

Contributions to the Study
of Science Fiction and Fantasy
Series Editor: Marshall Tynn

The Mechanical God: Machines in Science Fiction

Thomas P. Dunn and Richard D. Erlich, editors

Comic Tones in Science Fiction: The Art of Compromise with Nature

Donald M. Hassler

Formula Fiction? An Anatomy of American Science Fiction, 1930-1940

Frank Cioffi

H. P. Lovecraft: A Critical Study

Donald R. Burleson

A Literary Symbiosis: Science Fiction/Fantasy Mystery

Hazel Beasley Pierce

THE INTERSECTION OF SCIENCE FICTION AND PHILOSOPHY

CRITICAL STUDIES

Edited by

Robert E. Myers

Contributions to the Study of
Science Fiction and Fantasy, Number 4



GREENWOOD PRESS

Westport, Connecticut • London, England

Philosophy and Science Fiction

PHILIP A. PECORINO

"I love you sons of bitches," Eliot said in Milford. "You're all I read anymore. You're the only ones who'll talk about the really terrific changes going on, the only ones crazy enough to know that life is a space voyage, and not a short one, either, but one that'll last for billions of years. You're the only ones with guts enough to really care about the future, who really notice what machines do to us, what wars do to us, what cities do to us, what big, simple ideas do to us, what tremendous misunderstandings, mistakes, accidents, and catastrophes do to us. You're the only ones zany enough to agonize over time and distances without limit, over mysteries that will never die, over the fact that we are right now determining whether the space voyage for the next billion or so is going to be Heaven or Hell."

Eliot admitted later on that science fiction writers couldn't write for sour apples, but he declared that it didn't matter. He said they were poets just the same. . . .

God Bless you, Mr. Rosewater, or Pearls Before Swine
Kurt Vonnegut Jr.

For most philosophers, science fiction has three strikes against it: it deals with science; it is fiction; and even more it is science fiction. Although science fiction often deals with important issues in valuable ways, few philosophers consider it an appropriate media for conveying ideas, a

valuable source for significant issues, or an effective means for encouraging reflection. Yet reflections on the nature of both science fiction and philosophy and their possible interrelation may open the way to a new consideration of science fiction.¹ Such reflections necessarily involve an examination of the relationship of philosophy to art and literature and a discussion of the issues that belong to the philosophy of value. In so doing, it is hoped that misconceptions can be rectified and the basis for more fruitful interaction between philosophy and science fiction can be established. By speculating about present trends and future possibilities science fiction can offer much to philosophers, and philosophy can offer much to science-fiction writers in terms of understanding the interrelations, extensions, and implications of ideas, concepts, and visions. Through philosophy, science-fiction writers are likely to produce more critical and subtle executions of its art form and, through an appreciation of science fiction, philosophers may become more willing and able to speculate on issues of truly human concern.

Science Fiction

We are making the future...
and hardly any of us troubled to
think what future we were making.
And here it is!

When The Sleeper Wakes
H. G. Wells

Since the end of World War II, science fiction has enjoyed a constant popularity. While science-fiction movies, television series, magazines, and paperback novels are the most obvious signs of its surge in popularity, science fiction itself has never been satisfactorily defined. Theodore Sturgeon, a noted science-fiction author, has defined science fiction as speculative fiction that deals with science. However, this definition is inadequate, for it suffers from vagueness, and it does not at all answer the question, "What is and is not science fiction?"

H. Bruce Franklin has adopted a more comprehensive yet critical approach.² Noting that all fiction seeks to describe present reality but different types of fiction do so from different viewpoints, he divides fiction into four general types:

1. Realistic fiction—a description of present reality by the production of a counterfeit of that reality
2. Historical fiction—a description of present reality by the production of a counterfeit of that reality's history
3. Science fiction—a description of present reality in terms of a credible, hypothetical invention, past, present, or, most usually, future, extrapolated from that reality
4. Fantasy—a description of the present reality in terms of impossible alternatives to that reality.

