanced humans around the world, Odd John locates an isolated island in the South Pacific, and eliminating (that is, killing) a group of natives who frequent the island, John establishes and begins developing a colony on the island. With the establishment of this colony John finally realizes for himself a sense of community and personal intimacy. The colony, indeed, achieves a highly advanced level of personal intimacy among its members through mental telepathy, which is their primary mode of communication among themselves. The transparent sharing of minds, coupled with a high level of sexual intimacy among its members, allows for a mutual conscious resonance within the community far exceeding normal human beings. Again, as in *Last and First Men*, we see Stapledon's ideal humanistic vision of heightened communal consciousness among advanced individual minds being highlighted and expounded upon in his fiction.

Yet, John with his capacity to "see" both into the past and some aspects of the future, discovers that the colony is doomed. Although he and the other members of the colony have attempted to hide away from the traffic and concerns of humanity, he realizes that humanity, will feel threatened by the colony's existence, and will not leave them alone and will inevitably locate and destroy them. In coming to this realization, John sees that he will never achieve his distinctive purpose.

The colony indeed is discovered, and although John and his community, with their superior mental powers, are able to confuse a series of landing parties, the colony members know that they can not indefinitely hold the outside world at bay. Odd John, with his other fellow super-humans, blow up themselves and the colony, destroying all their unique inventions and records of their accomplishments.

Perhaps, as Odd John realizes at the end, some future super-humans will accomplish what Odd John could not; perhaps there will be transcendence to a higher level of mentality and culture, a suggestive intimation of the Last Men. But this is a possibility, as yet, undefined and unrealized in the time of Odd John. Again, as in *Last and First Men*, there is the unfulfilled promise; again, there is a tragic ending, after another elevated flight of the imagination.

The distinctive strength of *Odd John* is that, within the context of Stapledon's ongoing quest to grapple with the question of future mental evolution, he attempts to create a detailed and intimate picture of how an advanced mind would think, feel, and behave. Again, as in *Last and First Men*, there are repeated comments on how difficult, if not impossible, it is to accurately describe the depths of consciousness that an advanced mind would realize. Odd John tells the narrator on a number of occasions that he can not adequately describe his insights and perspectives on reality within the concepts and language of normal present human society. Still, Stapledon does succeed, to a significant degree, in conveying the strangeness (relative to us) of Odd John along multiple dimensions of psychology, ethics, and behavior.

We can view *Odd John* as a story about a Nietzschean “ubermensch” (overman), who in search of self-actualization and self-fulfillment, is not constrained by the customs and values of mass society. Odd John is different, and self-assertively different in many different ways. As one important point in this regard, Odd John generates conscious dissonance within the narrator’s mind on ethical ideals and values. If we envision a future preferable human, we may see that future human as ethically superior to us; but Odd John does not behave as an ideal human relative to our ethical ideals; he often ignores or transgresses upon our ethical values. Odd John realizes that he stands above us, as we analogously feel superior to animals, and he believes that his life and his potential achievements are more important than those of the rest of humanity. Hence, at one level, we are not significant, and therefore, our rules and values do not hold much weight with him. In this sense he has gone beyond us on the ethical plane.

In the final analysis, is Odd John admirable or heroic? It depends on how we want to look at it. In some ways he unequivocally behaves like a psychopath, disregarding human values, often treating people as simply a means to his ends, and at times, even murdering those individuals who are in this way. And yet, he is a solitary and lonely figure struggling to create a new way, which he sees as a better and more evolved mode of existence. He is a jolt to human consciousness; an experiment or possibility in future evolution that does not conform to our present values and ways of thinking.

Star Maker

*"Probably the most powerful work of imagination every written."
Arthur C. Clarke*

After a short Preface, *Star Maker* (1937) begins with the line, “One night when I had tasted bitterness I went out on to the hill.” The narrator of the novel, gazing up into the star studded night sky, is thinking about the value and importance of his love and life with his wife, the growing troubles in the world, and the smallness of humanity and the earth within the context of the dark vastness revealed above him. He wonders whether there is any transcendent mind or spirit that gives meaning and purpose to the universe and his existence. He wonders whether humanity’s quest for wisdom and deep understanding is a solitary pursuit, or part of some greater cosmic process. Is there intelligence elsewhere in the universe? Does humanity or his own individual life have any significance in the grand scheme of things? At a depth and profundity colossally beyond anything he ever imagined, his concerns are going to be addressed and his questions are going to be answered, for he is about to travel to the ends of time and peer into wheel of eternity.

Star Maker is generally considered Stapledon’s greatest novel. In my estimation it is the greatest science fiction novel ever written. As noted above, Arthur C. Clarke considered it “probably the most powerful work of imagination,” inclusive of all literary works, “ever written.” But the elevated status that this novel has achieved should not overshadow the

immense imaginative power of *Last and First Men*, which in my mind runs a very close second to *Star Maker* among Stapledon's science fiction writings. Indeed, as I have already introduced, there are a number of commonalities in theme and purpose between *Star Maker* and *Last and First Men*. As with *Last and First Men*, the overarching scientific and narrative framework in *Star Maker* is cosmic evolution, now carried to even greater intellectual heights. Moreover, within this cosmic evolutionary framework the focus is on mental evolution, but now expanded to include intelligence and consciousness across the entire expanse of space and time within the universe. Further, as with *Last and First Men*, there is a unity or fusion of science fiction and futures studies achieved in *Star Maker*. The general sequential narrative, with ongoing philosophical analysis, on the possibilities and preferable directions of the future now encompasses the future of minds and societies across the universe. And since, as in *Last and First Men*, Stapledon pushes the boundaries of our present beliefs and values, he creates in *Star Maker* evolutionary myth; he expands and further articulates our holistic future consciousness and he pushes to new heights, in particular, the cosmic dimension of our future consciousness. All in all, he achieves transcendence. Finally, as with *Last and First Men*, Stapledon weaves in a tragic dimension and a deep sense of "beyond-ness, awe, and wonder" in *Star Maker* at the conclusion of the novel, although in this latter novel he goes one step further and attempts to convey some sense of an ultimate cosmic culmination and insight into the deepest mysteries of existence.

In explaining the nature of *Star Maker*, I would suggest that the book presents a grand theory of existence and ethics masquerading as a science fiction story. The grand theory is cosmic evolution, specifically applied to the spheres of mind and creativity. Not only does Stapledon explain the nature of the universe, inclusive of mind and consciousness, and the nature of the good in terms of cosmic evolution, he assimilates into this framework the nature of the Star Maker (the creator of the universe). The Star Maker is described as an evolutionary being.