In this view, science fiction is concerned primarily with extrapolation from the present reality. But this extrapolation must be seen as possible or else the work is in the realm of fantasy and is not science fiction at all. For instance, if a writer in 1981 writes a story in which Mars is depicted as having an atmosphere similar to Earth's the work would be fantasy because it is contradictory to scientific knowledge. If, however, the author portrays a planet with an atmosphere similar to Earth's in another galaxy, the work may well be classified as science fiction. There is, then, a dividing line between science fiction and fantasy.

If science fiction is not fantasy, it also is not realistic fiction in Franklin's sense of the word. To be science fiction there must be speculation as science fiction is an extrapolation from the present reality. If a writer in 1981 writes a story involving laser technology or a story in which a city is destroyed by an atomic weapon, it is not science fiction. Fifty years earlier either story would have been science fiction because either would have been a speculation on future possibilities, but in 1981 the stories are either realistic fiction or historical fiction since the element of speculation beyond present scientific knowledge and technology has been almost totally eliminated.

Beyond extrapolated possibilities, science fiction, as its name implies, somehow must be related to science. As science is responsible for the most rapid advances in constructing the world in which we presently live and will live tomorrow and as science fiction is concerned with extrapolated future possibilities, science fiction must be concerned with "science," if it is concerned about the future of human experience. "Science" here is taken to signify that body of systematic knowledge, including hypotheses, theories, and laws, that has been built up through the work of numerous scientists who pursue the common goal of a more accurate understanding of the universe. As such, there are three levels: pure science, applied science, and technology. Pure science can be ex-

emphasized by a research scientist studying micro-organisms in the blood; applied science by the doctor who is treating the patient with a blood disease, and technology by the drug that is used in the treatment. One or more of these levels of science is present in most science fiction, but the way in which they are treated differs with the tone or intention of the works.

Isaac Asimov has noted that there are three types of science fiction: 1) adventure oriented, 2) technology oriented, and 3) socially oriented. To these three types, there may be added a fourth—the philosophically oriented. Science is treated differently in each of these types of science fiction. The adventure type is usually close to fantasy because it often includes implausible events and/or situations. The adventure story usually can be reduced to a simple clash between a hero/heroine and a villain/villainess, that is, good and evil, in simplistic terms. In adventure science fiction, science is usually just an embellishment to the story, superimposed to keep the reader interested. There are numerous adventure stories of this type in the comic strips and on television. *Buck Rogers*, *Flash Gordon*, the many stories of Edgar Rice Burroughs, and now the film saga, *Star Wars*, are fine examples of the adventure type of science fiction.

In the technological type of science fiction, science usually is seen as a value unto itself and not as a means to an end. These works are often referred to as "gadget" stories because they are concerned primarily with presenting new technological devices to further embellish the simple adventure story. The vast majority of all science fiction is a combination of adventure and "gadget" stories. The elements of these stories are familiar to all and include the hero or heroine, the villain or villainess, invaders from outer space who are usually BEMs (bug-eyed monsters), and an imposing array of ray guns, heat waves, space ships, and so forth. Superior gadgets usually allow the "good guys" to triumph. There are times when it is not a scientific gadget but a scientific theory that is the focus of the story. For example, there are numerous stories dealing with time and relativity theories.

It is in the third, the socially oriented types that the real cultural and philosophical importance of science fiction emerges. These science-fiction works focus on the implications of technological progress for society in general rather than on technological advances, gadgets, or theories. Science in these works is viewed as a means to an end. The works them-

selves display and explore varying views on the value and role of science, especially technology. A fine example of socially oriented science fiction is Isaac Asimov's novel, *I, Robot*, which considers the sociological implications of employing robots in nearly every area of society. The work explores the values and attitudes of a technologized future society in which humans are becoming less and less important to the maintenance of society. It is in this process of exploring values and attitudes that science fiction becomes vitally important.