As an illuminating contrast, Stapledon's cosmic evolutionary mindset can be compared to the seventeenth century philosopher, Baruch Spinoza. Spinoza attempted to articulate a philosophical theory of everything—of infinity with infinite attributes and modifications—subsuming God (God is infinity), and placing humanity within this context, viewing us, as he stated it, "through the eyes of eternity." Spinoza's architecture of exposition is a logical-deductive system of abstractions, implications, and conclusions, modeled on Euclid's geometry. It is a "timeless" scheme without any sense of progression or transformation.

Stapledon, on the other hand, reaches toward the infinite as well, but he sees the totality of everything through the "eyes of evolution," presenting the nature of existence as a progression and a narrative of sequential events. Although highly abstract and general in many ways, it is still much more particularized and concrete than Spinoza's treatise. Indeed, the vision and the story of reality is presented through the eyes and experience of a particular character, the narrator of the novel, although it should be added that the narrator undergoes a colossal expansion of consciousness as the story unfolds, encompassing and integrating a multiplicity of other minds and perspectives as

he moves toward his cosmic epiphany. There is a past and an unfolding future in Stapledon's novel, conceptualized in dynamic evolutionary terms. Although it might seem paradoxical, even when Stapledon dives into eternity at the end of the novel, he gives it an evolutionary and transformative quality experienced from a personalized point of view.

To begin the saga of the universe and all of creation, we begin with an individual point of consciousness, localized in space and time. Our narrator, standing on a hill, looking up into the sky, and pondering the meaning of it all, desires to understand, and his mind reaches out toward the stars, hoping to penetrate the mystery of existence. This powerful impulse toward enlightenment seems to propel his mind and conscious point of view upward into the sky, and he sees the world below receding away from him. Somehow propelled by his own desire for understanding, his conscious mind ascends into outer space. How is this possible? Perhaps some cosmic power, aware of his mind reaching outward for illumination, has taken hold of him and propelled him upward into space? Whatever the cause, the conscious mind of our narrator begins to travel outward into space, deeper and deeper. He sees the earth from space as a beautiful and single living organism, tiny and fragile within the immensity of the surrounding darkness.

As he continues outward, the enormity of the cosmos and the potential futility of his individual search for understanding within the overpowering vastness of it all, depresses his spirits and he finds that his movement through space, as his spirits sink, comes to a standstill. He realizes that if he embraces the cosmic quest with faith, courage, and optimism, in the face of unfathomable uncertainty and mind-boggling immensity, he begins to move forward again.

In leaving the solar system behind him, he begins to search for other minds and other civilizations in the farther reaches of space. At first, he finds nothing. Aside from humanity, is the universe empty of consciousness and intelligence? Again, he becomes depressed, but then he does find another world with life, mind, and civilization. On approaching this new world (the "Other Earth"), he discovers "men" similar in many ways to earthly humans and enters the mind of one individual after another, attempting to establish communication. But the minds of these other men believe that they are going insane, experiencing this felt "other presence" within their consciousness, and do not comprehend what is happening. Finally, a mind on this "Other Earth" does comprehend and accept the narrator's consciousness and a resonance and mutual understanding begins to emerge between the two of them.

Our human narrator spends a number of subjective years on this "Other Earth," observing the culture and customs, while his mental connection with his alien host and partner continues to grow in intimacy and integration. This "Other Earth," although different from our earth in many ways, seems to have struggled through similar challenges to those of the earth as its form of civilization emerged out of barbaric and primordial conditions. Presently these "other men" seem to be facing a global crisis as

severe and far-reaching as the global crisis the human narrator had just left on the planet Earth.

The biological, social, and philosophical features of these “other men” and their world are described in considerable detail, providing a first point (among many to come) of comparison between alien and human forms of intelligence. The other men have much more highly developed senses of taste and smell which impact their entire culture, mental framework, and values. Religion, for example, is highly commercialized and based on taste, and the different views of God within this alien world emphasize different possible tastes of God (Is God sour, sweet, or bitter?). As perhaps a parody on human religious conflicts, the aliens do battle over the truest and deepest taste of God. Moreover, tasting God has clear sexual overtones, a gustatory intimacy at a chemical level. The aliens have also developed radio, but not possessing music (their auditory sense is significantly undeveloped relative to humans), radio is used to communicate conscious experiences from one alien brain to another brain, the process technologically facilitated by skull caps which read brain waves. With clear intimations of virtual reality pornography, there is a great deal of vicarious sexual experience transmitted via the radio.

As the alien host mind explains, there have been recurrent ups and downs in the history of his species. As he states, some of his fellow species believe that, in spite of recurrent fluctuations, the best has yet to come; others believe, including him, that the best has already been achieved. The alien suggests that there is some fundamental flaw in “human nature” (referring to his own species), and that whenever progress is realized, there is a natural and inevitable reaction to oppose the advance and dive back into the abyss. The question is asked again: Is there some purpose behind this mayhem and chaos? Is there a Star Maker at work guiding things? Or is the only point to just savor the tang of existence, both good and bad, or sour and sweet?

The alien host mind decides to accompany the human narrator and journey beyond this “other earth” in search of other worlds possessing minds and developed civilizations. In bringing their conscious minds together into a single conscious entity moving through space, they have a number of significant insights. Although they remain at one level two distinctive personalities, a “third mind,” transcending in power their dual minds, emerges that is the unity and integration of the two of them. The whole transcends the parts. Also, just as the human narrator discovered that when he lost faith, his power of mobility dissipated, they discover that if their individual minds are in conflict, their mobility also stagnates. A house divided against itself can not stand (or in this case move). They also realize that their capacity for journeying through the universe with their conscious minds is governed by the power of “psychic attraction.” Their coupled moving conscious mind is drawn toward other worlds of intelligent beings that possess minds similar to their own. This power of psychic attraction explains why the human narrator was first drawn to the “Other Earth” and “other men,” since this first discovered world and its intelligent species were very similar to the earth and its human inhabitants. This last insight leads to a further one: If these two journeying coupled minds bring other minds into their collective consciousness, adding further to their own psychological diversity, they should

be able to progressively tune into alien minds increasingly more different than their own minds. As a final flash of insight, the human narrator realizes that his mind can not only travel through space but through time as well, and that the “Other Earth” that he had just visited actually existed in a era of the distant past relative to his present time. All of these discoveries will become increasingly significant in the story as the journey unfolds.

Given these various “discoveries” pertaining to mind-melding and mind-journeying through the universe, before moving further on in the story, we can ask what Stapledon actually thought about such psychic capacities. At one level, the perspective of a conscious mind (or integrated mental collective) moving through space and time provides a literary device through which the story of the universe can be told. This traveling consciousness is analogous in function to the member of the “Last Men” who travels back in time and communicates the story of humanity’s future. Moreover, especially in *Star Maker*, this imagined traveling perspective on the whole universe provides a personal anchor for the telling of the cosmic story. We vicariously experience the history of the universe through the eyes of a hypothetical individual, who feels, thinks, and reacts to the grand flow of events. The traveling narrator provides a personalized cosmic consciousness through which the saga of the universe can be experienced and described.

Yet did Stapledon actually believe that conscious minds, potentially at least in some distant, more evolved future, could travel across time and through space? Did he believe that minds could, again potentially in the future, establish telepathic contact with each other? Did he think that conscious minds could integrate and merge into higher forms of mentality and awareness? Almost all these powers are included in his speculations on the future evolution of humans in *Last and First Men*, and in *Star Maker*, all these mental abilities are taken to greater colossal heights of evolutionary development.

As mentioned on previous occasions, “psychic abilities,” such as those identified above, have not been seen as plausible within the scientific establishment, and yet science fiction writers, such as “Doc Smith,” Edgar Rice Burroughs, John Campbell, and many others, have postulated such powers in their science fiction stories. Stapledon (as well as “Doc” Smith) suggests in *Last and First Men* that such various psychic capacities could be realized through technological advancements; there may not be anything “supernatural” at work in telepathy or telekinesis. In fact, we get the strong impression that Stapledon, at some deep level, rejects the notion of the supernatural. Even the *Star Maker* is integrated (within the limits of human comprehensibility) into a naturalistic vision of existence. Although Stapledon repeatedly uses the word “spiritual” he makes a point of stating that he doesn’t define the concept the same way as traditional religion. All in all, for Stapledon, “psychic” abilities may arise in the future with naturalistic and scientifically explicable causes for their emergence.

Again picking up the storyline, after the human and alien minds have coupled together on their cosmic journey, and achieved the various insights identified above, what follows

next in the narration can best be described as a “Matryoshka” ascension of increasingly larger concentric scales of space and time, steadily accelerating in pace of discovery and revelation. Discoveries progressively extend outward to new and stranger intelligent species and alien worlds; the temporal chronicle and spatial territory continues to expand in scope, as minds and civilizations integrate into larger and larger collectives, moving from solar systems, to galaxies, and eventually to the universe as a whole; time moves forward millions and then billions of years into the future; technologies eventually expand to galactic levels; biological life and intelligence integrates with stellar and nebulae minds; and then we jump up a cosmic level to eternity, the Star Maker, and the infinitude of universes. Stapledon, in this journey of exploring minds, just keeps progressively expanding, faster and faster, the sphere of cosmic consciousness, in an ever-enlarging series of Matryoshka shells of space, time, and mind.

This form of narrative development in *Star Maker* is similar to the narrative structure in *Last and First Men*. Both novels start off at a more detailed, finer grain level of analysis and a slower pace, and then both progressively accelerate in scope and expansiveness of imagination, eventually each culminating in an asymptotic evolutionary development—the eighteenth men and the Star Maker respectively—at which point, Stapledon delves into considerable detail describing these pinnacles of astounding, wondrous, and awe inspiring realities. As a basic narrative thrust, both novels exhibit positively accelerated curves of imagination.

Traveling through space and time, the human and alien minds, at first discover a diversity of worlds that are similar to their own respective home planets. As they journey, other minds decide to join them, adding to their conscious power and experiential flexibility. This growing group mind discovers that most intelligent species fail at passing through their “spiritual crisis.” Described as two connected fundamental struggles, pervasive across the universe of civilizations, the spiritual crisis involves both realizing a true sense of community among the members of a species and being able to achieve as a community the “right attitude” toward the cosmos as a whole. Can we work together and can we attune to the big picture of things? Most worlds fail at realizing these states of collective consciousness. Most worlds, on the second challenge, fail due to their excessively parochial (species-centric) attitudes toward the universe.

Concurrent with this new wave of discoveries, the travelers also realize that they are not the only group of integrated, disembodied minds moving outward into space and time exploring and searching the heavens. To quote from the book,

“In time it became clear that we, individual inhabitants of a host of other worlds, were playing a small part in one of the great movements by which the cosmos was seeking to know itself, and even see beyond itself.”

There are many groups of minds searching for the meaning and purpose of the universe, as well as evidence or indications of a Star Maker.

Hence, what is revealed at this juncture in the story is that there are two parallel forms of cosmic evolution going on in the universe. On one hand, conscious minds and civilizations are emerging on individual planetary systems, struggling to realize increasing levels of psychological, social, and technological advancement. Some of these localized intelligent systems eventually will extend outward across surrounding solar systems and galaxies. But second, there are interstellar and mobile mental collectives forming, which are growing in richness and conscious scope and range of exploration, searching out the universe and drawing in increasingly diverse minds. These two lines will converge in the distant future.

As discovered worlds become stranger and stranger, Stapledon excels in inventiveness at a cosmic level. Reminiscent of Flammarion's speculations on alien life, Stapledon creates a rich and diverse cosmic zoology of intelligent biological forms and different types of alien societies, that rivals, if not exceeds, anything put forth in science fiction pulp magazines.

The traveling group-mind encounters, for example, the "human echinoderms" who are shaped like starfish, and reproduce communally, where every member of the species is a parent for all its offspring. The echinoderms consequently, with this intimate personal connection among all its individual members with the whole, have an amazingly well-developed communal consciousness. Indeed, as the reverse of religions that emerged out of individualistic species, the echinoderms worship individuality, rather than togetherness, as the supreme conscious achievement. As was the case in *Last and First Men*, Stapledon, in the *Star Maker*, grapples with the theme of balancing communal and individual consciousness as essential qualities in any advanced society and form of intelligence. This issue is repeatedly examined in the context of different forms of alien life and society.

The travelers also discover the "Nautiloids," who are aquatic beings, and some of whom evolve into giant living sailing ships. The Nautiloids, though, in their biological evolutionary specialization, develop into different castes. One group, in becoming servants for the giant ships, is relegated to an inferior and dissatisfying social status, thus creating an unstable society, permeated with social injustice, and repeatedly collapsing and rising again.

One of the most significant forms of intelligent life are the "Symbiotics," a coupling of two distinctive species, the "ichthyoids" (fish-like) and the "arachnoids" (crab-like). In their early stages of evolution they were in competition over dominance in their world, and after almost destroying each other due to their great differences in form and temperament, they eventually achieve a highly interdependent partnership and division of labor. This inter-species partnership evolves to become so intimate that the closest life companion for each individual life form is not a member of their own species, but a member of the other species. The symbiotics worship a symbiotic God, of interdependent and harmonious personae, rather than a single God. Providing a provocative metaphor for the ideal community of diverse individuals, the Symbiotics are complementary and integrated pairs, the "ichthyoids" being artistic and mystical,

whereas the “arachnoids” are dexterous and practical. The Symbiotics will eventually play a very significant role in the evolution of a galactic society.