In philosophical science fiction, the exposition and investigation of values and philosophy become the dominant themes of the works. Works in this classification either expose a certain philosophical tradition through the story or criticize such a philosophical tradition by showing its failures. Perhaps the two definitive examples of philosophical science fictions are Olaf Stapledon's *Last and First Men* and *Star Maker*. The first work traces mankind from the twentieth century to its end millions of years later on Neptune as the sun begins to die. *Star Maker* is the story of one man's journey from Earth to the farthest reaches of the cosmos, where he is confronted by the Star Maker, "the eternal and perfect spirit which comprises all things and all times." It is, in fact, an exposition of the cosmology and anthropology of process philosophy. In the preface to *Last and First Men*, Stapledon writes, "To romance of the far future, then, is an attempt to see the human race in its cosmic setting, and to mould our hearts to entertain new values."³ Stapledon labels his work "an imaginative construction of possible futures." It is in the philosophical form that science fiction attains its highest level of artistic achievement. Science fiction in these works becomes a vehicle for the exploration of values as well as an exposition of possible alternatives for the future. Among contemporary novels some of the works of Stanislaw Lem display this philosophical character.

These four types of science fiction have been presented here as if they were clearly defined entities that are mutually exclusive. This is not the case at all. All four may be present in a single work, although this is exceedingly rare. Almost all science-fiction novels have elements of the first two types, many today have elements of the third, and some are philosophically oriented. What is inherent in all four is speculation; this speculation usually comes about as a result of the author's attempt to answer one of three possibilities: what if . . . if this goes on . . . and if only. . . .⁴ Thus, the science fiction writer wonders what past trends have

conditioned the present or what the future will be like if certain trends continue or what would happen if certain important trends were altered or reversed.

If science fiction is as rich and important as this essay presents it to be, why does it not enjoy more critical acclaim? In order to consider this issue, it is necessary to appraise science fiction as art. In order to do this, it is necessary to distinguish between the medium of science fiction and its message between its process and its substance.

For the most part, science fiction has been regarded as poor literature. With certain exceptions, this is true; most science fiction is stylistically primitive, that is the syntax and writing style are not as developed as those of other forms of fiction. The sentence structure is simplistic, usually composed of many declarative sentences piled on top of each other. Science fiction authors usually do not display any great virtuosity with such literary techniques as symbolism, allegory, or metaphor. Because most science fiction is based on action to keep the story moving, the characters are usually one dimensional and unmemorable. The emphasis is on the plot, the action, for science fiction writers are more concerned with the ideas embodied in their stories than the manner in which they present them. Thus, the medium of the story, its process, is fairly primitive.

The critical importance of science fiction as art, however, lies not in its process but rather in its substance. The author is concerned with the relationship of ideas, with extrapolated possibilities, with the patterns important in a society. If the importance of art is seen to lie in its offering of images to help form an interpretation of reality, then science fiction is important as an art form. It is, however, an art form often conspicuously lacking the refinements that appeal to aesthetic sensibility. The strong point of science fiction as art lies in its substance, in its offering of images to aid in an interpretation of reality and its presentation of possibilities that force us to remember we are shaping the future and should be conscious of its possible consequences for humankind.

Science fiction, then, is that class of prose narrative that concerns itself primarily with extrapolated possibilities. It is not fantasy because the extrapolations are seen as being possible; it is not realistic fiction because it utilizes extrapolation and speculation. Science fiction exists in a temporal perspective: what was science fiction in 1900 may well be realistic fiction or fantasy if written today. Science fiction creates extrapolated

possibilities that are a combination of present trends and the author's critical imagination.

Philosophy

In philosophical discussion, the merest hint of dogmatic certainty as to the finality of a statement is an exhibition of folly.