Another variety of intelligent life forms are the “composite beings,” where it is only the group that has a clearly defined mind and personality. The individual bodies of the group have a much lower level of consciousness. Among those life forms most frequently forming into composite beings, found on diverse planets, are “bird-clouds” and insect-like creatures. For the “bird-clouds” conscious integration of its members is achieved through radio resonance among individual bodies. But since the bird-clouds do not form a contiguous connected body of flesh, the individualized group mind is very tenuous, and when two clouds make physical contact, their individualized members can disconnect from each other, generating confused and amorphous states of individualized consciousness. Yet, the insect-like group minds, in particular, achieve a level of relative immortality, since even if individual bodies within the group die and are replaced, the integrated whole persists with a continuity of consciousness.

One of the strangest and most fascinating types of intelligent species, which also populate a number of different worlds, are the “Plant Men.” On such worlds, the animal and plant biological lines did not separate, and the dominate intelligent species on such planets is both plant and animal. During the day, the members are more vegetable-like, unfolding their leafage and basking in the light of their sun, while at night the species becomes more animal like, moving about and creating technologies and industries. The animal side of them is active, assertive, and inquisitive, whereas the plant side is passive, contemplative, and acquiescent. The plant side is especially interesting, who are described as realizing a deep resonance and fusion with God or the cosmic whole, in a sort of ecstatic sexual trance state and photosynthetic rapture. Yet, such species, with this deep duality of function within themselves, repeatedly through history swing between opposite dispositions. If the animal side dominates, the species becomes too mechanical and soulless; if the plant side dominates, the species loses touch with the necessities of life and may die due to neglect of its immediate environmental challenges. A meditative mindset and way of life, even if in tune with the cosmic whole, is not sufficient to achieve evolutionary success and continuance.

In coming into conscious connection with these different worlds and intelligent species, as well as many others, the travelers discover that different worlds have diverse and distinctive views on the nature and possibility of God or a Star Maker. Yet, the more they travel across space and time, the more they find themselves in a deep existential quagmire. From the point of view of logic, reason, and science it increasingly becomes more evident that a Star Maker is not needed to explain the universe; yet, equally, there is a growing intuitive sense that some kind of ubiquitous psychic presence is at work in the cosmos, and that the expanse and depth of existence is far greater and bigger than the observable universe. Among the members of the group, various identities of the Star Maker are entertained and debated: Power, reason, love, or creativity, are considered as some possibilities forming the essence of the Star Maker, but each of these ultimate identities seems to fall short.

As the explorers move further forward in time, they grow in numbers, bringing into their fold more conscious minds from diverse worlds. In line with Stapledon's ideal conception of an harmonious group of distinctive personal identities, the travelers experience themselves as both a "We" and an "I," a diversity of distinctive conscious minds co-existing with an integrated single group mind. This dual state of individuality and community, of plurality and singularity, will be the ultimate form that intelligence achieves across the entire universe in the far distant future.

Also, as they move progressively forward in time, into farther reaches of the future, more utopian worlds awaken and arise in the galaxy. Although most intelligent worlds fail at making the transition through their spiritual crisis, the number that do achieve success keeps accumulating. Such utopian worlds view themselves as having reached a level of collective sanity and organized will, and see their pre-utopian existence as suffering from a generalized state of mental disease or insanity. In the bulk of cases, once the crisis is passed, the society engages in a pervasive social restructuring, emerging with both "communist" and "democratic" features.

Many of these more advanced worlds develop space flight and interstellar travel capabilities; many engage in purposeful biological evolution (eugenics); and many evolve telepathy across both space and time. In moving forward in time, our galaxy increasingly becomes a vast expanse of solar systems and planets teeming with intelligent and highly advanced forms of life and societies.

It is in the midst of this part of the saga as civilizations emerge throughout the galaxy, that a single paragraph is included describing the rise and fall of humanity. The story of the *Last and First Men*, cosmically speaking, is a tiny piece within the story of the galaxy. It is not clear if any of humanity's spores takes root on any other world.

As the proliferation of utopias continues, a new and more monumental level of crisis and strife emerges in tandem. As worlds develop interstellar space flight, coalitions and empires of star systems begin to form. And among some of these interstellar collectives, as described in *Star Maker*, a new form of insanity emerges. With a deep collective sense of mission and purpose, some empires become self-righteously convinced of the supremacy of their own values and beliefs, unable and unwilling to see the validity and worth of other system perspectives on reality. These "perverted" empires set out to convert all other worlds to their "true religion," and in the process either subjugate or destroy numerous other advanced societies. Interstellar "imperialism" spreads across the galaxy, and great wars and conflicts take place between competing empires, repeatedly threatening the collective evolutionary achievements within the galaxy.

At this point in the cosmic narrative, the Symbiotic worlds come back into the picture. Existing in regions of space just outside the main arms of the galaxy, the Symbiotics have been able to maintain a level of isolation separated from the general flow of events going on within the galaxy. Isolated away, though continually monitoring happenings in the galaxy, the Symbiotics have developed an amazing interstellar civilization. Roughly ten billion years in the future, they have constructed thousands upon thousands of

habitable artificial worlds of all sizes. They have created huge systems of concentric shells and girded worlds around various suns. (Stapledon's anticipation of "Dyson Spheres.") Because they have aquatic members in their population, they have constructed "goldfish bowl" worlds, that are giant globes of water appropriately positioned relative to stars. As their telepathic abilities grow, they create entire worlds possessing single collective minds. All told, they evolve into an interstellar network of machinery, super-structures, and life systems realizing a unified consciousness and sub-galactic integrated mentality.

After contemplatively observing worlds within the galaxy suffer and on a number of occasions getting totally destroyed by fanatical imperialist coalitions, the Symbiotics intervene and with their immense telepathic abilities, empowered by their integrated collective consciousness, they mentally undermine the madness of the imperialist groups. The empires come unglued and fall apart—the integrated fanaticism becoming fragmented into a myriad doubtful individual minds—some worlds even falling into a suicidal plunge. And it is out of this rupture and destruction of regional fanaticisms, that finally, approximately thirty to thirty-five billion years in the future, a Galactic utopia and galactic mind emerge.

Thus, in this vastly distant future, our galaxy becomes united. And three main directions emerge within this galactic civilization: There is an ongoing harmonizing and further diversifying of worlds, with new worlds being progressively incorporated into the whole; there is an ever-evolving telepathic outreach and connection with other galaxies and respective forms of intelligence within these additional spiral universes; and there is growing self-awareness and yet detachment, as the galactic mind reaches outward toward a higher plane of existence and a more encompassing perspective on reality. Hence, the search for the Star Maker, now at a galactic level, goes on. In its great complexity and immense level of intelligence, and its technologically entwined, gargantuan network of worlds, the galactic mind recognizes its minuscule nature within the total expanse of the universe. As expressed through the mentality of this distant and enlightened time, "When the cosmos wakes, if ever she does, she will find herself not the single beloved of her maker, but merely a little bubble adrift on the boundless and bottomless ocean of being."