Alfred North Whitehead

Like science fiction, philosophy too is in need of a definition, and like science fiction, such a definition is not easily obtained. Philosophers not only disagree over such a definition but revel in and pride themselves on their disagreements. In the most general sense of the term, many people define philosophy as a personal attitude toward life and the universe, but it is more than that. It begins in wonder, doubt, and curiosity and results in a method of critical thinking and reasoned inquiry. Philosophy is an intellectual activity that tries to view life in all its relationships. Speculative philosophy, especially, is an attempt to formulate a worldview that is consistent with both science and human experience. It is an attempt to better understand reality as it exists now, and as it may exist in the future. It is important to realize as Titus writes, that "philosophy is willing to look beyond the actualities to the possibilities."⁵ Thus, in its broadest sense, philosophy attempts to integrate all of man's knowledge and set forth a comprehensive view of the universe and of life and its meaning, while maintaining a critical stance toward that view.⁶

With this as a starting point, it is possible to consider how several philosophers have defined philosophy. In the first chapter of *Process and Reality*, A. N. Whitehead describes his notion of philosophy:

Philosophy is the welding of imagination and common sense into a restraint upon specialists, and also into an enlargement of their imaginations. By providing the generic notions, philosophy should make it easier to conceive the infinite variety of specific instances which rest unrealized in the womb of nature.⁷

Speculative philosophy is the endeavor to frame a coherent, logical, necessary system of general ideas in terms of which every element of our experience can be interpreted.⁸

Thus, in Whitehead's description of philosophy, in general, and speculative philosophy, in particular, there is an intrinsic relationship between philosophy and imagination. It is the role of philosophy to provide the generic notions that guide the artist. The artist in turn creates images of the "specific instances" that are seen to be possible. Philosophy is also concerned with interpreting experience, that is exhibiting the fullest meaning of events and ideas in their relationship to other events and ideas. It is interesting to note that Whitehead sees philosophy as enlarging the imaginations of specialists, for enlarged imaginations can only result in a wider range of possibilities to be placed at the disposal of the society in general. To Whitehead, then, philosophy is the organization of a given world in such a way as to make evident the intensity of contrast; this intensity of contrast is affected by the introduction of novelty into the society. It is the role of the artist, the force of imagination, to present novel images that aid in an interpretation of reality. These images are then judged by philosophy according to their comprehensiveness and relevance.

In distinguishing between two elements of philosophy, the analytic and the interpretive, John E. Smith offers a more precise definition of philosophy in his book, *Reason and God*.⁹ The analytic is the critical portion of philosophy, semantics, linguistic analysis, and so forth; speculative philosophy belongs to the interpretive element. The same distinction is made by John Dewey in *Democracy and Education*:

Philosophy thus has a double task: that of criticizing existing aims with respect to the existing state of science, pointing out values that have become obsolete with the command of new resources, showing what values are merely sentimental because there are no means for their realization; and also that of interpreting the results of specialized science in their bearing on future social endeavor.¹⁰

Thus, Whitehead, Smith, and Dewey have all distinguished two elements of philosophy, the analytic or critical, and the speculative, or comprehensive. This distinction is important to an understanding of the relationship between science fiction and philosophy.

Dewey further explores the nature of philosophy in his *Reconstruction in Philosophy*. Quoting William James, he notes that "philosophy is vision" and its chief function is to free men's minds from bias and prejudice and to enlarge their perceptions of the world around them.¹¹ This is similar to Whitehead. Dewey goes on to say that philosophy may proceed down a path wherein it becomes a

systematic endeavor to see and state the constructive significance for the future of man issuing from the revolution wrought primarily by the new science; provided we exercise resolute wisdom in developing a system of beliefs-attitudes, a philosophy, framed on the basis of resources now at our command.¹²

Inherently, then in the formulation of a speculative philosophy that interprets all the elements of one's experience coherently is the vision to shape future events so as to include that which a person values as good. This reiterates the Titus quotation at the beginning of this section concerning philosophy's willingness to look beyond actualities to possibilities.

Philosophy and Science Fiction

We do not merely have to repeat the past, or wait for accidents to force change upon us. We use our past experiences to construct new and better ones in the future. The very fact of experience thus includes the process by which it directs itself in its own betterment.

John Dewey

By tracing the history of speculative philosophy, it is possible to see why science fiction emerges when it does and to explore the relationship between philosophy and science fiction.