The galactic mind also realizes that with the ongoing expansion of the universe and the continual burning and exhaustion of stars, that relatively speaking, little time remains to fulfill the promise of the universe—to realize a cosmic mind encompassing the entirety of the universe. Only ten to twenty billion years remain before the universe begins to slide into its inexorable death and dissipation.

Through immense telepathic powers the galactic mind has discovered other galactic minds and gained a trans-galactic perspective on the universe. Many other galaxies have struggled with achieving a mental and intellectual unity, and as in our galaxy, there have been wars and conflicts, and the pervasive oscillatory pattern of growth and evolution, and decay and destruction. But some other galaxies have achieved galactic

utopias, indeed some achieved this level of evolution before us, and have been watching our galaxy as it progressed toward unification.

It is at this point in the narrative that we arrive at a section titled “Disaster in Our Galaxy.” In order to go beyond simple telepathic contact among galaxies, our galaxy decides to send a group of planets powered by a sun across the inter-galactic void and achieve direct physical contact with another galaxy and its intelligent beings and its galactic mind. But when the entourage is sent outward from our galaxy the star explodes for no apparent reason, destroying the accompanying planets and all of the inhabitants. After additional unsuccessful attempts are made to journey outside of our galaxy, stars within the galaxy for no apparent reason also begin to explode. And the galactic mind, with its colossal level of scientific understanding of reality, is unable to explain this wave of chaos within our galaxy. The number of stellar eruptions become so frequent that the galactic mind begins to fall apart, as the galactic civilization crumbles amidst this stellar holocaust. After the surge forward in evolution that created the galactic mind, another wave of destruction and death seems to have come about in the great flow of events, now on a colossal galactic scale, ripping apart what had been achieved. History oscillates; order and chaos swing back and forth in the ongoing evolution of civilization and the mind.

What is eventually realized among the minds of the galaxy, counter-intuitive to the inherent biases of biological life, is that the stars are alive and possess intellects and consciousness. The stars, having been forcefully moved about by the “vermin” (that is biological life forms) that occupy the planets, decide to rid the galaxy of these minuscule pests, even if it means detonating a number of their own bodies.

Planetary biologically-based consciousness, after numerous failures and struggles, eventually makes contact with the minds of the stars, and learns of their view of reality and how they see themselves within the grand scheme of things. The stars, as they communicate and explain to planetary life, possess self-consciousness; a perceptual-like awareness of their surroundings; a sense of volitional behavior; and a social awareness of other stars. The stars also possess a sense of beauty and cosmic ecstasy. Although from the biological point of view, the stars seem to behave in accordance with mechanical unconscious laws, the stars feel that they initiate and guide voluntarily their own behavior and motions. The stars aspire toward an interstellar social order and possess a sense of love for each other and the whole, and the older stars guide the younger stars in their development. As the stars explain, they possess two main motives in their behavior: To perfectly execute their part in the communal dance of stars and to realize insight into the cosmos as a whole. When planet-based biological life begins to control and move the stars about, the stars found this abhorrent to their own will and sense of beauty and harmony. At no time did it dawn on the stars that the planets might possess some type of higher intelligence; biological and planetary life from their point of view was nothing but primitive “vermin.”

Of course, this mutual lack of understanding and resonance between stars and planets (or star-consciousness and planet-consciousness) described in the narrative is meant to

illustrate that the inherent biases of a form of mentality, based on its peculiar and distinctive physical embodiment, may prevent one type of intelligence from recognizing a very different type of consciousness and intelligence existing right “in front of their nose.” This episode of galactic catastrophe is also intended to illustrate that no matter how evolved and advanced an intelligence may become, presumably cognizant of all the contingencies and possibilities of reality, there may still be the proverbial “fly in the ointment” that has gone unnoticed and that may totally upset the edifice of evolution. Nothing is ever finally and completely safe and secure.

Once the stars and planets in our galaxy achieve a mutual understanding and realize that they are both on similar cosmic quests—to attune into the big picture of it all—they come together into a galactic mental unity, and finally, a true, all-encompassing galactic mind is realized. But the disaster within our galaxy took eons to resolve itself and many planetary systems within our galaxy have been destroyed; time is running shorter and shorter in which to realize the next step in cosmic evolution. Great resources have been squandered; many opportunities have been wasted. Moreover many galactic minds and civilizations in other galaxies have passed their apex of evolution, and are already sliding downward into increasing disorder and oblivion. Is there enough time left to achieve a cosmic mind? Is there enough time and mental power still available to contact the Star Maker?

It is at this point in the saga that the separation disappears between the galactic explorers with their disembodied collective mind (who have been the narrators of the story) and the integrative mind of the galaxy. Somewhere deeply embedded in this unity of galactic consciousness still exists the human traveler who first began the journey chronicled in the book, but now he has become one with the mind of the galaxy.

As diverse galaxies across the immensities of space begin to unite into a cosmic mind, the capacity of this universal mind to move through space and time grows, and its ability to appreciate and apprehend stranger and stranger forms of mentality also increases. In this regard, another great discovery is made. Just as the stars possess consciousness, the emerging cosmic mind, in traveling back towards the beginnings of the universe, discovers that the formative nebulae out of which stars were born possessed the earliest manifestation of consciousness. These early nebulae, amorphous in form, originally merged together into a continuous sphere of diffuse gases and particles, and possessed a correspondingly ill-defined sense of identity and awareness. Yet, in order to realize a cosmic consciousness, truly embracing all of space and time within the universe, the consciousness of these nebulae are assimilated into the cosmic mind of the far distant future. Past and future are drawn together. The time in the narrative is approaching fifty billion years in the future.

The cosmic mind within this far distant future feels like an “adolescent in an old body.” The time of the great diversity and profusion of forms of biological life within our galaxy, as well as in other galaxies, has passed. Life is redesigned to better fit within a universe of that is old and dying. The great age of bright, illuminate stars is also over. New biological forms resembling insects, worms, and extensive two dimensional curved

surfaces populate the inner spheres of artificial solar structures surrounding the burning cinders of old stars. Such physical forms support the mind of the cosmos.

As the apex of trans-galactic awareness and the integrated intelligence of the universe comes closer and closer to its climatic culmination, and available energy to support this vast mental system further and further drains away, the mind of the universe feels itself being drawn, with growing fear and dread, toward something that is both absolutely transcendent to itself, and yet more deeply and truly itself than anything else. It is both a final and complete self-awakening and a conscious jump to the next level of existence above the totality of the universe. As Stapledon writes, "As the spirit awakens, it craves more and more to regard all existence not merely with a creature's eyes, but in the more universal view, as though through the eyes of the creator." In one sense, this is Spinoza's vision of seeing oneself through the "eyes of eternity," but recast as an evolutionary accomplishment realized at the end of time. This ultimate conscious awakening, as it is described, also represents a theory of transcendence in which what exists at the infinite horizon ("beyond the hill") is somehow paradoxically what is at the innermost core of our existence.