In the beginning of Western philosophy the central concern was to derive from nature the root metaphor to interpret the nature of reality. Thus, in the Milesian school of philosophy, Thales, Anaximander, and Anaximenes sought to derive a root metaphor for the interpretation of reality from the four recognized elements: earth, air, fire, and water. Pythagoras, Heraclitus, and Parmenides sought to refute past speculations and to derive new interpretations of the nature of reality. In doing so, they were attempting to formulate a system of thought that would explain human experience. This is speculative philosophy.

Plato carried on this task of speculation. It can be said in fact that the *Republic* is the oldest example of science fiction known for Plato speculated in exactly the same way as many science fiction writers do today. He investigated trends that were active in his day and speculated on what would happen if they continued, were altered, or were reversed. In the fifth book of the *Republic*, Plato's speculation even included eu-

genics, a subject that is becoming increasingly controversial today because of advancements in the technology of genetic engineering and reproduction.

After Plato, speculation declined. Aristotle did not speculate as much as he classified. The emphasis in philosophy shifted slightly from interpretation to analysis. With the growth and widespread acceptance of the hellenized Judeo-Christian world view, speculation suffered a premature death. During the Middle Ages the hellenized Judeo-Christian world view was so ingrained in the fabric of society there was no speculation on future possibilities at all. Philosophy was concerned with filling in the picture of things known. While in Greece, speculation on possible future alternatives was inherent in philosophy until the death of Plato. During the Middle Ages the accepted interpretation allowed for no alternatives to the future. There was only one possible future and that was the future of linear Judeo-Christian history.

The birth of the "new science," as Dewey called it, altered all that. A chronological investigation of utopian fiction and science fiction reveals a revitalization of speculation that corresponds to the beginnings of modern science. The hellenized Judeo-Christian world view was shown to be grossly inaccurate in many of its assumptions and the result was a search for a new interpretation of reality. The controversy between creation and evolution, although arriving late in the breakdown of the old order, is a fine example of why speculation was resurrected. When evolution became a viable theory, men could no longer believe that a humankind, created by God at a given instant in time, would always remain the same, and the floodgates of speculation on past and future evolutions flow open. It would be difficult to find today a science-fiction anthology that did not include at least one selection concerned with the evolutionary process. In fact, one of the finest science-fiction narratives ever written, Olaf Stapledon's *Last and First Men*, is concerned with just that—possible future evolutions involving humankind.

It is possible that science fiction is so popular today because too much philosophical energy has been directed toward the analytic task of philosophy and not enough toward the speculative task. Scientific advancements constantly raise more and more possibilities that need to be explored and judged. Today's science fiction incorporates these advancements and shows the kind of future they may form. In its advanced forms, science fiction fulfills the function of Dewey's social philosopher, one who "solves" problems by showing the relationship of ideas.¹³

The relationship between science fiction and philosophy reflects the relationship between art in general and philosophy. The first part of this paper dealt with science fiction as an art form and concluded that the artistic importance of the genre lay in its ability to create images to aid in an interpretation of reality. This is the crux of the artistic-philosophic relationship. Art is the representation of a critical imagination that sees a present reality and speculates on the past and possible futures of that reality. These images then are offered to the judgment of philosophy, which ought to be in contact with all sources of information in a society and which should judge the adequacy and applicability of the images in relation to the reality they are attempting to interpret. The images are then either accepted or modified or rejected. This is the interaction between the philosopher and the artist. Science fiction may be philosophically oriented, but it is not philosophy, for it cannot judge the adequacy and applicability of its own images, which must be tested by concrete experience and judged by philosophy. Science fiction, as an art form, offers images from the lowest level of conscious activity to be tested in experience and judged by philosophy at the highest level of reflective thought. By exploring the type of world that is shaped by philosophy, these images may well include a criticism of certain philosophies.

Like philosophy, science fiction has its origin in wonder, doubt, and curiosity. Some humans wonder, doubt, and are curious and reflect these feelings by producing a work of art. Others have the same feelings but their speculation is more controlled, complex, and developed and result in a speculative philosophy. This is the difference between a Stapledon and a Whitehead. *Star Maker* is an aesthetic exposition of process philosophy, but it is not as comprehensive, sophisticated, logically coherent, or as adequate as Whitehead's most complex essay, *Process and Reality*, which is itself imperfect. Herein lies the reason that even the greatest works of art are not philosophy.