In a time roughly fifty billion years in the future, the "Supreme Moment of the Cosmos" is realized. The mind of the universe experiences (contacts) the Star Maker, the creator behind it all, and although the cosmic mind has ascended in its evolution to incredible heights of intelligence, this evolutionary mind of the entirety of the universe feels totally overpowered and "appalled," and in complete awe in the face of the Star Maker. The Star Maker reveals itself to the mind of the universe in two modes: "As the spirit's particular creative mode that had given rise to me, the cosmos; and also, most dreadfully, as something incomparably greater than creativity, namely as the eternally achieved perfection of the absolute spirit." Through the Star Maker, the cosmic mind sees the dissipation and death of itself in its own future, as well as the end of the universe.

Although the cosmic narrator of this bedazzling experience repeatedly states that words and finite concepts totally fail at describing the nature of this vision of creation and the Star Maker, the narrator struggles to convey some sense of what is apprehended within this "Supreme Moment." Although the Star Maker is the Creator, this "absolute spirit" seems without love for the multitudinous creatures manifested within its creation; the Star Maker seems more like an artist attempting to achieve some incomprehensible level of beauty to be beheld and contemplated.

But then, after this overwhelming encounter with the Star Maker, in a final flash of even deeper revelation, the cosmic mind experiences the creative life of the Star Maker. The Star Maker is an awakening spirit, itself in a type of ongoing evolution, and our universe is just one in a multitudinous array and series of different universes created by the Star Maker. Again the narrator conveys the unfathomable nature of what is being described, and in fact, at this point, suggests that what is about to be explained is best seen as a "myth" or a parable, not to be taken as literally true.

In its “beginning” the Star Maker reveals itself as blind creativity without any purpose behind its creations. The “first” created universes were very simple, without space or time, but as the Star Maker experimented with different possibilities, increasing complexity emerged in successive universes, and the Star Maker began to realize a greater lucidity of consciousness and clarity of purpose within its creations. Many universes were forms and variations of music. Many were intentionally chaotic. Different forms of time were experimented with in different universes. Sometimes the Star Maker created a universe and left it alone, simply observing how it evolved; other times the Star Maker interfered and guided the events within that universe. In some universes, there was free will within its intelligent inhabitants; within other universes there was complete determinism. For a great number of universes, the Star Maker divided itself into competing creative spirits: One spirit was progressive and moral, the other spirit was evil and diabolical. The Star Maker at times created eternal heavens and hells for these dialectical and oppositional universes.

Although the Star Maker is described as eternal, and hence transcendent of time, and the array of all created universes is depicted as positioned on a wheel moving from the simple to the complex, there is a definite sense of evolution both in the Star Maker’s consciousness and the series of its creations. Indeed, “after” the creation of our universe, the Star Maker experiences an epiphany in contemplating its own evolutionary development and “later” created universes reflect this deeper understanding of existence. On the wheel of creation, existing at its asymptote, the Star Maker “will” eventually create the “ultimate cosmos,” which like the last movement in a musical symphony, will contain reflections of all “earlier” or more primitive universes, similar to the composite atoms that make up our present universe. Although the deepest and truest essence of the Star Maker is artistic contemplation, this ultimate cosmos “will” be the truest and most complete fulfillment of the Star Maker’s creative desires. All evils, agonies, miseries, and modes of chaos and confusion, will somehow be contained, integrated, and ‘lucidly contemplated’ into this final creative achievement. The ultimate “spiritual” awakening will come in this reciprocal asymptote of contemplative creator and perfected creation. The Star Maker, in a sense, requires its creative manifestations to realize its own supreme evolution. In the final point and epiphany of the narrator’s stream of consciousness, the Star Maker reveals itself as the eternal spirit in everything, both immanent within the cosmic wheel of its creations and yet transcendent to it all.

And then, after this colossal explosion of revelation, the original human narrator of the story awakes on the hill, engulfed in the darkness of the night sky—a tiny point of consciousness in the abyss of the immensity of space and time. He realizes that the only certainty is uncertainty. Within the overpowering, engulfing vastness, he realizes that his wife and their partnership in life is a “rock” to which to anchor himself. He sees two symbolic lights to guide him, macrocosmic and microcosmic, one light being the light of human community, the other light, the stars in the heavens above. He realizes, after his cosmic experience, that it is more urgent than ever, right at the cusp of World War II, to play some positive role in the contemporary struggles of humankind—for apprehending the whole of things illuminates and gives value to the parts—“to win for [our] race some increase in lucidity before the ultimate darkness.”

The Eyes of Evolution

What is to be made of *Star Maker*? How does it fit within the ongoing evolution of science fiction? How are we to understand the significance of Olaf Stapledon and his science fiction novels in relationship to other important early writers and classic novels of science fiction?

As noted earlier, *Star Maker* presents a theory of reality and the good (ethics) expressed in the form of a narrative. The theory of reality is cosmic evolution. The theory of the good encompasses the ideas of individualism and communalism achieving a mutually supported evolution of development and a luminous and comprehensive awareness of the whole and one's personal position and significance within the whole. The evolutionary theory of reality provides the narrative structure of the book—the book is a chronicle of sequential evolution within the universe—and the theory of the good represents an ideal that the evolution of consciousness within the universe strives toward across the ages and eons of time. The vision of reality also includes an irreducible dimension of mystery and incomprehensibility, for the *Star Maker* is beyond the grasp of even the cosmic mind of the universe. Although there is an eternal dimension to Stapledon's theory of reality—the realm of the *Star Maker* and the wheel of created universes—both creator and created at this eternal level embody an evolutionary quality, with reciprocal trajectories toward self-fulfillment and heightened self-consciousness, on one hand, and an all-subsuming possibility space of entities and variables of existence, on the other hand, represented across the wheel.

The spatial-temporal expanse of the universe covered in *Star Maker* envelops the much more limited (though still immense) arena of action within *Last and First Men*. The latter covers a mere two billion years; the former, as represented within two time scales provided by Stapledon, extend out respectively eighty and three hundred billion years into the future of the universe (long after the “Supreme Moment of the Cosmos.”). One earlier writer that attempted to journey outward toward such vast distances in the future was Camille Flammarion, who at the conclusion of *Omega: The Last Days of the World* ventures into times beyond the end of this universe, delving into a cyclic oscillation of recurrent universes. “Doc” Smith in his *Chronicles of the Lensmen* goes backward in time into the deep past of the primordial universe describing the emergence of intelligence within the Arisians, and jumps out of the universe in explaining the origin of the Eddorians. As one other notable cosmic author, William Hope Hodgson in both *The House on the Borderland* and *The Night Land* ventures out millions, if not billions of years, into metaphysically strange and ambiguous futures. But Stapledon's visions of the far distant future and the trans-cosmic realm of eternity far exceed in depth, detail, and immensity of scope what Flammarion, Smith, or others achieved in earlier times.

Although *Star Maker* significantly transcends *Last and First Men* in cosmic and ontological scope, the same evolutionary theory of reality and the good structures the narrative of both books. The latter is a story of the evolution of humanity; the former is a story of the evolution of intelligence in the universe. And in both books, the same

striving forward is chronicled: Conscious minds attempt to realize an integrated and communal supra-consciousness that preserves the individuality of its constituent individual conscious minds. And the whole of communal consciousness attempts to apprehend the biggest picture and experience of reality that is possible.

Within such an evolutionary model, Stapledon as a philosopher and a cosmic psychologist, highlights the mental and “spiritual” dimensions of the evolution of life and intelligence in both the future of humanity and the future of the universe. Mind and consciousness is the center of gravity in his thinking and his visions. In this regard, he may be seen as slighting the physical and technological sides of possible future evolution. “Doc” Smith, John Campbell, Jack Williamson, and other early science fiction writers with technological and physical science backgrounds, create in some ways a much richer variety of possible physical inventions in the future. Stapledon seems to miss or minimize the whole arena of possible developments in technological intelligence, although this is only a partial truth. But where are the robots and forms of artificial intelligence in Stapledon’s visions of the future? Stapledon does though invent a host of solar and astronomical technological structures, and he clearly does recognize, repeatedly so, the possibilities of biotechnological evolution within life. Yet, all told, it is the evolution of mind that most draws his attention, no doubt because in his view this is where the supreme achievements of evolution will occur. The powers and potentials of mind transcend those of matter and the physical sciences.

Even if the physical is relatively downplayed in comparison with the mental, Stapledon, especially within *Star Maker*, reflecting a long-standing and powerful interest among science fiction writers, extensively delves into space travel and the exploration of the physical cosmos. In this regard, he actually ventures much further outward into space than the bulk of novels of space exploration before him. Beginning with Lucian, Kepler, and de Bergerac, and continuing forward with Voltaire, Verne, Wells, Lasswitz, and the great panorama of pulp magazine science fiction writers, outer space and plausible (and implausible) vehicles for traveling through it, has been one of the central narrative themes in the history of science fiction, and clearly Stapledon enthusiastically delves into this vast arena of imagination. Just as with “Doc” Smith’s *Skylark* and *Lensmen* series, the galaxy is explored and colonized within *Star Maker*. And as part of this important tradition within science fiction, Stapledon postulates a host of different alien life forms and types of intelligence living on alien worlds. In fact, the sections in *Star Maker* when stranger and stranger alien intelligences are progressively encountered transcends in imaginative richness, most, if not all, previous efforts to envision alien life and alien societies. We could though list Burroughs and Smith, at least, as two writers who came close to immense variety of aliens in *Star Maker*.

On the potential powers of the evolution of mind, Stapledon does align, in one important respect with Smith, Campbell, and others. He does foresee the emergence of various psychic capacities such as telepathy, clairvoyance, and telekinesis. In this regard, he stands with many other science fiction writers in postulating mental capacities that presently seem scientifically implausible. Disembodied minds traveling through the cosmos and minds able to reach backwards in time and communicate with earlier minds

stretches, if not exceeds the limits of scientific credibility. And yet, there are two ways, at least, to look at this transgression beyond the scientific: For one thing, although informed by the ideas of modern science, science fiction has never stayed within the limits of plausibility of the scientific establishment of the time. And second, we can propose that one of the main purposes of science fiction is to push the limits of credible scientific imagination. Who is to say, as Goddard noted, what is possible and what is impossible? This fuzziness at the edge of science is especially pronounced regarding the possibilities of the future and in particular the possibilities of consciousness and mind.

In Stapledon's speculations on mental evolution, both at an individual and a communal level, he articulates and further develops three important and connected streams of thought within the history of science fiction: The possibilities of human evolution; the more general possibilities of the future evolution of mind and consciousness; and the whole historical tradition of utopian thought. Going back at least as far as St. Augustine in his vision of a more rarified and spiritual human being in the coming Millennium, and in more modern times, as explored by Edward Bulwer-Lytton, Flammarion, Wells, J. D. Beresford, C. Fowler Wright, and Edmund Hamilton, among others, science fiction writers have explored the possibilities of the future of humans. But in this regard, as well as, the more general theme of mental evolution, Stapledon vastly exceeds in *Last and First Men*, on human evolution, and *Star Maker*, on mental evolution, anything envisioned before him. He is the culmination and transcendence of what came before. On the utopian theme, which also runs back as far as St. Augustine and even further to Plato, and continues forward in the works of Bacon, Campanella, Mercier, Bellamy, Wells, and Lasswitz, among others, Stapledon articulates both in *Last and First Men* and *Star Maker* specific examples and general theories of ideal communities of intelligent beings. In fact, he pushes the envelop of imagination again, in *Star Maker*, actually attempting to describe "galactic" and "cosmic" utopias. Yet, on a more limited and focused scale, Stapledon's description of the ideal society of the "Last Men" is especially riveting and poignant.

In speculative descriptions of ideal social states we engage by contrast in descriptions of less desirable, if not abhorrent and frightening social systems. Utopias and dystopias define each other by comparison and contrast. In science fiction, especially in more modern times, dystopias have been an object of repeated fascination and inquiry. Wells delved into both utopian and dystopian visions, such as in *The Sleeper Awakes*, *A Modern Utopia*, *The World Set Free*, and *The Shape of Things to Come*, defining each relative to the other, in the context of his theories of contemporary social failings and ideal and preferable future societies. In the early twentieth century, Lang and von Harbou's *Metropolis*, Hasting's *City of Endless Night*, Zamyatin's *We*, Williamson's *The Humanoids*, and Čapek's *R.U.R.* stand out as significant dystopias that included in their narratives, ideas on negative and positive possibilities within conceivable societies. Stapledon, in both *Last and First Men* and *Star Maker*, provides arguments and illustrations regarding both elevating and destructive social realities. On the grandest of scales, we have "The Tragedy of the Perverts" within *Star Maker*, in which in their fanatical zeal to assimilate all galactic societies into their vision of the truth, almost

obliterate galactic civilization before they crumble in their own self-annihilation. Stapledon's message is that diversity and the independence of minds and cultures within a world or a galaxy are necessary conditions for any utopian achievement, and the forceful attempt to eliminate fundamental differences, or subjugate some distinctive portion of the population to a lower and more subservient status, are key developmental seeds spawning dystopias.