Even so, it is today's science fiction that fulfills the current need for a revised interpretation of reality. If philosophy is viewed as composed of two elements, the speculative and the analytic, science fiction is related to the speculative element insofar as it is primarily concerned with extrapolated future possibilities and it offers up images to aid in an interpretation of the nature of reality. It can be said that science fiction is one part of the telescope that enables philosophy to look beyond the actualities to explore the possibilities for the future of the human race.

But science fiction lacks the logical coherence and consistency that is the basis of speculative philosophy. Whereas philosophy is essentially self-critical, science fiction must be tested in experience and judged by philosophy. The vital importance of science fiction in a world that science is changing daily lies in its attempt to view human beings in their cosmological setting, clothed in their greatest successes and most ignominious defeats. Realizing this, perhaps philosophers can share the feelings for science-fiction writers that Kurt Vonnegut's socially minded humanitarian character, Eliot Rosewater, expresses when he exclaims, "I love you sons of bitches." After all, science-fiction writers provide not only philosophers but all humankind with images, stories, questions, quandaries, and future possibilities that serve as the foundation and provocation for what is properly described as philosophical reflection.

Notes

1. The development and expression of the ideas contained in this paper have been greatly assisted by John Hurley, who shared my interest in and appreciation of science fiction as a source of wonder, the birthplace of philosophy.
2. H. Bruce Franklin, *Future Perfect: American Science Fiction of the Nineteenth Century* (New York: Oxford University Press, 1966), p. 3.
3. Olaf Stapledon, *Last and First Men and Star Maker* (New York: Dover Publications, Inc., 1961), p. 9.
4. J. O. Bailey, *Pilgrims Through Space and Time: Trends and Patterns in Scientific and Utopian Fiction* (New York: Argus, 1947), p. 12.
5. Harold H. Titus, *Living Issues in Philosophy*, 4th ed. (New York: American Book Co., 1964), pp. 6-7.
6. *Ibid.*, p. 96.
7. Alfred North Whitehead, *Process and Reality* (New York: The Free Press, 1969), p. 21.
8. *Ibid.*, p. 5.
9. John E. Smith, *Reason and God* (New Haven: Yale University Press, 1961), p. xii.
10. John Dewey, *Democracy and Education* (New York: Macmillan Company, 1916), p. 329.
11. John Dewey, *Reconstruction in Philosophy* (Boston: The Beacon Press, 1948), p. 21.
12. *Ibid.*, p. xxxiv.
13. *Ibid.*, p. 192.

Science Fiction and Emerging Values

ALEXANDRA ALDRIDGE

In the *New York Review of Books* a few years ago, Michael Wood dismissed what he called science fiction's "favorite alibi": the claim, implicitly made as early as H. G. Wells and overtly expressed by such critics as Robert Scholes, that "the genre helps us to meet our sudden tomorrows." Scholes had stated in *Structural Fabulation* that "to live well in the present, to live decently and humanely, we must see into the future." Wood countered, "It seems more likely that to live at all in the future, we need to see into the present."¹

Let us assume with Wood, that the futures offered by science fiction are rarely reliable as short-term forecasts, much less prophecies; that projected uses of technology depend on variables inaccessible to human foresight; and most importantly, that science-fiction writers are limited by the terms of their zeitgeist. Even the works of so successful a forecaster as H. G. Wells become, over time, increasingly appreciated as social criticism—admonitions to his heedless contemporaries.² Dystopic stories such as *When the Sleeper Wakes*, *The Time Machine*, and *The Shape of Things to Come* document the worst fears of Wells's progressivist generation. While they may not "see into" any future that has come to pass, they dramatize the potential consequences of large-scale social and political neglect and offer alternatives to the collapse of civilization within the world view of post-Victorian England.

This is not to say that some scenarios, for example, those predicated on ecological or nuclear disaster, could never occur. And certainly the continued existence of some social engineering trends that were first exposed by Aldous Huxley and George Orwell cannot be denied. But