In considering the themes of utopia versus dystopia and the possibilities of mental evolution, the ethical dimension of future mental evolution is a central concern. As noted above, Stapledon articulates both an ontology of reality and a theory of ethics (of the preferable or ideal) within his novels. His visions of what is possible, in fact, are significantly influenced by his visions of the ideal, just as much as his visions of the ideal are set within the ontological context of evolution. It is illustrative, at this point, to compare the cosmic and ethical visions of Stapledon and "Doc" Smith, for this comparison will lead us into some fundamental points regarding the developmental history of all of science fiction.

To recall, Smith's cosmic vision involves a fundamental conflict between the forces of good and evil, represented respectively, by the Arisians and their evolutionary creations, the "Lensmen," and the evil Eddorians, and all of their diabolical accomplices and henchmen, including the space pirates and Boskonians. This war of good and evil, involving a cosmic battle over control of the galaxy, including control over humanity, is very resonant with the Judeo-Christian cosmic-ethical vision of the war of God and Satan, with all the associated angels and demons fighting over the eternal souls of humans. The separation of good and evil is very clear, and in the final dramatic act within the *Lensmen Chronicles*, the forces of evil appear to be thoroughly and completely destroyed. Although good is distinguished from evil on psychological and social grounds—good strives toward empowering humanity, whereas evil aspires toward dominating humanity—the final resolution requires a great physical and military confrontation (a trans-galactic Armageddon). But in this final confrontation good triumphs because it possesses more powerful "guns," which although there are numerous gigantic physical technologies involved in the battle, the ultimate "guns" that obliterate the evil enemy are mental in nature. Roberts (2005), in fact, argues that this final battle is metaphysically a battle between mind (the Lensmen and Arisians) and matter (the Eddorians). Yet still, it is a battle of force against force, of the destruction of one side by the other.

Stapledon, on the other hand, conceptualizes the great saga of existence as the evolutionary striving toward ultimate cosmic enlightenment: Literally, the driving goal behind the action is the seeing of God realized through the evolution of mind and consciousness in the universe. (A second driving goal is mutual understanding and resonance among all sentient minds.) Although there are battles along the way, and there is a confrontation of good and evil, specifically in the galactic clash with the imperialist and fanatical "perverts," the main thrust of the story is the drama of mental evolution. If there is an enemy in this upward struggle the enemy is within us. The cosmos struggles with its own ongoing failures of sufficient insight, foresight, and

cooperation. Moreover, our universe is set within the context of the ontological experimentations of God, who is also an evolutionary being striving toward some ultimate insight and creative act. What is the ultimate good in all of this? Interestingly, the Judeo-Christian vision of good versus evil, recapitulated in “Doc” Smith, represents one sub-set of all sagas of existence realized by the Star Maker. In our universe, where all forms of matter seems permeated with consciousness and intelligence (a panpsychism involving stars and nebulae), humanity and the cosmic mind in their supreme epiphany face the unfathomable depths of eternity and infinity. Is this supreme humbling experience, of awe and wonder, the ultimate good to be realized within our evolutionary journey?

This contrast of Smith and Stapledon can be viewed as an evolutionary transformation in mythic imagination. Although informed and inspired by modern scientific technologies, real and imagined, Smith basically sticks to the ancient mythic (Zoroastrian) scenario of good versus evil spirits fighting over control of the universe, and Smith even includes a super-hero and savior in the form of the Lensman, Kimball Kinnison. Parenthetically, all super-heros, such as in the emerging wave of comics in the 1930s, are modeled to some degree on “Saviors” of humankind, possessing super-human or trans-human qualities and protecting humanity from the powerful forces of evil.

Stapledon, in contrast, thoroughly incorporates into his saga the modern theme of cosmic evolution, and his fundamental mythic narrative reflects this change in perspective. He applies this basic concept even to the Star Maker: Instead of an unchanging God creating a single universe, the Star Maker, though eternal, creates an evolutionary sequence of universes and in the process realizes a trajectory of self-development from unconstrained and primordial creativity to contemplative artist. Instead of some great “military-like” victory at the end of time, there is a mental and “spiritual” achievement involving the overpowering and humbling experience of unfathomable mystery within our universe and the manifestation of a supreme creation at the level of the Star Maker and the wheel of multiverses.

Is there anything like a super-hero or savior in all of this? Within *Last and First Men* there is a last man born who realizes a poetical and philosophical vision regarding the life of humanity. To whatever degree there is some triumph within the saga of *Star Maker*, it is a collective achievement. It is the synthesized and diverse minds of the universe that realize contact with the Star Maker.

We could argue that Stapledon’s vision of the Star Maker actually more closely aligns in spirit with religious visions (including Judeo-Christian) of a Creator who transcends human comprehensibility. Most traditional religions, in spite of professing deep existential mystery regarding the nature of God, provide detailed and definitive answers to the meaning and purpose of the universe and the nature of God. *Star Maker* is truer to the deepest sense of awe and wonder within the cosmos, a critical point, according to Campbell, in the mythic experience. The colossal jump in the wonder and mystery of it all is realized because Stapledon integrates evolution (and the future possibilities of evolution) into his scheme and fundamental mythic narrative. Science expands

consciousness and evolution expands the possibilities of existence. As with *Last and First Men*, Stapledon attempts to transcend the myths of the past, and for that matter, even the present, and in so doing, stretches the scope of imagination and existential possibilities, making reality more vast and strange and more mystifying.

It is a fascinating circle in conscious speculation and associated human thinking that after modern science attempted to break free of dogmatic religious doctrine and superstitious ancient myths and fantasies, and science fiction, empowered and inspired by this modern view of reality, arose in the centuries after the Scientific Revolution, challenging God in the process, that in Stapledon, God re-enters the picture and a more expansive realm of existence beyond our universe is revealed. As noted, science fiction has never been able (or willing) to stay within the confines of the scientifically plausible, and with Stapledon, the deep human archetype of a Creator, bursts forth once again, although now transformed by the evolutionary framework, for true believers the most challenging and disconcerting of all scientific theories. The archetype has been “evolved” by evolution itself. The myth of the Creator has been assimilated into the scientific evolutionary model of the universe. Does this grandest of all scientific implausibilities, of a transcendent Creator, render *Star Maker* more fantasy than science fiction? My answer would be no, since Stapledon, through an immense saga, beginning with the *Last and First Men* and then taken up in *Star Maker*, chronicles the evolution of mind, intelligence, consciousness, alien worlds, space flight and colonization, the terraforming of planets, techno-networks across planets, star systems, and galaxies, biological and neurological engineering, communal minds and galactic utopias, artificial worlds, the life span and impending heat death of the universe, and contact with the Star Maker, within a naturalistic and evolutionary framework that encompasses the entirety of the ultimate cosmos.

Where now do we go from here?